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OF THE

DEPARTMENT OF MARINE AND FISHERIES

1903

FISHERIES

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FISHERIES REPORT

1903

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REPORT

OF THE

DEPUTY MINISTER.

To the Honourable
RAYMOND PRÉFONTAINE,
Minister of Marine and Fisheries.

SIR,—I have the honour to submit the thirty-sixth annual report on the Fisheries transactions of the Department of Marine and Fisheries for the fiscal year ending on June 30 last. The financial statements are brought down to that date: but the statistical tables embrace the period of twelve months ending on the preceding 31st of December, as it has been found impossible to have the detailed returns compiled and the particulars necessary to complete them obtained from the distant areas where fishing is actively pursued not only until the close of navigation but long after winter has set in, and operations have to be continued through the ice as on the inland rivers and great lakes, and in the inshore and estuarine waters of the sea-coast. The large increase in the total value of the catch of fish for 1901 recorded in last year's report was unfortunately not maintained in the succeeding year, which fell to within half a million dollars of the total value for the year 1900. In 1900 the total yield of fish in the Dominion was valued at $21,557,639; but in 1901 it rose to $25,737.153, whereas in 1902, as shown by the statistical tables on a later page in this report, the total value of the catch of fish in the seven provinces of Canada amounts to $21,959,433, viz, : Nova Scotia, $7,351,753; British Columbia, $5,284,824; New Brunswick, $3,912,514; Quebec, $2,059,175; Ontario, $1,265,706; Manitoba and North-west Territories, $1,198,437, and Prince Edward Island, $887,024.

Appended to this report are two special reports by the Dominion Commissioner of Fisheries, Professor Prince, the subjects treated being 'The Dog-fish Plague in Canada' and 'The Maximum Size of some Important Fish'.

The Appendices include reports on Fish-Culture Work in Canada for 1903, Oyster Culture, Fisheries Protection Service, Bait Cold Storage, Fisheries Intelligence Bureau, &c., while in the body of the report itself are given a summary of the Fishing Bounty Work and more or less detailed accounts of the Fisheries Commission, authorized by Order in Council, dated November 14, 1903, of the Scheme for the Impro-

vement of Canadian Cured Herring, and of the scientific investigations carried on at the Marine Biological Station, Malpeque, Richmond bay, Prince Edward Island, and the Great Lakes, Biological Station, Penetang, Georgian bay, Ontario.

FISHERIES COMMISSION 1903-4.

This Commission consisting of six members, viz. :—Colonel J. J. Tucker, M.P., chairman, Mr. A. J. S. Copp, M.P., Mr. R. E. Armstrong, Mr. E. C. Bowers, the Rev. Father Turbide, and Mr. R. N. Venning (Marine and Fisheries Department) commenced its investigation into certain important sea-fishery problems towards the end of November. Mr. W. A. Found, Marine and Fisheries Department, acted as Recorder and Secretary. The sittings were held on the Magdalen Island at Point Basse, Grindstone Island, November 25 ; Grand Entry, Coffin Island, November 26 ; Tidmarsh Point, November 27 ; Etang du Nord school house, November 28 ; Etang du Nord (village) November 28 ; Barachois, November 28 ; The Bassin, Amherst Island, November 30 ; Amherst, November 30 ; and later, on Grand Manan, at North Head, December 8 ; Grand Harbour, December 9 ; North Head hotel, December 9 ; and Grand Harbour, December 10, while informal meetings were held at Pictou, N.S., St. John, N.B., and St. Andrews, N.B.

The Commission was authorized to take evidence on the herring fisheries of the Bay of Fundy, including the sardine fishery of Passamaquoddy bay, New Brunswick, in addition to certain points of urgent importance in the lobster industry, as well as on the serious dog-fish pest which has proved so injurious to our Atlantic sea-fisheries during recent seasons.

The commissioners in completing the twelve initial sittings, submitted an interim report, and will resume their investigations during the coming summer.

IMPROVEMENT OF CURED HERRING.

It has long been a matter of grave concern that the pickled herring put up in the maritime provinces of Canada have never gained a very high place in the markets of the world. Strange as it may appear, the vast demand in the United States for a superior quality of cured herring has been met not by the fish pickled in Canada ; but by herring imported from Norway, the Netherlands, and Scotland.

The continent of Europe takes so great a part of the famous Scottish salt herring that only a very small portion can be spared to be exported to the United States markets. That Canadian herring, in a fresh condition, are of the finest quality is generally admitted by experts, and the low prices they realize when pickled is unquestionably due to the inferior handling and poor methods of cure.

This year active steps have been taken to put the Canadian pickled herring industry on a better basis, in accordance with a detailed scheme prepared by Professor Prince. As a first step a reliable and experienced Scottish curer, Mr. John J. Cowie, of Lossiemouth, Scotland, was authorized to visit Canada, and spend some time at Halifax, Canso, Digby and other ports making a full inquiry into the existing condition of the pickled herring industry. On completing his preliminary investigation, Mr. Cowie

reported that a scheme of improvement was most feasible, and the fishermen, and dealers, indeed the general population along the coasts visited evinced the liveliest interest in the steps suggested to be taken. As an evidence of this general interest which has indeed extended to the British Isles, the following extract from a Dominion newspaper furnishes full proof :—'The Hon. Mr. Préfontaine, Minister of Marine and Fisheries, recently authorized the carrying out of a scheme for the improvement of curing herring in Canada, so that these fish may command a higher price, and establish for themselves a creditable position in the markets of the world. The scheme is attracting wide attention, and the chief fish trade organizations on this continent and Europe, are making references to it. The *Fish Trades Gazette*, of London, England, has recently devoted a prominent article to this project, and the following extracts therefrom cannot fail to be interesting to all concerned in the Fisheries of the Dominion :—

'Our Canadian friends in the herring trade are bestirring themselves, or it would be more correct to any that they are getting stirred up a bit, in order that they may attend better to their own interests. The Dominion Minister of Marine and Fisheries, Mr. Préfontaine, has the opinion that Canadian herring do not command the price and favour they would do were more attention paid to the curing and packing by those interested with this important part of the business. A correspondent in the *Montreal Witness*, writing from Ottawa, makes himself responsible for the statement that the Canadian herring are quite as good as those taken in Scottish waters, but he deplores the fact that is familiar to every one with a knowledge of the market, that the latter can command from 50 to 100 per cent more money in Canada than those caught by our colonial cousins. That the attention paid to packing and the careful system of cure by the Scottish herring merchants has much to do with the difference in price there can be no question.

'Mr. Préfontaine is going the right way about the business. The plan he has chosen is that recommended by Professor Prince, Dominion Commissioner of Fisheries, whose report, it will be remembered, I was able to place before my readers when it came out. Scotch fishermen and others versed in the catching and curing of herring are to be taken over to Canada to instruct the local fisherfolks in the best way of preparing the fish for market in much the same way as the Scotchmen are employed in Ireland by the Congested Districts Board. The Minister of Marine and Fisheries is not one who takes his information at second hand when he can have it from the fountain head. For some weeks past he has been on a visit to the maritime provinces to see for himself what can be done in the way of a practical development of the Dominion fisheries. He started at Charlottetown and Sydney, Halifax, Pictou, St. John and other points are in the programme for the tour. His main object is to familiarize himself with some of the more important questions upon which he will be called upon to pronounce, and while he does not hope to be able to make such an exhaustive investigation as he should like, he proposes to extend his sojourn in the more eastern provinces in another year. I am at pains to give the chief points of the article in the *Witness* as showing the earnest way the Dominion Minister of Marine and Fisheries goes about his work ; and also to give an object lesson to those at home who have charge of our fisheries, and who cannot give us a return of the herring catch that is of the slightest value to those directly interested in the trade, or any one else.'

The foregoing extracts are only about one-third of the whole article published by the *Fish Trades Gazette*, which goes into considerable detail upon the takes of herring on the Scottish and English coasts, and the exceedingly good prices that have been received for the best qualities in the continental and London markets. One instance is given of an extraordinary price paid for some Scottish herring about fifteen years ago, when, after deducting the charges for freight, insurance and duties, the Scottish fish merchant pocketed $75 per barrel from the buyers in St. Petersburg.

No clearer indication could be afforded of the vast importance to the fishermen all along the Canadian coasts, and to the fish merchants in the maritime provinces, of the plan which the Honourable Mr. Préfontaine is carrying through with such foresight and zeal, than the wide public notice it is attracting in the British and foreign fish journals.

It is not too much to say that the measures sanctioned by Mr. Préfontaine, will effect nothing short of a revolution in the herring industry of Canada.

For the complete success of the scheme, of course the help of the fishermen and all interested in the herring industry will be necessary, as the work develops. The initial operations to be commenced within two or three months at Canso, and possibly other points on the Atlantic coast, will be watched with anxious interest, and as the practical part of the work is to be in the hands of a most competent and energetic herring curer from Scotland, the object lessons which these first experiments will provide, must have a widespread effect. There is abundant evidence that the fishing population has awakened to the importance of this scheme. They realize that the herring fisheries of the Dominion have yielded them not more than a fraction of the wealth that will come into their hands by the adoption of the improved methods of handling and curing the herring, which the Honourable Mr. Préfontaine is desirous of seeing adopted generally by our Canadian fishermen.

MARINE BIOLOGICAL STATION.

In last year's report it was pointed out that by a resolution of the board of management this scientific fisheries' station was to be moved from Canso to a suitable location on the shores of Richmond Bay, adjacent to the famous Malpeque oyster beds. Unfortunately, after leaving Canso on May 18th, and while the floating station was being towed up the Northumberland Straits, a period of stormy weather began, and the station went aground not far from Pictou Harbour. The building was flooded by heavy seas which did serious damage not only to the structure itself but to the valuable contents. After being overhauled at Pictou, involving a serious delay of over three weeks, the Biological Station reached its destination near Kier's wharf, Malpeque, on June 16th, and fisheries investigations were at once vigorously resumed. Professor Ramsay Wright, assistant-director of the station, superintended the season's operations, and Dr. Joseph Stafford, of McGill University, again performed the duties of curator and principal assistant. Professor Ernest W. MacBride, McGill University, spent the season at the station, and a number of scientific gentlemen, including Professor J. J. Mackenzie, Toronto University, took part in the work. During a portion of the season the oyster steamer *Ostrea*, in command of Captain Kemp, rendered most effective assistance, and elaborate physical (including temperature, salinity, &c.,) and biological

researches on the oyster beds were carried out. The information gained proved of the greatest value in carrying out three new methods of oyster breeding and fattening from which it is anticipated a most essential basis of facts will be secured with a view to the improvement of the valuable but deteriorated beds all along the coast of Prince Edward Island and New Brunswick. Faunistic and embryological studies were also pursued by the staff, and a most successful season's work closed about the end of September. Further oyster work, and fisheries surveys of a highly valuable nature will be continued during the season of 1904.

The programme of work for the year was as usual prepared by the Director (Professor Prince): but owing to the mishap referred to and the consequent delay, the whole of the field outlined could not be covered. It embraced :—

1. Faunistic work; surface and bottom;
2. Pelagic ova and young of Teleosteans;
3. Extended studies on the life history of the oyster, its food, reproduction and local variations on the famous Malpeque and Curtain Island oyster beds;

(Richmond bay, being one of the most famous and extended place of oyster beds in the world, affords splendid facilities for this important field of fisheries investigation.)

4. Experiments in raising oysters by fascines, *viviers, claires,* &c.
5. The occurrence of smelt in the local streams, the schools of young and food at different stages;
6. Faunistic studies, especially fishes, a great variety of specimens available at some of the fishing stations along the shore.
7. A thorough study of the external features and internal anatomy of the Sea Trout of P.E. Island, and comparisons with specimens of Brook Trout from inland waters. This research is intended to decide an important controversial point in connection with the Fisheries administration;
8. Experiments on the behaviour of lobsters in traps, especially with regard to the entrance and exit of small, undersized lobsters;
9. A comparison of the schools of young clupeoids herring, alewives or gaspereaux, shad, etc.;
10. A study of the peculiar structures developed on tidal gauges floats, material for which will be provided by Dr. Bell Dawson;
11. Studies on the clam beds, soft and hard shelled;
12. Inquiry into the depredations of dog-fish, and methods of coping with the serious plague of these fish.

On this subject, A. N. Whitman & Son, of Canso, N.S., offer the following remark in their report to the Intelligence Bureau:

We believe that the time has ceme when a new departure should be taken in the study of marine life. For some years an amount has been appropriated yearly by the government of Canada for the promotion of this important branch of scientific research,

and a floating structure built for the purpose was located at St. Andrew's, New Brunswick, then at Canso and now at Prince Edward Island, whereby some of our best college men have been enabled to carry on original investigation in Marine Biology, but the facilities furnished have been quite inadequate, though not to be despised. The results accomplished have been far beyond what might have been expected in view of the inadequate facilities available. We believe that a larger sum of money should now be provided for this purpose and that at some central point in close touch with the fisheries of our Atlantic coast a permanent establishment should be erected and equipped, and placed under the management and control of one of the best men available for the purpose. In connection with it there should be a museum into which should be gathered specimens of every form of marine life indigenous to our North Atlantic waters, and a suitable steamboat should be attached to the establishment, equipped with all useful appliances for dredging the ocean floor and searching its water. A summer school should be established in connection with this institution in which students from our colleges in Canada could carry on original investigation on their own account during the vacation months and acquire at first hand an intimate knowledge of marine life such as could not possibly be obtainable in college lecture rooms or laboratories. This too, would cost money, but we are convinced that it would be money well spent, as well spent as any that is spent on experimental farms, agricultural colleges and dairy schools, or colleges of mining and metallurgy.

We commend the suggestion to the attention of our government.

GEORGIAN BAY BIOLOGICAL STATION, UNDER THE DIRECTORSHIP OF DR. B. ARTHUR BENSLEY, OF TORONTO UNIVERSITY.

This station devoted to the study of the lake fish and fisheries has continued the work of the preceding season. The staff, as pointed out in previous reports, mainly consists of members of the Madawaska Club, Go Home Bay, and their work, in addition to the Hydrographic Survey carried out by Professor C. H. C. Wright, of the School of Practical Science, Toronto, and certain physical and meteorological researches by Professor W. J. Loudon, has embraced an examination of practically every species of fish, both of economic importance and otherwise, in the adjacent waters. The valuable collections of material made during this season and during the previous year have taken much time working up; but when finished there will be available a more complete account of the fish life and other life in this portion of Georgian bay than has been attempted before in Canada. The smaller and less important fish have claimed attention as furnishing food, both in the egg stage and as young fry, for the larger species, such as the valued black bass, doré or yellow pickerel and blue pickerel, great lake trout, &c. Certain features lacking in a proper equipment of such a biological laboratory as this, have been supplied during the year, and a scheme of work for 1904 is contemplated which will yield valuable information for the benefit of the fisheries of the great lakes.

FISH CULTURE.

The fish breeding report for 1903, by the officer in charge of this work, viz., Professor E. E. Prince, is of a most satisfactory character. The total output of fry, 314,511,000

is far in excess of the quantity planted in any year since this work was commenced under the auspices of the Dominion government. From the report which forms Appendix No. 11, it will be seen that no less than twenty-two hatcheries are reported upon, of which two are new hatcheries operated this season for the first time. Formerly the work of fish culture was confined to the four most valuable economic fishes, viz. :— the whitefish, lake trout, Atlantic and Pacific species of salmon ; but the Commissioner of Fisheries points out that as many as twelve species of economic and game fishes were hatched and planted in the various waters of the Dominion.

OYSTER CULTURE.

The report of the department's Oyster Expert gives the usual detailed account of the operations carried on in New Brunswick, Prince Edward Island and Nova Scotia. The steamer *Ostrea* proved invaluable in the important operations of preparing old deteriorated beds for restocking, laying down cultch, and scattering brood oysters for spatting purposes. If the work of oyster culture and the improvement of once valuable oyster beds under the department's auspices are to yield their full results, some amendments of the existing regulations are necessary. The size at which oysters can be legally taken and marketed is too small, and the season and conditions of fishing are not such as to stave off their scarcity, indeed that serious depletion of an increasingly valued and valuable edible commodity, which has become alarming in recent years, has reached a crisis. Our oyster supply can be saved and can be immensely increased by a more stringent and adequate protection as outlined in Mr. Kemp's report, and by that moral support of the population generally which is necessary to any effective improvement. Mr. Kemp's knowledge and his zealous and judicious aid on the Richmond Bay oyster beds were highly valued by the staff of the Biological Station. Indeed, without the help of the *Ostrea* and the experience of Mr. Kemp, the oyster investigations at Malpeque could not have been carried on with the success which was actually accomplished.

BAIT COLD STORAGE.

The work of the various bait freezers established under the auspices of the department and operated during the past year is detailed in the report of the officer in charge of that branch of the department's transactions. This report forms Appendix No. 12, and it indicates the fact that while a considerable proportion of the bait freezers are giving very satisfactory results, there are others which are not so satisfactory, and a small proportion, which have no results at all to report. It has been urged that the limit of three years, during which the government bonus is guaranteed (at $5 per ton up to $100 total bonus per annum) is far too short to allow of many freezers being put on a permanent basis. It remains to decide if a five-year period would not be more satisfactory. Further, in a few cases the local fishermen have found themselves unable, from poverty and other causes, to raise the amount of share capital required by the conditions issued by the department. These minor difficulties are of small importance compared to the great benefits that a series of bait freezers permanently established along our coast, will in future years confer upon the Canadian fishing population on the Atlantic seaboard. The cry of scarcity of bait need not be heard again, if the

scheme be carried successfully through its initial stages, always the most difficult in any enterprise of this kind.

The scheme has recently taken a new turn, and the establishment of large bait-freezers has taken practical shape in the steps authorized by Order in Council, November 14th, 1903. If a large bait-freezer, partially under government and partially under local auspices erected at Canso, fulfil in any adequate measure the anticipations formed, it must be of incalculable benefit to our vast deep-sea, especially the 'Bank' fisheries. In his special report last year upon 'The Bait Freezer System in Canada' the Dominion Commissioner of Fisheries (Prof. Prince) referred to the necessity of this new development of the bait-freezer scheme, which is really merely an expansion of the scheme already being carried out. Professor Prince said :—

'It appears inevitable that freezers of larger capacity at central fishing ports will require to be included. The claims of the deep-sea fishermen the 'bankers,' cannot be ignored. They form a most important section of our fishing population, and there is every ground for favouring such a development of the present system as to provide for the 'bait' requirements of the deep-sea fishermen. The erection of capacious freezers, holding several hundreds tons of bait, would provide full and reliable supplies for that special demand. One of the leading Nova Scotia fish merchants, owning a large bait-freezer, has strongly urged the establishment of capacious freezers under government auspices, so important and imperative is the demand of the 'bankers' in the eyes of enlightened and enterprising firms engaged in our great sea-fishing industries. Others, like the Hon. William Ross, of Halifax, N.S., anxious that nothing should be left undone that will advance the prosperity and growth of the Atlantic fisheries of Canada, have likewise advocated the construction of large freezers. Mr. Ross, in 1899, for example, urged that bait-freezers of large capacity should be erected at points such as St. Ann's, Cape Breton, where the 'bankers' might secure ample supplies of bait, without trespassing upon the supplies provided by the smaller freezers, which were designed to supply the shore fishermen. Such a development of the scheme would involve material changes in the department's regulations, as set forth in the special bulletins issued from Ottawa. It would also necessitate a largely increased parliamentary appropriation. A bait association having for its object the erection of a capacious bait-freezer holding 200 tons to 300 tons of bait would be wholly different in the character of its membership and management from the small bait associations of the shore fishermen. Men of capital alone could raise the shareholders' moiety if the freezer was to cost from $40,000 to $50,000. The working details would, indeed, require the most careful consideration in order that it might avoid causing dissatisfaction and arousing unfavourable criticism.' The foundations are already laid and most of the materials, and the necessary equipment are on hand at Canso, so that the new large bait freezer should be in operation in time for the coming fishing season (1904).

VALUE OF THE FISHERIES.

The total value of fish and fish products in Canada for the year 1902 aggregates $21,959,433, showing a decrease of over three and three-quarter million dollars less than that of the previous season. Notwithstanding this large falling off from this previous yield, which was swelled by the phenomenal catch of British Columbia, the

fishery production of 1902 exceeds that of any previous year, excepting the catch of 1897 which was valued at over twenty-two million dollars.

The following table shows the values of fish by provinces as compared with the previous year:—

Provinces.	Value of all Fish.	Increase.	Decrease.
	$		$
Nova Scotia	7,351,753		637,795
British Columbia	5,284,824		2,657,947
New Brunswick	3,912,514		280,750
Quebec	2,059,175		115,284
Ontario	1,265,706		162,372
Manitoba and North-west Territories	1,198,437	240,027	
Prince Edward Island	887,024		16,359

While a similar table in the last annual report showed an increased value in the fisheries yield of every province but one, the above statement reverses results by showing a considerable falling off in every province excepting in Manitoba and the North-west Territories, where a substantial improvement is noticed. Of course the most important fluctuation is due to the fact that the previous year's large surplus of over three million dollars in British Columbia was in 1902 converted into a shortage of $2,650,000.

The next important statement is the diminution of over half a million dollars in the Nova Scotia fisheries for that year. While this falling off may be generally ascribed to some of the principal branches of the sea-fisheries as herring, halibut and the cod family, it might more especially be attributed to the failing of the mackerel fishery which yielded $431,394 less than during the previous season in the coast waters of that province alone.

The features of the various fisheries in the different provinces are fully dealt with and explained by the different inspectors of fisheries in their respective reports and returns forming the appendices three to ten of this publication.

The figures here given do not include all the quantity of fish consumed by the Indians of British Columbia, the Yukon district and remote parts of the North-west Territories where their staple food consists of fish.

The following statement shows the relative values of the principal kinds of the commercial fishes (above $100,000) for the year 1902 as compared with those of the previous year.

Kinds of Fish.	Value.	Increase.	Decrease.
	$	$	$
Salmon	4,335,039		2,886,348
Cod	4,028,788		10,606
Lobsters	3,133,737		112,144
Herring	1,723,098		142,296
Mackerel	839,368		533,091
Whitefish	810,873	27,409	
Trout	637,210		26,432
Haddock	599,237		182,926
Halibut	575,441	181,420	
Smelts	458,512		27,362
Pickerel	408,085	68,400	
Sardines	382,326		180,639
Hake	265,378		38,834
Pollock	250,583	23,365	
Clams	238,175	139,651	
Pike	190,248	17,307	
Alewives	187,006	47,578	
Sturgeon	173,315	40,051	
Oysters	155,168		24,320
Eels	108,404		16,186

The quantity of fish used as bait is valued at $352,696, that of fish oil at $230,439, and the fur seal skins of British Columbia realized $337,660.

A glance at the above table will confirm the previous remarks respecting the fluctuations in the yield of fisheries for the different provinces.

While the decrease of nearly three million dollars in the salmon industry of British Columbia is alone responsible for the falling off noted in that western province, the shortage of over half a million dollars in the mackerel fishery is the principal item to which the decline may be attributed in the eastern provinces. The other most important fluctuations in the sea fisheries are the decreased values noted in haddock, sardines and herring and the surplus catch of halibut.

In the fresh water species, pickerel, whitefish and sturgeon make specially good showing as compared with the previous result.

From the year 1869 to 1902 inclusive, the five principal commercial fishes have yielded the following enormous values :—

Cod	$125,200,083
Salmon	74,552,814
Lobster	68,645,095
Herring	66,106,645
Mackerel	43,444,702

EXPORT OF FISH.

During the last fiscal year the value of fish and fish products as well as marine animals exported from Canada to foreign countries was $11,826,646.

Details of these exports will be found in the annual report of the Department of Customs for 1903.

RECAPITU

SHOWING the whole production of the Fisheries in the

Number.	Kinds of Fish.		NOVA SCOTIA.		BRITISH COLUMBIA.		NEW
			Quantity.	Value.	Quantity.	Value.	Quantity.
				$		$	
1	Cod, dried	Cwt.	646,654	2,586,616	5,400	27,000	93,644
	" tongues and sounds	Brls.	592	5,920			189
2	Haddock, dried	Cwt.	93,296	279,888			2,659
	" fresh	Lbs.	4,419,705	132,591			1,064,876
	" smoked, (finnan haddies)	"	2,091,800	125,508			99,002
3	Hake, dried	Cwt.	71,910	161,798			22,722
	" sounds	Lbs.	41,055	20,527			21,640
4	Pollock	Cwt.	103,827	207,654			21,389
5	Tom cod or frost fish	Lbs.	151,500	7,575			1,595,500
6	Halibut	"	1,233,396	123,339	8,417,000	420,850	127,250
7	Flounders	"	783,870	39,194			174,900
8	Salmon, fresh	"	532,761	106,552	2,195,540	219,554	1,443,525
	" preserved in cans	"	4,710	707	30,103,776	3,010,377	6,900
	" smoked	"	11,315	2,263	388,750	38,875	5,740
	" dry salted	"			10,457,148	418,286	
	" pickled	Brls.	38	570	6,680	66,800	
9	Trout (all kinds)	Lbs.	121,155	12,115	351,350	35,135	206,350
10	Ouananiche	"					
11	Whitefish	"					5,500
12	Smelts	"	252,180	12,609	389,500	19,475	7,830,410
13	Oulachons	"			1,632,000	33,650	
14	Herring, pickled	Brls.	49,555	198,220	1,653,600	82,680	161,577
	" fresh	Lbs.	5,385,915	53,859			6,883,900
	" smoked	"	1,600,000	32,000	446,490	44,649	10,024,360
	" kippered in cans	"					343,000
15	Sardines, preserved in	Cans.					939,500
	"	Brls.					166,891
16	Shad	"	1,133	11,330	47	475	6,190
17	Alewives	"	20,956	83,824			23,091
18	Pike	Lbs.					
19	Maskinonge	"					
20	Eels, salted	Brls.	2,285	22,850			2,325
	" fresh	Lbs.					
21	Perch	"					
22	Pickerel	"					100,800
23	Bass (sea)	"	12,235	1,223			138,300
24	" (achigan)	"					
25	Mackerel, salted	Brls.	19,775	296,625			305
	" fresh	Lbs.	2,062,096	247,462			515,000
26	Sturgeon	"			33,500	3,350	1,000
	" caviare and bladders	"					
27	Lobsters, canned	"	4,637,204	943,895			1,965,296
	" fresh or alive	Cwt.	120,902	1,109,295			20,853
28	Oysters	Brls.	1,663	6,652	2,500	16,000	12,795
29	Clams	"	8,663	47,411		27,840	
30	Squid	"	28,006	112,024			3,760
31	Coarse and mixed fish	"	60,505	121,010		32,060	9,030
	" "	Lbs.			569,500	28,475	55,000
32	For home consumption (not included above)					300,000	
33	Fur seal skins (in B.C.)*				16,883	*337,660	
34	Hair seal skins	No.	127	159	5,600	4,200	209
35	Fish used as bait	Brls.	78,926	118,389			85,990
36	Fish used as fertilizer	"	63,998	31,999	1,500	4,500	131,020
37	Fish oil	Galls.	293,699	88,100	161,950	56,683	48,088
	Totals			7,351,753		5,284,824	

* Add in No. 33 ten sea otter skins, value $6,250.

LATION

different Provinces of Canada for the Year 1902.

Brunswick.	Quebec.		Ontario.		P. E. Island.		Manitoba and N. W. Territories.		Number.
Value.	Quantity.	Value.	Quantity.	Value.	Quantity	Value.	Quantity.	Value.	
$		$		$		$		$	
374,578	228,520	914,080	...	...	28,426	113,704	...	...	1
1,890	300	3,000	...	...	200	2,000	...	...	
7,977	3,364	10,092	...	...	1,000	3,000	...	...	
31,946	70,500	2,115	...	...	6,000	180	...	...	2
5,940	...	...	...	...	...	...	...	...	
51,125	331	745	...	...	6,168	13,878	...	...	3
10,820	...	...	...	...	12,970	6,485	...	...	
42,779	...	...	...	...	75	150	...	...	4
79,775	399,900	9,915	...	...	7,700	385	...	...	5
12,725	180,070	18,007	...	...	5,200	520	...	...	6
8,745	...	...	...	...	...	...	...	...	7
288,705	877,083	175,416	...	...	1,700	340	...	...	
1,035	...	...	...	...	...	...	...	...	
1,150	...	...	...	...	...	...	...	...	8
...	...	...	...	...	...	...	...	...	
...	294	4,410	...	...	...	...	...	...	
20,635	379,280	37,928	5,345,468	523,152	25,450	2,545	114,000	5,700	9
...	26,000	2,600	...	...	...	...	...	...	10
990	71,550	7,155	2,909,170	231,278	...	...	11,429,000	571,450	11
391,520	296,400	14,820	...	...	401,750	20,088	...	...	12
...	...	...	...	...	...	...	...	...	13
646,308	35,208	140,832	4,322	17,288	20,934	83,736	...	...	
68,839	806,230	8,062	5,081,354	101,627	587,000	5,870	...	...	
200,487	142,050	2,841	...	...	75,000	1,500	...	...	14
34,300	...	...	...	...	...	...	...	...	
46,975	...	...	...	...	...	...	...	...	
333,782	523	1,569	...	...	...	...	...	...	15
61,900	178	2,562	...	...	...	...	...	...	16
93,114	...	...	...	...	2,517	10,068	...	...	17
...	263,900	13,195	1,720,830	68,833	...	...	4,614,800	108,220	18
...	24,600	2,460	...	...	...	...	...	...	19
23,250	217	2,170	...	...	908	9,080	...	...	20
...	777,670	46,660	73,238	4,391	...	...	...	...	
...	206,400	10,266	1,289,894	38,696	...	...	46,000	1,320	21
5,040	280,660	20,536	2,930,855	146,543	...	...	6,885,600	235,966	22
13,830	...	...	...	...	...	...	...	...	23
...	83,650	8,365	3,300	264	...	...	...	...	24
4,575	12,333	184,995	...	...	2,329	34,935	...	...	
61,800	3,500	420	...	...	71,380	8,566	...	...	25
80	295,380	17,723	492,484	29,549	...	...	912,000	75,600	
...	...	...	...	...	...	...	30,000	30,000	26
393,059	708,018	141,604	33,804	17,013	2,039,603	407,920	...	...	
136,569	55	275	...	...	224	1,120	...	...	27
51,180	...	...	...	...	20,334	81,336	...	...	28
157,274	415	830	...	...	1,205	4,820	...	...	29
15,040	4,466	17,864	...	...	705	2,820	...	...	30
18,060	...	...	...	...	1,095	2,190	...	...	
5,586	2,123,174	39,862	2,970,303	87,069	...	...	9,904,500	149,945	31
...	...	...	...	...	...	...	1,011,800	20,236	32
...	...	...	...	...	...	...	...	...	33
209	*22,682	28,352	...	...	7,520	15,040	...	...	34
128,985	37,520	56,280	...	...	32,695	49,042	...	...	35
65,510	89,255	44,627	...	...	895	895	...	...	36
14,426	221,364	66,409	...	...	16,033	4,811	...	...	37
3,912,514	...	2,059,175	...	1,265,706	...	887,024	...	1,198,437	

* Add in line 34 Quebec 33 white whale skins $132.

RECAPITULATION

OF the Yield and Value of the Fisheries in the Dominion of Canada for the Year 1902.

No.	Kinds of Fish.		Quantity.	Value.	Total.
1	Cod dried	Cwt.	1,002,644	$4,015,978	
	" tongues and sounds	Brls.	1,281	12,810	
					$4,028,788
2	Haddock dried	Cwt.	100,319	300,957	
	" fresh	Lbs.	5,561,081	166,832	
	" smoked (finnan haddies)	"	2,190,802	131,448	
					599,237
3	Hake dried	Cwt.	101,131	227,546	
	" sounds	Lbs.	75,665	37,832	
					265,378
4	Pollock	Cwt.	125,291	.....	250,583
5	Tom-cod or frost fish	Lbs.	2,154,600	.....	97,650
6	Halibut	"	9,962,917	.....	575,441
7	Flounders	"	958,770	.....	47,939
8	Salmon, fresh	"	5,050,609	790,567	
	" preserved in cans	"	30,115,386	3,012,119	
	" smoked	"	405,815	42,288	
	" pickled	Brls.	7,012	71,780	
	" dry salted	Lbs.	10,457,148	418,286	
					4,335,041
9	Trout (all kinds)	"	6,543,053	.....	637,210
10	Ouananiche	"	26,000	.....	2,600
11	Whitefish	"	14,415,220	.....	810,873
12	Smelts	"	9,170,240	.....	458,512
13	Oulachons	"	1,632,000	.....	83,650
14	Herring pickled	Brls.	271,596	1,086,384	
	" fresh	Lbs.	20,397,999	320,937	
	" smoked	"	12,287,900	281,477	
	" kippered in cans	"	343,000	33,300	
					1,723,098
15	Sardines preserved in	Cans.	939,500	46,975	
	" fresh	Brls.	167,414	335,351	
					382,326
16	Shad	"	7,548	.....	76,267
17	Alewives	"	46,564	.....	187,006
18	Pike	Lbs.	6,599,530	.....	190,248
19	Maskinonge	"	24,600	.....	2,460
20	Eels salted	Brls.	5,735	57,350	
	" fresh	Lbs.	850,908	51,054	
					108,404
21	Perch	"	1,542,264	.....	50,282
22	Pickerel	"	10,197,915	.....	408,085
23	Bass (sea)	"	150,535	.....	15,053
24	" (achigan)	"	86,950	.....	8,629
25	Mackerel salted	Brls.	34,742	251,130	
	" fresh	Lbs.	2,651,976	318,238	
					839,368
26	Sturgeon	"	1,734,364	126,302	
	" caviare	"	63,804	47,013	
					173,315
27	Lobsters canned	"	9,350,121	1,886,478	
	" fresh or alive	Cwt.	142,034	1,247,259	
					3,133,737

RECAPITULATION—Of the Yeild and Value of the Fisheries &c.—*Concluded.*

No.	Kinds of Fish.		Quantity.	Value.	Total.
28	Oysters	Brls.	37,292		$155,168
29	Clams	"			238,175
30	Squid	"	36,937		147,748
31	Coarse and mixed fish	"	86,660	$173,320	
	" "	Lbs.	15,622,477	310,937	
					484,257
32	Fish for home consumption				320,236
33	Sea otter skins	No.	10		6,250
34	Fur seal skins in B.C	"	16,883		337,660
35	Hair seal skins	"	36,138		47,960
36	White whales (Belugas)	"	33		132
37	Fish used as bait	Brls.	235,131		352,696
38	Fish used as fertilizer	"	286,668		147,532
39	Fish oil	Galls.	741,138		230,439
	Total for 1902				21,959,433
	" 1901				25,737,153
	Decrease				3,777,720

RECAPITULATION—Showing the Total Value of the Fisheries in the respective Provinces of Canada, from 1870 to 1902, inclusive, as compiled from the Annual Reports of the Department of Fisheries.

Year.	Nova Scotia.	New Brunswiek.	Prince Edward Island.	Quebec.	Ontario.	British Columbia.	Manitoba and North-west Territories.	Total for Canada.
	$	$	$	$	$	$	$	$
1870	4,019,425	1,131,433	No data.	1,161,551	264,982	No data.	No data.	6,577,391
1871	5,101,030	1,185,033	"	1,093,612	193,524	"	"	7,573,199
1872	6,016,835	1,965,459	"	1,320,189	267,633	"	"	9,570,116
1873	6,577,085	2,285,662	207,595	1,391,564	293,091	"	"	10,754.997
1874	6,652,302	2,685,794	288,863	1,608,660	446,267	"	"	11,681,886
1875	5,573,851	2,427,654	298,927	1,596,759	453,194	"	"	10,350,385
1876	6,029,050	1,953,389	494,967	2,097,668	437,229	104,697	"	11,117,000
1877	5,527,858	2,133,237	763,036	2,560,147	438,223	583,433	"	12,005,934
1878	6,131,600	2,305,790	840,344	2,664,055	348,122	925,767	"	13,295,678
1879	5,752,937	2,554,722	1,402,301	2,820,395	367,133	631,766	"	13,529,254
1880	6,201,061	2,744,477	1,675,089	2,631,556	444,491	713,335	"	14,490,979
1881	6,214,782	2,930,904	1,955,290	2,751,962	509,903	1,454,321	"	15,817,162
1882	7,131,418	3,192,339	1,855,687	1,976,516	825,457	1,842,675	"	16,824,092
1883	7,689,374	3,185,674	1,272,468	2,138,997	1,027,033	1,644,646	"	16,958,192
1884	8,763,779	3,730,454	1,085,619	1,694,561	1,138,724	1,358,267	"	17,766,404
1885	8,283,922	4,005,431	1,293,430	1,719,460	1,342,692	1,078,038	"	17,722,973
1886	8,415,362	4,180,227	1,141,991	1,741,382	1,435,998	1,577,348	186,980	18,679,288
1887	8,379,782	3,559,507	1,037,426	1,773,567	1,531,850	1,974,887	129,084	18,386,103
1888	7,817,030	2,941,863	876,862	1,860,012	1,839,869	1,902,195	180,677	17,418,510
1889	6,346,722	3,067,039	886,430	1,876,194	1,963,123	3,348,067	167,679	17,655,256
1890	6,636,444	2,699,055	1,041,109	1,615,119	2,009,637	3,481,432	232,104	17,714,902
1891	7,011,300	3,571,050	1,238,733	2,008,678	1,806,389	3,008,755	332,969	18,977,878
1892	6,340,724	3,203,922	1,179,856	2,236,732	2,042,198	2,849,483	1,008,254	18,941,171
1893	6,407,279	3,746,121	1,133,368	2,218,905	1,694,430	4,443,963	1,042,093	20,686,661
1894	6,547,387	4,351,526	1,119,738	2,303.386	1,659,968	3,950,478	787,087	20,719,573
1895	6,213 131	4,403,158	976,836	1,867,920	1,584,473	4,401,354	752,466	20,199,338
1896	6,070,895	4,799,423	976,126	2,025,754	1,605,674	4,183,999	745,543	20,407,425
1897	8,090,346	3,934,135	954,919	1,737,011	1,289,922	6,138,865	638,416	22,783,546
1898	7,226,034	3,849,357	1,070,202	1,761,440	1,433,632	3,713,101	613,355	19,667,121
1899	7,347,604	4,119,891	1,043,645	1,953,134	1,590,447	5,214,074	622,911	21,891,706
1900	7,809,152	3,769,742	1,059,193	1,989,279	1,333,294	4,878,820	718,159	21,557,639
1901	7,980,548	4,193,264	1,050,623	2,174,459	1,428,078	7,942,771	958,410	25,737,153
1902	7,351,753	3,912,514	887,024	2,059,175	1,265,706	5,284,824	1,198,437	21,959,433
Total	223,756,804	104,719,226	31,107.727	64,529,799	36,307,786	78,631,361	10,394,534	549,343,253

General Statistics of Fisheries.

Expenditure and Revenue.

The statements of the total expenditure for the different services connected with the fisheries of Canada during the last fiscal year amounting to $527,944, form the first appendix of this report. This amount comprises, fisheries proper, $114,719 ; fish-culture, $77,330 ; fisheries protection service, $145,137 ; miscellaneous expenses $30,903, including also $159,853 distributed as fishing bounties.

The total amount received as revenue from fishery licenses, fines, &c., during the same period, in the different provinces, is given at $78,635. This sum also includes the *modus vivendi* licenses granted the United States fishing vessels, $9,057.

A comparative statement of all fisheries expenditure and revenue, for the last fourteen years concludes this appendix.

Full details of these different expenditures may be found in the Auditor General's Report under their respective headings.

Fishing Bounties.

During the year 1902, the fishermen of the maritime provinces received the sum of $159,853 as fisheries bounties on their respective catches of deep-sea fish for that season. The owners and crews of 795 vessels received $71,079 of the above amount, while the balance, $88,774, was distributed amongst 20,229 boat fishermen. To cover these amounts, 12,723 claims were paid ; ninety-one were refused payment as being fraudulent.

For the last season, Nova Scotia received nearly double the amount of bounty distributed to all the other provinces, amounting to $100,455 ; Quebec received $36,125, New Brunswick, $14,555 and Prince Edward Island, $8,716.

Since its inception (1882) the sum of $3,315,966 has been distributed among the fishermen of the above mentioned provinces to improve the development of their sea-fisheries.

The regulations governing the payment of such fishing bounties, as well as full particulars respecting their distribution, will be found in Appendix No. 2.

Extent of Coast.

The fisheries of Canada are the most extensive in the world, extending on our immense sea-coast line, besides innumerable lakes and rivers. The eastern sea-coast of the maritime provinces from the Bay of Fundy to the Strait of Belle Isle covers a distance of 5,600 miles, while the western sea-coast of British Columbia is reckoned at 7,180 miles or more than double that of Great Britain and Ireland. While the salt water in shore area, not including minor indentations, covers more than fifteen hundred square miles, the fresh-water area of that part of the great lakes belonging to Canada is computed at 72,700 square miles, not including the numerous lakes of Manitoba and the North-west Territories, all stocked with excellent species of food-fish.

Capital invested in the Canadian Fisheries.

No less than 77,801 men were engaged during the season of 1902 in our fishing industry, using 5,623,717 fathoms of gill-nets and other fishing gear and fixtures representing an aggregate capital of $11,305,959.

The lobster plant alone is estimated at $1,287,656, comprising 723 canneries dispersed on the sea coast of the maritime provinces. No less than 13,563 persons were employed in this branch of the fishing industry.

The salmon canning industry of British Columbia for the year 1902, comprising seventy-five establishments valued at a million and a half dollars, gave employment to 17,098 persons, and preserved over 30,103,776 cans of salmon.

The sealing fleet in the same province for 1902 consisted of thirty-four shooners, with 129 boats and 206 canoes, valued altogether at $452,000, and manned by 858 sailors and hunters.

RECAPITULATION.

SHOWING the Value of Fishing Vessels, Boats, Nets, &c., and of all the Capital invested in the Fishing Industry of Canada in 1902.

PROVINCES.	FISHERMEN IN		VESSELS.			BOATS.		GILL NETS AND SEINES.		Value of Pound and Trap Nets, Weirs, Trawls, &c.	Value of Lobster Plant.	Approximate Value of Freezers, Ice and Smoke-houses and other fixtures.	TOTAL VALUE.
	Vessels.	Boats.	Number.	Tonnage.	Value.	Number.	Value.	Fathoms.	Value.				
					$		$		$	$	$	$	$
Nova Scotia	5,482	17,845	551	33,443	1,132,755	14,921	306,691	1,503,676	540,873	244,410	628,844	631,916	3,485,489
New Brunswick	1,164	11,903	340	4,564	155,255	6,756	212,905	952,555	450,033	319,671	325,410	480,380	1,943,654
Prince Edward Island	156	4,168	26	683	13,506	2,201	56,927	76,085	29,990	12,593	236,957	45,675	395,648
Quebec	84	12,039	26	767	16,225	9,794	223,648	319,169	216,625	143,560	96,445	317,665	1,014,168
Ontario	589	2,296	‡124	2,227	276,310	1,295	76,202	1,277,537	217,390	175,073	.....	71,417	816,392
British Columbia	607 *858	17,098	169 †34	4,230 2,428	355,050 452,250	4,483 335	253,530 27,000	757,700	576,375	43,978	.....	1,452,500	3,160,683
Manitoba and N. W. Territories	183	3,329	26	1,546	219,310	1,882	42,695	706,995	72,335	1,300	.....	154,285	489,925
	9,123	68,678											
Totals	.....	77,801	1,296	49,888	2,620,661	41,667	1,199,598	5,623,717	2,103,621	940,585	1,287,656	3,153,838	11,305,959

*Sailors and seal hunters. †Sealing fleet. ‡Tugs.

RECAPITULATION.

STATEMENT of the Lobster Industry in Canada during the Season of 1902.

PROVINCES.	Number of persons employed.	PLANT.					CATCH.				
		Number of Canneries.	Value.	Number of Traps.	Value.	Total value of Plant.	Number of 1-lb. Cans.	Value.	Fresh or Alive, cwt.	Value.	Total value of Catch.
			$		$	$		$		$	$
Nova Scotia	5,219	240	192,735	657,531	436,109	628,844	4,637,204	943,895	120,902	1,109,295	2,053,190
New Brunswick	4,238	198	125,100	229,739	200,310	325,410	1,965,296	393,059	20,853	136,569	529,628
Prince Edward Island	2,252	192	83,865	241,896	153,092	236,957	2,039,603	407,920	224	1,120	409,040
Quebec	1,854	93	41,005	192,070	55,440	96,445	708,018	141,604	55	275	141,879
Total	13,563	723	442,705	1,321,236	844,951	1,287,656	9,350,121	1,886,478	142,034	1,247,259	3,133,737

COMPARATIVE TABLE showing Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries of Canada, together with the Value of Fishing Materials employed, from 1879 to 1902.

Year.	Vessels.			Boats.		Value of Nets and Seines.	Value of other Fishing Material.	Total of Capital Invested.
	No.	Tonnage.	Value.	No.	Value.			
			$		$	$	$	$
1879	1,183	43,873	1,714,917	25,616	854,289	988,698	456,617	4,014,521
1880	1,181	45,323	1,814,688	25,266	716,352	985,978	419,564	3,936,582
1881	1,120	48,389	1,765,870	26,108	696,710	970,617	679,852	4,113,049
1882	1,140	42,845	1,749,717	26,747	833,137	1,351,193	823,938	4,757,985
1883	1,198	48,106	2,023,045	25,825	733,186	1,243,366	1,070.930	5,120,527
1884	1,182	42,747	1,866,711	24,287	741,727	1,191,579	1,224,646	5,014,663
1885	1,177	48,728	2,021,633	28,472	852,257	1,219,284	2,604,285	6,697,459
1886	1,133	44,605	1,890,411	28,187	850,545	1,263,152	2,720,187	6,814,295
1887	1,168	44,845	1,989,840	28,092	875,316	1,499,328	2,384,356	6,748,840
1888	1,137	33,247	2,017,558	27,384	859,953	1,594,992	2,390,502	6,863,005
1889	1,100	44,936	2,064,918	29,555	965,010	1,591,085	2,149,138	6,770,151
1890	1,069	43,084	2,152,790	29,803	924,346	1,695,358	2,600,147	7,372,641
1891	1,027	39,377	2,125,355	30,438	1,007,815	1,644,892	2,598,124	7,376,186
1892	988	37,205	2,112,875	30,513	1,041,972	1,475,043	3,017,945	7,647,835
1893	1,104	40,096	2,246,373	31,508	955,109	1,637,707	3,174,404	8,681,557
1894	1,178	41,768	2,409,029	34,102	1,009,189	1,921,352	4,099,546	9,439,116
1895	1,121	37,829	2,318,290	34,268	1,014,057	1,713,190	4,208,311	9,253,848
1896	1,217	42,447	2,041,130	35,398	1,110,920	2,146,934	4,527,267	9,826,251
1897	1,184	40,679	1,701,239	37,693	1,128,682	1,955,304	4,585,569	9,370,794
1898	1,154	38,011	1,707,180	38,675	1,136,943	2,075,928	4,940,046	9,860,097
1899	1,178	38,508	1,716,973	38,538	1,195,856	2,162,876	5,074,135	10,149,840
1900	1,212	41,307	1,940,329	38,930	1,248,171	2,405,860	5,395,765	10,990,125
1901	1,231	40,358	2,417,680	38,186	1,212,297	2,312,187	5,549,136	11,491,300
1902	1,296	49,888	2,620,661	41,667	1,199,598	2,103,621	5,382,079	11,305,959

COMPARATIVE TABLE showing the number of men employed in the Fishing Industry since 1879.

Year.	Number of Persons in Lobster Canneries.	Number of Men in Vessels.	Number of Men in Boats.	Total Number of Fishermen.	Total Number of Persons in Fishing Industry.
1879		8,818	52,577	61,395	
1880		8,757	51,900	60,657	
1881		8,359	50,679	59,056	
1882		8,498	52,785	61,283	
1883		9,966	52,259	62,225	
1884		9,968	51,854	61,822	
1885		9,539	53,282	62,821	
1886		8,927	53,073	62,000	
1887		8,911	55,247	64,158	
1888		9,574	53,109	62,683	
1889		9,621	55,382	65,003	
1890		8,726	55,000	63,726	
1891		8,666	56,909	65,575	
1892		8,330	55,348	63,678	
1893		8,899	58,854	67,753	
1894		9,525	61,194	70,719	
1895	13,030	9,804	61,530	71,334	84,364
1896	14,175	9,735	65,502	75,237	89,412
1897	15,165	8,879	70,080	78,959	94,124
1898	16,548	8,657	72,877	81,534	98,082
1899	18,708	8,970	70,893	79,893	98,601
1900	18,205	9,205	71,859	81,064	99,269
1901	15,315	9,148	69,142	78,290	93,605
1902	13,563	9,123	68,678	77,801	91,364

The following are inspectors of fisheries in the different provinces of the Dominion.

Name.	P. O. Address.	Extent of Jurisdiction.
Bertram, A. C	North Sydney, N.S.	District No. 1.—Cape Breton Island.
Hockin, Robt	Pictou, N.S	District No. 2.—Cumberland, Colchester, Pictou, Antigonish, Guysboro' Halifax and Hants counties.
Ford, L. S	Milton, N.S	District No. 3.—Lunenburg, Queen's, Shelburne, Yarmouth Digby, Annapolis and King's counties.
Pratt, J. H., capt	St. Andrews, N.B	District No. 1.—The counties of Charlotte and St. John.
Chapman, Robt. A	Moncton, N.B	District No. 2.—Restigouche, Gloucester, Northumberland, Kent, Westmoreland and Albert counties.
Harrison, H. E	Maugerville, N.B	District No. 3.—King's, Queen's, Sunbury, York, Carleton and Victoria counties.
Matheson, J. A	Charlottetown	Prince Edward Island.
Wakeham, Wm., M.D	Gaspé Basin, Que	Lower St. Lawrence River and Gulf.
Lavoie, N., M.D	L'Islet, Que	That portion of Quebec south of River St. Lawrence and north and east of and including county of Bellechasse.
Belliveau, A. H	Ottawa	Province of Quebec, north of River St. Lawrence and west from and including River Saguenay, and the portion which lies west and south of the county of Bellechasse to Pontiac.
Riendeau, Jos	Montreal	The counties of the province of Quebec bordering on the St. Lawrence from Huntington to Three Rivers.
Hurley, J. M	Belleville	That portion of Ontario east of the western boundary line of the counties of Durham, Victoria and Haliburton, including Lake Scugog and the eastern boundary of Muskoka and Parry Sound districts.
Sheppard, O. B	Toronto, Ont	That part of the province of Ontario west of the eastern boundaries of the county of Ontario, and the districts of Muskoka and Parry Sound along the Mattawa and Ottawa rivers, and northward along the north-eastern boundary line of said province to James bay.
Duncan, A. G	Marksville, Ont	That portion of Ontario lying west and north of Lake Nipissing, the Rivers Mattawa and Ottawa and the north-east boundary line of the province to James bay, embracing Nipissing, Algoma, Thunder bay and Rainy river districts, Lake Superior and such portions of Lake Huron and Georgian bay as lie adjacent or opposite to the part of Ontario above described.
Young, Wm. S	Selkirk, Man	Province of Manitoba.
Miller, E. W	Qu'Appelle, N.W.T.	Eastern part of the North-west Territories.
Young, Harrison S	Edmonton	Western part of the Territories.
Stewart, Theophilus	Dawson City	Yukon district.
Sword, C. B	N. Westminster, B.C.	Province of British Columbia.—No. 1. Southern district.
Williams, J. T	Port Essington	" " No. 2. Northern "

The following are the officers in charge of the Government Fish Hatcheries:

Name.	P. O. Address.	Rank.
Armstrong, Wm	Newcastle, Ont	Officer in charge of Government Fish Hatchery.
Parker, Wm	Sandwich, Ont	" "
Walker, John	Ottawa, Ont	" "
Finlayson, Alex	Magog, Que	" "
Catellier, L. N	Tadoussac, Que	" "
Lindsay, Robt	Gaspé Basin	" "
Mowat, Alex	Campbellton, N.B.	" "
McCluskey, Chas	Grand Falls, N.B	" "
Sheasgreen, Isaac	South Esk, Miramichi,	" "
Ogden, A	Bedford Basin, N.S	" "
Edward Doherty	Pictou, N.S	" Lobster Hatchery.
Carmichael, A. G	N. E. Margaree	" Fish Hatchery.
Sword, C. B	New Westminster, B.C.	" "
Whitwell, Thos	Skeena River	" "
Young, W. S	Selkirk, Man	" "
Kempt, Ernest	Charlottetown, P.E.I	" Oyster Culture.

FISHING SEASON OF 1903

PRELIMINARY REPORTS OF THE DIFFERENT INSPECTORS OF FISHERIES IN CANADA.

A glance at the following preliminary reports for the fishing season of 1903 will show that another falling off might be expected in the yield of fish when compared with the product of 1902, published in detail in this volume. In the maritime provinces the shortage of one species might be redeemed by a surplus of another and thus fluctuations might equalize one another. For instance, mackerel were very plentiful for a short time in Nova Scotia and the catch of 1903 will be treble that of 1902.

In Manitoba and the North-west Territories the fishing operations seem satisfactory and will show a surplus. Unfortunately the same cannot be said of British Columbia, where the canning industry has experienced another poor year. The pack, being over 150,000 cases less than the last, would cause a considerable diminution in the aggregate value.

For the first time a report is herewith published from the department's inspector on the fisheries of the Yukon district. It will be found interesting.

NOVA SCOTIA.

Inspector A. C. Bertram, of North Sydney, C.B., reports on the Cape Breton fisheries for 1903 as follows:—

In the leading commercial branches, there has been an average fishery, salmon alone excepted. The lobster fishery throughout Cape Breton takes the lead in increase over previous results. In the spring, as well as in the autumn months, the cod fishery was good but in mid-summer it was poor. The reason of this is not far to seek. Around the Cape Breton coast there are excellent cod banks where cod is plentiful until the arrival of dog-fish the latter part of June, when the latter take possession. Dog-fish make their appearance on the coast after the spring schools of mackerel arrive. They disappear in autumn, about the time mackerel schools are journeying south, where no doubt their natural home is. They first make their appearance in May in the vicinity of Cape Hatteras, following the mackerel schools north. In May, the Gloucester mackerel seiners, reporting from the southern waters complained that dog-fish had broken up the mackerel schools, resulting in a poor spring fishery for them. That those ravenous sea animals are to day the greatest menace to the successful prosecution of the fisheries in the maritime provinces there can be no doubt. I observe in United States papers that petitions are being circulated, throughout the fishing districts there praying that Congress grant a bounty for the purpose of exterminating dog-fish. I believe that something should be done to encourage our Canadian fishermen to capture them also. I may here add that a leading Cape Breton lobster packer began the canning of dog-fish

after the close of the lobster canning season. The canned dog-fish were labelled 'Chinese Halibut,' and it is stated that there is an extensive foreign market for preserved dog-fish in cans. Very little is known of the quality or value of this fish preserved, but I will endeavour to make inquiries and report to the department later. If there is a market for dog-fish, the fishermen should be made acquainted with all the facts, in order that they may be enabled to engage in this industry if there is profit in it for them. It might also relieve the country of the payment of a bounty on dog-fish or the cost of establishing plants for the purpose of converting dog-fish into fertilizer in order to decrease their numbers, as has been suggested.

Inspector Robt. Hockin, of Pictou, reports on the fisheries of district No. 2, for the season 1903, and indicates that there will be an increase in the value of the catch over that of last year.

The noticeable feature of the season's operations is a very large increase in the catch of mackerel, probably from 300 to 400 per cent. The catch of herring is 40 per cent over last year, while the cod, haddock, hake and pollock fisheries will not be so large—the decrease not more than 10 per cent. The catch of halibut will be 40 per cent less than last year.

The lobster fishery shows an increase of about 5 per cent over last season. Salmon a decrease, which will be at least 25 per cent. The shad fishery was almost a total failure.

The other fisheries will show about an average catch.

Inspector L. S. Ford, of Milton, says that in the absence of reliable returns from the several overseers of fisheries, it is impossible to be accurate.

Despite the gloomy outlook, the banking fleet, which certainly will have a large decrease in the catch of deep sea fish, especially the Lunenburg fishermen; the bankers in other localities have done fairly well, notably the Lockeport men. As a rule, for some unexplained cause, the hand-liners have done better than the trawlers.

The catch of codfish will probably fall short by 25 per cent, somewhat a serious deficit for the fishermen, but not sufficient to dampen their energy.

The mackerel are very erratic in their movements. In certain localities where they were once plentiful, of recent years they have completely failed. In the counties of Queen's and Lunenburg, the fishermen have done fairly well with the mackerel. This helped the shore fishery out to a considerable extent, as the scarcity of bait and the rodent dog-fish injured the shore fishery considerably.

Shad fishing in the Bay of Fundy and waters adjacent was a complete failure. Something should be done in the near future to protect these valuable fish in their spawning season, or they will become practically extinct. There will probably be a falling off in most places in the catch of herring. For some reason not yet well understood, this fishery seems to be on the decline also.

Outside the fish named I think all other species, river fish included, will give an average yield.

Lobsters will likely show an improvement. This valuable fishery shows no sign of depletion as yet. At the close of the season, more were caught than at any other time of any season of the same length. However, better regulations are needed for the protection of this valuable industry.

NEW BRUNSWICK.

Inspector Pratt, of St. Andrews, reports as follows :

The year just closing will show a slight decrease in the value of the fisheries, when compared with that of 1902, principally in the catch of herring. Large herring failed to strike in at Grand Manan, as they have done in former seasons, and were quite scarce on the mainland also. The unusual catch in St. John harbour of small herring suitable for sardine purposes, assisted very materially in keeping the herring catch up to the quantities of former years. The enormous schools of ravenous dog-fish found in all parts of the Bay of Fundy, played havoc among the schools of herring, and many intelligent fishermen attributed the small size of the herring schools to their presence. These fish also played havoc with the line fishermen, destroying trawls as well as nets, and it is hoped that some effective remedy will soon be discovered that will put an end to their ravages.

The catch of cod will show about the same as previous years, with quite an increase in the prices. The returns will also show an increase in the catch of pollock, as they were very plentiful on the Quoddy river grounds. Their livers brought as high as 60c. per bucket. Pollock fishermen entertain the idea that the prohibition to dynamite those fish has much to do with this increase.

The lobster fisheries will show a decreased catch from previous seasons, owing to the new law raising the size limit to 10½ inches going into effect in Charlotte county last April. This change deterred many men from lobster fishing owing to the closing of the factories, and therefore, no demand for small fish. However, the men recognize the fact that the change will be in their interests and that a proper step has been taken which will be proved by future results.

Inspector R. A. Chapman, of Moncton, reports for the season of 1903 on the fisheries in district No. 2, New Brunswick, that the aggregate catch will be about the same as last year. Much stormy weather during the previous year and other causes named below, served to lessen the take of some kinds of fish rather than any real scarcity of shad. Less shad were taken at the head of the Bay of Fundy than ever before. This fishery can never be restored while the parent fish are slaughtered at St. John and other points when on their way to the spawning grounds.

The catch of salmon is hardly up to the average, chiefly owing to unfavourable weather in the spring and early summer, but fly fishing was good, and the officers report great numbers on all the streams this fall during spawning time.

Spring herring were exceedingly plentiful and large quantities were caught for food, bait, &c., as well as for smoking in the large smoke houses recently erected at Bay Verte, Point de Chene, &c. Fall herring on the Miscou Caraquet banks were also plentiful, and many taken. These are good fish and would command a much higher price

if more care was taken in curing them. It is hoped that the information to be derived from the Scotch expert will lead to this object.

The catch of codfish, especially in some localities, is scarcely up to that of last year, largely owing to the dog-fish nuisance, which is reported for the first time as seriously menacing this fishery, but prices have been very high this fall and consequently those engaged in it have fared well.

While smelt fishing in the fall of 1902 opened well in the small rivers, in the Miramichi the aggregate for the winter was away below that of previous years, but this fall they have appeared in great quantities and of fine size, many parties this week on the Miramichi, Richibucto, and Buctouche rivers have made from $50 to $100 in a single haul. The importance of this fishery can scarcely be over-estimated.

About the same quantity of oysters has been raked as last year, except in the Miramichi bay and river where they are of poor quality, and consequently less attention is given to them than formerly, some seven or eight hundred barrels were raked this fall on the reserve in Shediac Harbour. Hard shell clams (quahog) were raked in usual large quantities at Buctouche, Cocagne, &c., and the clam cannery of Messrs. A. & R. Loggie at Inkerman, Gloucester county, again increased its output.

The pack of lobsters has again been larger this year than last, owing no doubt to greater care being taken in the past few years to return berried lobsters to the water. This, with hatcheries now built at Shemogue and Shippegan should fully restore this fishery within the next few years.

The catch of other kinds of fish is about an average one except that of bass, which is smaller, but little bass of about ½ lb. weight were plentiful everywhere this fall.

Inspector H. E. Harrison, of Maugerville, says that when statistics for 1903 come to hand, he thinks a comparatively satisfactory showing will be made in the inland fisheries of New Brunswick, with the exception of that of alewives. These, the first marketable fish of large quantities that ascend the St. John river and tributaries seemingly come just as plentiful each season, notwithstanding the immense numbers taken year after year.

The smaller catch of this season, is not attributed to a light run, but merely because the demand was very limited. As mentioned in my previous report, the principal market for alewives, the West Indies, seems to have completely failed. This seems to be a periodical affair, and while it means the loss of a large amount of money to our fishermen, it is not so much felt at the present time on account of other remunerative work.

Shad fishing was carried on as extensively as in past years and gives profitable imployment to many of our people. The demand during the present season for salted shad, as in the past, was far beyond the supply. Shad fishing is hardly over before the beautiful salmon frequenting the St. John river made its appearance in quite large numbers and before August 15, a great quantity of these fish were captured. This year's catch has been very satisfactory, not only in the St. John, but in the Tobique river, the principal fly fishing river in my district.

Sturgeon fishing has been carried on more extensively in our river than for years past. I am not at present in a position to say just how the industry has yielded.

Trout fishing has, as usual, given lots of sport to residents of this district as well as to the increasing number of tourists.

PRINCE EDWARD ISLAND.

Inspector J. A. Matheson, for the province of Prince Edward Island, reports for the season of 1903, as follows:—

I have not yet received the various returns from the fishery officers, but from personal knowledge, I am safe in reporting an increase in lobsters, and a decrease in oysters. The large advance in prices will go a long way to equalize the values to fishermen and shippers, but further protection to preserve the oyster is necessary. I would strongly recommend an increase in the size limit to three inches, and that means be adopted to prevent spring fishing.

Cod and hake fishing has fallen off in the catch, owing to the lack of interest in this branch and also on account of the large number of dog-fish which have infested our coast, much to the loss and annoyance of our fishermen. Mackerel show an increase especially in King's county. All other kinds of fish will yield about an average catch.

QUEBEC.

Doctor Wakeham, officer in charge of the Gulf of St. Lawrence division, reports a decided decrease in the yield of fisheries as compared with the past two seasons. This was entirely due to the roughness of the season. Fresh easterly winds with frequent fogs prevailed through the early spring, and right up to mid-summer, or what should have been mid-summer, for the whole season was unusually raw and cold, and we only had an approach to our usual summer weather for a few weeks in the fall, our warmest weather occurring in October.

Spring herring were as abundant as ever, on the regular spawning grounds, in April and May, at most points, during the rest of the season up to the fall. Herring were scarce, having kept off shore; towards the close of the season. About the end of November, wherever nets could be pulled out, fat herring were found to be abundant.

The returns for the salmon net fishery will show a decrease as compared with an average year. The catches in the large estuaries, such as Moisie, St. John's and Natashquan were good, but most of the sea coast nets did poorly. This failure was clearly due to the weather conditions, as most of the sea-coast nets cannot be properly fished if strong northerly winds prevail. Salmon was abundant in the rivers, and most anglers did well, the dull cloudy condition of the weather with high water in the rivers being favourable for angling.

The lobster pack at the Magdalen Islands, and on the mainland of Gaspé and Bonaventure, was the best we have had since 1896. The run of lobsters was large and steady during the early part of the fishery. At Anticosti and on the north coast, the

pack was much smaller than usual; the season was much later than usual in opening, and at Anticosti particularly, two heavy easterly gales, which followed each other in quick succession, practically destroyed all the traps. In consequence of this I recommended an extension of two weeks, which was granted, but the destruction of gear was so complete that it was impossible to get reorganized in time, and the extension was not utilized. No lobsters were caught on the north coast or at Anticosti, until during the first week of June. Of course, as one would naturally expect, the fishery always open on the north coast two or three weeks later than it does on the south shore, under the circumstances it would only seem reasonable that the packing season should continue open for at least two weeks longer than it does on the rest of the division.

The cod fishery, which is the staple industry of the gulf, has been below the average. This was altogether due to the unusual season. At certain stations where the fishery is made in sheltered waters, as at Natashquan and Newport, and where bait was also more regularly obtainable, cod were taken in great abundance, in fact at most points where fishing was practicable and bait to be had fair fishing was made.

The presence of the dog-fish interfered very greatly with the fishery—they came earlier in the season—were in greater abundance, and remained later than usual. Old fishermen tell me that they had just such a visitation, from these pests, some forty or fifty years ago, they came into the gulf without warning, were an abominable nuisance for a few years, and then totally disappeared. I note in a recent number of *Chambers*, that a correspondent, alluding to the fishery in St. Andrews bay, says :—

'The first startling fact is that the bay, especially in the later autumn and the early winter, abounds with sharks from the dog-fish upwards. The dog-fish is not nearly so common as he was, some years ago he swarmed in the latitude of the Forth and Tay, so as to paralyse the fishing: seizing on the bait before anything else had a chance, or fish and bait in one mouthful. Now, for some reason, he has retreated farther north, and reserves his favours for the Orcadians, on whom he bestows them without stint.'

Now exactly similar conditions are occurring here. The dog-fish has always been found on the Atlantic coast, south of the Bay of Fundy, but it was not a regular inhabitant of the gulf, now for some reason, most probably scarcity of food, it has moved north, just as has been the case on the coast of Scotland.

A company has been licensed to catch these, and other sharks, on the north coast of the gulf. It is proposed to express the oil, and turn the mass into fertilizer, and a bounty has been granted; the whole thing is an experiment. Though these pests exist in great numbers, yet, unless we find some better way of capturing them, I doubt our ability to make the venture profitable.

A fair mackerel catch was made at the Magdalen Islands, especially in the face of the rough weather and the damage caused by the dog-fish. I noticed that a few mackerel were seen, and some taken, in the herring nets, all over the gulf. I have always claimed that we owe the ruin of our mackerel fishery, to the introduction of the purse seine, and more particularly to the spring fishery, made with this engine off the Nova Scotia coast, by United States vessels, in May and June. All the mackerel then taken are the nearly ripe spawning fish making for the breeding grounds in the gulf. Before the introduction of the purse seine these fish were never disturbed until after they had spawned. They began to disappear in the inner gulf immediately after the introduction of this

spring purse seining off the coast of Nova Scotia. For the past three seasons purse seine fishing in the spring has been a partial failure, owing to rough weather, and if I am right we are now benefiting by this failure, any way we have had three good seasons mackerel fishing, about the Magdalen Islands, and a few mackerel are again being caught all over the inner gulf. There does not seem to be the slightest doubt that if we could by any arrangement do away with the use of the purse seine until after the mackerel have spawned, these fish would be found as abundantly as they formerly were, all over the gulf.

The prices of fish, and fish products, ruled high, and though the yield of the fishery on the whole is below an average, yet the return to the fisherman has been fair.

Inspector N. Lavoie, of L'Islet, reports on the fishing operations in his division during the season of 1903, as follows:—

Taken as a whole, the fishing season just concluded cannot be said to have been a success, although the yield was better in some places than in others. The upper and lower parts of my division fared better than the centre. The total value of fish caught is estimated at about $80,000. Cod fishing was fair enough, early in the spring, from Marsouis to Cap Chatte, but poor above these places. There is a heavy decrease in the yield of herring. Eel fishing was very good all along the counties of Bellechasse and Lévis, and far from being remunerative in other parts of my division. Sardine fishing, although somewhat better than in previous seasons, cannot be deemed successful. The catch of sturgeon and shad somewhat improved. Salmon shows a light increase, while trout fishing gives good promises for the future. Only 32 porpoises were killed in the sedentary fisheries of River Ouelle. The catch of halibut was very unsatisfactory. The same remarks apply to mixed and coarse fish. Whitefish, pickerel and bass (barfish) fishing were failures.

Lobster fishing began very early on Bay des Chaleurs and in the county of Gaspé. By the middle of June, the bulk of the packing was done and by that date the pack exceeded that of last year for the whole season. No loss of gear occurred and prices were $3 in advance of last year. Only a couple of slight violations of the law occurred, which I did not deem of sufficient importance to punish with fines and confiscations. The total pack was 4,166 cases against 3,181 in 1902. The grounds are everywhere reported to be well stocked and the lobsters were of unusually large size.

Inspector Joseph Riendeau, of Montreal, who has been appointed inspector of fisheries for the counties bordering on the St. Lawrence, from Huntington to Nicolet, states that the yield of fish will be fully one-third less than that of the previous season. The fish brought to the markets, chiefly in Montreal, are steadily diminishing in size, so much so that many are considered immature and are thus wasted rendering the fishermen liable to punishment.

The fishery regulations were fairly observed in Lakes St. Francis and St. Louis, but the same cannot be said of Lake of Two Mountains. Rivers Mille-Iles, Ste. Rose and Des Prairies are not protected in the least, and fishing is carried on therein without licenses. On the St. Lawrence proper, from Laprairie to Nicolet, things are satisfactory, but around Lake St. Pierre, especially in the vicinity of the Sorel and Berthier islands, there exist grave abuses prejudicial to fisheries interest. Thousands of (verveux) hoop nets are fished where not a hundred are licensed; the mesh of these nets has dwindled

down to about $\frac{3}{4}$ of an inch instead of $1\frac{1}{2}$ as it should be. The small minnow seines are used to capture bait for night-lines, which also catch the young of other species. So small are the fish caught with these illegal implements that in some cases it requires from ten to fifteen fish to the pound. When the fishermen are reprimanded for bringing such immature fish to market, they answer that they are compelled to catch the small ones, as there are no more large ones to be taken. Another evil to which I desire to call your attention is the immoderate use of tar to dye the hoop nets to such an extent that the water becomes contaminated for miles around, being covered by a thick blueish, oily substance, where fish cannot live. In the numerous lakes of Terrebonne county, trout are being caught, winter and summer, with night lines and other illicit devices, contrary to fishery regulations. If these different abuses are tolerated much longer, some of our former best fishing grounds will become entirely ruined before five years.

Inspector A. H. Belliveau, of Ottawa, who has charge of the inland districts of Quebec, expects a further falling off in the aggregate fish crop for the season just closed (1903). The better grades of fish are steadily being depleted and making way for inferior species. As before stated, this depletion can only be ascribed to overfishing and indiscriminate use of undersized meshed gear in the past.

The regulation prohibiting all netting in the St. Lawrence from Huntington to Three Rivers during the warm months of July and August, which was enforced for the first time last summer, was generally well received by the fishing community, and will no doubt be productive of beneficial results. This restriction should have extended further east as only half of the county of Nicolet was included, thus creating jealousy amongst the fishermen of the same district. These different parties bringing fish to the Three Rivers market could claim to have caught them in the lower part of the county where the restriction does not apply.

During the summer I had a test made of the use of the small seine to catch minnows to bait night lines in the vicinity of Sorel Islands. While in some hauls we captured minnows only, in others the young of other species were mixed. In a few hauls of this seine we had black bass, rock bass, maskinonge. perch, sardines, carp and minnows, proving that the fishermen's contention that minnows only were caught with such seines is not correct.

The prohibition of netting in Lakes St. Francis and St. Louis was renewed for a period of two years, with the exception of ten seine licenses which may be granted within the parish of Chateauguay. Several nets were seized in Lake St. Francis for illegal use.

There is still considerable poaching in the beautiful lakes of the eastern townships. Several poachers were prosecuted and fined for netting in Lake Memphremagog in contravention to the Federal regulation prohibiting all netting in the different waters of the townships. I was informed in Newport, Vermont, that over one thousand pounds of our famous lunge captured upon their spawing beds on the Canadian side were disposed of in that town in a single morning by our own fishermen. This year the water of this large lake was so much lower than usual that the parent fish became an easy prey to the bold poachers of the locality.

Lake Massawippi, in the county of Stanstead, has had for some years an efficient fish and game protection club. If the rapid growth of North Hatley as a summer resort

is due to the exertions of this club it should be conducive to stimulate the ambition of neighbouring lakes equally well adapted. Besides numerous palatial residences bordering the shores of the north end of this lake, North Hatley now possesses a commodious and spacious hotel, second to none on the St. Lawrence route, giving a $5 per diem rate.

ONTARIO.

Inspector J. M. Hurley, of Belleville, states that the fishing season of 1903 was very satisfactory in eastern Ontario, in fact the fall fishing has not been better in the remembrance of old fishermen in the vicinity of Bay of Quinte.

Whitefish was quite plentiful, much more so than during the previous season. As these fish only remain a short time in Bay of Quinté before returning to the other side in the lake, Mr. Hurley thinks they might be allowed to be caught in the said bay unrestricted for the short time they remain there. The same remark applys to herring in the same bay.

Our best sporting fish, as bass, maskinonge and trout, are reported on the increase, so are the sportsmen seeking these fish getting more numerous every season. There is a great demand for the young of bass and trout to stock the numerous deep and clear water lakes of the midland districts. As the land is being stripped of the lumber the neighbouring public is clamouring to have their lakes stocked with high grades of fish.

Last summer there was quite an agitation in the vicinity of Quinté to have a total prohibition of all netting in the bay at all times for the apparent benefit of sportsmen. Mr. Hurley protested against this movement, giving the following reasons :—

Fishery regulations are still somewhat mixed between the provincial and federal authorities.

Bay of Quinte having about 200 miles of coast, gives employment to many fishermen capturing coarse fish as pike, perch, catfish, bullheads and suckers. The more of these coarse fish that are captured by the netters, the better for the protection of the best grades of sporting fish. Besides, herring and whitefish which frequent the Bay of Quinte, are then caught in quantities, and they cannot be taken otherwise than with nets.

Instead of a total prohibition of nets, he suggested that netting be allowed only after September 15th in each year. This would allow protection to the spring spawning fish as bass, maskinonge and pike, &c., as well as prevent netting during the warm weather of July and August, and also during the angling period by the summer tourists. This compromise should conciliate both factions. It should be taken into consideration that Bay of Quinté is one of the most important subdivisions on Lake Ontario ; its aggregate catch last year was nearly $17,000. Besides its perch and catfish, over 100,000 pounds of coarse fish were reported from this division.

Inspector O. B. Sheppard, of Toronto, says :—As far as I can learn, the fishing in my division, the past year, has been fairly satisfactory with the exception of angling,

which shows a large decline, especially in the inland waters. In some instances this is due to the large number of carp that are multiplying to an alarming extent. This applies to international as well as inland waters. The past summer was particularly unfavourable for rod and line fishing, being exceptionally cold, wet and stormy.

I would strongly advise the setting apart of certain breeding grounds for game fish where no netting of any kind would be allowed. If this were done and a limit placed on the number of fish to be taken, and were the law strictly enforced, our sporting fisheries would soon regain their splendid standard. These fisheries bring thousands of sportsmen and tourists to Canada every year, who spend a very large amount of money in boats, hotels and among the guides and settlers.

I am pleased to say that a great number of fish-ways have been placed in important streams during the last year, which will have a desirable and lasting effect.

I have also taken steps to prevent the disposing of saw-dust and other mill refuse in lakes and streams, which was formerly done in a great number of cases; this also will have a beneficial effect on our fisheries.

The law has been fairly enforced, but there is still great room for improvement in this respect. In my opinion, too many licenses are granted and the size of the mesh could be advantageously increased; this would prevent the taking of many small fish and be a potent factor in the preservation of our fisheries.

Inspector A. G. Duncan, of Marksville, states that although the catch of fish for the season of 1903 was not so productive as the previous one in some sections of his district, nevertheless the majority of fishermen claim to be satisfied with the result of the fishery operations. There is a steady and serious falling off each year in the principal food fishes, whitefish, trout and sturgeon. Most of the catch of this western division finds its way to the United States markets.

It is impossible for him to secure complete returns from the provincial officers, although he is of opinion that every licensee should be compelled to give his exact catch under oath at the end of the season, otherwise the license should not be renewed.

Several channels and lakes were inspected by him when blocked by rafts and logs in the spring.

My remarks for the past season apply to this year's fishing. There was considerable illegal fishing carried on by the United States citizens at the south end of St. Joseph's island and in that vicinity. I have seized three trap and ten gill-nets from American fishermen who were poaching in the Canadian portion of these waters. This persistent poaching by foreigners in our waters last season is attributed to the restriction of nets by the United States authorities in their own waters, between Detroit and Sault Ste. Marie, to protect the game fish.

Many summer tourists visit Little Current Killarney and St. Joseph islands. Last summer, they were not quite satisfied with their sport.

Although the local fishery officers were fairly diligent this season in attempting to check illegal operations, it looks as if it required still more vigorous efforts to cope with this growing evil. The mere fact of finding illegal fishing implements upon one's premises should constitute a liable offence and be considered as evidence against their owner.

MANITOBA.

Inspector Wm. S. Young, of Selkirk, says that the returns of the catch for 1903 will likely show a substantial increase over that of 1902. The catch of whitefish will break all records. The sturgeon catch will show a large yield over the preceding one, the pickerel and pike will also show a substantial surplus. Tullibee, catfish, perch and goldeyes will hold their own with the catch of 1902. In fact, in the aggregate I look for an improvement in all kinds of fish caught during the year. I also expect that the fish caught and exported will considerably exceed one million dollars. This result will be very gratifying, expecially when there is no apparent diminution of any of the different kinds of fish caught in our lakes, with perhaps, one exception, that of whitefish in the waters of Lake Winnipegosis.

This year's operations so far have been profitable both to the companies and fishermen engaged. The weather has been fairly good throughout the season.

NORTH-WEST TERRITORIES, (DISTRICT NO. 1.)

Inspector E. W. Miller, of Qu'Appelle, reports as follows:—In the division of the territorial fisheries the most notable feature of the year 1903 has been the further development of the sturgeon fishery. In addition to the active continuation of this fishery in the Nelson river and Ceder lake districts, a catch of about 70,000 lbs. of sturgeon was made during the summer in the waters near Cumberland on the Saskatchewan river down which the fish were transported by steam tugs to Ceder lake. In spite of the long haul, the results were sufficiently profitable to both buyers and fishermen to promise an active renewal of the business next summer. The catch in Cedar lake for the year was a good average one and on the Nelson an increase is noted. In the latter district a great deal more ground is being covered by the buyers, and sturgeon were brought by four days canoe journey to Warren's Landing, the most northern post on Lake Winnipeg, over which they are conveyed to Selkirk. This would appear to be the limit of distance over which the fish can be handled profitably under present conditions.

In other districts the year has been a normal one and the catch will vary but little from last year's.

The lakes have more than maintained the increase in volume noted last year, and their waters as well as those of the rivers and streams are in first class condition. There is a great abundance of the coarse fish everywhere, and whitefish generally are reported on the increase; Long lake, Assa., being the only lake showing a falling off. The whitefish lakes, however, which had become completely depleted show little sign of recovery in spite of improved conditions, and their restocking by fry is very desirable.

DISTRICT NO. 2, N.W.T.

Inspector Harrison S. Young, of Edmonton, makes the following remarks on the fisheries of the principal lakes of his district, for the year just closed.

Speaking generally, I may say, that the fisheries of this district are in a very satisfactory state this year. The close seasons have been enforced without much trouble. One or two prosecutions with convictions have, I think, shown that the laws must be obeyed.

Lac la Biche.—The fish in this lake are just as numerous as they ever were, large, and in good condition. During the close season which has just expired, the half-breeds on this lake were allowed to fish on the bars of the islands which have been strictly preserved for some years past, and they made a large catch of fish. The object of this change was to give the shore bars a rest. The fishermen are using nets of six, and six and a half inch mesh in this lake.

Beaver lake.—Fish are increaing in this lake every year, it is fished by a small band of Indians who all made good catches in the time allowed them.

Beaver lake South.—This lake is now picking up again and is fairly well stocked with coarse fish.

Saddle lake, Goodfish lake, Floating Stone lake, Whitefish lake are all in Indian Reserve, and protection has not been given them in the spawning season, and in consequence they are all pretty well fished out.

Little Whitefish lake.—This is a very small lake but well stocked with fish; unfortunately they spawn late and do not get all the protection they should.

Lake Ste. Anne is picking up very fast now, in two years more fish will be as plentiful there as they ever were. Fishermen in this lake this year are using nets of seven inch mesh, very few of less than six, they say they can get all the fish they require with the large sized mesh, so why kill the small fish. This action is voluntary on their part, though I have strongly commended them for it.

White Whale lake.—The quality of the fish in this lake with heavier fishing will soon leave nothing to be desired. There is considerable demand this fall for fish from this lake for shipment to the Kootenay and other points. A Winnipeg firm has a buyer here who is paying $3\frac{3}{4}$ cents a pound for all the round fish he can get delivered here.

Pigeon lake.—This wonderful little lake under strict protection and a long close season shows no signs of being overfished.

Buck lake.—This lake is practically a virgin one, but with the rapid increase of settlement in this district can not long continue to be so.

The black bass put in Buffalo and Tanglefoot lakes are doing well. In Tanglefoot, being a small lake, the fish can be seen. In Buffalo lake, one was killed two months ago, that showed good growth, and none have been found dead.

BRITISH COLUMBIA.

Inspector C. B. Sword, of British Columbia, reports as follows on the fisheries for the season of 1903.

This has been a very poor year, the total pack of salmon only amounting to 473,547 cases against 627,162 in 1902 and 765,519 in 1899, the year which corresponds with this in the four year cycle to which the salmon catch seems to be subject. The decrease in the catch was common to the Northern district as well as to the Fraser river district. Taking the sockeye catch in the Fraser river, there were 90,821 cases less put up than in 1902. On Puget Sound, where the sockeye pack is practically all Fraser river fish, the falling off was even greater; the 1903 pack, 167,211 cases, being less than one half that of 1902, 339,556 cases.

I have not yet got the returns, but the shipments of dry-salted dog salmon for the Japanese market will show a considerable falling off from the figures of 1902. This, however, seems to be mainly owing to an unsatisfactory market. Barrelled salt salmon will be about the same as in 1902, but there will be an increase of about one-third in the quantity of fresh salmon exported.

Except in the case of sturgeon, of which there was practically none taken, all other branches of the fishing industry show encouraging progress.

Halibut will have an increase of about 25 per cent.

Herring, the main market for which is still as bait for the halibut fishing, will show a larger increase as the export of this fish cured in different forms is, though, still to a comparatively small extent, steadily increasing.

Oulachons, the market for which is as yet mainly among the Indians, show an increase of more than 25 per cent over 1902, and there will be a similar increase in the oil from these fish, though the falling off in the salmon catch will seriously affect the total quantity of oil produced.

YUKON DISTRICT.

Inspector T. A. Stewart, of Dawson, forwards the following report on the fisheries of the Yukon Territory for the year 1903, together with statistics showing the yield and value of the fish as well as the number of boats and value of gear used, &c.

Owing to the limited market for the sale of fish the number of men engaged in the work has not been large, as the wages paid to labouring men in this territory are so high that they can make more money working in the mines than following the fishing industry.

The principal fish caught in the rivers and lakes of the Yukon Territory, are whitefish, lake trout, greyling, king and dog salmon. The largest quantity of whitefish and trout, are caught in Lake Laberge, situated about twenty-five miles north of the White Horse, which flows into the Thirty-Mile river. The whitefish taken from Lake Laberge are of a smaller species than those taken from the other lakes and streams. A large species of the whitefish is caught in the Pelly river, at the mouth of Mica creek, a small tributary flowing into the Pelly, thirty miles from its mouth. The source of Mica creek is Tataman lake. This lake is about twenty miles long and five miles wide and situated, in a north-westerly direction, about twenty miles from Selkirk and about thirty-five miles from the Pelly river.

Winter fishing has been tried in this lake, but as yet has not proved a success. Owing to the great distance from the Dawson market, about 175 miles, the cost of transportation was so high that the margin left for the fishermen was so small they could not continue the work.

Greyling are caught in the Klondike river and in the eddies along the banks of the Yukon river. They make their appearance about April 1st and remain until June. They reappear in the month of September and run until the close of navigation, or about the middle of October. They are a small species of fish weighing from one-half to one and one-half pounds. They are very plentiful in some sections and command a good price at some seasons of the year, especially in April, when they sell for $1 per pound, for a short time. There is a ready market for them in Dawson.

The king salmon makes its appearance from the first to the fifteenth of July, and runs from six to eight weeks. The run in 1903 was good for only one week, after which they became scarce. The market for the sale of them is very limited, consequently very few men are engaged in the work. When they first arrive at Dawson they are not of very good quality, owing to the great distance they travel up the Yukon and the number of shoals they cross. This causes them to be badly bruised and hardly fit for human food.

After the middle of August the dog salmon puts in an appearance. They continue to run until the close of navigation. This fish is principally used for dog feed. They are smoked and dried and kept for dog feed in the winter.

The market for all kinds of fish is limited as there is no outlet except the Dawson market, consequently very few people engage in the business.

Two new mining districts have been opened up this season, which has been the means of locating two large lakes, viz: Mayo lake in the Stewart district and Kluhane lake in the White Horse district.

The fishing laws have been well observed in the district during the year.

The following is a statement showing the kinds, quantity and value of the fish caught and cost of outfits, &c.

Kinds of fish.	Pounds caught.	Selling price.	Totals.
Whitefish	46,200	15 cts	$6,930 00
Trout	20,700	15 "	3,105 00
Greyling	9.750	20 "	1,950 00
King salmon	50,000	10 "	5,000 00
Dog salmon	20,000	3 "	600 00
Other kinds	5,000	10 "	500 00
	151,650	av prc. 12 cents	$18,085 00

Number of men employed	40
Number of licenses issued, 17 at $20	$340

Capital invested.

Number of boats engaged, 17 at $50 each	$ 850 00
Value of nets and fishing gear	3,400 00
Total	$4,250 00

Besides the above, a large quantity of fish is caught by the miners for their private use, which a miner's license permits. It is impossible to give anything near a correct estimate of the amount taken in this way, as the miners are scattered over the entire territory.

THE BEHRING SEA QUESTION AND PELAGIC SEALING.

Diplomatically this question remains unchanged, and the sealing business, so far as conducted by British subjects, continues to be regulated by the legislation which gave effect to the Paris Award of 1893.

The sealing fleet during the year 1903, aggregated twenty-four vessels, representing 1,717 tons register, with crews comprising 299 white men and 338 Indians, using 92 boats and 164 canoes. These twenty-four vessels were so distributed at different times during the season, that twenty-one of them participated in the North American coast catch, nineteen in the Behring Sea fishery, and six in the waters in the vicinity of the Russian seal islands. It will be noticed that the waters contiguous to the Japanese coast were not exploited by Canadian sealers during the past season. The catch may be summarized as follows :—

North American coast, including the Indian inshore coast catch	4,630
Catch in the vicinity of the Russian Islands	1,910
Behring Sea catch	8,161
Total	14,701

It may be of interest to note that, in addition to the above, a very important sealing industry has sprung up in the South Atlantic Ocean, in the vicinity of the Falkland Islands, during the past three years. In 1901 but one Canadian vessel operated in these waters, making a catch of 1,630 seals. In the following year three vessels engaged in the fishery, procuring 3,840 seals, and during the past season eight vessels operated there, which succeeded in taking 21,126 seals.

SEIZURE OF SEALING VESSELS BY RUSSIA IN 1892.

After a number of years of diplomatic correspondence, with a view to procuring satisfactory terms of reference on which to arbitrate the claims for these seizures, the Russian government has now agreed to a consideration of the claims without arbitra-

tion, and delegates have already been appointed by both the Canadian and Russian governments, who meet in London early in March, with the object of coming to some final arrangement in the matter.

CONCLUSION.

The fisheries work during the past year has been marked by several important features, as already pointed out in the preceding pages; but the department, and the officers of the department stationed in their districts in various parts of the Dominion, are still hampered to some extent by the uncertainty existing respecting the limits of federal and provincial authority in fishery matters. Several of the provinces express anxiety to see the present uncertainty removed, either by the assumption under proper legal authority of all fishery rights by the Dominion or by some well-defined settlement of the mutual limits of each.

Whichever step may appear most feasible, the final sanctioning of such step will be the benefit of the fisheries as a whole, and will without doubt more certainly and rapidly ensure their reasonable protection, preservation and improvement.

I have the honour to be, sir,
Your obedient servant,

F. GOURDEAU, Lt.-Col.,
Deputy Minister of Marine and Fisheries.

SPECIAL

APPENDED REPORTS

BY

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1903

SPECIAL APPENDED REPORTS.

I

THE DOG-FISH PLAGUE IN CANADA.

By Professor Edward E. Prince, Commissioner and General Inspector of Fisheries for Canada.

In view of the widespread alarm caused along the Atlantic coast of Canada by the incursions of hordes of dog-fish during the last four or five years, it seems opportune to give some account of the habits of the various kinds of miniature sharks collectively known as dog-fish. It is upon accurate information, such as the scientific expert has at command, that action can alone be justifiably taken by the government either of a legislative or of an administrative character in dealing with this pernicious plague. One species of dog-fish is above all others the main cause of the trouble: but the habits, occurrence, breeding, uses, &c., of the various species have much in common and for general information a brief account appears appropriate at this time.

For the last three seasons public attention has been prominently directed to the very serious damage done by dog-fish to the commercial fisheries of the maritime provinces. Such plagues of these detested 'wolves of the sea' are, of course familiar to all who have had any extensive experience with sea-fishery matters, and old fishermen readily recall visitations of hordes of dog-fish, at irregular intervals during the past fifty years, some of them no less menacing and extensive than the plague of recent years, and quite as lamentably bringing loss to our fishery enterprises. The alarmist paragraphs recently appearing in the newspapers indicate that a feeling almost of panic has arisen on some parts of the coast, and fishery officers and other government officials have altered the calm and judicial character of their customary reports to indulge in grave prophecies of the ruin of our coast and deep-sea fisheries. The serious damage done to fishing gear and the scarcity of fish in some localities owing to their being driven away or decimated by dog-fish cannot be denied: but there is no good ground for panic owing to the present plague of dog-fish infesting our Atlantic waters. A survey of the actual facts may allay some of the alarm and a knowledge of the characteristic habits of the dog-fish family will help to define some effective methods of dealing with the pest.

It may at once be stated that from the analogy of plagues of dog-fish on the coasts of Canada and other countries, there is no reason to regard the existing scourge as one likely to permanently afflict our fishermen and fishing industries. Of course a plague so extensive and general as the one referred to, is not of common occurrence: but in Britain and other countries, and indeed in Canada, the dog-fish trouble has been known before and a similar feeling of alarm has seized the maritime population when the scourge has previously appeared. 'All fishing will be unprofitable' declared a well-known authority in the maritime provinces recently, 'if the government does not devise some plan of coping with the evil.'

VARIETIES OF DOG-FISH.

What are these dog-fishes which are the cause of so much harm and dismay? The term dog-fish is carelessly applied to a number of fish mostly belonging to the shark tribe;

but classified under very different family names. The sea dog-fish have of course no relationship with the dog-fish or bow-fin of the great lakes, (a fresh water species ranged with the sub-class Ganoidei, and scientifically called *Amia calva*) but are really small species of shark differing, as stated, amongst themselves in points of structure and habit: but all characterized by their small size, rarely more than 4 or 5 feet in length and frequently 2 or 3 feet long only. In structure, appearance, and habits they are precisely the same as the large and dreaded sharks of the ocean, differing from them only in the same way that a small terrier or pug-dog differs from a Danish hound or a St. Bernard dog. These small kinds of shark are known as sea-hounds, blue, spined, spotted and smooth dogs, cat-sharks and nurse-hounds, *chiens-de-mer*, &c., and are in all respects like the large sharks, being included in the great Selachioid group of the sub-order Plagiostomata. All the sharks have a rounded cylindrical body, a rough granulated skin, the mouth cross-wise on the under side of the large head, and the tail not fan-shaped or divided into two equal lobes; but lengthened out and unsymmetrical in form. They are never flattened laterally or covered with shining scales like a salmon or herring; but elongated, cylindrical and tapering backward from the flattened head and shoulder region. The transverse mouth, like a cross-slit, has no protruding jaws like most fishes, while the gills appear as at least five lateral openings in the region of the neck, not covered by an operculum or gill cover, such as is found in the cod or salmon. The tail is a long irregular flap of skin, longer above than below *i.e.*, it is unequally lobed or heterocercal. The dog-fishes, like the large sharks are dull in external appearance and never exhibit the bright metallic appearance of the silver-scaled higher class of fishes.

Three or four kinds of dog-fish are very common and widely distributed, and one species, the picked dog or spiny dog-fish (*Acanthias vulgaris*, Risso, or *Squalus acanthias*, Linn.) is most abundant. It is to this species that most people refer when speaking of dog-fish, especially in connection with the depredations of dog-fish, although there are no less than nine or ten different kinds of dog-fish found upon the north Atlantic shores of this continent.

A very common species in Europe is the small spotted dog-fish (*Scyllium canicula* Linn.) a gaudily coloured fish 15 or 18 inches long, pale reddish brown above and sandy coloured below, and dotted dorsally with spots of dark brown. There is a larger closely allied species which is grayish brown above, variegated with blotches of blackish brown, while below it is dusky white in colour. Many dog-fish are of a uniform bluish or dusky gray tint above like the more familiar sharks, and of a dirty white colour below. The tope (*Galeus canis*, Bonap. or *Mustelus canis*) is very common on the New England coast, Ayres indeed stating that it is the only common shark in some localities. It is often called the smooth dog-fish; but is quite a different species from the smooth hound or skate-toothed shark called *Mustelus vulgaris*, Mull and Henle. All the dog-fishes are not equally destructive, and some kinds may be looked upon as beneficial owing to the war they wage upon the enemies of commercially valuable fish, while others are scavengers, clearing away debris and injurious matters cast into the sea. Such a species as the one named last, the smooth hound, is by no means a pest, and sweeping condemnation of the whole tribe is not justifiable.

Even Professor J. A. Allen inadvertently made the sweeping assertion that all are in the highest degree harmful. 'The dog-fish is the pigmy of the shark tribe, some species of which attain a length of thirty to fifty feet,' he says, 'they are all blood thirsty and carnivorous, some of the species being dangerous to human life, as the man-eaters of the warmer seas. The largest of our native species is the bone-shark (*Cetorhinus maximus*) specimens of which have been captured on the coast of Maine measuring from twenty-eight to thirty-four feet in length,' which species it may be here added is characterized by Dr. Albert Gunther as 'quite harmless if not attacked' (Study of Fishes, p. 322). In the same manner Pennant speaking of the lesser dog-fish of Britain states 'they are very numerous on some of our coasts and very injurious to the fisheries' whereas it is now known that they live chiefly upon shell-fish, crustaceans, &c., and do comparatively little damage to the commercial fish.

THE COMMONEST OR SPINY DOG-FISH.

The most widely distributed of all the dog-fishes is the picked dog-fish, also called the piked and the spiked dog-fish, and named *Squalus acanthias* or *Acanthias vulgaris*. The name is due to stout spines or spikes, one of which occurs in front of each dorsal fin, on the back of the fish. It is often called in England the 'Bone Dog' for the same reason. In colour it is of a slate colour, often brownish ash, with indefinite whitish spots fading with age, while underneath it is of a dirty white tint. It is rather larger then the dog-shark (*Galeus*) as it reaches a length of 5 feet, ranging from $1\frac{1}{2}$ to 5 feet and weighing from 5 lbs., to 8 lbs. No doubt Pennant was mistaken when be tells of specimens 20 lbs., in weight. Indeed he himself describes a greater dog-fish (*Scyllium catulus*, Cuv.) 3 feet 8 in. long which weighed 6 lbs., 3 oz. 'So light (he says) are the cartilaginous fish in respect to their size' yet he also records a tope (*Galeus canis*) which though only 5 feet in length is recorded as weighing no less than 27 lbs. It is a recognized fact that the female dog-fish are larger, as a rule, than the males of the same age. Like all the shark tribe the dog-fishes are essentially restless wanderers. They resemble wolves in their habit of roving in great herds or schools, and on account of their voracity and predacious character they soon exhaust the supply of food in limited areas either by devouring or by driving the fish away. No doubt the disappearance of fish accustomed to frequent certain localities may in many cases be attributed to the appearance of dog-fish. Thus they are compelled to move from place to place in search of new supplies of food.

DOG-FISH INCURSIONS TEMPORARY.

So strong is the hunting instinct that while in the infant stage and barely 6 inches long, they have been observed hastening in pursuit of schools of large herring much longer than themselves, which they could not have devoured even if they had secured the frightened fish. They rarely remain in numbers for long upon any particular part of a coast, though last year the dog-fish are said to have remained on some of the Canadian fishing grounds for over five months; but as a rule they move off after a stay of five or six weeks, striking in in the Bay of Fundy waters, for example, about July 1, and moving off in September. They cannot readily endure very low temperatures and are abundant in the warmer months and in warmer waters. Indeed only one member of the whole shark tribe is known within the arctic circle-viz. the Greenland shark (*Laemargus*). There is good reason to believe that the sharks and dog-fishes which as a rule occur sparingly along the shores of Canada are really wanderers from elsewhere, most likely they are from the southerly and warmer regions off the United States' coast where 60 years ago they were recorded as abundant, especially off Cape Cod. Or it may be that the vast hordes of dog-fishes, which have been infesting the coasts of the maritime provinces are transatlantic visitors, whose original haunts may be the western waters of Europe. On that western coast off Ireland and Scotland where the Gulf stream spends itself, these pests are frequently a serious trouble. Reports from the Maine and Massachusetts coasts indicate that the dog-fish plague has done serious damage there, and a widespread movement was on foot to forward in December (1903) large petitions to Congress in the 'cause of saving the nations of fisheries' as one of the leaders (Captain Jas. C. Gannon, of Boston), expressed it. If the schools of dog-fish which have in recent years infested our waters for so many months each year are really from the more southern regions, there is some reason for their migration north, and the possible cause will be fully explained later on. It is also apparent that without united international effort it will be impossible to exterminate the pest. If they produce their young in the winter months, in November and the two or three succeeding months, then any efforts in Canada will be only partially effective. The young brood must be exterminated as well as the larger mature specimens.

SOME KINDS PRODUCE LIVING YOUNG.

The dog-fish in its breeding habits illustrates a very exceptional state of things amongst fishes. Instead of depositing eggs in vast quantities it produces its young alive

and they are comparatively few in number. Some of the dog-fish like the two spotted species (*Scyllium*) produce eggs inclosed in a flattened yellowish or dark horny case or purse from each corner of which projects a curling stalk or tendril. Two longitudinal slits towards each end of the egg-case admit water to the young fish as it develops inside and when old enough it pushes through the opened end of the case, which opens only from within and permits the little creature to make its way out into the open sea. These eggs lie amongst weeds at the bottom of the sea ; but in stormy weather they are cast up on the beach and are known as sailor's purses or mermaids' purses. Others of the dog-fish tribe such as the tope and the piked dog-fish produce their young alive, the former bringing forth thirty young in May or June but the latter is said to produce not more than 10 to 20 in a season, and the time is probably late in the fall or in the early months of the year. Fishermen often declare that the dog-fishes breed at all times of the year; but this erroneous opinion is due to the fact that eggs of considerable size are found in the bodies of some species of dog-fish in nearly every month. The eggs are large and not unlike the hen's egg excepting that the large round yolk is of a pale cream colour, and the number produced is very limited. In Norway the yolk of the eggs of dog-fish and skate are used for puddings and other culinary purposes and they serve as well as fowl's eggs. The young fish are so hardy, well protected and strong, that it has been held by some authorities that out of the millions of eggs produced each spring by a female cod fewer survive and reach maturity than result from the few eggs and limited family of a dog-fish or viviparous shark. Dr. Fredrik M. Wallem furnished the following interesting estimate at the Fisheries Conference, London, July 5, 1883 :—'If only ten millions of female codfish have the chance to deposit their eggs, each fish would yield at least one million of eggs : and if only one per cent of these were hatched out safely every spring, there should be young cod enough to form a new stock for an average take of 25 millions of cod per season for some thousands of years.' If 1 per cent of young cod survive, probably nearly 100 per cent of dog-fish survive. Dog-fishes have been credited with exercising parental affection of an unusual kind similar to that of the blue shark, which an old author says 'will permit its small brood taken in danger to swim down its mouth and take shelter..... a fact comfirmed by Rondeletius. But this degree of care is not peculiar to the blue shark ; but is common to the whole genus including the picked dog-fish.' 'From the discovery of young dog-fish alive in the stomachs of adult members of the race' says a recent writer 'the habit of sheltering their young from attack has been attributed to them, as well as to the closely allied species the blue shark. But what sentimental observers of nature have ascribed to maternal affection, matter-of-fact people have assigned to cannibalistic propensities, and their conclusion is probably the juster of the two. Certainly the behaviour of these fish towards their usual prey does not warrant the assumption that they would spare the fallen member of their own community if it came to a pinch.' It is easy to see that a species so well able to look after itself immediately after its birth, and so bold and predaceous later in life has much greater chances of survival than cod, herring, haddock, salmon and similar species whose young are helpless and without defence.

ERRATIC PLAGUES OF DOG-FISH.

The increase in numbers of these fish if food sufficient to satisfy their voracity be abundant is a matter of course. Why they should at particular periods come like a cloud of locusts, and infest shores where as a rule they are not very common is less easy to understand. 'The movements of these schools are governed by laws which are as yet more or less unknown' says a modern authority, yet certain reasons can be adduced to account for these apparently erratic movements and some of the causes of their inordinate increase can be specified. A knowledge of these will aid effectively in applying remedies, and I shall deal with them in their proper place later on in this report.

Long ago the coast of Newfoundland was visited by hordes of dog-fish, but they disappeared and became no longer the serious menace to the fisheries which they were while infesting the fishing banks. In 1858 an army of these pests descended upon the

coast of Banff on the east coast of Scotland, and in reliable records it is stated they covered an area of between twenty and thirty miles, the water being alive with them. At one haul of a drag seine no fewer than 20,000 of the fish were captured. At a moderate computation eight and a half millions of these fish moved along the shores of Banff ruining the fisheries by devouring the valuable haddock, &c, and tearing up nets and gear. A Stonehaven fisherman, Mr. John Murray, no doubt was referring to this serious visitation in his evidence in Scotland before the Trawling Commission (1881) when he described the enormous numbers that 20 or 25 years before ravaged the east coast of Scotland. He said that the loss of netting, lines and fish was so extensive as to threaten to end all kinds of sea-fishing. In 1874 and 1875 there was a complete scourge of dog-fish in Donegal bay and on various portions of the west coast of Ireland, almost ruining the hopes of the fishermen; but the pests passed away or at any rate diminished, and were of no serious moment until 1890, when as naturalist on the survey of the Irish fishing grounds I found these pests once more increasing. The Irish inspectors indeed say in their report. 'The presence of enormous schools of dog-fish on the coast this summer (1890) was most unfavourable for line fishing, and from accounts received from the west of Scotland it seems that these pests of the ocean injured the fisheries a long way to the northward.' The experimental fishing in which in that year (1890) I took part was seriously interfered with by the hovering schools of dog-fish, which not only destroyed the bait; but ate large numbers of the cod, ling and other fish upon the lines, and damaged more than they ate, while not content with carrying off the bait, they in a large number of cases snapped off the snood and carried the hook and snood away with them. We hauled up great numbers and as is their habit they twisted their writhing bodies so hopelessly in the snoods and line that they could with difficulty be extricated and cast upon the heap of fish offal.

DAMAGE TO NETS AND GEAR.

Mr. E. W. H. Holdsworth wrote (in his well known work on British Sea fisheries): 'Dog-fish are the great enemies of the long-line fishermen, and in some season destroy immense numbers of cod, after they are hooked, and before the line has been hauled in. When the water is clear, the hooked fish can be seen at considerable distance, and their struggles to get free only make them more likely to attract the attention of the shoals of prowling "dogs." It is a curious circumstance that not for fifteen or sixteen years had there been a dog-fish scourge in Ireland until 1890, and I cannot find that for the last thirteen or fourteen years a similar serious abundance of these enemies to the fisheries has been recorded. Again the supply of mackerel did not seem to be seriously affected by the hordes of dog-fish, which were principally of the detested 'picked' species. In 1889 they had been a cause of serious loss on the Scottish coast and in that year and the following year the herring fishing in the north of Scotland and in the south of England was almost a complete failure, while the pilchard fishery off the Cornish coast was similarly a total failure.' On our own Canadian coast the dog-fish have never been a source of very serious trouble, until 1898, as one of the most experienced officers in the Department of Marine and Fisheries reported 'many years ago the older fishermen remember having been plagued with them as now.' The extent of the damage they can do when they appear in numbers is incredible, but their destructiveness begins at the earliest stage of their existence for, as already pointed out, dog-fish six inches long have been seen pursuing herring far larger than themselves. Hunting, as they do, in vast schools, their ravages when adult are incredible. They will not only take the bait set for cod, haddock and other fish; but tear off the captured fish or render them unsaleable by biting a piece out of the side. They often take the bait and hook; but are rarely secured by the hook piercing the jaws for they suck it down, as it were, gulping it into the capacious throat so that it become fixed fast deep down, sometimes indeed in the stomach. In such case it cannot be unloosed or pulled out and to add to the difficulty, the fish will twist the lines about their bodies, writhing about, so that it may take hours to undo them. Trawls or long lines as well as hand-lines, suffer seriously, for the dog fish possessing rows of sharp lancet-like teeth, often bite off the snoods and thus free themselves, though the imbedded hooks must cause them much inconvenience. The net-fishing also suffers, the valuable mackerel seines, the floating drift nets and

trammel nets, all being rent and torn, and the valuable fish taken, bitten and destroyed. 'Whilst the nets are in the water' writes Mr. Holdsworth in his account of the British herring drifting, the warp is occasionally hauled in till the fish net is reached: this is called the 'look on' net, and by examining it some idea may be formed of whether many herring are about, or the dog-fish are numerous. The latter at times are very mischievous, and do a great deal of damage to the fish and the nets, if they are left too long in the water.' Professor Brown Goode refers to this in a remarkable instance he gives of a government experiment 'a trawl line upon which were five hundred hooks set (he says) by the United State Fish Commission party of Gloucester, Mass., in 1878, had nearly one hundred and forty hooks bitten off by the dog-fish at one setting.' Their rapacity is such, a recent American writer notes, that "a pack of 'dogs'" will literally clean up an entire area of all marine life and carry away all nets and gear that may be operating in the vicinity. It is high time the many theories floating around regarding the extermination of the fish and utilization of the product were crystallized into a determined crusade against the common enemy of the fisherman.

USE AS FOOD.

Their flesh is usually regarded with aversion though in the Hebrides the Smooth Hound (*Mustelus*) a comparatively inoffensive and non-predaceous member of the dog-fish group is said to be esteemed as a delicacy on the table. It lives upon crabs, lobsters and similar excellent food. The Hebredean fondness for its flesh, says one authority is however, rather an acquired taste, though other writers speak of the flesh of dog-fishes as rather an important article of food amongst the crofters and islanders, and the piles of dog-fish skins in front of their cottage doors is certainly a familiar spectacle. Mr. Spotswood Green, H. M. Inspector of Fisheries for Ireland, in a report some years ago spoke of the dog-fish tribe as follows:—

Dog-fish, including topes, picked dogs, and small-spotted dogs, are only too abundant on the west coast. They enjoy an evil reputation, not undeserved in the case of the two first species, for destroying more valuable fish, whilst all three kinds are a great nuisance to the line fisherman: they take greedily any bait that may be offered, forestalling more valuable fish, and mutilate many of the latter which may have been hooked, whilst, when captured themselves, they are not known, as a rule, to be of any value to the fisherman. The small-spotted dog is probably of very little value. It is sometimes used for cleaning woodwork, its skin making an excellent substitute for sand-paper, and, according to Couch, its flesh is more or less palatable. The liver, however, is small. The picked dog is more valuable. Whilst its flesh is eaten in a dried condition by the Cornish fishermen, and to some extent, as I am told by Dr. Scharff, also on the south-west coast of Ireland, the liver is large, and yields a supply of oil of a valuable nature. Mr. Cyril Allies, of Inishboffin, tells me that upon his islands the oil is used in the preparation of wool for weaving, and also for lamps. It appears to command a price which would at all events make it worth while for the fishermen to save the livers of any of these fish that might be caught, while the employment of improved methods of refining would materially increase the value of the product.

Doubtless the offensive odour of the tope would deter most people from eating its flesh. But the liver is very large, and is valued upon the Boffin islands. I think there is no doubt that the oil extracted from these two fish might be made to afford a considerable set-off to the harm which may be done by them.'

Pennant in his British Zoology, 1769, p. 88 refers to the tope in very uncomplimentary and sarcastic terms 'Its skin and flesh (he says) have an offensive rank smell,' therefore we suppose that Mr. Dale (in his History of Harwich) give it ironically the title of Sweet-William! "A closely allied form the Angel Fish (*Squatina squatina*, Linn.) was in ancient times esteemed as food. Archestratus in his account of the fish of Niletus gave first place to the Angel Shark or Monk Fish amongst the whole tribe of cartilaginous fishes for the delicacy of its flesh.' To our modern tastes these fishes are without exception coarse and rank as an edible article. There is little doubt that if the flesh be entirely removed from the skin with such scrupulous care that it is not in any

way tainted with the offensive odour referred to, it is after salting quite an agreeable edible material, and no doubt could be cooked and put up in agreeable form, either canned or ground up as a fish-flour. In Nova Scotia and especially on the Cape Breton shore, said Dr. M. H. Perley, the dog-fish are often dried as food for cattle in great quantities and in winter it is fed to pigs which are said to thrive well upon it, while cows also show a great liking for this peculiar food. In Ireland, Scotland and Norway, dog-fish have been turned to account in that way. Indeed Mr. P. L. Simmonds says that in Norway it is considered a delicacy. It is also dried, he says as split stockfish for consumption in the country and for export to Sweden where it is greatly appreciated.

OIL AND OTHER PRODUCTS.

The most valuable product is the oil yielded by the liver, though the tenacious extract from the gristly skull and skeleton, and from the skin makes a most valuable glue, while the entrails and offal are convertedinto a useful fertiliser for the land. It usually takes the livers of 9 or 10 dog-fish to produce 1 gallon of oil, which brings at present from 30 cts. to 40 cts. per gallon.

The liver in all the shark, dog-fish and skate tribe is a large organ and full of oil. 'The liver (says Simmons) is exceedingly rich and makes a very fine oil.' On the Pacific coast a number of oil factories have been operated, some of them for over a quarter of a century, and one or two in northern British Columbia (on Queen Charlotte and Porcher Islands for example) have relied almost solely on dog-fish, with the addition of rat-fish in smaller quantities and the basking shark. The Inspector of Fisheries for the province in his report for 1879 spoke of the starting of the Skidegate Oilery as follows :

Skidegate Harbour on Queen Charlotte island, is on the inner shore, at the south-western angle of Graham island. Here there has recently been established a station for the extraction of dog-fish oil, in which, including the vessels attached and the necessary plant, a capital of nearly $25,000 has been invested. The Skidegate Oil Company, by which name the concern is known, commenced operations last spring; but the summer was well advanced before their buildings were completed, and they were in a position to work effectively. About thirteen thousand gallons of oil were secured—in itself an inadequate return for the outlay, as regards the present year, but, in conjunction with the experience acquired, affording to the proprietors a confident hope for the future. The oil is prepared at this establishment with great care, and a product of perfect clearness obtained. The livers of the fish (the only part employed) are first steamed, and the oil, after separation, is again subjected in another vessel to a certain degree of heat, by which very watery particles are dissipated. After being thus refined the oil is put up in cans of five gallons each, two of which are packed in a case, as is ordinarily done with coal oil. There is, I understand, a considerable local demand for this oil for lubricating and illuminating purposes.

In the following year Inspector Anderson again reported upon this enterprise saying :

'The oil station of the Skidegate Company, referred to by me last year as having been then recently established on Queen Charlotte island, has been moderately successful and is apparently remunerative. The oil prepared by this company being of perfect clearness and well refined, is in demand both as a lubricator and for lighting purposes. Of the crude dog-fish oil, prepared on a small scale at various points by the numerous white and native fishermen, large quantities are consumed locally, and especially at the logging-camps.

At these last the employment of oil to lubricate the ways is indispensable, in order to enable the teams to drag the gigantic timber to the water for rafting. Beyond the local demand the surplus is shipped to London.'

The piked dog-fish and the tope are found plentifully all the way from Nasse river to Puget sound and at the present time at least three B.C. factories are occupied in utilizing these fish, the oil from the liver being highly valued for machine purposes while the oil from the other tissues is inferior and used when a cheap common oil is required. As is well known the rat-fish or chimaera, very common in our Pacific waters, yields oil of the finest and most valued kind. The quantity of fish secured and the corresponding yield of oil, &c., varies most remarkably from year to year. Thus in 1883

the total yield of fish oils in the Dominion exclusive of dog-fish oil was 222,018 gallons (valued at $89,886) and in that year the refined dog-fish oil produced amounted to 40,000 gallons (valued at $22,000), but in 1884 the dog-fish, porpoise and other fish oils fell to 16,781 gallons (valued at $6,766.89) while refined dog-fish amounted to 45,000 gallons (valued at $24,800). In 1901 no less than 765,746 gallons of fish oil (including refined dog-fish and all the other fish oils) valued at $22,500 were produced in the Dominion, and of the total product probably one-third was dog-fish oil. In the U.S. portion of the Straits of Georgia, and Puget sound waters, dog-fish were formerly captured in great quantities for oil manufacture: but it has declined like the sister industry, viz.: the herring oil industry carried on in the same region, the reason given being on the one hand the low price of the oils produced, though the dog-fish are regarded as being as plentiful as ever, while on the other hand it is claimed that the dog-fish have been so reduced that the men found themselves able to make only very small captures and it did not pay to pursue the dog-fish fishery.

DOG-FISH AND SHARK FISHERIES.

Mr. P. L. Simmons in his interesting work 'The Commercial Products of the S a thus describes the dog-fish fishery on the coast of Norway where for a thousand ye rs the varied fishery productions of the sea have been zealously reaped. After an account of the shark fishery proper, he says:—'Of the remaining species of the shark tribe, there are only two besides the foregoing, which are of any importance on this coast. The first is the picked dog-fish, *Squalus acanthias*, which in former times was in great abundance along the whole coast from Gothenburg, and afforded lucrative employment to the fishermen. At present the fishery is carried on during the whole of the summer from the Naze to the North Cape, in the fiords as well as along the coast.

'This is a ravenous fish, which is caught in various ways. About midsummer he is observed to swim near the surface, and can then be taken in nets, as well as with lines, precaution being taken to protect the line by proper 'serving' for a short distance beyond the hook, to prevent its being bitten off. This fish is eaten sometimes fresh. but must be skinned before being cooked. When cooked in this way it is considered rather a delicacy. - - - The other species is called in Norway the kulp or hoastorsk (*Squalus niger*) and is the smallest of the shark tribe. It is met with in all the deep fiords along the coast where it commits great mischief by nibbling off the baits from the deep-sea lines which are set up for the ling (*Molva*) and the torsk (*Brosmius brosme*). Lines with single hooks are never laid to catch this fish; but at the end of summer and autumn, and in some fiords, all the year round, instead of a single hook, they employ 10 to 12, placed one above the other, baited with half decayed or tainted fish. The depth of water selected is 60 to 100 fathoms. As the kulp is a sluggish fish, bites lightly and is small, some experience is required to know when he bites, and is secured on the hook, especially if there is any wind. The line, however, is not brought up each time the bite is felt, as there are many hooks; a simple tug is given at every supposed bite. The fish being once hooked generally remains quiet, and 8 or 10 fish are usually found caught when the line is drawn up. As this fish comes in schools and take the bait freely, an experienced skilful fisherman will occasionally, during a single night, obtain a rich booty. The kulp will not bite during the day. It is not eaten, but sought after exclusively for the liver, which is unusually rich, and yields a very superior kind of oil.' Mr. Simmonds follows these remarks with a reference to the allied shark fisheries in Russia, Australia and India.

'In the bays about the peninsula of Kola, Lapland, the shark fishery is now vigorously carried on by the Russians', he wrote, 'the species chiefly taken is the *Scymnus borealis*. The fishery is only prosecuted off the coast in small undecked boats, manned by four men. In autumn the sharks are in the best condition and yield the most oil; in summer they scarcely afford any. Some of the large species of basking sharks will yield as much as 1,600 lbs. of oil. The crude shark oil sells in Russia at about 6s. the poud of 36 lbs., and when refined is worth double that price.

Sharks are caught on the New Zealand shores in great numbers, during the

months of November, December, and January, by the natives, who use them as an article of food. The fins can be procured at a very moderate rate, and fetch a good price in the China market.

The government of the colony of Victoria having published a scale of rewards for the capture of sharks, the pursuit has become a frequent occupation among the fishermen and boatmen of Hobson's bay. In one week in May, 1877, over 3,500 sharks were captured by the fishermen of Sandridge, some of whom earned from £3 to £4 per day One immense shark, measuring between 15 and 16 feet in length, was caught in the bay.

It was stated some years ago that there were 13 boats, manned with 12 men each, constantly engaged in the shark fishery at Kurrachee. One boat will sometimes capture at a draught as many as 100 sharks of different sizes. The average capture of each boat probably amounts to about 3,000, making the number of sharks taken not less than 40,000 a year. The great basking shark, or mhor (*Cetorhinus maximus*), is always harpooned ; it is found floating or asleep near the surface of the water. The liver of a large fish of this species yields there eight barrels of oil. The oil is of a very low specific gravity.

The fish, once struck, is allowed to run till tired ; it is then pulled in, and beaten with clubs till stunned. A large hook is now hooked into its eyes or nostrils, or wherever it can be got most easily attached, and by this the shark is towed to shore ; several boats are requisite for towing. The mhor is often 40, sometimes 60, feet in length ; the mouth is occasionally four feet wide. All other varieties of shark are caught in nets, somewhat like the way in which herrings are caught at home. The net is made of strong English whipcord ; the meshes about six inches ; they are generally six feet wide, and from 600 to 800 fathoms, or from three-quarters to nearly a mile in length. On the one side are floats of wood about four feet in length, at intervals of six feet ; on the other, pieces of stone. The nets are sunk in deep water, from 80 to 150 feet, well out at sea.

They are put in one day and taken out the next, so that they are down two or three times a week, according to the state of the weather and success of the fishing. The small sharks are commonly found dead, the larger ones much exhausted. On being taken home, the back fins, the only ones used, are cut off and dried on the sands in the sun ; the flesh is cut off in long strips, and salted for food ; the liver is taken out and boiled down for oil ; the head, bones, and intestines left on the shore to rot, or thrown into the sea, where numberless little sharks are generally on the watch to eat up the remains of their kindred. The species chiefly caught are the *Rhyncobatus pectinata*, *R. lævis*, and *Galiocerdo tigrina*.

Owing to the large size of the sharks from which the livers are taken, the Malabar fishermen, unlike those of Sind, are unable to capture them with nets. Putrid beef or porpoise flesh is employed, large pieces being buried for a day or two previous to being used. The hook is attached by a chain to the line whilst the fishing is carried on.

A shark fishery has been attempted on the north shore of the Gulf of St. Lawrence for the ground shark *(Carcharias littoralis)* but the total number per season captured, is very small, less than 50 probably all told. Some fishermen secured one only, others two or three, but six was the largest number taken by one fisherman in 1903. Their weight ranged from 200 pounds to 600 pounds each, 280 or 300 lbs. being a common weight.

UNCERTAINTY OF DOG-FISH SUPPLY A DIFFICULTY.

The main difficulty in carrying on a shark oil industry is the irregularity and uncertainty of the supply. The same difficulty arises in regard to the dog-fish. If the schools of dog-fish, at present roaming along our coasts could be turned to commercial account by profitable utilization, two objects would be gained, for the capture would afford a sufficient stimulus to the fishermen if a money return was secured for the labour and cost of fishing for them, and, secondly the continuous slaughter being general along the coast their number must inevitably be reduced. The reduction in number of these pests is by no means an easy matter, and their total extermination practically impossible. As Professor McIntosh (in his 'valuable and comprehensive work 'The

Resources of the Sea') has pointed out:—'The independence of nature in the sea and man's helplessness are shown in connection with the swarms of dog-fishes that occasionally occur on the north-west and southern shores of the British Islands, and which ruin his captured fishes and the nets and gear.'

ESTIMATES OF LOSSES DUE TO DOG-FISH.

The direct harm that a plague of dog-fish can do is well nigh incredible. Thus in 1882 the pack of cured herring in the Shetland Isles was 134,000 barrels, whereas in 1888, owing to the presence of dog-fish, the total quantity fell to 99,000 barrels, and in 1889, even lower *i. e.* not more than 47,000 barrels or only about one third of the pack two years before and representing therefore an enormous total loss.

Many similar cases could be instanced; but the facts as they exist to day in Canada are startling enough. The statement by Mr. Copp, M.P., in the House of Commons, Ottawa, on October 28 last, sufficiently indicates the grave nature of the matter. 'The dog-fish have become a serious menace to our fishermen in Nova Scotia,' he said. 'If the problem is not dealt with in some way it is going to seriously affect the fishing industries of the Dominion - - - The *Halifax Herald* of October 3, shows how the dog-fish is helping to destroy the industry in Nova Scotia. This newspaper tells of 'half a million shortage in our western Nova Scotia fisheries.' It is estimated that west of Halifax (that is in the counties of Lunenburg, Shelburne, Queen's, Yarmouth and Digby) the fishery catch is $400,000 to $600,000 below the average year.

A recent newspaper notice once more expresses this feeling of alarm. 'Every week brings reports from widely different points about the trouble by dog-fish, which are far more formidable pests by sea than the potato-bug is by land. Therefore some people contend that the government should take the matter up and do something to exterminate the invading swarms of dog-fish, or make them scarcer. Now let it be remembered that the fisheries department is not altogether unmindful of the loss suffered each year from this source. The officials, as we remarked before, have been instructed to collect information and tender advice. That was the proper thing for a preliminary step, and the parties applied to should have responded to the best of their ability, but it cannot be learned that many of them did so.'

DOG-FISH FLUCTUATE.

It is an easy matter to urge their extermination, but to decide upon an adequate and certain cure for the plague is less easy. Without some knowledge of the habits and mode of life of the dog-fishes it is useless to frame any plan of procedure. Like all the shark tribe, as already pointed out, the dog-fishes are essentially wandering in their habits. They roam about in the most puzzling way. Here one day, gone next, ever restless and hastening from one area to another, stimulated by the wolf's love of 'hunting' and driven no doubt by a voracious appetite to seek new supplies of food. They have been known to infest an extensive portion of coast for a few hours only and then move on. In the Bay of Fundy the schools have usually made their appearance in the last season or two on or about July 18, and the coast was never free from them for six or eight weeks. In some places their sojourn was abnormally long, and off the Cape Breton shores they were never really absent for the long period of five months during the present year (1903). As a rule dog-fish haunt a locality in unusual numbers for a comparatively short time only, just as the swarm of blackfish or pilot whales (*Globiocephalus melas*) which in 1891 appeared in such numbers off the Cape Breton coast, that the quantity of fish oil produced suddenly increased by no less than 11,000 gallons. Inspector Bertram, the Dominion officer in that district, referring to the large output of oil, said:—

'The large increase, however, is not made up altogether of cod oil, but of blackfish oil; large schools of these fish having visited our grounds this year—not for thirty years were so many seen and taken by our fishermen. These fish are, however, unwelcome visitors, as they frighten all other kinds of fish off the coast, mackerel and herring

particularly, in addition to the large numbers that are devoured by these black monsters. They are considered more of an injury than a benefit to our fishermen.'

A grain of comfort can be gathered from the fact that no one can foretell the date of the departure of these detested enemies to our fisheries. They come suddenly and they depart suddenly. The causes can be surmised; but to most people they are a mystery. Their erratic appearance and disappearance has been noticed in various countries. It was well brought out in some of the evidence given before H. M. Trawling commission, 1884, especially in that of Mr. J. Murry, of Stonehaven, Scotland, who said in the course of his remarks :—

'Of all fluctuations in the abundance of scarcity of any kind of sea-fish on this coast, that of the common sea-dog, or, as it is sometimes called, the English shark, is the most remarkable. About 20 or 25 years ago these fish resorted in enormous numbers to the east coast of Scotland. And yet, although the numbers of these fish had not been reduced by either line, net, or trawl fishing, still they have almost completely disappeared from this coast, and no good reason has ever been assigned for their disappearance. If these dog-fish had been of the same commercial importance as cod, ling, haddock, &c., their disappearance would have been a serious calamity to the fishing industry, whereas their continued absence is of the utmost advantage to the fisheries sea. That the sea abounds with life and living creatures is generally well understood, but the conditions of subsistence in the sea are frequently overlooked, viz., that all the larger fish exist by preying upon fish spawn and on their smaller neighbours, without much regard either to species or variety. Fish are generally of cannibal habits, and by this seemingly wasteful arrangement of a natural law, the prolific fecundity of sea-fish is kept in due check, and the balance of ocean life is thereby maintained and perpetuated.'

In my report (1898) on the 'Fluctuations in the Abundance of Fish' I referred to the increased numbers of dog-fish which between 1883 and 1893 frequented the Grand Manan and Passamaquoddy waters. I pointed out (p. 13) :—An increase in the number of sharks and dog-fishes in a particular area may have the most baneful results, entailing not merely the wholesale slaughter of valuable fish, but their dispersion and flight to other areas, and frequently extensive injury to the nets and other fishing gear. Over thirty years ago while mackerel were schooling in vast numbers in Massachusetts bay, great schools of blue fish, 16 to 20 pounds weight, suddenly made an incursion and devoured in quantity the smaller fish. The blue fish had been scarce for many years, and their unexpected advent had a most disastrous effect upon the mackerel fishery. Possibly a scarcity of food elsewhere had caused these larger fish to forage in this way.'

The splendid fishing grounds off Grand Manan, N.B., deteriorated some years ago on account of the inroads made by sharks, dog-fish, &c., and in an official report (1893) the matter is stated as follows :—

'The decrease in the cod catch has been gradual for the last ten years, which can only be attributed to the marvellous increase in the schools of dog-fish and sharks in the Bay of Fundy.

'The herring fishery is one-third less than last year, not from a scarcity of herring, but from the manner in which they have been harassed by the dog-fish, pollock and silver hake.'

There are records that, in 1729 and again in 1756, more than a quarter of a century later, the Welsh shores of Carnarvon and Anglesea were infested by great schools of the huge basking shark. For several seasons, about the two periods mentioned, they abounded in the warm mid-summer months, and about the month of October they disappeared. Pennant, the naturalist, writing in 1769, says that they had at that time entirely quitted the coast, at any rate scarcely more than a single one appeared along the coast referred to. Can it be that these schools had wandered from their accustomed grounds off the northwest coast of Ireland? In 1766, vast numbers of dog-fish appeared along the east coast of England, but they remained outside the usual fishing limits of small boats and interfered little with the inshore operations. In December, when the haddock fishery was at its height, the fishermen secured large takes of haddock, small cobles taking two tons a day; but outside the 3-mile limit nothing could be caught but dog-fish with which the outer waters were alive. On the Pacific coast dog-fish have for-

saken some of their accustomed haunts, as Mr. J. P. Hammond, in a letter to the late Prof. Spencer Baird, said :—'The dog-fish, which we catch for the oil contained in its liver, has become entirely extinct on some of the old fishing grounds and on many others where a man with 500 hooks would take from 300 to 500 dog-fish in a night, he would not take that many in an entire season now.'

WHY DOG-FISH APPEAR.

To account for their sudden appearance in great numbers along our coasts various causes are alleged. It has been argued that our inshore waters have altered appreciably in their average temperature owing to the equatorial current flowing north and the polar current flowing south in the western Atlantic having become modified. The movements of ice along the eastern shore of Canada have altered materially for several seasons, affecting very markedly the hair-seal industry of the Labrador and Newfoundland coasts. It is certainly true that quite a number of southern species of fish have been noticed in our Canadian waters, especially Scomberoids from warmer waters. May not such a change, oceanic in character, and possibly to be traced to some planetary aberration, have resulted in the movement north of southern species in unaccustomed numbers? The incursion of these miniature sharks would find some explanation in that way. Others have pointed out that the vast quantities of offal or gurry thrown overboard by the deep-sea fishing boats on the cod banks, &c., may have attracted north the schools of dog-fish. Certainly the scattering of food attractive to scavengers such as the dog-fish might in some degree account for the increase, and special restrictions were long ago urged *re* the disposal of offal not only in New Brunswick (Bay of Fundy), but as far north as the Labrador coast.

It was argued that the throwing of offal in large quantities into the sea was proving injurious to the schools of cod, herring, mackerel, &c., which each season resorted to these polluted areas. The late Captain 'Gat' Howard was so impressed with the vast waste of fish offal in northern areas, off Labrador, that he tried to carry out a scheme for securing and utilising these materials annually thrown away in the great cod fishery referred to. This waste is proportionate, of course, to the takes of cod in these amazingly prolific areas, whose abundance of fish-life may be gathered from such facts as those recorded by departmental officers, who patrol these northern waters. Dr. Wakeham, in his report for 1892 for example tells us :—

On the north coast and Labrador the cod fishery was in many places an almost phenomenal one. The fish struck early, and remained abundant well in shore until a much later date than usual in the fall. As showing in some degree the enormous bulk in which the cod sometimes strike on this coast, I would mention the following instance: On Wednesday evening, June 29 last, I anchored the 'La Canadienne' in five fathoms of water off Sheldrake Cove. This cove is about a mile long, and from the anchorage the water shoals gradually to the beach; the bottom is smooth, of fine sand and gravel. I had no sooner shoved clear of the ship in my gig, and the crew had only given a few strokes of the oars, when we ran the boat 'aground' in a mass of codfish. This school or body of fish, filled the cove. The fish on the surface were being forced or lifted out of the water by the mass below. This condition of affairs existed all the way to the shore, where the inshore fish were being driven upon the beach by the weight of those behind. It was with difficulty that we forced our boat through this mass of fish to the shore. As far as we could sound with a 17-foot oar the fish were solid to the bottom. A similar condition of affairs was reported in many other smaller coves in the neighbourhood.

It is only on the north coast, in the neighbourhood of Sheldrake, Thunder river and Natashquan, and on the Labrador that the cod are known to school inshore in this way. When this happens the fish are schooling after the capelin, and they will not take the hook and line. Out of such a volume of fish as this condition of affairs would represent, all that is taken in one season by our fishermen would be a bagatelle, and it is when the schooling inshore exists that seines and trap-nets are of use. The fish are there in illimitable numbers, they won't take the hook, and it is only with the 'twine

that they can be taken. Fish in a school are all of a uniform size. The simple trap-net affords at these times the most reasonable way of taking the fish.

OFFAL ATTRACTS DOG-FISH.

The sense of smell appears to be very acute in the dog-fish and shark tribe and even the scattering of ground-up bait, called " pumice " in such areas as the Gulf of St. Lawrence, must have its effect in attracting these hated enemies of the fishermen. A recent writer, on the pursuit of angling as a sport in the sea, says of the necessity of using scattered bait to attract fish ' only where there are sharks or dog-fish in the neighbourhood should ground bait be spared, for its attractions may be more potent than is good for the angler's tackle.'

Offal floating in the water is more easily secured by sharks and dog-fish than actively swimming prey like herring and mackerel, which form so large a part of their food. I have seen a huge shark, 25 to 30 feet long, lazily remaining under the platform of a Pacific salmon cannery, near the offal chute, and turning on his side, mouth almost directly upward, he received the stream of fish heads, tails and offal as it poured out all day long from the factory. This huge shark preferred this indolent mode of being fed to the more laborious method of feeding himself by actively pursuing schools of living fish. The same applies to dog-fish, and no better method of attracting these detested creatures could be devised than scattering fish offal in immense quantities along the maritime shores.* The picked dog-fish feeds, said Dr. R. H. Storer, upon offal and garbage thrown down by the fishermen, it clears the ground so perfectly that it is called the " Scavenger of the Sea ".

TEETH OF DOG-FISH.

Some dog-fish like the smooth hound (*Mustelus*) have teeth flattened like plates of mosaic, and fitted only for grinding up hard shelled animals, mollusks, crabs, &c. : but the picked dog-fish like so many of the shark tribe is well provided with sharp, rapacious teeth. As one popular writer upon the varied fishing industries of the sea has said :

The jaws are a perfect study 'in some species the adult members have six rows of teeth in each jaw, each tooth being pointed, the points being directed backwards, so as to form a veritable barb. These teeth, which in their normal state lie flat against the jaw, are erectile at will, and when the animal darts on his prey they start on end in the same manner that a cat's claws are protruded from their sheath. When a shark seizes his prey he is forced to bolt it, whether willing or not, for the arrangement of the teeth will not allow him to disgorge his food, which can only pass inwards to the stomach. His position in the water is also more or less awkward, and compels him to be quick at his meal. He approaches the object he intends to swallow, and just before reaching it, suddenly turns on his side and back, and then grabs at his prey from that position. This is necessary, because his mouth is too far under his head.'

FISHERMEN OFTEN SCATTER YOUNG DOG-FISH.

Other supposed causes of the abundance of dog-fish may be alluded to. Thus, it has been pointed out, that the failure to kill the adult females and the active young, when caught, is responsible to some extent for their increase. The cause may appear less serious than others, yet it is by no means trivial, and should certainly not be ignored. The commonest sight on board a fishing vessel is that of procuring a brood of young dog-fish by cutting open the body wall of a parent dog-fish. The picked dog-fish, as already stated, produces its young alive. Dr. M. H. Perley in his account of the New Brunswick fisheries states that : 'In August, 1849, at Point Miscou, in the Gulf of St. Lawrence, the writer opened a female fish in a gravid state, and found the young perfectly formed ; they were placed in the water with the sac attached, and appeared quite

*These fish scent their food at a great distance being readily attracted, as Dr. Günther has pointed out, by the smell of putrefying bodies, blood, &c.

lively.' The number of young seems to vary, 9 to 13 or even 19 at a birth are the numbers recorded. I have myself seen fifteen in a picked dog-fish. The fishermen, especially fisher boys, almost daily capture numbers of dog-fish, rip them open, and drop the living brood of young into the sea. It is a common amusement to do this, and to watch the active and well armed young, 5 or 6 inches in length, swim vigorously away. Each has a bag of yolk hanging like a sac under the body, and this supply of food gives them additional security; but though thus provided they have the predaceous instinct very strong, and pursue living fish quite readily. Dog-fish, like all the shark tribe, produce each season very few eggs; but nature has defended the young in the most effective manner. The viviparous species extrude their young in a condition well fitted to secure them from harm. They are of large size as compared with newly hatched fish like cod, salmon, &c., and with their hard rough skin, spiny back, powerful tail, and precocious nature they are well able to look after themselves. No greater folly is possible than to assist these vermin into the world, and scatter them in the very areas, where the more valuable food fish occur. It is artificial fish-breeding of a most successful kind; but it is a most pernicious course for a fisherman to adopt. Its harmfulness increases with its success.

DOG-FISH SHOULD BE THROWN ASHORE.

If the parent dog-fish, with their unborn brood of young, ready to emerge into the sea, were brought ashore, it would be one of the most effective steps possible to reduce their numbers. Yet it rarely, if ever, occurs to a fisherman to do this. Instead of that the young are freed and the parent fish, mutilated in some way, are as a rule also replaced in the water though mutilation is of little moment to a dog-fish. They are so hardy that even after the tail is cut of or the head badly injured they will swim off most actively. A shark after being most cruelly injured has been known to immediately return to the bait and be captured a second time. Owing to the hardy and well protected character of the young, the offspring of a single female, though few in number, may approach, as already stated, the progeny of a cod or salmon which produce eggs by thousands or even by millions each year. Fishermen hold that dog-fish breed all the year round but this is not so and the fall and winter months appear to be the principal time.

UNITED STATES CO-OPERATION NECESSARY.

Suggestions as to the best means of getting rid of the dog-fish pest have not been lacking. Many of these are admirable, but certain points have been overlooked, by most parties, to which allusion may now be made. In the first place, it is desirable that any action taken in Canada should be concurrently supported by similar action in the more southerly watersalong the New England coast. If the dog-fish really move up from these warmer waters to the south, any scheme to effect their destruction will require to be also carried out by the authorities further south, or our Canadian waters will continue to receive further contingents year by year to replace the decimated ranks of those haunting our waters.

DOG-FISH ARE INTRUDERS FROM THE SOUTH.

Dr. D. H. Storer, the well known American naturalist said, nearly 70 years ago, that the dog-fish were so numerous about Cape Cod that at in the spring and autumn these fish furnished the fishermen with important employment solely for their oil. 'It assembles' he said 'in large schools.' Messrs. Pew & Son, well-known in the United States fishing industry, have pointed out one difficulty in securing, further south, such united action as is desirable. Individual States along the New England coast (they affirm) have realized that unless all join in the effort it is useless for one State to take measures. Indeed, it is stated that individual States will not do so, hence it must be done by the federal government at Washington, if it is to be done at all. Canada can certainly take vigorous steps when some line of action is decided

upon off the New England shores. It is needless to point out that effective measures are desirable to prevent the scattering of offal in the sea, and all similar attractions to dog-fish.

Further, fishermen and others should be discouraged in the common practice of liberating young dog-fish in the ocean, and the destruction of the parent fish with their broods of contained young should be enjoined. If, as is stated, the dog-fish taken in December are for the most part females, their capture at that time is of immense importance. The destruction of breeding female fish has been abundantly shown to be a direct means of reducing the supply of fish in the future. The increase of dog-fish in recent years has been accounted for by their less extensive capture for oil purposes. The low price of fish oil has discouraged the annual destruction of dog-fish formerly carried on systematically. But that suggestion will not account fully for the increase.

DOG-FISH BOUNTY RECOMMENDED.

Any scheme or system adopted for coping with this evil will require to be thoroughly thought out in all its details, or its adoption might be more harmful than beneficial. The pest is one so widespread and serious that in the view of many it calls for special action by the government either directly or indirectly. Directly, for example, by employing officers to carry on the destruction, or by utilising in the work the fleet of fishery cruisers for part of the season. In most cases the recommendations to the government have covered little more than the sanctioning of a bounty. Just as the extermination of wolves in our forest territories has been attempted, more or less successfully, by the payment of a bounty—a fixed sum paid on each head brought to a properly authorized officer—so it is urged that each fisherman should be paid a fixed sum for every dog-fish destroyed by him. This payment of a bounty on dog-fish could, of course, be carried out in a variety of ways. Thus each tail of a dog-fish handed to a fishery officer might form the basis of the bounty payment, or the payment might be on the weight of dogfish, properly attested and certified. Other parties have favoured the payment on numbers rather than weight, while again others would limit the bounty to parties operating reduction works, oil and glue factories, &c., a bonus being guaranteed to companies willing to embark in the utilization of dog-fish for oil and glue, fertilizer, food, or other purposes. Companies or firms would require to employ tugs to collect every two or three days the dog-fish taken by the fishermen along the coast, and the system might provide for each fisherman receiving his due share of the bounty paid to the operators of oileries and reduction works. The following remarks from a well-known daily newspaper illustrate the kind of views and suggestions now current on this important matter :—

'Sometimes the fishermen hauling a trawl, will find 500 or 600 dozen fish on his hooks, and a few cod heads, the bodies of which have been devoured by the gluttonous spoilers. The despoiling and exasperated toilers of the sea, when they capture a dog fish, wreak summary vengeance on him, usually breaking his long snout. A dog-fish, so mutilated, is unable to steer himself or go to the bottom, and swims around on the surface in erratic circles. The fishermen have an idea that the antics of a broken-jawed dog-fish frightens away others of his tribe but as a matter of fact a sound and vigorous dog-fish has no objection to making a meal off his helpless relatives. 'The government has been urged to offer a bounty for the capture of dog-fish. In some parts of the world dog-fish are caught for their oil, but the industry is not very profitable. It is claimed, however, that if a bounty was offered, the fishermen would make systematic efforts to destroy this pest, that as the dog-fish were killed off the value of the fisheries would increase and that in a few years the bounty could be withdrawn without injury to the fisherman.'

SUGGESTED METHODS OF EXTIRPATION.

Of at least a dozen suggestions recently made to the government, I note the following as exemplifying the main lines of action urged in dealing with this serious pest.

1. Liberate alive some hundreds of dog-fish having securely fastened outside their bodies (by means of hooks, wires, &c.), glittering and gaudy streamers or jingling chains or bells, calculated to terrify and frighten away the schools of dog-fish, on the old principle of setting at liberty a rat with a bell hung round its neck.

2. Inoculate a number of dogfish with some fatal or contagious disease, thus securing the infection and death of all the schools of dog-fish which may hover near, on the principle adopted in reducing the pest of rabbits in Australia some years ago.

3. Dynamite the great schools of dog-fish when they appear.

4. Employ the government cruisers and their men in capturing these pests, or let the government employ special vessels for the purpose, until the plague is reduced.

5. Pay a bounty of 1c. for every five tails of dogfish ($2 per 1,000) brought to a fishery officer and after being officially recorded, destroyed by such officer. Many fishermen have declared that they get 1,000 dog-fish in a single day not unfreqnently; yet it is asserted that even $2.50 per 1,000 would not pay.

6. Pay a bounty on the basis of the weight of the dog-fish captured, say so much per 100 lbs. Some parties claim that $2 to $3 per ton or half a cent per fish would pay the fishermen, while others say that as dog-fish average a weight of 4 lbs. such a bounty of 1c. each fish would pay. Thus the suggested rates range from 10c. or 15c, per 100 lbs. to 25c. per 200 lbs.

7. Pay a bounty on the total yield of oil, a fixed rate on each gallon of oil produced by a factory being guaranteed to any firm or company carrying on reduction works.

8. Use long seines of strong cord, 1,000 yards or more in length, under departmental direction and surround the schools as is done with the schools of sharks in India.

If, as seems clear, the commercial products yielded by dog-fish bring such low returns in the market that it will not pay oil and fertiliser factories to utilize them, and cannot therefore pay the fishermen to fish for them or even to save them when caught accidentally, then a bounty paid by the government seems to be necessary. The livers of dog-fish bring to the fishermen 25c. per pail and at least 50 dog-fish are required to make a pail of livers, and the loss of hooks, bait, and time, have all to be included, hence only the encouragement of a bounty will ensure the energetic and continuous destruction of these fish. Certainly the suggestions numbered 1, 2 and 3 would probably harm the schools of valuable fishes as much as the detested dog-fish, while the employment of a few vessels or government cruisers would not suffice to deal with so general a pest as the dog-fish on our shores. Reliance can be placed only on the co-operation of the fishermen all along he coast stimulated by a bounty fairly and effectively distributed on a workable basis.t Unless, indeed, the dog-fish in the meantime take the course they have so commonly done in former times and on other coasts, and disappear as suddenly as their hordes originally have appeared. The problem would then solve itself.

II.

THE MAXIMUM SIZE OF FISHES AND ITS CAUSES.

By Professor Edward E. Prince, Dominion Commissioner of Fisheries, Ottawa.

Most people have a more or less definite idea of the normal size or the average size of our common fishes. They can form a judgment about any specimen placed before them as to whether it is a small one or a large one. And this is a matter of some importance, both from the practical commercial standpoint, and from the official or administrative standpoint. Fish of good average size and weight are in request in the markets; the fishery laws and regulations aim, amongst other objects, to protect undersized and immature fish, and to allow of the capture only of well grown mature fish. To the sportsman, in many cases, it is the large fish only that are the objects of his ambition. He will die happy if only it can be said of him that he secured the largest bass, or the biggest trout or the heaviest salmon, on record. The size of a fish, it has been often said, depends mainly on the limits of the fisherman's imagination, and it is generally admitted that the fish which have got away are, without exception, the largest ever seen. There is good ground for the view that the size and weight of many large fish, prominently announced in sporting papers, have rather a slender basis of fact. Nevertheless, the fact is well known to naturalists that large examples of fish, as of other living creatures, are now and then secured and it is a matter of interest and of no small practical importance to know what the conditions are under which a fish can attain its maximum growth. The subject is one which has attracted some attention from scientific experts, and is as much a legitimate subject for accurate study as any other branch of biological investigation. The conclusion reached by most naturalists is that each species of fish has certain maximum dimensions which it is possible for any individual to reach if no unfavourable conditions prevent. The great French naturalist, Chevalier de Lamarck, the author of the 'Philosophie Zoologique,' laid down the general biological law that 'the life inherent in any living body tends to increase the volume or size of the body which possesses it; and to extend the dimensions of its parts up to a limit which it determines,' and Professor John Cleland, in a luminous essay* published in 1881, speaks of that development larger than the development of the individual, which relates that individual to the family, genus, or class to which it belongs, and which 'proceeds in definite directions to terminal or adult conditions' and it is one of these terminal adult conditions which is known as the maximum size of a species.

It is, of course, desirable from the purely economic standpoint that the average size of fish sent to market should be as near the maximum as possible; but unfortunately it appears to be the rule for the average size of marketable fish to decrease; or, in other words, the aim of fishermen and dealers is to supply the markets with fish as near the minimum average size as possible. The sale of small immature fish has therefore long prevailed in most countries.

The reason for the tendency of marketable fish to decrease in size, does not appear far to seek. The answer occurs to any intelligent person that the demand is greater than the supply of large-sized fish, hence this excessive demand, is accountable for the decrease in the average size not only caught and marketed, but occurring in the waters frequented by such commercial fish. This explanation is by no means the correct one in all cases. There are cases of very important fisheries in which the average size of fish sent to market has shown a downward tendency, and yet the supply of fish is usually greatly in excess of the demand.

*The Evolutions of Organization. Glasgow, 1881.

It becomes necessary to ascertain upon what conditions the size of fish depends, and a very slight study of the subject, will show that many diverse causes are responsible. No doubt, as a rule, a virgin fishery, when first exploited, yields fish of comparatively large size and weight. In examining some osteological specimens in an ancient university museum* not long ago I was much struck by the exceptionally large size of some of the specimens, as compared with specimens of the same kind in museums in Canada and the United States. The old museums supplied with specimens one hundred or two hundred years ago had better chances of obtaining examples of maximum size.

The skulls of tigers and of lions were of huge dimensions compared with examples obtainable to-day, and no skulls of the hippopotamus or the rhinoceros now compare with these old specimens, for size and massive character. The increased perils of modern days render it impossible for these large mammals to attain that maturity and size which under their former unmolested conditions they readily attained. It is the same with fishes. Old fishermen in all the Canadian provinces universally speak of the former large average size of fish in the waters of the Dominion and of their extraordinary abundance. Thus in Lake Ontario, a few specimens of the Atlantic salmon are caught every season. These fish which must have ascended near 700 by miles from the sea, though scarce now, are recorded to have been incredibly abundant more than half a century ago. The late Mr. Samuel Wilmot was accustomed to tell of the wholesale destruction of salmon when ascending the creeks emptying into Lake Ontario, between 1840 and 1850. He himself often helped with a pitchfork when the farmers were using that rude implement to transfix and secure large numbers of the spawning salmon ; but the most extraordinary record on this matter was published 45 years ago, when the Superintendent of Fisheries for Upper Canada described in his report for 1859 the capture of an extraordinary number of salmon at certain points along the lake. At Port Credit he said there were taken 470,000 fish in 1856, two-thirds of them being salmon. It is difficult to understand such hauls of salmon, for the mention of salmon trout (the great lake trout) in the same report shows that the two were not confused as they frequently are in some parts of Ontario. Indeed even at that date salmon had seriously declined. Many of the streams running into Lake Ontario (he says) were once the resort of myriads of salmon (the salmon proper from the ocean). 'I have seen them from 1812 to 1815, swarming the rivers so thickly, that they were thrown out with a shovel, and even with the hand' said the Superintendent (Mr. McCuaig). Similarly there has been the most astonishing decrease in the whitefish of Lake Ontario. In a former report (in 1898) I made reference to this and said :—

'At present the lake is regarded as not a whitefish lake at all, the catch of over 620,000 pounds in 1870 had fallen to about 400,000 pounds in 1890 and in 1895 reached the low level of about 126,000 pounds. Yet 40 years ago on Wellington Beach at the east end of the lake, where whitefish are now exceedingly scarce, single hauls of nearly 500,000 large whitefish are recorded (viz., 400 barrels). At Burlington Beach in 1856, at the west end of Lake Ontario, the men netted 86,400 whitefish and nearly 2,000,000 lesser whitefish or lake herring.'

Many instances of this nature could be given. Thus Mr. W. F. Tidmarsh, of Charlottetown, Prince Edward Island, a well-known lobster packer, said in 1896. 'When the lobster business first started in Prince Edward Island, and for many years afterwards, when the lobsters approached the shore in the spring they were very generally distributed along the entire coast. A failure to secure a good catch was unknown.' Yet, as this authority went on to point out, the quantity of lobsters not only declined, but the average size decreased most seriously. Indeed, in mo t of the fishing localities around the island, a good sized lobster 10 in. or 11 in. in length is said to be a rarity.

As an evidence of this, Mr. Tidmarsh pointed out that in one lobster cannery known to him the yield of lobsters per trap fell in 1896 to one-fifth of the yield five years before, for in 1891 each trap averaged about 25 one-pound cans for the season, whereas in 1896 it was only 5½ one-pound cans. In spite of this general decline, especially in the average size of lobsters, there is evidence that a larger average would be once more realized if proper protective steps were taken. Last season I myself was

* The University of St. Andrews, St. Andrews, Scotland.

generously given a fine specimen of a lobster from the Northumberland Straits which was a giant of its kind, measuring no less than 28 inches from the tip of the tail to the tip of the large claws, and 12½ inches in girth near the head. Its weight was about 14 pounds, not a heavy weight for so large a lobster. The general opinion amongst the fishermen in that region is, that the run of lobsters necessarily averages a small size, and that they would never reach a large size; but the occurrence of an occasional 'giant' shows that if they were shown any mercy and afforded any reasonable protection, large lobsters would prevail, as in the earlier days of the industry.

It is of course important to know what are the conditions which favour a large average size in fish. These conditions have been ascertained by naturalists and given due attention in the framing of size limits, and enforcing of regulations against the capture of undersized and immature fish. Most people attribute the size of an unusually large specimen of any fish, either to its favourable environment, its food, or its mature age. A large fish must be an old fish in their view. As a matter of fact, this is by no means the case, and of the numerous causes, which favour the increase in size of fish there are seven or eight, which it is important for all interested in fisheries to know. These are, heredity, food, physical environment or physical surroundings, age, congenital variation or inherent strength or weakness, adaptability, and security from pernicious influences.

(1) *Heredity.* The most important of all the causes of corporeal magnitude in living creatures is heredity. Dwarfed parents produce dwarfed progeny, the young of large creatures are almost invariably large. Like begets like, especially in regard to bodily size. Large examples occur amongst most animals, a stock that is to say whose more massive physique gives them superiority. When a farmer desires to raise large sized cattle he will select appropriate parents and will thus secure, with almost absolute certainty, progeny surpassing in dimensions the average size of the stock on his farm. He does not expect animals like large Durham or Ayrshire cattle, if the parents are of the diminutive Kerry or Scottish Highland breed. It is the same with fishes. Trout which inhabit small mountain brooks and rills are almost invariably diminutive. The parents are small and the resulting progeny are small too. The average size of Scottish burn trout is much smaller than that of river trout. No doubt food and external conditions have much to do with the difference; but heredity is one of the most potent factors, and a brood of large trout cannot be obtained if small burn trout are selected as parents, nor will the large river trout produce diminutive mountain trout. The splendid brook trout (*Salvelinus fontinalis*) of Lake Nepigon, Ont., are in general of large size, ranging two pounds up to five, six, or it is even claimed eight pounds, and inasmuch as the lake measures at least 60 miles in length and on an average over 40 miles in breadth the influence of their environment has been thought by many to account for the exceptionally large average size of Lake Nepigon trout. As a matter of fact, however, the fish to a very large extent inhabit the river or outlet of the lake, a river 30 or 40 miles long, and they migrate more or less freely into Lake Superior. These conditions are not unlike those which apply to many other waters, where such a race of large brook trout is not known. One angler known to me caught in the 2½ miles stretch above Camp Alexander or rather in the rushing water above Cameron's Pool over 80 pounds weight of trout in a few hours afternoon fishing. Most of these trout were 2 pounds or 2½ pounds weight. About the same time a trout 4½ pounds weight, 22 inches long and 12½ inches girth, and another 3⅞ pounds weight, 20¼ inches long and 12⅛ inches girth were caught in the swift portion above Rock Island Portage. Food and environment merely do not account for the existence of this famous run of large Nepigon trout, whatever these causes may have effected primitively, the present race of these trout illustrate the persistence and significance of heredity. A large sized parent stock giving origin season by season to broods of young destined to excel in size and other qualities characteristic of the parents.

It is to heredity as the main factor that I attribute the differences which distinguish the runs of salmon in different rivers. Why should a large river like the Miramichi produce almost invariably salmon of small size and weight? The Grand Cascapedia, a river of probably only about one-third the length and prodnctivc capacity of the Miramichi, yields fish of large size running from 30 to nearly 5$ lbs.

weight. A well-known U. S. angler in August, 1897, took thirteen salmon on the Grand Cascapedia during a short stay, the three largest of which weighed 41, 42 and 43 lbs. respectively, while the average was 30⅔ lbs. yet a 10, 15 or 18 lbs. salmon would be quite an average on the noble Miramichi. Still more remarkable are the facts when we consider the salmon rivers in the British Islands. Large salmon are by no means unfrequent in the Scottish, English and Irish rivers, small though those rivers are. The record salmon in Scotland is the famous 83-pounder caught in the Tay in 1827; but in the Irish official reports many fine fish have been recorded within the last 10 or 12 years. Thus in 1893 which was a much drier season than the very favourable year preceding (1892) there were some fine early salmon taken (*i. e.* from Feb. 15 to April 15) several weighing as much as 60 lbs., and quite a number reaching 40 lbs. weight, though the average was 28 or 30 lbs. These fine fish be it remembered being taken in rivers ranging from 50 miles to 120 or 150 miles in length. Similarly in Norway large fish are of constant occurrence, though the rivers are of limited size and length. Thus two years ago amongst the salmon reaching London from Norway there were three of the following splendid dimensions, one 56 lbs. 48½ in. long by 28½ in. girth, a second 55½ lbs. and measuring 51 inches by 29 inches, while the third weighed 46 lbs. and was 48 inches by 26 inches. Mr. H. Ffennell in the London Globe is stated to have instanced three Rhine salmon shipped to London in 1889 which were of the following weights: one 56 lbs. 51½ in. by 28 in.; the second 50 lbs. 47½ in. by 27½ in. while the third was 49 lbs. 10 oz. and measured 47 in by 27 in. It is clear then that the surroundings, the amplitude of the waters and the special favouring conditions of large rivers, such as those of Canada, do not apply to these cases.

As Mr. Francis Francis long ago pointed out (Fish Culture, London, 1863 pp. 106 and 107): 'In some rivers, the race of salmon and trout are naturally small, and without apparent reason. In Scotland, for example, there will be four rivers running into the same estuary, and the breed, shape, make, and size of the fish of every river will be distinct and different. In some, the fish will be long and thin in shape; in others, short and thick. In some, they will scarce ever exceed twelve or fourteen pounds in weight, and in others they will run up to twenty, thirty, and even forty pounds, if allowed to exist for a reasonable time. Now, here it is evident that the rivers themselves can have little or nothing to do with the growth of the fish, since the great feeding grounds wherein the fish grow and increase their weight, at a rate out of all proportion to that of any other created creature, are identical, being the broad sea; since salmon never increase their weight in the fresh water after their first trip to the sea, but rather fall off and deteriorate. Why is it, then, that, enjoying these feeding grounds in common, some thrive so much better and faster than others? It cannot be doubted that it is in the nature of some breeds to increase more and faster than others, even as a Hereford or Norfolk steer exceeds a Welsh or Highland stot, feed him and breed him how, where, and when you will. We have discovered how, by the crossing of breeds of animals, we can get those which carry flesh best, and increase the fastest, upon a small amount of food. How easy it would be, therefore, having discovered the same thing with regard to fish, to transplant and cross the breeds of salmon and other fish, until we found that which is most valuable and suitable to our various rivers. Here is another branch, then, of the science, scarcely inferior in importance to the last, but of which we know literally nothing. Is it not a surprising thing, that a people whose interests are so vast in the elucidation of such questions, should be content to remain in ignorance of them, and should make scarcely an effort to obtain enlightenment on them?'

It is impossible to find in food or environment the true causes of such phenomena and there can be little doubt that the principle of race, the unfailing influence of heredity, must be resorted to, to explain the production of such exceptionally fine fish as those which the small British and Norwegian rivers, referred to, produce.

(2) *Food*—The influence of food of the right kind and in abundance is familiar to any one having the slightest knowledge of fish life. The quality and size of fish improve under the influence of plentiful and nutritious food. Even in rivers and lakes of large size the fish are known to degenerate if food be lacking and, apart from the all important influence of heredity, small races of fish may be developed in fish of much larger size by a change in the kind and quality of food accessible to them. Mr. Francis Francis some

years ago placed on record an experiment which fully substantiates the contention that food is of prime importance in influencing the growth of fish. Mr. Francis tells how trout were placed in three separate tanks, one of which was supplied daily with worms, another with live minnows, and the third with those small dark coloured water flies which are to be found moving about on the surface under banks and sheltered places The trout fed with worms grew slowly, and had a lean appearance ; those nourished on minnows, which, it was observed, they darted at with great voracity, became much larger ; while such as were fattened upon flies only, attained in a short time prodigious dimensions, weighing twice as much as both the others together, although the quantity of food swallowed was in nowise so great.

The change in the sea trout owing to variation in the kind and quantity of its food is familiar to all fishery authorities. The sea trout is really a sea run brook trout. Under the conditions of life in brackish water and sea water a fish which, confined to fresh water usually runs from 1 lb. to 2 lbs., will reach a weight of 4 lbs., indeed Norris in his work on Fish Culture states that 6 lbs. or 7 lbs., is not an unknown weight. A sea trout of 3 or 4 lbs., is however a well grown fish. 'The champion fish of the season,' wrote the late Col. J. Hunter Duvar, Fisheries Inspector on Prince Edward Island, 'is a sea trout, a female, perfect in condition and symmetry and turning the scale at 4 lbs. 3 oz., taken on a grilse fly at Rollo Bay by Mr. Fredk. Hyndman, of Charlottetown. Others of considerable weight, but none so fine as this, have been taken by myself and others.' Herr Jaffe, the German fish culturist has given an interesting example of the effect of food upon one of our indigenous species of trout, viz., *Salmo irideus*, the rainbow trout, which weighs at two years 8 or 10 oz., in the third year 1 to 2 lbs., and at four years old weighs 2 or 3 lbs., while it may reach a weight of 5 or 6 lbs., though as Drs. Jordan and Evermann say, as a rule 'it rarely exceeds 2 or 3 lbs.' When transplanted to Germany and fed chiefly on mollusks and small fish its growth is comparatively rapid. In the fall of 1896, Herr Jaffe received from the river Ems a three and a half pound fish which was planted as a yearling in the spring of 1894, and such records of quick growth have repeatedly come to his knowledge. From the lower Moselle similar reports were sent.

Mr. Jaffe finds that the fish does best in deep, warmish reservoirs, with plenty of mollusks and sticklebacks for food, reaching an average weight of a third to a half pound when two years old, two to three pounds at three years, and three to seven pounds when four years old. It matures at four years in Germany, and does not grow much afterwards, although occasional individuals at five year old weighed twelve pounds. At six years, says Mr. Jaffe, the rainbow begins to decay. He has sometimes kept three or four generations of rainbows in a breeding pond of about one acre without any evidence of cannibalism, but they had room enough and plenty of food.

But the most remarkable instance is the well known case of the English trout (*Salmo fario*) planted in New Zealand which are caught 25 to 28 lbs., in weight although a 2 or 3 lbs., trout in England is considered a fairly large fish. In all these cases the most potent cause of the large size and of rapid growth, is food.

It is difficult to discover any other cause especially in the case of typically predaceous fish such as black-bass which in one locality will reach an abnormal size and weight, and in waters not very distant will run small. The seven pounds small-mouth black bass caught by Mr. James Dowling, in Susquehanna river, near Conways Bridge, Md., in October, 1891, was evidently a well-fed example whose growth was due to abundant food, as a pickerel or doré (*Stizosedion*) was caught a few weeks before weighing six and a half pounds, a weight very often exceeded in Canadian waters, but still of an exceptional character. The *American Angler* in January, 1892, announced the capture of a large mouthed black bass, in Florida, weighing over 23¾ lbs., a record which could hardly be accepted as accurate. A black bass of 6¾ lbs., weight (29½ inches long) and another 6 lbs., weight (20 inches long), of the small mouthed species, recently caught by a United States angler, are no doubt reliable records, and indicate the maximum size and weight reached on the average by that fine game fish. So also a 52 lbs., maskinonge caught at Boot Lake, Wis., by Mrs. Bredel, of Milwaukee, is an exceptional capture, and abundant food must be regarded as the most potent cause in these cases.

(3) *Inherent adaptability* is an important factor in enabling a fish to reach a large size. Thus the Pacific salmon transported across the continent on many occasions and planted in considerable quantities have apparently wholly failed to establish themselves or even to survive. It is true that the Steelhead salmon, the only true salmon in our Pacific waters, (*Salmo gairdneri*) has with more or less success been introduced into the great lakes, and every season, a few specimens of this fine fish are taken by Canadian and United States fishermen in Lake Huron or Lake Superior: but the attempt to establish the spring salmon or quinnat, or the sockeye salmon, in rivers flowing into the Atlantic Ocean has proved an entire failure. These Pacific species lack that inherent adaptability to new conditions and do not apparently survive. It is not a question of food, &c., as these fish do not apparently feed after leaving salt water. The attempt in New Zealand to introduce the salmon (*Salmo salar*) has been a remarkable failure, while the trout (*Salmo fario*) were more than a success, they were a surpassing triumph in fish-culture in Antipodean waters.

(4) *Age.*—It is very usual to attribute to age the unusual dimensions of a large fish and while this is quite an accurate explanation in many cases, it will not apply generally. As the late Professor Rolleston, of Oxford, said 'many grow as long as life lasts ,e.g., for over a hundred years (carp, pike): others attain a certain standard of size and are short-lived, e.g., cyprinodonts (or minnows), many clupeidæ (herrings) &c.,' when secure from harm, and provided with plenty of food, living creatures as a rule reach a size which is regarded as exceptional. The old specimens of tiger's skulls, &c., already mentioned prove that. When the famous halibut grounds of Iceland which had been practically undisturbed until about 20 years ago, were exploited by the steam tugs from England and other countries, the size of the halibut secured was very remarkable. Vast numbers measuring 6 and 7 feet in length were secured: but in size and in numbers the Iceland halibut have declined in recent years. Lying scattered over great sandy areas, these flat fish are particularly liable to fall an easy prey to the fishermen and the extent of the destruction possible, may be judged from the fact that in 1902 one fish guano factory in British Columbia obtained no less than 320 tons of halibut heads alone representing only a fraction of the catch of the halibut fleet in the Straits of Georgia and Hecate Straits. There are of course few reliable records of the age of fish which have attained unusual years. The late John Mowat of Campbellton, New Brunswick, recorded the liberation of a 10 lbs. male salmon, one of 30 which had been used for fish hatchery purposes and had been marked by the excision of the adipose fin. It was caught in 1891 (10 years after its liberation) and weighed 40 lbs. If the fish was 3 or 4 years old, or say 5 years old in 1881 then it was 14 or 15 years old when it weighed 40 lbs. That fish grow to a large size with advanced age admits of no doubt, but on the other hand unless food and environment be favourable, even old fish may remain stunted. As I have pointed out each species has its limit of age, and Mr. J. Harvie Brown, whose authority on these matters is so widely recognized, tells us that 'the age of trout, or rather we should say the age of growth in trout (*Salmo fario*) does not exceed 5 to 7 years at Howietown (the famous Scottish hatchery).'

The Pacific quinnat or spring salmon (*Oncorhyncus quinnat*) is a fish which normally reaches a large size and weight. It is by by no means unusual to see numbers of these fish weighing from 20 to 40 or 50 lbs. brought to the salmon canneries: but such a specimen as that I saw in 1894 at Port Essington, Skeena river, which weighed 84 lbs. and measured nearly 5 feet in length, bore all the indications of venerable age. It was an old fish, and its large size was due to its age no doubt, rather than to any of the other causes referred to in these pages. Quinnat exceeding 100 lbs. are reported to have been captured. It is quite different with species such as the tarpon or giant herring of Florida, and the monster mackerel or tunny of the Atlantic and the Californian shores. These fish appear to reach enormous dimensions, the former 6 or 7 feet and over 100 lbs. weight, the latter 8 or 12 feet length and 900 to 1,200 lbs. weight, in a comparatively short time, as the herring and mackerel tribes are active, quick growing, and apparently short-lived types of fish, according to the best authorities.

(5) *Environment.*—The influence of their physical surroundings is very great upon the growth of fish. In large rivers and extensive lakes fish, as a rule, reach a larger

size than in small contracted waters. The gray trout of Quebec and eastern Ontario ranging from two lbs. to six or seven lbs. are really the same species as the monstrous great lake trout of Lake Huron and Lake Superior, which run from twenty to forty lbs. or even to seventy to eighty lbs. weight. Jordan and Evermann speak of sixty to one hundred and twenty-five lbs. as the weight of this fish though the average weight they say may not exceed fifteen or twenty lbs. But while environment is so potent, yet one of the largest lake trout which ever passed through my hands was a fine specimen weighing at least forty or fifty lbs. from the Lake of the Woods, a lake in which *Salvelinus namaycush* is not supposed to flourish or indeed to occur, excepting very sparsely. If the environment be unfavourable, the growth of fish is remarkably slow and retarded. Thus Mr. Harvie Brown has mentioned a trout known to be over twenty years old which was thirteen inches long and did not weigh over one lb. and a number of sea salmon retained by the Marine and Fisheries Department, Ottawa, in a small tank for four or five years did not weigh more than two or two and a half lbs. each. It has been found that bushes and trees, and appropriate shade and hiding places encourage the growth of many fishes, it may be, as Frank Buckland claimed, from the insect food which drops from the leaves and branches or merely from the shelter afforded. 'The rate of growth' says an eminent authority, 'is largely a question of temperature, of food, and extent of water area. In water of sixty degrees with plenty of food, fish one or two years old will double their size several times in a single season; while in water at forty degrees, with limited food, the growth is very slow indeed.' Much depends of course upon the kind of fish. Cod reach their largest dimensions strange to say in the cold stretches of water on the Labrador coast or the icy banks of Newfoundland.

(6) *Temperature.*—While food and such features in the physical environment as purity of water, freedom from enemies, shade and shelter, &c., are of prime importance in the successful progress of fish from infancy to mature age, the influence of temperature has always been regarded as vitally affecting the life of fishes. A low temperature appears to be favourable to the welfare of the most valuable food fishes and it is in the colder waters of the northern hemisphere that these prized economic fishes reach their largest dimensions. 'Nearly all marine fishes,' says Dr. Günther, 'are very sensitive to changes in the temperature of the water, and will not bear transportation from one climate to another. This seems to be much less the case with some fresh water fishes of the temperate zones; the carp may survive after being frozen in a solid block of ice and will thrive in the southern parts of the temperate zone. On the other hand, some fresh water fishes are so sensitive to a change in the water that they perish when transplanted from their native river into another, apparently offering the same physical conditions.'

Some fishes like the shad (*Alosa sapidissima*) flourish when transplanted from the colder Atlantic basin to the waters of the Pacific coast, and the Pacific trout (*Salmo irideus*), is found to do well, and, indeed to surpass in size the fish in their native waters at the corresponding age. A warmer temperature favours rather than discourages its growth. After considerable experience Dr. Jaffe says it is not a competitor of the European trout (*Salmo fario*) and will not thrive where the brook trout thrives.

Mr. Jaffe's experience with the rainbow trout in Germany was satisfactory to him. He planted many thousands of the fry in the shallow headwaters of streams, and they invariably worked down into the deep, sluggish water of the larger streams, into regions too warm for *Salmo fario*.

When it is planted in streams communicating with large lakes, or with the ocean, it migrates freely and sometimes becomes established at a distance from its intended location. In some of the states, however, it has been successfully introduced and meets with favour. This is especially true in Michigan, Missouri, Virginia, North Carolina and several of the Rocky Mountain States.

In Japan this species appears to find very favourable conditions, and itis acclimatized in many parts of Europe.

No doubt in many cases of failure in attempts to transplant fish of various kinds the real unfavourable cause is the difference of temperature, and if the temperature of the water be unfavourable normal growth is arrested and dwarfing or death ensues.

(7) *Congenital variation.*—One important factor in determining the size which a fish attains is that inherent strength, robustness, and power of growth which vary most remarkably in every example. These are independent of food, environment, &c., and are known as congenital potencies, or congenital variations. The forces of life which the growing fish is endowed with in the ovum are subject to variation of the most profound and mysterious character. In a former report I referred to this element of variation in the earliest period of a fish's life, pointing out that Frank Buckland drew attention to this in his little work entitled 'Fish Hatching' (London, 1863), where he quotes an authority as saying that of three specimens of young salmon taken from the Stormontfield ponds in Scotland, on April 1, 1863, all of the same age, one was $6\frac{1}{2}$ inches long and weighed 646 grains; another was $3\frac{5}{8}$ inches long and weighed 135 grains; and the third was $2\frac{1}{8}$ inches long, and weighed 26 grains. The last had the dark parr-bands along the sides, the second had indications of small scales, and in the largest the scales were large, silvery and in an advanced stage of growth. As Buckland remarked, young fish whether kept in hatchery tanks, reared in large ponds or turned into streams, vary very much in growth; some individuals growing more rapidly and attaining a greater size than others. In a study which I made at the Marine Biological Station of Canada of three batches of Pacific salmon fry, I found a similar though not quite so marked a difference in growth. The specimens in each series (five or six dozen fish in each series) were presumably about the same age, and in one series they varied from 42 millimetres ($1\frac{11}{16}$ in.) to 31 millimetres ($1\frac{1}{4}$ in.) in length. In another batch (belonging to the brood of another year) they varied from 65 millimetres ($2\frac{3}{5}$ in.) to 38 millimetres ($1\frac{6}{13}$ in.) and in another year's series they varied from 47 millimetres ($1\frac{11}{2}$ in.) to 34 millimetres ($1\frac{3}{8}$ in.)' Many years ago, when engaged in hatching fish for scientific experimental purposes, I had a batch of 21 small minnows, the well known British species *(Leuciscus phoxinus)* under observation. These small fry were of the same age, hatched, that is to say, within a few hours of each other and yet so great was the variation in size, that, when about four or five weeks old they were found on careful measurement to vary from $\frac{1}{4}$ inch. in length up to $1\frac{1}{4}$ inch. Two of them were dwarfs and barely $\frac{1}{4}$ inch long, the majority, eleven in number were $\frac{5}{8}$ inch; seven of them were still larger, viz., $\frac{3}{4}$ inch; and one large and lusty specimen was $1\frac{1}{4}$ inch or five times the length of his weaker brethren of the same age.

When the minnows were fed, particles of a common earth-worm being cut into fragments the size of a pin's head, the large specimen always got the largest share. He drove the others aside, and when in a distant corner of the tank, and food was dropped amongst a group of the small ones, he rushed rapidly across and generally secured the chief portion of the food. His greater size and strength gave him an advantage, and his growth was therefore more rapid than the others, but in the first instance his superiority was due to congenital variation. All fish culturists have noted this remarkable variation in the newly hatched fry, and its after results are most striking. The late Sir James Maitland followed this up, and he tells us that on weighing a $3\frac{1}{2}$ year old Lochleven trout on July 7th, measuring $14\frac{1}{2}$ inches in length be found it to be 1 lb. 5 oz. 'I consider this to be a very important record as the fish he said could not have been more than 42 months old, although by no means the largest fish in the pond, as I find on March 7th, 1878, my note regarding the same lot of fish and some were close on 2 lbs.' He also speaks at a little later date of some 36 months old weighing $1\frac{1}{2}$ lb. in March, though the average was $\frac{3}{4}$ lb; and the 4 year olds averaged 2 lbs.

Lastly (8) *Security from danger and pernicious influences* form a factor which cannot be ignored. It is this immunity from disturbance, and harmful influences which has much to do with the size of fish in virgin waters. When man's interference comes in the fish suffer more or less from fear, and harassing disturbance, effectively retarding their normal health and growth. Steam vessels, sailing or rowing craft, the noises of factories, mills, &c., all tend to interfere with the normal conditions of healthy life and growth in the fishes inhabiting the waters so disturbed. When baited hooks and meshed nets are introduced into such waters, the large fish are rapidly decimated, as they are the first to secure the tempting baits, while they also are strangled in the nets through which the small undersized fish safely pass. Hence fishing operations cannot

fail not merely to reduce the number of fish; but in the first instance to reduce the average size of the fish, by taking the larger ones in disproportionate numbers.

'In the majority of fishes the rate of growth is extremely irregular, and it is hardly possible to know when growth is actually and definitively arrested,' says Dr. A. L. C. Günther, formerly of the British Museum. 'All seems to depend on the amount of food and the more or less favourable circumstances under which the individual grows up.'

It is plain from the foregoing survey of a subject, as yet little investigated, that the maximum size of fish depends primarily upon heredity, which determines within what limits a maximum growth must of necessity be confined; but food is of course potent in the course of the life of the individual and may hasten or retard growth, while elasticity, or inherent adaptability to all conditions, is a factor of prime importance without which the organism either degenerates or wholly perishes. Age, as pointed out, may not explain the size of a fish, as many aged specimens are by no means large specimens of the kind to which they belong; but we must consider environment as next to heredity, in having more to do with the attainment of maximum growth than any other factor. Temperature, to which allusion was briefly made, cannot be ignored; but it may be regarded as embraced under environment although so potent especially during the earliest stages of fish life as to be of very vital significance. Congenital variation, which scientific men even now only vaguely understand lies at the root of the question of growth. If such variation be favourable, the growing fish has so much on its side, if unfavourable it labours under a serious disadvantage; but heredity, environment and other factors may largely over-ride congenital variation. A puny boy under favouring conditions may develop into a strong large man. Lastly, security from unfavourable contingencies is, in view of man's growing interference with the order of nature, an increasingly important factor in the question of the maximum growth or size of fishes.

APPENDIX No. 1.

EXPENDITURE AND REVENUE.

The total expenditure for all Fisheries services, except Civil Government, for the fiscal year ending June 30, 1903, including Fishing Bounty, amounted to $527,944.62, being within the appropriation by $46,635.10.

The total net fisheries revenue, during the same period, from rents, license fees, fines and sales, including the *modus vivendi* licenses to United States vessels, amounted to $78,635.

Service.	Expenditure.	Vote.
	$ cts.	$ cts.
Fisheries	114,719 00	115,000 00
Fish-breeding	77,330 86	92,000 00
Fisheries protection service	145,137 99	150,770 00
Fishing bounty	159,853 50	160,000 00
Miscellaneous expenditure	30,903 27	56,805 72
Total	527,944 62	574,575 72

The details of the above will be found in the Auditor General's report under the proper headings.

In addition to the above, the following summary shows the salaries and disbursements of fishery officers in the several provinces, together with the expenses for maintenance of the different fish-breeding establishments throughout the Dominion.

Service.	Expenditure.
	$ cts.
Fisheries, Ontario	4,660 53
" Quebec	6,585 86
" New Brunswick	27,132 84
" Nova Scotia	39,118 79
" Prince Edward Island	7,081 60
" Manitoba	3,129 70
" North-west Territories	7,076 26
" British Columbia	17,808 45
" Yukon	1,522 00
General account	402 97
Total	114,719 00

FISHERIES GENERAL EXPENDITURE.

This expenditure by provinces is subdivided as follows:—

—	Amount.	Total.
	$ cts.	$ cts.
Ontario.		
Salaries of officers	3,600 00	
Disbursements of officers	1,060 05	
Miscellaneous	0 48	
Total		4,660 53
Quebec.		
Salaries of officers	2,914 33	
Disbursements of officers	2,673 28	
Miscellaneous	198 25	
Total		6,785 86
New Brunswick.		
Salaries of officers	18,821 75	
Disbursements of officers	8,404 55	
Miscellaneous	6 54	
Total		27,132 84
Nova Scotia.		
Salaries of officers	23,397 72	
Disbursements of officers	15,708 17	
Miscellaneous	12 90	
Total		39,118 79
Prince Edward Island.		
Salaries of officers	5,269 43	
Disbursements of officers	1,803 17	
Miscellaneous	9 00	
Total		7,081 60
Manitoba.		
Salaries of officers	1,820 30	
Disbursements of officers	1,055 20	
Miscellaneous	254 20	
Total		3,129 70
North-west Territories.		
Salaries of officers	3,736 66	
Disbursements of officers	3,316 15	
Miscellaneous	23 45	
Total		7,076 26
British Columbia.		
Salaries of officers	10,501 25	
Disbursements of officers	3,857 16	
Miscellaneous	3,450 04	
Total		17,808 45
Yukon.		
Salaries of officers	1,400 00	
Disbursements of officers	122 00	
Total		1,522 00
General account		402 97
Grand total		114,719 00

FISHERIES GENERAL EXPENDITURE—*Continued.*

FISH-BREEDING.

Service.	Expenditure.	Total.
	$ cts.	$ cts.
Fish-breeding, Ottawa hatchery, Ont	2,261 45	
" Newcastle " "	4,572 05	
" Sandwich " "	7,193 34	
" Quinté Bass Pond hatchery, Ont	817 52	
		14,844 36
" Tadoussac hatchery, Que	3,206 84	
" Gaspé " "	3,106 94	
" Magog "	1,585 15	
" St. Alexis " "	181 10	
		8,080 03
" Restigouche " N.B.	4,624 42	
" Miramichi " "	2,477 29	
" St. John River hatchery, N.B.	5,204 31	
" Shemogue " "	2,881 48	
" Shippegan " "	911 51	
		16,099 01
" Bedford hatchery, N.S.	1,384 74	
" Margaree " "	2,443 53	
" Bay view " "	3,585 28	
		7,413 55
" Selkirk " Man.		2,415 09
" Fraser River hatchery, B.C.	6,257 05	
" Granite Creek " "	7,948 34	
" Skeena " "	9,069 90	
		23,275 29
General account		5,203 53
Total		77,3

SALARIES, ETC.

Newcastle Hatchery.		
Salaries	1,015 00	
Miscellaneous expenditure	3,557 05	
Total		4,572 05
Sandwich Hatchery.		
Salaries	900 00	
Miscellaneous expenditure	6,293 34	
Total		7,193 34
Ottawa Hatchery.		
Salaries	1,308 00	
Miscellaneous expenditure	953 45	
Total		2,261 45
Quinté Bass Pond.		
Salaries	125 00	
Miscellaneous expenditure	692 52	
Total		817 52
Tadoussac Hatchery.		
Salaries	716 62	
Miscellaneous expenditure	2,490 22	
Total		3,206 84
Carried forward		18,051 20

FISHERIES GENERAL EXPENDITURE—*Continued.*

FISH-BREEDING—*Continued.*

	$ cts.	$ cts.
Brought forward		18,051 20
Gaspé Hatchery.		
Salaries	687 50	
Miscellaneous expenditure	2,419 44	
Total		3,106 94
Magog Hatchery.		
Salaries	613 32	
Miscellaneous expenditure	971 83	
Total		1,585 15
St. Alexis.		
Salaries	120 00	
Miscellaneous expenditure	61 10	
Total		181 10
Restigouche Hatchery.		
Salaries	916 66	
Miscellaneous expenditure	3,707 76	
Total		4,624 42
Miramichi Hatchery.		
Salaries	1,000 00	
Miscellaneous expenditure	1,477 29	
Total		2,477 29
St. John River Hatchery.		
Salaries	600 00	
Miscellaneous expenditure	4,604 31	
Total		5,204 31
Shippegan.		
Miscellaneuos expenditure		911 51
Shemogue.		
Miscellaneous expenditure		2,881 48
Bedford Hatchery.		
Salaries	450 00	
Miscellaneous expenditure	934 74	
Total		1,384 74
Bay View Hatchery.		
Salaries	450 00	
Miscellaneous expenditure	3,135 28	
Total		3,585 28
Margaree.		
Salaries	500 00	
Miscellaneous expenditure	1,943 53	
Total		2,443 53
Selkirk Hatchery.		
Miscellaneous expenditure		2,415 09
Fraser River Hatchery.		
Salaries	550 00	
Miscellaneous expenditure	5,757 05	
Total		6,257 05
Carried forward		55,109 09

FISHERIES GENERAL EXPENDITURE—*Continued.*

FISH-BREEDING—*Concluded.*

	$ cts.	$ cts.
Brought forward		55,109 09
Skeena.		
Salaries	1,083 33	
Miscellaneous expenditure	7,986 57	
Total		9,069 90
Granite Creek.		
Miscellaneous expenditure		7,948 34
General account		5,203 53
Total		77,330 86

FISHERIES PROTECTION SERVICE—1902-1903.

	$ cts.	$ cts.
Steamer 'Acadia.'		
Wages of officers and men	8,366 56	
Provisions	5,181 76	
Fuel	1,784 35	
Repairs	4,476 73	
Miscellaneous	3,601 20	
Clothing	884 30	
Total		24,294 90
Steamer 'La Canadienne.'		
Wages of officers and men	7,884 76	
Provisions	3,082 16	
Fuel	3,161 95	
Repairs	4,865 88	
Miscellaneous expenditure	1,478 13	
Clothing	548 12	
Total		21,021 00
Steamer 'Curlew.'		
Wages of officers and men	5,599 90	
Provisions	1,509 60	
Fuel	1,977 49	
Repairs	2,317 37	
Miscellaneous expenditure	412 87	
Clothing	339 25	
Total		12,156 58
Steamer 'Petrel.'		
Wages of officers and men	6,342 27	
Provisions	1,931 43	
Fuel	1,614 18	
Repairs	1,559 97	
Miscellaneous expenditure	535 07	
Clothing	351 45	
Total		12,334 37
Carried foward		69,806 85

FISHERIES GENERAL EXPENDITURE—*Continued.*

FISHERIES PROTECTION SERVICE—1902-1903—*Concluded.*

	$ cts.	$ cts.
Brought forward		69,806 85
Steamer 'Constance.'		
Wages of officers and men	6,869 40	
Provisions	2,538 16	
Fuel	4,745 98	
Repairs	4,308 74	
Miscellaneous expenditure	4,466 26	
Clothing	423 03	
Total		23,341 57
Schooner 'Osprey.'		
Wages of officers and men	3,715 94	
Provisions	1,787 21	
Fuel	91 50	
Repairs	2,368 97	
Miscellaneous expenditure	649 61	
Clothing	343 85	
Total		8,957 08
Schooner 'Kingfisher.'		
Wages of officers and men	3,261 61	
Provisions	3,315 55	
Fuel	148 66	
Repairs	1,877 42	
Miscellaneous expenditure	861 73	
Clothing	377 00	
Total		9,840 97
'Georgia.'		
Wages of officers and men	1,893 52	
Supplies, &c	1,786 92	
Total		3,680 44
'Kestrel.'		
Wages, &c	2,831 22	
Miscellaneous expenditure	6,032 36	
Total		8,863 58
'Brant.'		
Wages of officers and men	1,174 32	
Provisions	334 34	
Fuel	160 83	
Supplies	62 41	
Total		1,739 05
General account		10,238 84
Fisheries Intelligence Bureau		2,660 44
New Steamer—British Columbia		23,695 00
Two patrol launches		5,775 00
		168,598 82
Less amount paid by Customs Department for steamer *Constance*		23,460 83
Net total		145,137 99

FISHERIES GENERAL EXPENDITURE—*Concluded.*

MISCELLANEOUS EXPENDITURE.

MISCELLANEOUS.	$ cts.
Building fishways	938 69
Legal and incidental expenses	1,998 95
Canadian fisheries exhibit	2,817 20
Expenditure in connection with the distribution of fishing bounties	4,900 11
Surveys of oyster beds	3,712 16
Issuing licenses to United States fishing vessels	505 72
Cold storage	11,331 49
Wharf storage at Sapperton	3,000 00
Russian seizures	87 50
Georgian Bay biological laboratory	1,495 95
Marine Biological Station of Canada (2,000), Fisheries revenue (refunds)	115 50
	30,903 27

STATEMENT of Fisheries Revenue paid to the credit of the Receiver General of Canada, for the Fiscal Year ended June 30, 1903.

	$ cts.
Ontario—rents, license fees, fines, &c	1,818 83
Quebec "	4,379 15
Nova Scotia "	3,962 45
New Brunswick "	11,188 02
P. E. Island "	2,007 35
Manitoba "	1,784 00
N. W. Territories "	1,350 50
British Columbia "	43,015 62
Yukon Territory "	320 00
Total	69,825 92
LESS—Refunds	115 50
Total	69,710 42
Licenses to United States fishing vessels	9,057 40
Less refund	132 00
Net total	8,925 40
	78,635 82

COMPARATIVE STATEMENT of Expenditure and Revenue of the

Nombre.		1889-90.		1890-91.		1891-92.	
		Expenditure.	Revenue.	Expenditure.	Revenue.	Expenditure.	Revenue.
		$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1	Ontario	14,539 87	23,666 96	15,540 30	26,517 70	15,155 83	25,368 90
2	Quebec	9,670 94	5,409 81	10,666 98	3,642 14	10,917 36	4,742 76
3	New Brunswick	14,914 95	8,834 35	16,082 77	7,193 69	15,707 98	6,334 83
4	Nova Scotia	17,395 24	5,424 95	17,844 19	5,582 65	18,755 86	3,357 42
5	Prince Edward Island	3,113 21	302 88	3,242 25	667 00	1,835 65	166 00
6	Manitoba & N.W. Territories.	3,604 70	794 00	3,609 03	1,234 00	3,593 43	1,079 00
7	British Columbia	3,634 41	11,367 50	4,220 53	12,859 02	6,158 17	8,192 48
8	Fish-breeding and fishways	39,126 91	.....	39,496 45	1,286 50	43,957 74	178 00
9	Fisheries Protection Service	64,434 66	1,176 38	83,050 16	1,934 49	93,397 40	.....
10	Miscellaneous	9,313 92	.....	13,382 28	.....	17,449 06	.....
	Total	178,748 81	56,976 83	207,234 94	60,917 19	226,928 48	49,719 39
	Fishing bounties	149,999 85	.....	165,967 22	.....	156,892 25	.....

		1896-97.		1897-98.		1898-99.	
11	General Account Fisheries	2,198 47	.....	2,389 66	.....	2,632 12	.....
12	Ontario	21,592 40	32,814 66	19,239 34	30,574 57	11,784 22	5,830 85
13	Quebec	12,910 80	7,876 12	11,140 16	7,571 15	11,350 27	6,287 71
14	New Brunswick	21,671 92	10,110 77	17,063 58	5,317 08	22,922 50	10,430 08
15	Nova Scotia	23,682 33	5,239 55	21,683 91	11,511 85	25,348 11	6,668 22
16	Prince Edward Island	3,744 36	2,032 25	6,775 78	2,707 57	6,832 85	2,242 24
17	Manitoba	1,908 14	1,719 00	1,206 26	1,515 00	1,883 37	1,537 85
18	N. W. Territories	2,181 58	344 13	2,324 66	393 87	4,065 68	150 50
19	British Columbia	8,841 64	39,888 82	8,508 79	47,864 75	8,459 47	45,801 75
20	Yukon	.....	.....	.....	.....	.....	.....
21	Fish-breeding	27,330 73	.....	28,002 32	.....	34,522 57	.....
22	Fisheries Protection Service	99,357 01	.....	101,807 96	.....	105,133 27	.....
23	Miscellaneous	62,777 30	.....	59,919 56	.....	23,207 73	.....
	Totals	289,197 01	100,025 30	280,061 98	107,455 84	427,599 16	76,949 20
	Fishing bounties	154,389 77	.....	157,504 00	.....	159,459 00	.....

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Fisheries Department from July 1, 1889, to June 30, 1903.

1892-93.		1893-94.		1894-95.		1895-96.		Nombre.
Expenditure.	Revenue.	Expenditure.	Revenue.	Expenditure.	Revenue.	Expenditure.	Revenue.	
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	
20,116 91	30,623 09	22,634 37	28,632 82	21,938 56	33,211 60	24,917 48	35,681 68	1
11,761 34	7,471 70	11,692 82	7,211 82	12,459 34	8,836 18	11,870 43	8,160 98	2
15,721 05	7,831 53	18,522 94	8,333 24	21,370 94	11,170 36	20,526 56	10,696 88	3
19,444 22	6,782 02	20,420 81	5,296 27	23,555 38	7,075 07	23,049 41	6,180 93	4
2,847 60	304 10	3,078 55	980 15	3,796 58	3,312 30	3,555 87	2,161 85	5
3,932 96	1,661 68	5,331 29	926 99	6,178 71	2,458 80	6,915 20	2,256 69	6
5,490 60	40,264 00	5,283 21	25,337 90	6,218 74	23,517 25	6,226 77	26,410 75	7
47,322 49	.....	45,024 67	.....	39,730 93	.....	38,050 41	.....	8
106,805 39	.....	115,147 59	.....	100,207 29	.....	102,021 72	.....	9
100,602 14	.....	34,892 19	.....	24,619 86	.....	20,203 25	.....	10
334,044 70	94,938 12	282,028 44	76,719 19	260,076 33	89,581 56	257,237 10	91,549 76	
159,752 15	.....	158,794 54	.....	160,089 42	.....	163,567 99	.....	

1899-00.		1900-01.		1901-02.		1902-03.		
652 41	.....	1,117 49	.....	765 78	.....	402 97	.....	11
3,804 94	794 12	3,819 57	717 35	4,445 93	373 42	4,650 53	1,818 83	12
5,452 41	2,543 04	7,934 03	4,738 92	6,242 58	2,498 85	6,785 86	4,379 15	13
21,659 94	12,015 27	28,452 51	10,150 40	23,813 62	11,658 34	27,132 84	11,188 02	14
27,461 91	5,494 49	35,760 39	6,595 94	32,618 00	6,084 65	39,118 79	3,962 45	15
7,364 30	2,207 12	7,934 03	1,525 30	7,814 02	1,843 45	7,081 60	2,007 35	16
1,723 59	2,028 00	2,669 74	1,103 00	2,624 87	2,279 00	3,129 70	1,784 00	17
3,848 25	1,522 50	6,251 39	1,222 55	5,928 22	950 07	7,076 26	1,350 50	18
13,662 17	53,195 35	17,886 36	52,960 35	18,560 73	41,178 65	17,808 45	43,015 62	19
.....	.....	.....	.....	2,066 66	1,130 00	1,522 00	320 00	20
38,070 12	.....	68,961 40	.....	79,891 85	.....	77,330 86	.....	21
97,370 11	.....	124,211 21	.....	152,723 69	.....	145,137 49	.....	22
31,125 67	.....	27,833 79	.....	56.131 26	.....	30,903 27	.....	23
411,717 35	79,799 89	332,767 07	79,013 81	393,627 21	67,996 43	368,091 12	69,825 92	
160,000 00	.....	158,802 50	.....	155,942 00	.....	159,853 50		

APPENDIX No. 2.

FISHING BOUNTIES.

The payments made for this service are under the authority of Act 54-55 Vic., cap. 42, intituled: 'An Act to encourage the development of the sea fisheries and the building of fishing vessels,' which provides for the payment of the sum of $160,000 annually, under regulations to be made from time to time by the Governor General in Council.

REGULATIONS.

The regulations governing the payment of fishing bounties are as established by the following Order in Council dated December 10th, 1897:—

Order in Council.

AT THE GOVERNMENT HOUSE AT OTTAWA.
FRIDAY, the 10th day of December, 1897.

Present:

HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL.

His Excellency, in virtue of the provisions of 'The Bounty Act, 1891,' 54-55 Victoria, chapter 42, and by and with the advice of the Queen's Privy Council for Canada, is pleased to order that the regulations governing the payment of fishing bounties established by order of the Governor in Council dated the 24th August, 1894, shall be and the same are hereby rescinded, and the following regulations substituted therefor:—

1. Resident Canadian fishermen who have been engaged in deep-sea fishing for fish other than shell-fish, salmon and shad, or fish taken in rivers, or mouths of rivers, for at least three months, and have caught not less than 2,500 pounds of sea-fish, shall be entitled to a bounty; provided always, that no bounty shall be paid to men fishing in boats measuring less than 13 feet keel, and not more than 3 men (the owner included), will be allowed as claimants in boats under 20 feet.

2. No bounty shall be paid upon fish caught in trap-nets, pound-nets and weirs, nor upon the fish caught in gill-nets fished by persons who are pursuing other occupations than fishing, and who devote merely an hour or two daily to fishing these nets but are not, as fishermen, steadily engaged in fishing.

3. Only one claim will be allowed in each season, even though the claimant may have fished in two vessels, or in a vessel and a boat, or in two boats.

4. The owners of boats measuring not less that 13 feet keel which have been engaged during a period of not less than three months in deep-sea fishing for fish other than shell-fish, salmon or shad, or fish taken in rivers or mouths of rivers, shall be entitled to a bounty on each such boat.

5. Canadian registered vessels, owned and fitted out in Canada, of 10 tons and upwards (up to 80 tons) which have been exclusively engaged during a period of not less than three months in the catch of sea-fish other than shell-fish, salmon or shad, or fish taken in rivers, or mouths of rivers, shall be entitled to a bounty to be calculated on the registered tonnage which shall be paid to the owner or owners.

6. The three months during which a vessel must have been engaged in fishing, to be entitled to bounty, shall commence on the day the vessel sails from port on her fishing voyage and end the day she returns to port from said voyage.

7. Owners or masters of vessels intending to fish and claim bounty on their vessels must, before proceeding on a fishing voyage, procure a license from the nearest Collector of customs or Fishery Overseer, said license to be attached to the claim when sent in for payment.

8. Dates and localities of fishing must be stated in the claim, as well as the quantity and kinds of sea-fish caught.

9. Ages of men must be given. Boys under 14 years of age are not eligible as claimants.

10. Claims must be sworn to as true and correct in all their particulars.

11. Claims must be filed on or before November 30 in each year.

12. Officers authorized to receive claims will supply the requisite blanks free of charge, and after certifying the same will transmit them to the Department of Marine and Fisheries.

13. No claim in which an error has been made by the claimant or claimants shall be amended after it has been signed and sworn to as correct.

14. Any person or persons detected making returns that are false or fraudulent in any particular will be debarred from any further participation in the bounty, and be prosecuted according to the utmost rigour of the law.

15. The amount of the bounty to be paid to fishermen and owners of boats and vessels will be fixed from time to time by the Governor in Council.

16. All vessels fishing under bounty license are required to carry a distinguishing flag, which must be shown at all times during the fishing voyage at the main-topmast head. The flag must be four feet square in equal parts of red and white, joined diagonally from corner to corner. Any case of neglect to carry out this regulation reported to the Department of Marine and Fisheries will entail the loss of the bounty, unless satisfactory reasons are given for its non-compliance.

JOHN J. McGEE,
Clerk of the Privy Council.

The bounty for the year 1902 was distributed on the basis authorized by the following Order in Council :—

AT THE GOVERNMENT HOUSE AT OTTAWA,
The 6th day of February, 1903.

Present :

HIS EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL.

The Governor General in Council is pleased to Order, and it it is hereby Ordered, that the sum of One hundred and sixty thousand dollars, payable under the provisions of the Act 54-55 Victoria, chapter 42, intituled : "An Act to amend chapter 96 of the Revised Statutes, intituled an Act to encourage the development of the Sea Fisheries and the building of fishing vessels," shall be distributed for the year 1902-1903 upon the following basis :—

Vessels : The owners of the vessels entitled to receive bounty shall be paid one dollar ($1) per registered ton, provided, however, that the payment to the owner of any one vessel shall not exceed the sum of eighty dollars ($80), and all vessel fishermen entitled to receive bounty, shall be paid the sum of seven dollars and twenty-five cents ($7.25) each.

Boats : Fishermen engaged in fishing in boats, who shall also have complied with the regulations entitling them to receive the bounty, shall be paid the sum of three dollars and eighty cents ($3.80) each, and the owners of fishing boats shall be paid one dollar ($1) per boat.

JOHN J. McGEE,
Clerk of the Privy Council.

There were received for the year 1902, 12,796 claims, a decrease of 597 as compared with 1901.

The number of claims paid during the year was 12,723, a decrease of 651 as compared with the previous year.

There were $71,079 in bounties paid to vessels and their crews, and $88,774,50 to boats and boat fishermen, making the total payments during the year 1902, $159,853,50.

The number of vessels which received bounty during the year was 795, the total tonnage being 25,521 tons, an increase of 9 vessels and a decrease of 84 tons.

During the year bounty was paid on 11,928 boats, and to 20,226 boat fishermen, being a decrease of 660 boats and 991 men as compared with 1901.

DETAILED STATEMENT of Fishing Bounty Claims received and paid during the year 1902.

Province.	County.	Number of Claims received.	Number of Claims rejected.	Number of Claims paid.
Nova Scotia	Annapolis	134	1	133
	Antigonish	114		114
	Cape Breton	366	9	357
	Cumberland	9	1	8
	Digby	448	1	447
	Guysborough	857	9	*849
	Halifax	1,364	5	1,359
	Hants	1		1
	Inverness	334		*335
	King's	55	2	53
	Lunenburg	910	2	908
	Pictou	10		*16
	Queen's	137	3	134
	Richmond	637	8	629
	Shelburne	694		694
	Victoria	390	1	*390
	Yarmouth	250	6	244
	Totals	6,710	48	*6,671
New Brunswick	Charlotte	373	4	369
	Gloucester	348	4	344
	Kent	51		51
	Northumberland	4		4
	Restigouche	2		2
	St. John	24		24
	Totals	802	8	794
Prince Edward Island	King's	456		*458
	Prince	358	3	355
	Queen's	99		99
	Totals	913	3	*912
Quebec	Bonaventure	829	11	*819
	Gaspé	2,584	12	*2,577
	Rimouski	49	4	*46
	Saguenay	909	5	904
	Totals	4,371	32	*4,346
	Grand totals	12,796	91	*12,723

* The number of claims paid includes several applications for previous years, which explains the difference between claims paid and claims received after deducting those rejected.

DETAILED STATEMENT of Fishing Bounties paid to Vessels in each County during the Year 1902.

Province.	County.	Number of Vessels.	Tonnage.	Average Tonnage.	Number of Men.	Amount paid.
						$ cts.
Nova Scotia	Annapolis	9	247	27·44	34	493 50
	Antigonish	1	10	10	3	31 75
	Cape Breton	12	196	16.33	52	573 00
	Cumberland					
	Digby	50	1,496	29·90	425	4,577 25
	Guysborough	42	766	18·24	214	2,317 50
	Halifax	51	1,161	22·76	318	3,466 50
	Hants	1	17	17	1	24 25
	Inverness	23	304	13·22	111	1,108 75
	King's	4	49	12·25	8	107 00
	Lunenburg	166	12,515	75·39	2,734	32,336 50
	Pictou					
	Queen's	7	95	13·56	31	319 75
	Richmond	38	907	23·60	223	2,522 75
	Shelburne	56	1,694	30·25	486	5,217 50
	Victoria	4	52	13	24	226 00
	Yarmouth	41	1,729	42·41	462	5,088 50
	Totals	505	21,248	42·07	5,125	58,410 50
New Brunswick	Charlotte	49	841	17·16	200	2,291 00
	Gloucester	189	2,279	12·06	734	7,600 50
	Kent					
	Northumberland	3	33	11	11	112 75
	Restigouche	2	37	18·50	8	95 00
	St. John	6	103	17·16	19	240 75
	Totals	249	3,293	13·22	972	10,340 00
Prince Edward Island	King's	18	438	24·33	88	1,076 00
	Prince	6	143	23·83	31	367 75
	Queen's	4	49	12·25	16	165 00
	Totals	28	630	22·50	135	1,608 75
Quebec	Bonaventure					
	Gaspé	5	88	17·60	15	196 75
	Rimouski					
	Saguenay	8	262	32·75	36	523 00
	Totals	13	350	26·92	51	719 75
	Grand totals	795	25,521	32·10	6,284	71,079 00

DETAILED STATEMENT of Fishing Bounties paid to Boats in each County during the Year 1902, showing also total amount paid to Vessels and Boats for the Year.

Province.	County.	Nnmber of Boats.	Number of Men.	Amount paid.	Total Bounty paid to Vessels and Boats in 1902.
				$ cts.	$ cts.
Nova Scotia	Annapolis	124	195	865 00	1,358 50
	Antigonish	113	161	724 80	756 55
	Cape Breton	345	642	2,784 60	3,357 60
	Cumberland	8	13	57 40	57 40
	Digby	397	692	3,026 60	7,603 85
	Guysborough	807	1,288	5,700 80	8,018 30
	Halifax	1,308	1,770	8,034 00	11,500 50
	Hants				24 25
	Inverness	312	665	2,838 10	3,946 85
	King's	49	72	322 60	429 60
	Lunenburg	742	865	4,029 00	36,365 50
	Pictou	16	24	104 80	104 80
	Queen's	127	223	974 40	1,294 15
	Richmond	591	912	4,056 60	6,579 35
	Shelburne	638	1,042	4,597 60	9,815 10
	Victoria	386	582	2,601 10	2,827 10
	Yarmouth	203	296	1,327 80	6,416 30
	Totals	6,166	9,442	42,045 20	100,455 70
New Brunswick	Charlotte	320	476	2,128 80	4,419 80
	Gloucester	155	371	1,564 80	9,165 30
	Kent	51	84	370 20	370 20
	Northumberland	1	3	12 40	125 15
	Restigouche				95 00
	St. John	18	32	139 60	380 35
	Totals	545	966	4,215 80	14,555 80
Prince Edward Island	King's	440	610	2,757 40	3,833 40
	Prince	349	802	3,396 60	3,764 35
	Queen's	95	226	953 80	1,118 80
	Totals	884	1,638	7,107 80	8,716 55
Quebec	Bonaventure	819	1,534	6,640 00	6,640 00
	Gaspé	2,572	5,101	21,953 00	22,149 75
	Rimouski	46	60	273 70	273 70
	Saguenay	896	1,485	6,539 00	7,062 00
	Totals	4,333	8,180	35,405 70	36,125 45
	Grand totals	11,928	20,226	88,774 50	159,853 50

GENERAL STATISTICS.

The fishing bounty was first paid in 1882.

The payments were made each year on the following basis :—

1882, vessels $2 per ton, one half to the owner and the other half to the crew. Boats at the rate of $5 per man, one-fifth to the owner and four-fifths to the men.

1883, vessels $2 per ton, and boats $2.50 per man, distributed as in 1882.

1884, vessels $2 per ton, as in 1882 and 1883.

Boats from 14 to 18 feet keel	$1 00
" 18 to 25 "	1 50
" 25 feet keel upwards	2 00

And boat fishermen $3 each.

1885, 1886 and 1887, vessels $2 per ton as in previous years. Boats measuring 13 feet keel having been admitted in 1885, the rates were :—Boats from 13 to 18 feet keel, $1 ; from 18 to 25 feet keel, $1.50 ; from 25 feet keel upwards, $2, and fishermen $3 each.

1888, vessels $1.50 per ton, one-half each to owner and crew. Boats, the same as in 1885, 1886 and 1887.

1889, 1890 and 1891, vessels $1.50 per ton as in 1888. Boats $1 each. Boat fishermen 3.

1892, vessels $3 per ton, one half each to owner and crew. Boats $1 each. Boat fisherman $3.

1893, vessels $2.90 per ton, paid as formerly. Boats $1 each. Boat fishermen $3.

1894, vessels $2.70 per ton, distributed as in previous years. Boats $1 each. Boat fishermen $3.

1895, vessels $2.60 per ton, half each to owner and crew. Boats $1 each. Boat fishermen $3.

1896, vessels $1 per ton, which was paid to the owners, and vessel fishermen $5 each, clause 5 of the regulations having been amended accordingly. Boats $1 each, and boat fishermen $3.50 per man.

1897, vessels $1 per ton, and vessel fishermen $6 each. Boats $1 each, and boat fishermen $3.50 per man.

1898, vessels $1 per ton, and vessel fishermen $6.50 each. Boats $1 each, and boat fishermen $3.50 per man.

1899. vessels $1 per ton, and vessel fishermen $7 each. Boats $1 each, and boat fishermen $3.50 per man.

1900, vessels $1 per ton, and vessel fishermen $6.50 each. Boats $1 each, and boat fishermen $3.50 per man.

1901, vessels $1 per ton, and vessel fishermen $7 each. Boats $1 each, and boat fishermen $3.50 per man.

1902, vessels $1 per ton, and vessel fishermen, $7.25 each. Boats $1 each, and boat fishermen, $3.80 per man.

Since 1882, 17,026 vessels, totalling a tonnage of 607,153 tons, have received the bounty. The total number of vessel fishermen which received bounty is 130,834 being an average of about 7 men per vessel.

The total number of boats to which bounty was paid since 1882 is 288,893, and the number of fishermen 532,427. Average number of men per boat, 2.

The highest bounty paid per head to vessel fishermen was $21.75 in 1893 ; the lowest 83 cents, while the highest to boat fishermen was $4, the lowest $2.

The general average paid per head is $4.99.

COMPARATIVE STATEMENT by Provinces for the Years 1882 to 1902, inclusive, showing :—

(1) Total number of Fishing Bounty Claims received and paid by the Department of Marine and Fisheries.

YEAR.	NOVA SCOTIA.		NEW BRUNSWICK.		P.E. ISLAND.		QUEBEC.		TOTAL.	
	Received.	Paid.	Received.	Paid.	Received.	Paid.	Received.	Paid.	Received.	Paid.
1882	6,730	6,613	1,257	1,142	1,169	1,100	3,162	3,117	12,318	11,972
1883	7,171	7,076	1,693	1,579	1,138	1,106	3,602	3,325	13,604	13,086
1884	7,007	6,930	1,252	1,224	923	885	3,470	3,429	12,652	12,468
1885	7,646	7,599	1,609	1,588	1,117	1,025	3,943	3,912	14,315	14,124
1886	7,639	7,702	1,767	1,763	1,131	1,080	4,275	4,355	14,812	14,900
1887	8,262	8,227	1,975	1,958	1,201	1,126	4,138	4,105	15,576	15,416
1888	8,481	8,429	2,065	2,026	1,153	834	4,328	4,310	16,027	15,599
1889	8,816	8,523	2,428	2,392	1,211	1,511	4,664	4,652	17,119	17,078
1890	9,337	9,429	2,522	2,469	1,352	1,257	4,860	4,804	18 071	17,959
1891	10,242	10,063	2,831	2,084	1,482	1,446	5,108	4,913	19,663	18,506
1892	8,272	8,186	1,067	1,001	1,065	1,051	4,425	4,204	14,829	14,442
1893	7,926	7,844	967	881	1,027	1,012	4,059	3,898	13,979	13,635
1894	8,640	8,600	925	911	983	963	3,948	3,876	14,496	14,350
1895	8,835	8,825	979	975	1,009	1,025	3,904	3,955	14,727	14,780
1896	8,597	8,562	1,137	1,064	1,111	1,120	4,366	4,229	15,211	14,975
1897	8,450	8,418	1,042	991	1,175	1,171	4,180	4,149	14,847	14,729
1898	8,446	8,347	934	917	1,143	1,145	4,156	4,092	14,679	14,501
1899	7,894	7,754	849	825	1,016	947	4,134	4,102	13,893	13,628
1900	7,484	7,452	904	904	1,119	1,169	4,264	4,251	13,771	13,776
1901	7,346	7,344	829	826	941	937	4,277	4,267	13,393	13,374
1002	6,710	6,671	802	794	913	912	4,371	4,346	12,796	12,723
Total	169,931	168,594	29,834	28,314	23,379	22,822	87,634	86,291	310,778	306,021

(2) NUMBER of vessels, tonnage and number of men which received Bounty in each year.

YEAR.	NOVA SCOTIA.			NEW BRUNSWICK.			P.E. ISLAND.			QUEBEC.			TOTAL.		
	No. of Vessels.	Tonnage.	No. of Men.	No. of Vessels.	Tonnage	No. of Men.	No. of Vessels.	Tonnage.	No. of Men.	No. of Vessels.	Tonnage.	No. of Men.	No. of Vessels.	Tonnage.	No. of Men.
1882	588	22,841	5,343	120	2,171	531	15	389	74	63	2,210	538	786	27,611	6,486
1883	700	29,788	6,238	126	2,102	496	16	450	66	62	2,236	443	904	34,576	7,243
1884	700	29,828	6,327	139	2,289	560	16	582	92	56	1,965	382	911	34,664	7,361
1885	629	27,709	5,897	128	2,120	496	19	597	113	55	1,791	317	831	32,217	6,823
1886	562	25,375	5,022	145	2,628	520	32	1,071	215	52	1,730	320	791	30,804	6,077
1887	566	24,520	4,900	154	2,889	563	38	1,677	338	54	1,883	334	812	30,969	6,135
1888	589	26,008	5,450	150	2,545	544	37	1,245	249	51	1,842	388	827	31,640	6,631
1889	597	27,123	5,684	153	2,590	565	35	1,274	239	48	1,729	330	833	32,716	6,818
1890	540	23,955	4,935	133	2,129	447	32	1,002	203	34	1,182	220	739	28,268	5,805
1891	527	22,780	4,618	124	2,051	411	27	778	155	27	924	168	705	26,533	5,352
1892	507	22,279	4,611	108	1,683	343	30	983	139	23	803	159	668	25,748	5,252
1893	536	23,195	4,780	210	2,922	634	27	910	151	32	952	179	805	27,979	5,744
1894	602	24,735	5,077	238	3,189	721	21	594	114	38	1,066	178	899	29,584	6,090
1895	603	25,018	5,184	238	3,107	764	27	769	129	39	1,262	173	907	30,156	6,250
1896	553	23,415	4,607	250	3,337	800	23	656	114	36	1,143	144	862	28,551	5,665
1897	507	21,323	4,829	239	3,079	816	20	490	109	24	833	116	790	25,725	5,870
1898	505	20,868	4,840	239	3,155	859	24	561	125	16	524	77	784	25,108	5,901
1899	519	22,538	5,323	238	3,131	885	15	373	76	17	497	78	789	26,539	6,362
1900	525	22,474	5,352	234	2,969	890	29	737	153	14	459	76	802	26,639	6,471
1901	508	21,469	5,158	242	3,229	872	23	541	115	13	366	69	786	25,605	6,214
1902	505	21,248	5,126	249	3,293	972	28	630	135	13	350	51	795	25,521	6,284
Total	11,868	508,489	109,301	3,857	56,608	13,689	534	16,309	3,104	767	25,747	4,740	17,026	607,153	130,834

(3) NUMBER of Boats and boat fishermen which received Bounty in each year.

YEAR.	NOVA SCOTIA.		NEW BRUNSWICK.		P. E. ISLAND.		QUEBEC.		TOTAL.	
	No. of Boats.	No. of Men.	No. of Boats.	No. of Men.	No. of Boats.	No. of Men.	No. of Boats.	No. of Men.	No. of Boats.	No. of Men.
1882	6,043	12,130	1,024	2,530	1,087	3,070	3,071	5,716	11,225	23,446
1883	6,458	13,553	1,453	3,309	1,098	3,106	3,266	6,188	12,275	26,156
1884	6,257	12,669	1,086	2,505	869	2,346	3,344	6,416	11,556	23,936
1885	6,970	13,396	1,460	3,254	1,006	2,606	3,857	7,485	13,293	26,741
1886	7,140	13,351	1,618	3,567	1,048	2,547	4,303	7,981	14,109	27,446
1887	7,662	13,997	1,804	3,994	1,088	2,711	4,051	7,550	14,605	28,252
1888	7,840	14,115	1,876	4,148	797	2,141	4,259	7,852	14,772	28,256
1889	7,926	14,118	2,237	5,032	1,475	3,568	4,602	8,807	16,240	31,525
1890	8,886	15,738	2,324	5,242	1,192	3,024	4,766	9,241	17,168	33,245
1891	9,525	16,552	1,928	4,126	1,383	3,427	4,865	9,402	17,701	33,507
1892	7,679	12,307	893	1,765	1,021	2,047	4,181	7,693	13,774	23,812
1893	7,308	11,748	671	1,314	985	1,962	3,866	7,245	12,830	22,269
1894	7,956	12,899	661	1,281	913	1,813	3,821	7,139	13,351	23,132
1895	8,222	13,106	737	1,434	998	2,141	3,916	7,877	13,873	24,558
1896	8,008	12,454	814	1,553	1,095	2,126	4,189	7,688	14,106	23,821
1897	7,911	12,542	752	1,351	1,151	2,147	4,125	7,572	13,939	23,612
1898	7,872	12,438	678	1,237	1,121	2,199	4,076	7,627	13,747	23,501
1899	7,235	11,305	587	1,027	932	1,710	4,085	7,696	12,839	21,738
1900	6,927	10,645	670	1,184	1,140	2,198	4,237	8,004	12,974	22,031
1901	6,836	10,464	584	1,001	914	1,735	4,254	8,017	12,588	21,217
1902	6,166	9,442	545	966	884	1,638	4,333	8,180	11,928	20,226
Total	156,827	268,969	24,402	51,820	22,197	50,262	85,467	161,376	288,893	532,427

(4) TOTAL Number of men receiving Bounty in each year.

YEAR.	NOVA SCOTIA.	NEW BRUNSWICK.	P.E. ISLAND.	QUEBEC.	Total.
	No. of Men.	No. of Men.	No. of Men.	No. of Men.	
1882	17,473	3,061	3,144	6,254	29,932
1883	19,791	3,805	3,172	6,631	33,399
1884	18,996	3,065	2,438	6,798	31,297
1885	19,293	3,750	2,719	7,802	33,564
1886	18,373	4,087	2,762	8,301	33,523
1887	18,897	4,557	3,049	7,884	34,387
1888	19,565	4,692	2,390	8,240	34,887
1889	19,802	5,597	3,807	9,137	38,343
1890	20,673	5,689	3,227	9,461	39,050
1891	21,170	4,537	3,582	9,570	38,859
1892	16,918	2,108	2,186	7,852	29,064
1893	16,528	1,948	2,113	7,424	28,013
1894	17,976	2,002	1,927	7,317	29,222
1895	18,290	2,198	2,270	8,050	30,808
1896	17,061	2,353	2,240	7,832	29,486
1897	17,371	2,167	2,256	7,688	29,482
1898	17,278	2,096	2,324	7,704	29,402
1899	16,628	1,912	1,786	7,774	28,100
19 0	15,997	2,074	2,351	8,080	28,502
1901	15,622	1,873	1,350	8,086	27,431
1902	14,568	1,938	1,773	8,231	26,510
Total	378,270	65,509	53,366	166,116	663,261

(5) TOTAL annual payments of Fishing Bounty.

YEAR.	Nova Scotia.	New Brunswick.	P. E. Island.	Quebec.	Total.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
1882	106,098 72	16,997 00	16 137 00	33,052 75	172,285 47
1883	89,432 50	12,395 20	8,577 14	19,940 01	130,344 85
1884	104,934 09	13,576 00	9,203 96	28,004 93	155,718 98
1885	103,999 73	15,908 25	10,166 65	31,464 76	161,539 39
1886	98,789 54	17,894 57	10,935 87	33,283 61	160,903 59
1887	99,622 03	19,699 65	12,528 51	31,907 73	163,757 92
1888	89,778 90	18,454 92	9,092 96	32,858 75	150,185 53
1889	90,142 51	21,026 79	13,994 53	33,362 71	158,526 54
1890	91,235 64	21,108 33	11,686 32	34,210 72	158,241 01
1891	92,377 42	17,235 96	12,771 30	34,507 17	156,891 85
1892	109,410 39	10,864 61	9,782 79	29,694 35	159,752 14
1893	108,060 67	12,524 09	9,328 62	28,320 72	158,234 10
1894	111,460 03	12,690 80	7,875 79	28,040 18	160,066 80
1895	110,765 27	12,919 32	9,285 13	30,598 27	163,567 99
1896	98,048 95	13,602 88	9,745 50	32,992 44	154,389 77
1897	102,083 50	13,454 50	9,809 00	32,157 00	157,504 00
1898	103,730 00	13,746 00	10,188 00	31,795 00	159,459 00
1899	106,598 50	13,514 50	7,822 00	32,065 00	160,000 00
1900	101,448 00	13,562 50	10,589 00	33,203 00	158,802 50
1901	101,024 50	13,420 50	8,335 50	33,161 50	155,942 00
1902	100,455 70	14,555 80	8,716 55	36.125 45	159,853 50
Total	2,119,496 59	319,152 17	216,572 12	660,746 05	3,315,966 93

LIST of Vessels which received Fishing Bounty during the Year 1902–03.

PROVINCE OF NOVA SCOTIA.

ANNAPOLIS COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	Number of Crew paid.	Amount of Bounty paid.
							$ cts.
111837	A. L. B.	Digby	22	Alton Bent.	Phinney's Cove.	3	43 75
94704	Charles Haskell	"	67	John W. Snow	Thorne's Cove	4	96 00
94835	Georgie Linwood	"	25	John Magranahan	Margaretville	3	46 75
36569	Hope	Halifax	34	Elias Hudson	Parker's Cove	6	77 50
107478	Jessie C.	Digby	10	Lewis Sabeau	Port Lorne	2	24 50
94732	Only Son	Windsor	13	James D. Aldred	Margaretville	3	34 75
83253	Rescue	Annapolis	17	Thomas Templeman	Port Lorne	4	46 00
100539	Rowena	Digby	10	John F. Peters	Litchfield	3	31 75
107293	S. C. H.	Annapolis	49	John S. Hayden	Victoria Beach	6	92 50

ANTIGONISH COUNTY.

90642	Komaroff	Yarmouth	10	John J. Brow	H'b'r au Bouche.	2	24 50

CAPE BRETON COUNTY.

112376	Agnes	Arichat	15	Patrick Wadden	Scatarie Island	4	44 00
100389	Annie F	Sydney	13	John Farrell	Main à Dieu	3	34 75
100372	Betsy Jane	"	11	Samuel Moore	Little Bras d'Or.	4	40 00
85381	Champion	"	19	John Williams	Louisburg	4	48 00
85382	G. H. Marryatt	Halifax	24	Thomas Hart.	"	4	53 00
103458	K. McKenzie	Arichat	17	Thomas Peach, jr.	Port Morien	6	60 50
107360	Ovando	Sydney	11	Patrick Campbell.	Main à Dieu	4	40 00
100566	Rob S.	Halifax	21	Gilbert Tutty	Louisburg	5	57 25
107376	Rozzie.	Sydney	17	Joseph Degaut	Little Bras d'Or.	6	60 50
103464	St. Patrick	Arichat	27	Lewis Dickson	Louisburg	6	70 50
107359	Victoria.	Sydney	11	James Turner	Glace Bay	4	40 00
107351	Wilfrid Laurier	"	10	Philip Pike	North Sydney	2	24 50

DIGBY COUNTY.

83431	Acadian.	Weymouth	32	Edwin Hains.	Freeport	10	104 50
107476	Addie B.	Digby	13	Charles H. Bailey	Westport	5	49 25
112286	A. E. Moore.	"	11	James A. Moore	"	3	32 75
111528	Alert.	"	11	Stephen A. Doucette	Cape St. Mary	5	47 25
88598	Alph. B. Parker	St. John, N.B	47	Holland Outhouse	Tiverton	13	141 25
107807	America	"	15	James Cosseboom	"	5	51 25
111524	Annie Laurie	Digby	10	Stephen Perry	Freeport	3	31 75
90655	Annina	Yarmouth	12	James S. Ellis	Digby	4	41 00
100547	B and C.	Digby	14	Edwin Hains.	Freeport	3	35 75
94698	Carrie H	"	20	Norman Robbins	Tiverton	7	70 75
74331	Condor.	Yarmouth	11	Howard Titus	Westport	6	54 50
103181	Curlew.	Digby	63	George Denton	"	18	193 50
107112	Daisy Linden	"	97	David Sproul	Digby	21	232 25
77740	Elmer.	"	15	Howard Anderson	"	9	80 25
103749	Emerald	"	29	Roland Wormell	"	14	130 50
107604	Emma D	Weymouth	20	Frank S. Doucette	Cape St. Mary	7	70 75
94707	Ernest F. Norwood.	Digby	79	Joseph E. Snow.	Digby	13	173 25
75757	Etta.	Yarmouth.	17	Clarence Webber	Westport	5	53 25
111527	Etta H	Digby	10	Edward Welch	"	4	39 00
112281	Eveline.	"	22	Cesar Robicheau	Meteghan	6	65 50

LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*

DIGBY COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							$ cts.
74329	Fairy Queen	Yarmouth	13	Wallace Coggins	Westport	6	56 50
100891	Fleur-de-lis	Weymouth	17	Chas. W. Pyne	Beaver River	4	46 00
80798	Freddie G.	Digby	18	E. C. Bowers	Westport	6	61 50
77963	Freeman Colgate	St. Andrews	26	James A. Peters	"	10	98 50
111839	Harry C	Digby	16	Fred. J. Coggins	"	3	37 75
107480	Hattie & Eva	"	11	Edwin Hains	Freeport	4	40 00
100544	Helen Maud	"	26	Chas. McDormand	Westport	8	84 00
77786	Hesperus	Halifax	17	David Hayden	Digby	6	60 50
111530	Island Girl	Digby	10	Esrom Thurber	Freeport	4	39 00
100064	Isma	St. John, N. B.	30	James A. Peters	Westport	10	102 50
111525	James W. Cousins	Digby	87	Joseph F. Milberry	"	26	268 50
111839	Lavinia D	"	21	Jas. Doucett	Cape St. Marys	6	64 50
85690	Lora T	"	15	Judson Thurber	Freeport	4	44 00
100487	Mabel B	"	57	Chas. E. Finigan	"	12	144 00
107479	Marguerite	"	24	David Sproul	Digby	9	89 25
88583	Mary Odell	Yarmouth	14	Jno. T. Therrio	Meteghan	5	50 25
103184	Mayflower	Shelburne	26	Geo. C. Stevens	Freeport	8	84 00
100574	Melrose	Lunenburg	71	Arthur W. Suthern	Westport	18	201 50
100895	New Home	Weymouth	31	Moise C. Thibodeau	Church Point	11	110 75
111471	Quickstep	Arichat	83	David Sproul	Digby	14	181 50
111834	Rosan	Digby	11	Frank J. Doucette	Cape St. Marys	4	40 00
111835	Roxana	"	11	Ainslie Titus	Westport	3	32 75
111840	Sparrow	"	28	Fred Titus	Meteghan	6	71 50
111529	Spray	"	12	Benj. Taylor	Smith's Cove	2	26 50
111833	Sunlocks	"	59	Wm. Finigan	Freeport	14	160 50
100609	Swan	Shelburne	56	Edwin Hains	"	14	157 50
94694	Utah and Eunice	Digby	33	"	"	9	98 25
94832	Venus	St. Andrews	42	"	"	14	143 50
103704	Whisper	Yarmouth	31	Wm. McGrath	Digby	9	96 25
100543	W. Parnell O'Hara	Digby	79	Joseph E. Snow	"	17	202 25

GUYSBORO' COUNTY.

90866	Alice	Halifax	12	Caleb H. Peart	Guysboro'	5	48 25
107992	Alice J. Davis	Canso	20	Edward Hearn	Canso	7	70 75
111422	Annie B.	Halifax	26	Benj. Boudrot	Port Felix	3	47 75
100813	Blanche	Barrington	24	George Riley	West Liscomb	6	67 50
112016	Blanche	Canso	13	Simon Williams	Canso	5	49 25
103537	Bonacord	Halifax	12	Geo. L. Avery	Larry's River	5	48 25
96923	Cardigan	Charlottetown	38	Joseph Fougere	"	5	74 25
103308	Ella May	Pt. Hawkesbury	34	Hibbert Carr	Mulgrave	5	70 25
80994	Esperance	Guysboro'	10	Fred Myers	Cole Harbour	6	53 50
107993	Florence May	Canso	11	W. G. Matthews	Canso	5	47 25
112373	Flying Cloud	Arichat	13	Stephen Marshall	Cook's Cove	4	42 00
83180	Friend	Halifax	17	Edward Munroe	Lr. White Head	2	31 50
100818	Geneva Ethel	Barrington	29	Martin Meagher	Canso	8	87 00
107997	Gertie Bell	Canso	15	Wm. Digdon	White Head	3	36 75
94963	Golden Seal	Halifax	32	Edward B. Petrine	Larry's River	3	53 75
107996	Green Linnet	Canso	12	Borden A. Jones	Cook's Cove	4	41 00
100815	Happy Home	Barrington	10	Samuel Snow	Up. White Head	5	46 25
85569	Jessie B.	Westport	36	Hubert Richard	Charlo's Cove	6	79 50
111908	Laura B. G.	Arichat	10	Benj. Gerrior	"	4	39 00
111910	Lizzie J. Greenleaf	"	11	Thos. Ryan	Canso	3	32 75
100835	Lottie B.	Lunenburg	12	Thomas Boudrot, sr.	Dover	6	55 50
107995	Maggie M. F.	Canso	15	Jas. Fitzgerald	Queensport	5	51 25
111421	Maple-leaf	Halifax	25	Norman S. Corkum	Beckerton	6	68 50
111909	Margaret May	Arichat	12	Jno. Kavanagh	Canso	5	48 25
112371	Mary A.	"	11	Thos. Pembroke	"	4	40 00
103859	Mary May	Halifax	23	Benj. David	Port Felix	4	52 00
107999	Maud S.	Canso	12	J. W. Sproul	Canso	5	48 25

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LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*

GUYSBORO' COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							$ cts.
100446	Minnie May	Canso	12	Chas. H. Richard	Charlo's Cove	6	55 50
100450	Minto	"	18	Wm. O'Hara	Canso	7	68 75
107998	Money Bush	"	15	Thos. Richard	Port Felix	7	65 75
103547	Morning Glory	Halifax	11	John J. Gerrior	Larry's River	5	47 25
80970	Orion	"	24	Edward B. Pelrine	"	4	53 00
100572	Rowena	Lunenburg	51	Arthur Crooks	Liscomb	12	138 00
112372	River Swan	Arichat	11	Jos. Bonvie	Larry's River	4	40 00
111430	Shamrock	Halifax	23	Jacob Keizer	Beckerton	5	59 25
96962	Sunrise	Yarmouth	18	Reuben H. Munroe	White Head	8	76 00
100448	Surprise	Canso	15	Jno. J. Meagher	Canso	5	51 25
108000	St. Patrick	"	18	Remmie Belfountain	Port Felix	7	68 75
107318	St. Stephen	Halifax	19	Moses Cahoon	Canso	5	55 25
103199	Trilby	Canso	12	Edward Flaherty	"	3	33 75
107994	True Love	"	10	David Walsh	"	3	31 75
107991	Two Brothers	"	14	Fred Jello	Port Felix	4	43 00

HALIFAX COUNTY.

100474	A. Beatrice	Lunenburg	19	Jas. Morash, jr	West Dover	5	55 25
107313	Alice A	Halifax	16	Wm. McPherson et al.	Pope's Harbour	4	45 00
103507	Annie	"	16	Isaac Bowser	Musquodbt. Hbr	3	37 75
103858	B. & B. Holland	"	26	Richard Holland	Duncan's Cove	7	76 75
94662	Bessie Florence	"	12	Chas. W. Twohig	Penaunt	4	41 00
90496	Black Prince	"	18	George Julien et al.	W. Chezzetcook	3	39 75
96799	Catherine A. C	"	17	Hezekiah Cleveland	West Dover	2	31 50
103853	Dawn	"	13	Thos. Parker	Owls Head	2	27 50
59484	Dayspring	"	36	Geo. L. Baker	East Jeddore	10	108 50
111428	Duchess	"	12	Austin A. Zwicker	Indian Harbour	3	33 75
74091	Eastern Clipper	"	35	Stanley Magrath	East Dover	3	56 75
111425	Effie Howard	"	23	John Verge	Sober Island	7	73 75
90726	Ellen Maud	"	16	Wm. H. Whiston	Halifax	4	45 00
107320	Eva Gertrude	"	34	Andrew Sullivan	Herring Cove	10	106 50
92564	Evangeline	"	23	Lewis Murphy	East Ship Hbr	1	30 25
100247	Fairy Qveen	"	11	Geo. H. Nickerson	Pennant	5	47 25
100259	Florence G	"	15	Caleb Gray	Sambro	5	51 25
107330	Gertie M. Starr	"	16	Wm. A. Martin et al.	Smith's Cove	5	52 25
100228	Golden Dawn	"	46	Edward Conrod et al.	E. Chezzetcook	13	140 25
107319	Globe	"	32	Chas. W. Hart	Sambro	12	119 00
103544	Grace D	"	10	George Slauawhite	Terence Bay	4	39 00
111747	Grace Darling	"	100	Oswald Dauphinee	Boutilier's Cove	17	203 25
88220	Grandee	"	14	Jerem. Slaunwhite, J. P	Terence Bay	5	50 25
103174	Iona	"	15	Leander Hubly	Indian Harbour	5	51 25
103191	Jennie B	Liverpool	13	Hezekiah Wambolt	"	5	49 25
100216	Katie M	Halifax	11	Chas. Nelson	Halifax	4	40 00
103312	Laura	Pt. Hawkesbury	13	Reuben Cooper et al.	Tangier	4	42 00
96797	Laura Phoebe	Halifax	18	Jno. Kent	Musquodbt Hbr	6	61 50
107113	L. Morton	"	60	Simeon Coolen	Hubbard's Cove	12	147 00
94665	Louis Luby	"	41	Martin Julien et al	W. Chezzetcook	14	142 50
100580	Maggie E. C	Lunenburg	20	Hibbert Richardson	Indian Harbour	3	41 75
111424	Maggie M	Halifax	13	Jas. Marryatt	Pennant	4	42 00
96805	Maggie May	"	62	Joseph Fillis et al	W. Chezzetcook	18	192 50
85664	Mary E.	"	14	Walter Slaunwhite	Terence Bay	5	50 25
100816	Mattie Morrissey	Barrington	24	James Reno	Herring Cove	9	89 25
100227	May	Halifax	10	Thos. E. Little	Terence Bay	3	31 75
100254	Myrtle M. Gray	"	19	Jas. Gray	Pennant	7	69 75
103539	Neva	"	11	Ephraim Marryatt	"	3	32 75
80841	Nina	"	13	John De Bay	Owls Head	4	42 00
92571	Primrose	"	14	Angus Gray	Pennant	6	57 50
94677	Progress	"	14	David Richardson	Lower Ship Hbr.	3	35 75
96806	Rising Sun	"	28	Richard Christian	Prospect	5	64 25

LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*

HALIFAX COUNTY.—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							$ cts.
107327	Sir Wilfred	Halifax	18	Chas. Fader	Mason's Point	6	61 50
75833	Twilight	"	14	George Gates	Boutilier's Cove	7	64 75
103869	Uganda	"	14	Jas. B. Stoddard	Ship Harbour	5	50 25
96781	Venture	"	43	Edward Dempsey	Herring Cove	10	115 50
100260	Violet	"	12	Jas. H. Smith	Sambro	2	26 50
61904	Water Lily	"	14	Horatio Zink	West Dover	5	50 25
92578	Willetta	"	12	Jos. Gray	Sambro	5	48 25
100226	Willie H. Crosby	"	65	Jas. Julien, et al	W. Chezzetcook	18	195 50
85378	Zephyr	"	16	Robert J. Slaunwhite	Terence Bay	5	52 25

HANTS COUNTY.

75614	Fawn	Digby	17	H. E. Ogilvie	Summerville	1	24 25

INVERNESS COUNTY.

96778	Campania	Pt. Hawkesbury.	11	C. Robin, Collas & Co.	Eastern Hbr.	5	47 25
103313	Catherine	"	10	Severin Chiasson et al.	"	4	39 00
96825	Cecelia W	Halifax	41	David Walker	Pt. Hawkesbury	7	91 75
83244	Claribel	Charlottetown	19	Fred. Doucet	Eastern Hbr	6	62 50
103325	Elizabeth Ann	Pt. Hawkesbury.	11	David Bourgeois	"	4	40 00
103542	Emma Brow	Halifax	17	Simeon Bellfountain	"	6	60 50
96774	Florence	Pt. Hawkesbury.	11	"	"	4	40 00
103317	Flying Star	"	11	"	"	4	40 00
103316	Laura	"	10	Ubald Bourgeois	"	5	46 25
103315	Lillie	"	12	P. Fiset	"	4	41 00
96775	Louise	"	11	Placide Boudrot	"	4	40 00
103330	Lucy	"	11	Théophile Maillet	Little River	5	47 25
96779	Majestic	"	12	C. Robin, Collas & Co.	Eastern Hbr	5	48 25
96771	Marie	"	10	John Roach	"	4	39 00
96777	Marie Joseph	"	11	Victor Roach	"	4	40 00
103314	Mary	"	10	P. Fiset	"	4	39 00
96769	Mary Lambert	"	11	Luke Chiasson	Little River	6	54 50
69125	May Flower	"	20	Hyacinthe Chiasson	"	7	70 75
103326	Mizpah	"	10	George LeBrun	Eastern Hbr	5	46 25
96770	O. L. B	"	12	David Chiasson	Grand Etang	4	41 00
103329	St. Helier	"	12	C. Robin, Collas & Co.	Eastern Hbr	4	41 00
96773	Virgin	"	10	Michael J. Ramard	"	5	46 25
96776	Willie B.	"	11	Chas. J. Roach	Point Cross	5	47 25

KING'S COUNTY.

83261	Economist	Digby	14	Jesse Parker	Hall's Harbour	3	35 75
88549	Frank	Halifax	12	Charles Hagerty	Blomidon	1	19 25
97150	Gleaner	St. Andrew's	13	Roscoe J. Cook	Harbourville	2	27 50
42089	Lily	"	10	Hantford Rawding	Canada Creek	2	24 50

LUNENBURG COUNTY.

111641	Aquadilla	Lunenburg	100	Freeman Anderson	Lunenburg	18	210 50
107953	Ahava	"	85	Wm. C. Smith	"	17	203 25
100846	Albatross	"	26	Phineas Willneff	Black Rocks	5	62 2

LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*

LUNENBURG COUNTY—*Continued.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							$ cts.
107644	Albertha	Lunenburg	94	Aniel Corkum	Middle LaHave.	17	203 25
107657	Alcaea	"	99	Alexr. Knickle	Lunenburg.	18	210 50
111728	Alameda	"	93	Chas. L. Silver	"	17	203 25
111745	Alexa	"	99	Fenwick Zwicker	"	17	203 25
111647	Alhambra	"	90	Thomas Hamm	"	17	203 25
111738	Alice Gertrude	"	81	Thomas A. Wilson	Bridgewater	16	196 00
107955	Annie C. Hall	"	74	Adam Selig	Vogler's Cove	20	219 00
111737	Annie M. W	"	98	Jos. N. Wolfe	Getson's Cove	17	203 25
111750	Arabia	"	80	David Heisler	Lunenburg.	16	196 00
100472	Arcana	"	87	Alexr. Knickle	"	15	188 75
103495	Athlon	"	99	Wm. C. Smith	"	16	196 00
100170	Atlanta	"	96	Freeman Anderson	"	17	203 25
112088	Australia	"	89	Jno. McLean	Mahone Bay	17	203 25
103745	Avis	"	100	A. V. Conrad	E. Mid. LaHave	17	203 25
111740	Azalea	"	80	Jas. A. Hirtle	Lunenburg	15	188 75
111412	Baden Powell	"	94	Jas. W. Geldert	"	18	210 50
103501	Barcelona	"	99	Wm. C. Smith	"	17	203 25
103755	Basil M. Geldert	"	99	Robert Geldert	"	17	203 25
111734	Blake	"	99	J. Norman Rafuse	Conquerall Bank	20	225 00
100838	Blanche A. Colp	"	96	C. U. Mader	Mahone Bay	17	203 25
100571	Britannia	"	90	Willet Conrad	Rose Bay	18	210 50
111732	Calavera	"	90	Obadiah Deal	Ritcey's Cove	17	203 25
111718	Carl E. Richard	"	99	L. B. Currie	West Dublin	18	210 50
103502	Carlraine	"	99	Alvin Himmelman	Rose Bay	17	203 25
111749	Champion	"	79	Jeffrey Publicover	Getson's Cove	16	195 00
111415	Clara	"	100	Abraham Ernst	Mahone Bay	19	217 75
111739	Clarence B.	"	90	Abraham Ernst	"	18	210 50
105415	Clarence Smith	"	96	Wm. C. Smith	Lunenburg	17	203 25
107122	Collector	"	99	W. N. Reinhardt	La Have	17	203 25
111702	Colonia	"	98	Davis Westhaver	Lunenburg	18	210 50
103759	Columbia	"	99	J. Alex. Silver	"	17	203 25
107966	Companion	"	95	Jeffrey Publicover	Getson's Cove	22	239 50
111650	Concord	"	79	Jas. Getson	"	16	195 00
111743	Corean	"	70	Dean Fralick	Pleasantville	18	200 50
111736	Coronation	"	98	H. W. Adams	Lunenburg	17	203 25
100159	C. U. Mader	"	88	Martin Evans	Chester	17	203 25
111637	Cyril	"	100	Thos. A. Wilson	Bridgewater	17	203 25
111708	Crofton McLeod	"	85	Jno. W. McLean	Mahone Bay	16	196 00
111405	Deeta M	"	81	John McLean	"	17	203 25
111711	Defender	"	98	Alex. Knickle	Lunenburg	17	203 25
111710	Demering	"	85	Jessen Anderson	"	17	203 25
90834	Diego	Port Medway	27	James Teel	Broad Cove	6	70 50
107649	D. M. Owen	Lunenburg	72	J. Norman Rafuse	Conquerall Bank	16	188 00
107986	Dove	"	95	W. C. Acker	Lunenburg	15	188 75
111730	Earle V. S.	"	100	Howard Wynacht	"	17	203 25
111748	Elena	"	73	A. V. Conrad	E.Mid. La Have	16	189 00
83308	Ella	Liverpool	10	Jennis C. Hanson	Mahone Bay	1	17 25
107127	Ellen L. Maxner	Lunenburg	93	H. W. Adams	Lunenburg	17	203 25
103424	Elva M	"	92	C. U. Mader	Mahone Bay	17	203 25
117123	Emulator	"	99	Jno. M. Ritcey	Ritcey's Cove	18	210 50
112087	Ethel	"	99	W. N. Reinhardt	La Have	18	210 50
111727	Excelda	"	100	Chas. L. Silver	Lunenburg	19	217 75
103429	Fern	"	70	Edmen Walters	Park's Creek	17	193 25
103743	Flo F. Mader	"	100	C. U. Mader	Mahone Bay	17	203 25
111406	Flora W. Sperry	"	95	Jno. D. Sperry	Petite Riviere	17	203 25
111401	Frances Willard	"	97	Wm. C. Smith	Lunenburg	18	210 50
111746	Fredonia	"	92	C. U. Mader	Mahone Bay	18	210 50
103753	Gladys B. Smith	"	99	Benj. C. Smith	Lunenburg	20	225 00
111742	Glenwood	"	99	David Heisler	"	18	210 50
103752	Glyndon	"	99	Jno. M. Ritcey	Ritcey's Cove	17	203 25
107289	G. S. Troop	"	99	L. B. Curry	West Dublin	17	203 25
111703	Harold	"	100	Abraham Ernst	Mahone Bay	17	203 25
107119	Harold J. Parks	"	99	L. B. Curry	West Dublin	17	203 25

LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*

LUNENBURG COUNTY—*Continued.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	Number of Crew paid.	Amount of Bounty paid.
							$ cts.
107951	Harry Lewis.	Lunenburg	83	Wm. C. Smith	Lunenburg	17	203 25
103744	Harry Smith.	"	91	Henry Wilson	"	18	210 50
107641	Hattie L. M.	"	88	P. B. Zwicker	Mahone Bay	17	203 25
107965	Hazel B. Mosher	"	72	C. E. Kaulbach	Lunenburg	15	180 75
111640	Hazel L. K	"	88	Thos. Hamm	"	18	210 50
111418	H. H. Kitchener	"	100	Jas. Shankle	E. Mid. La Have	17	203 25
107659	Hilda C.	"	99	S. Watson Oxner	Lunenburg	16	196 00
111416	Hugh John	"	119	David Ritcey	Ritcey's Cove	19	217 75
107128	Huron	"	81	J. Henry Wilson	Lunenburg	17	203 25
100607	Icelda	Shelburne	19	Jno. S. Wolfe	West Dublin	5	55 25
107956	Iona	Lunenburg	98	Murdoch MacGregor	Ritcey's Cove	17	203 25
112089	Iona W	"	78	Abraham Ernst	Mahone Bay	17	201 25
111638	Ivanhoe	"	100	Thos. A. Wilson	Bridgewater	17	203 25
107116	Ivy	"	12	Jno. Spindler	Rose Bay	3	33 75
96830	J. A. Silver	"	91	Jas. A. Hirtle	Lunenburg	17	203 25
103414	Jeanie Myrtle	"	98	Jno. M. Ritcey	Ritcey's Cove	17	203 25
103491	Jennie May	"	88	Martin B. Westhaver	Lunenburg	15	188 75
111726	Juanita	"	100	Wm. C. Smith	"	17	203 25
107960	J. W. Mills	"	76	J. W. Mills	Mahone Bay	17	199 25
107969	Kandahar	"	100	Wm. C. Smith	Lunenburg	19	217 75
107970	Karnoe	"	97	Ammon Ritcey	Ritcey's Cove	18	210 50
111404	Kimberley	"	92	C. U. Mader	Mahone Bay	18	210 50
111410	Kuvera	"	99	Wm. C. Smith	Lunenburg	19	217 75
111635	Latooka	"	99	A. V. Conrad	E. Mid. LaHave	16	196 00
94788	Laura C. Zwicker	"	85	Wm. C. Smith	Lunenburg	17	203 25
107126	Lena F. Oxner	"	99	Jas. Geldert	"	17	203 25
107660	Lila D. Young	"	100	Jno. B. Young	"	19	217 75
107129	Lilla B. Hirtle	"	99	Benj. Anderson	"	17	203 25
111717	Linus	"	70	Amiel Corkum	Middle La Have	14	171 50
83316	Lottie	Port Medway	81	Samuel E. Teel	Vogler's Cove	18	210 50
111634	Loyal	Lunenburg	99	Abraham Ernst	Mahone Bay	17	203 25
111735	Lucania	"	99	Murdoch MacGregor	Ritcey's Cove	17	203 25
103420	Luetta	"	98	Wm. C. Smith	Lunenburg	18	210 50
107120	Maderia	"	99	Theophilus Creaser	Ritcey's Cove	18	210 50
103509	Maggie E. Z	"	70	Emmanuel Zellers	Feltzen South	17	193 25
97100	Maggie M. W	"	89	Isaac Heckman	Cross Roads	16	196 00
103425	Majestic	"	99	Reuben Ritcey	Ritcey's Cove	18	210 50
111720	Maravilla	"	117	Wm. C. Smith	Lunenburg	19	217 75
111709	Mariner	"	100	Cyrus W. Parks	Park's Creeks	17	203 25
107652	Mascot	"	98	John H. Schwartz	Lunenburg	22	239 50
111714	Mauna Loa	"	99	Wm. C. Smith	"	17	203 25
107967	May Myree	"	89	Elias Richard, sr	Getson's Cove	21	232 25
112086	Melba	"	61	Jno. D. Sperry	Petite Rivière	10	133 50
100849	Merl M. Parks	"	100	James Wambach	LaHave	17	203 25
107111	Millie Mace	"	99	Wm. C. Smith	Lunenburg	18	210 50
100153	Milo	"	99	David Backman	"	18	210 50
111408	Mindora	"	91	Richard A. Lohnes	Ritcey's Cove	17	203 25
103412	Minnie B	"	25	Harris Pickles	Port Medway	5	61 25
103757	Minnie J. Heckman	"	100	Anthony Heckman	Rose Bay	18	210 50
107952	Minnie M. Cook	"	84	Wm. C. Smith	Lunenburg	17	203 25
111701	Mizpah	"	100	J. Wm. Young	"	18	210 50
111645	Moran	"	100	Daniel Getson	Getson's Cove	17	203 25
103758	Muriel	"	110	Elias Walters	Lunenburg	18	210 50
107968	New Era	"	116	Reuben Ritcey	Ritcey's Cove	18	210 50
111644	Nimrod	"	99	Jno. D. Sperry	Petite Rivière	17	203 25
111729	Olympia	"	99	Jno. Westhaver	Lunenburg	17	203 25
61916	Only Son	Liverpool	16	Wilbert Young	Mill Cove	5	52 25
111704	Ophir	Lunenburg	99	Edwin Eikle	Petite Rivière	17	203 25
100245	Oracle	Halifax	18	Stannage Publicover	West Dublin	4	47 00
111639	Pacific	Lunenburg	99	J. F. Risser	Ritcey's Cove	17	203 25
111642	Palatia	"	95	Chas. Silver	Lunenburg	17	203 25
111725	Palmetto	"	98	Chas. Smith	"	17	203 25
111712	Peerless	"	95	Arthur H. Zwicker	"	18	210 50

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List of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*

LUNENBURG COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							$ cts.
103747	Perfect	Lunenburg	54	Jno. Schmeisser	E. Mid. LaHave	14	155 50
111417	Pilgrim	"	99	Thos. A. Wilson	Bridgewater	18	210 50
107655	Premier	"	99	James Wamback	LaHave	16	196 00
107959	Reliance	"	100	J. F. Risser	Ritcey's Cove	18	210 50
107653	Renown	"	83	Wm. C. Smith	Lunenburg	17	203 25
111648	Riviera	"	96	Andrew Ross	E. Mid. La Have	19	217 75
111723	Roanoke	"	100	Abraham Ernst	Mahone Bay	18	210 50
96834	Robert F. Mason	"	87	Wm. C. Smith	Lunenburg	17	203 25
107125	Roma	"	99	Daniel Myra, sr.	Ritcey's Cove	18	210 50
111741	Saratoga	"	92	C. U. Mader	Mahone Bay	17	203 25
111643	Scintilla	"	100	Wm. C. Smith	Lunenburg	17	203 25
107963	Shamrock	"	89	Alex. Knickle	"	17	203 25
111413	Sigdrifa	"	13	Wm. Westhaver	"	1	20 25
100165	Snow Queen	"	67	Leander Meisner	Martins Point	14	168 50
111744	Stanley	"	100	Thos. A. Wilson	Bridgewater	18	210 50
111407	Strathcona	"	89	Freeman Anderson	Lunenburg	17	203 25
107117	St. Clair	"	98	Chas. Smith	"	12	167 00
103500	St. Helena	"	99	Howard Wynacht	"	18	210 50
111636	Tasmania	"	99	"	"	19	217 75
111707	Tidal Wave	"	75	J. Norman Rafuse	Conquerall Bank	17	198 25
107651	Torata	"	92	J. Wm. Young	Lunenburg	16	196 00
111733	Transvaal	"	79	Wm. C. Smith	"	18	209 50
100575	Tyler	"	54	"	"	13	148 25
117957	Ungava	"	88	Wm. Cleversey	Pleasantville	21	232 25
103742	Unique	"	95	Abraham Ernst	Mahone Bay	17	203 25
103417	Uruguay	"	97	Daniel Lohnes	Ritcey's Cove	17	203 25
111731	Vendetta	"	93	Thos. Hamm	Lunenburg	17	203 25
107964	Vernie May	"	76	Abraham Ernst	Mahone Bay	17	199 25
100811	Vesta Pearl	"	40	Wm. C. Smith	Lunenburg	9	105 25
111409	Victoria	"	100	W. N. Reinhardt	La Have	18	210 50
103504	Viking	"	96	Amiel Corkum	Middle La Have	18	210 50
100152	Werra	"	85	Thos. Hamm	Lunenburg	17	203 25
111403	Willis C	"	82	Amiel Corkum	Middle La Have	18	210 50
96829	Wisteria	"	96	Freeman Anderson	Lunenburg	17	203 25
111649	W. S. Wynot	"	100	C. U. Mader	Mahone Bay	17	203 25
107645	Yosenite	"	84	Kenneth Silver	Dayspring	19	217 75
111419	Yukon	"	97	Elijah Ritcey	Ritcey's Cove	18	210 50

QUEENS COUNTY.

83134	Infant	Lunenburg	15	Wm. J. Wagner	Summerville	5	51 25
54132	John Franklin	Halifax	18	Andrew McNutt	Liverpool	5	54 25
90839	Lena A	Port Medway	11	Eldred Wolfe	E. Port Medway	4	40 00
111700	Miriam F	Liverpool	11	Fred H. Campbell	Port Mouton	4	40 00
94833	News Boy	Port Medway	16	Calvin Bowlby	Port Medway	5	52 25
103194	Oressa	Liverpool	10	Lemuel Cross	E. Port Medway	3	31 75
100608	Vesper	Shelburne	14	Robt. Williams	S.W. Pt. Mouton	5	50 25

RICHMOND COUNTY.

88456	Alice May	Arichat	39	Wm. I. LeVesconte	River Bourgeois	7	89 75
111472	Annie May	"	17	James Manbourquette	Rockdale	4	46 00
75561	Boreas	Lunenburg	41	John Colford	Port Richmond	4	70 00
74100	Candid	Arichat	23	Desire Burke	River Bourgeois	8	81 00
72061	C. P. M.	"	22	Alex. Burke	"	2	36 50
100383	Florence L	Sydney	10	Celestin Cordeau	"	6	53 50
88599	Guide	Halifax	38	Edward Poirier	Poirierville	12	125 00

LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Continued.*

RICHMOND COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner. or Managing Owner.	Residence.	Number of Crew paid.	Amount of Bounty paid.
							$ cts.
100161	Hilda Maud	Pt. Hawkesbury	45	John D. Malcom	Port Malcolm	6	88 50
111474	Howler	Arichat	15	Laurence Lavache	West Arichat	2	29 50
88513	Ida	Sydney	10	Vital LeBlanc	River Bourgeois.	5	46 25
96764	Ida C. Spoffard	Pt. Hawkesbury	54	Robert Murray	Port Richmond	5	90 25
103470	Ida M. Burke	Arichat	16	Samuel P. Burke	St. Peters	6	59 50
111476	Indianna	"	11	Joseph Petitpas	Arichat	3	32 75
100490	Irene M. B	Lunenburg	66	Fred. Poirier	Descousse	17	189 25
83135	J. B. M.	Halifax	20	John Landry	Petit de Grat	5	56 25
112374	J. B. Saint	Arichat	18	Benj. Birett	L'Ardoise	4	47 00
103469	Katie B	"	16	John Burke	River Bourgeois.	6	59 50
11480	Lady Laurier	"	12	Thos. Boudrot	Petit de Grat	4	41 00
96763	Lelia Linwood	"	67	Wm. I. Le Vesconte	River Bourgeois.	15	175 75
111905	Lena Jane	"	11	Dominic Boudrot	Petit de Grat	5	47 25
111901	Lillian Louise	"	12	Edwd. Boudrot	"	4	41 00
103467	Lizzie May	"	12	Abram Fougere	River Bourgeois.	3	33 75
72071	Lumen Diei	"	20	Urbain Sampson	"	5	56 25
38522	Mary	"	23	James Barron, sr	L'Ardoise West.	5	59 25
111479	Mary Atalanta	"	15	Peter Bouchard	River Bourgeois.	3	36 75
111475	Mary Matilda	"	15	Maurice Burke	St. Peters	5	51 25
103462	Maud	"	20	Henry Duyon	Arichat	5	56 25
111904	Minnie L	"	15	Elias Bois	Petit de Grat	5	51 25
74365	Nova Stella	"	53	Leon N. Poirier	Descousse	15	161 75
100231	Pearl	Halifax	17	John J. Boudrot	Petit de Grat	7	67 75
100477	Pilot	Lunenburg	42	Wm. Proctor	L.R. Inhabitants	5	78 25
111903	Stella	Arichat	14	Camil Bouchie	River Bourgeois.	3	35 75
103461	St. Lidwina	"	11	Benj. Peters	L'Ardoise	5	47 25
111902	St. Thomas	"	10	Thomas Pottie	Rockdale	4	39 00
92599	Thistle	Sydney	11	Robt. Mombourquette	L'Ardoise	5	47 25
103460	Two Brothers	Arichat	18	George Peters	"	7	68 75
38523	Victoria	"	24	Henry Burke	St. Peters	7	74 75
57662	Village Bride	Halifax	24	Jacob Marshall	Point Tupper	4	53 00

SHELBURNE COUNTY.

94632	A. C. Greenwood	Shelburne	15	Edw. Smith	Cape Negro	6	58 50
97034	A. D'E	Yarmouth	15	Jos. Dixon	Wood's Harbour	5	51 25
103793	Agatha	Shelburne	92	J. H. Thorbourn	Sandy Point	21	232 25
100612	Ardella	"	10	Eleazar Crowe	"	5	46 25
100617	Atlanta	"	28	Austin Swansburg	Little Harbour	9	93 25
107053	Bonnie Lin	Barrington	10	Wm. N. Madden	Baccaro	6	53 50
103186	Britannia	Shelburne	11	Ross Enslow	W. Green Hbr	5	47 25
103051	Carrie May	Yarmouth	25	Chas. Wickens	Shag Harbour	10	97 50
61905	Champion	Liverpool	14	Gardner Cunningham	N. E. Point	6	57 50
96970	Charlie Richardson	Shelburne	26	John B. Harding	Lockport	9	91 25
112130	Coronia	"	99	Geo. A. Cox	Shelburne	19	217 75
94942	Coronilla	"	28	Fred Greenwood	Shag Harbour	5	64 25
107058	Defender	Barrington	20	Archibald Madden	Baccaro	9	85 25
103118	Della F. Tarr	St. Andrews	34	Samuel Greenwood	Port Saxon	8	92 00
107057	Dollie Varden	Barrington	10	Freeman Atwood	Atwood's Brook	3	31 75
103053	Eddie C.	Yarmouth	11	Alfred Stoddart	Shag Harbour	2	25 50
77603	Eldon C.	Barrington	27	Josiah Thomas	Cape Negro	10	99 50
103795	Etta Vaughan	Shelburne	98	P. Thorbourn	Sandy Point	21	232 25
107054	Favorite	Barrington	28	Wm. O. Hopkins	Doctor's Cove	5	64 25
85476	Fleetwing	Shelburne	15	Wm. McMillan	Lockeport	5	51 25
112131	Grace D. Day	"	39	Hugh McAlpine	"	12	126 00
111683	Greenwood	"	71	E. P. Greenwood	N. E. Harbour	19	208 75
107342	Harry G. Ellis	Yarmouth	16	S. E. Countaway	N. E. Point	5	52 25
90647	Hattie Emeline	"	11	Chas. A. Reynolds	Up. P. La Tour	5	47 25
80799	Hattie S	Digby	16	Wm. Atwood	Atwood's Brook	4	45 00
111687	Ida M. Clarke	Shelburne	99	Wm. McMillan	Lockeport	23	246 75

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LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*

SHELBURNE COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							$ cts.
85566	J. Lyons	Barrington	17	Josiah Nickerson	Up. P. La Tour.	7	67 75
111684	Julian H. Archer	Shelburne	99	Churchill Locke.	Lockeport	21	252 25
73967	Katie	Liverpool	14	James Eisenhauer	Allendale	5	50 25
107981	Kestrel	Shelburne	99	Geo. A. Cox	Shelburne	21	232 25
100329	La Rose	Yarmouth	13	Noah Abbott	Forbes Point	4	42 00
90438	Lark	Barrington	13	Thos. Ross	Up. Pt. La Tour	6	56 50
94661	L. C. Tough	Shelburne	12	Thos. Swain	Black Point	5	48 25
103796	Mabel Denvers	"	14	A. L. Reynolds	Up. Pt. La Tour	5	50 25
103712	Marguerite	Yarmouth	10	F. H. Nickerson	Forbes Point	4	39 00
83493	Mary C.	Liverpool	84	John A. Harding	Osborne	6	123 50
92568	Mary Kate	Shelburne	13	Chas. Hipson	Jordan Bay	4	42 00
83434	Mary May	"	20	Adam Firth	Shelburne	6	63 50
103177	Mayflower	"	12	Avard Hamilton	Carleton Village	4	41 00
103057	Mayflower	Yarmouth	12	Benj. Cunningham	South Side	5	48 25
107988	Maud Churchill	Shelburne	96	Enos Churchill	Lockeport	22	239 50
107985	Muriel	"	25	Edmund Locke	"	8	83 00
100606	Myra Louise	Barrington	17	Arthur Perry	N. W. Harbour	5	53 25
103175	Myrtle	Shelburne	10	Wm. E. Wolf	Big Pt. Le Herb't	5	46 25
111688	Nan F. Churchill	"	54	Enos Churchill	Lockeport	12	141 00
103800	Nellie I. King	"	99	Geo. H. King	Sandy Point	20	225 00
90439	Oscar F.	Barrington	18	C. H. McKay	Roseway	6	61 50
100820	Ranger	"	11	Crowell Swim	Doctor's Cove	1	18 25
107334	Shamrock	Yarmouth	17	David Watkins	Atwood's Brook	3	38 75
90648	Stranger	Barrington	20	James C. McGray	Centreville	9	85 25
90433	Ste. Anne	"	11	David Murphy	Forbes Point	6	54 50
107990	Terence C. Lockwood	Shelburne	98	Wm. McMillan	Lockeport	23	246 75
96961	Tivoli	"	24	Wm. J. Doane	Red Head	6	67 50
77744	Whip-poor-Will	"	17	Allen F. Perry	"	6	60 50
100812	Wyvern	Barrington	25	Albert S. Swim	Clarks Harbour	7	75 75
75722	Yuba	Yarmouth	15	Foster Salisbury	Port La Tour	7	65 75

VICTORIA COUNTY.

107372	Emerald	Sydney	15	W. J. Christie	North Sydney	6	58 50
75571	Fanny	Liverpool	16	"	"	7	66 75
107379	Maggie	Sydney	11	Chas. J. Williams	South Ingonish	6	54 50
107375	Minnie B.	"	10	James Brewer	"	5	46 25

YARMOUTH COUNTY.

94980	Aurore	Yarmouth	86	Leon D'Eon	West Pubnico	18	210 50
103187	Ben Bolt	"	90	A. F. Stoneman & Co.	Yarmouth	15	188 75
107346	Caddie	"	10	James E. Perry	Port Maitland	4	39 00
111836	Chevalier	Digby	11	Warren S. Sollows	"	4	40 00
111871	Coronation	Yarmouth	98	A. F. Stoneman & Co.	Yarmouth	19	217 75
100605	Dawn	"	49	Henry A. Amiro	West Pubnico	16	165 00
103066	Eddie J.	"	23	"	"	10	95 50
112280	Edith L.	Digby	26	James A. Adams	Port Maitland	6	69 50
107332	Estelle	Pubnico	15	Stillman Smith	Lower Argyle	2	29 50
85551	Ethel	Yarmouth	93	J. H. Porter & Co.	Tusker Wedge	17	203 25
100535	Fair Play	"	11	Luke Holmes	Yarmouth	2	25 50
94972	Florence	"	19	Eben Frost	Comeau Hill	7	69 75
107350	Forrester	"	23	Chas. J. Fox	Pubnico Head	8	81 00
111876	Geneva May	"	72	Leander Amiro	East Pubnico	20	217 00
90885	Georgiana	"	90	Henry Lewis	Yarmouth	20	225 00
111872	Gertrude L	"	99	H. S. LeBlanc	West Pubnico	23	246 75

LIST of Vessels which received Fishing Bounty, &c.—Nova Scotia—*Con.*

YARMOUTH COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner. or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							$ cts.
80643	Hazel Dell	Yarmouth	87	Parker, Eakins & Co.	Yarmouth	22	239 50
85551	Hazel Glen	"	96	H. T. D'Entremont	L. E. Pubnico	20	225 00
103717	Henry L.	"	10	A. C. D'Entremont	West Pubnico	2	24 50
80624	Lima	"	12	Giles Simmons	L. E. Pubnico	5	48 25
88261	Little Joe	"	18	Thos A. Crosby	Yarmouth	3	39 75
103709	Lizzie E.	"	14	E. Juston Ellis	Port Maitland	6	57 50
80614	Louise	"	85	J. H. Porter & Co.	Tusket Wedge	20	225 00
103718	Lucy	"	10	AmbroiseD'Entremont	West Pubnico	1	17 25
107605	Mabel M.	Weymouth	20	Edison Ellis	Port Maitland	4	49 00
88596	M. A. Louis	Yarmouth	64	A. F. Stoneman & Co.	Yarmouth	18	194 50
107337	Marguerite	"	57	L. P. D'Entremont	West Pubnico	17	180 25
90659	N. A. Laura	"	59	Julien D'Entremont	"	17	182 25
103705	Nebula	"	24	Henry A. Amiro	"	8	82 00
90892	Nellie	"	59	J. H. Porter & Co	Tusket Wedge	15	167 75
111875	Nelson A	"	72	Henry A. Amiro	West Pubnico	20	217 00
103706	Regine	"	10	Wm. D'Entremont	"	5	46 25
111521	Retta E.	Digby	10	Calvin Sollow	Port Maitland	4	39 00
88589	Sanford	Yarmouth	20	Wm. A. Killam	Yarmouth	4	49 00
75724	Sea Foam	"	75	J. H. Porter & Co.	Tusket Wedge	15	183 75
83254	Sea Foam	Annapolis	28	Leander Amiro	L. E. Pubnico	7	78 75
100323	Senora	Yarmouth	85	Marc A. Surette	West Pubnico	22	239 50
100313	Souvenir	"	71	G. H. D'Entremont	"	20	216 00
103716	Valkyrie	"	11	E. Goodwin	Argyle Sound	5	47 25
103711	Venite	Digby	24	Edison Ellis	Port Maitland	5	60 25
85559	Willie F.	Yarmouth	12	David S. Haskell	"	6	55 50

PROVINCE OF NEW BRUNSWICK.

CHARLOTTE COUNTY.

83478	Argyle	St. Andrews	10	Wm. J. Tucker	Le Tête	3	31 75
107439	Arminta	"	15	Heman E. Guptill	Grand Harbour	3	36 75
107913	Arnold B.	"	10	Henry H. Cheney	White Head	3	31 75
107603	Augusta Evelyn	St. John	31	James Scovil	Flagg's Cove	7	81 75
107903	Ava M.	St. Andrews	17	George A. Johnson	Woodward's Cov	5	53 25
64011	Bee	"	18	Wm. Cronk	St. Andrews	3	39 75
107911	Bertie	"	13	Judson L. Guptill, jr.	Grand Harbour	3	34 75
103128	Britannia	"	22	Chas. Sinclair	Castalia	3	43 75
107905	Centennial	"	16	John F. Morse	White Head	5	52 25
107304	Clara A. Benner	"	37	Simon Brown	Wilson's Beach	6	80 50
103114	Edward Morse	"	32	Alex. Calder, jr.	"	12	119 00
111522	Elizabeth	Digby	21	Frank L. Benson	Seal Cove	3	42 75
92516	Emma	St. Andrews	22	Walter Calder	Campobello	6	65 50
83202	Enchantress	"	10	Peter Dixon	Flagg's Cove	4	39 00
80803	Exenia	Windsor	18	Robert Barry et al	Beaver Harbour	4	47 00
88276	Falcon	St. Andrews	12	John Cronk	Flagg's Cove	5	48 25
92511	Fleet Wing	"	11	Aldin McFarland	"	3	32 75
111552	Flora B.	"	13	Nelson Ingersoll	Woodward's Cve	4	42 00
107915	Freddie L.	"	15	Chas. E. Leighton	Grand Harbour	1	22 25
107432	Golden Rule	"	49	Mariner Calder et al	Wilson's Beach	8	107 00
107110	Grace & Ethel	"	16	Robt. Ingersoll	Woodward's Cve	6	59 50
94839	Harrie	"	14	John Kelly	Le Tête	3	35 75
83463	Havelock	"	33	Wm. James	Wilson's Beach	5	69 25
103997	Jessie James	"	11	Josephine Frankland	White Head	2	25 50
77766	Laconic	Shelburne	15	John Dixon	Flagg's Cove	2	29 50
88273	Lilian E.	St. Andrews	13	Sanford Dakin	Beaver Harbour	3	34 75
59321	Little Nell	"	21	Wm. McLallan	Welshpool	3	42 75

LIST of Vessels which received Fishing Bounty, &c.—New Brunswick—*Con.*

CHARLOTTE COUNTY.—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							$ cts.
92514	Maggie Jane	St. Andrews	10	Alex. McNichol	Le Tête	3	31 75
107438	Mamie F	"	11	Wm. I. Frankland	White Head	4	40 00
111558	Majestic	"	12	Wm. Flewelling	Flagg's Cove	3	33 75
80794	Minnie C	Digby	18	Howard Lahey et al	"	5	54 25
85442	Mystery	St. Andrews	14	John R. Moses	"	5	50 25
107920	Nellie L	"	17	Austin Levy	Grand Harbour	2	31 50
92518	Peril	"	18	Martin Eldridge	Beaver Harbour	2	32 50
103993	Pythian Knight	"	19	Frank Ingersoll	Flagg's Cove	4	48 00
107806	Rena F	St. John	12	John Ingersoll	Wood'ard's Cove	5	48 25
83132	Restless	Digby	25	S. L. Dakin	Beaver Harbour	2	39 50
75591	Rise & Go	St. Andrews	16	Walter Sirles	Wilson's Beach	7	66 75
107909	S. B.	"	12	Shadrach Bancroft	White Head	4	41 00
111556	She Said No	"	11	Samuel Lakeman	Wo'dward'sCove	4	40 00
107433	Sir John	"	10	Hiram Morse	White Head	4	39 00
59387	Telephone	"	19	Jas. Brown, jr., et all	Wilson's Beach	3	40 75
107440	Three Links	"	12	Robert A. Main	Wo'dward'sCove	5	48 25
88414	Trumpet	St. John	20	George U. Wright	Beaver Harbour	2	34 50
111555	Valkyrie	St. Andrews	16	Lorenzo C. Watt	Flrgg's Cove	5	52 25
88282	Veritas	"	10	Geo. Lasley	Back Bay	3	31 75
103125	Virgin Queen	"	16	Nelson Morse	White Head	5	52 25
77969	Wave Queen	"	11	Elizabeth Foster	Grand Harbour	3	32 75
107917	Zelma	"	17	Henry Frankland	White Head	5	53 25

GLOUCESTER COUNTY.

72099	Adelina	Chatham	12	Clement Lanteigne	Lameque	4	41 00
103009	Adeline Gladys	"	12	Jos. N. LeBouthillier	Caraquet	4	41 00
103081	Albatross	"	13	Thos. Ahier	Shippegan	4	42 00
112156	Albert W	"	10	Alex. F. Wilson	Lit. Shippegan	4	39 00
100984	Alice	"	11	Wm. Doucet	Caraquet	5	47 25
103279	Alice Maud	"	10	C. Robin, Collas & Co.	"	4	39 00
97194	Alika	"	12	Lange Paulin	Lameque	4	41 00
103763	Alouette	"	10	Thos. Ahier	Shippegan	4	39 00
103073	Anna	"	11	Henry Friolet	Caraquet	4	40 00
92419	Anna	"	12	Docithé Chiasson	Shippegan Id.	4	41 00
100960	Annie M	"	11	W. S. Loggie Co	Chatham	4	40 00
100987	Arabi	"	12	Joseph F. Hebert	Caraquet	4	41 00
103085	Argentina	"	12	C. Robin, Collas & Co.	"	3	33 75
96739	Argeline	"	14	Octave Paulin	"	4	43 00
85694	Arrow	"	14	Honore Duguay	"	3	35 75
100983	Bee	"	11	C. Robin, Collas & Co.	"	3	32 75
61431	Bee	"	11	Paul Noel	Lameque	4	40 00
103072	Ben Hur	"	11	John Leclerc	Caraquet	5	47 25
72079	Betsy	"	13	Wm. Fruing & Co.	Shippegan	4	42 00
100975	Big Bear	"	10	Robert Young	Caraquet	1	17 25
100299	Blanchard	"	12	C. Robin, Collas & Co.	"	3	33 75
103589	Blenheim	"	13	"	"	4	42 00
103780	Britannia	"	13	Wm. Fruing & Co	"	5	49 25
100780	Britannic	"	12	C. Hubbard	"	3	33 75
100988	Caesar	"	10	Philip Rive	"	4	39 00
100774	Calliope	"	12	"	"	4	41 00
103271	Celia	"	11	Dominique Gallien	"	4	40 00
103585	Cerdric	"	14	Philip Rive	"	4	43 00
100784	Charlotte	"	13	Robert Young	"	4	42 00
100789	Chazalie	"	11	"	"	4	40 00
96730	Christina	"	11	C. Robin, Collas & Co.	"	4	40 00
101000	Condor	"	10	Thos. Ahier	Shippegan	5	46 25
103083	Corsair	"	10	"	"	4	39 00
111465	C. R. C.	"	13	C. Robin, Collas & Co.	Caraquet	4	42 00
100916	Cygnet	"	12	"	"	4	41 00

LIST of Vessels which received Fishing Bounty, &c.—New Brunswick—*Con.*

GLOUCESTER COUNTY.—*Continued.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner. or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							$ cts.
100971	Cyprian	Chatham	10	Elie Syvret	Caraquet	4	39 00
100913	Daffodil	"	10	Thos. Ahier	Shippegan	3	31 75
100915	Dawn	"	12	C. Robin, Collas & Co.	Caraquet	4	41 00
103076	Dipper	"	12	W. S. Loggie Co	Chatham	4	41 00
93412	Dollie Dutton	"	13	John Jones	Little Lameque	4	42 00
103948	Dora	"	12	C. Robin, Collas & Co.	Caraquet	4	41 40
100999	Dove	"	11	Thos. Ahier	Shippegan	4	40 00
100998	Eagle	"	10	Thos. Ahier	Shippegan	4	39 00
103590	Eliza	"	13	Peter Fiott	Caraquet	4	42 00
100293	Eliza	"	15	Robert Young	"	4	44 00
96737	Elmina	"	11	Jacques Noel	Lameque	4	40 00
100911	Emperor	"	10	Thos. Ahier	Shippegan	3	31 75
100786	Empress	"	12	Robert Young	Caraquet	4	41 00
103776	Esk	"	14	Robert Young	"	3	35 75
100772	Estelle	"	13	Philip Rive	"	3	34 75
100787	Ethel	"	11	Robert Young	"	3	32 75
100905	Evangeline	"	10	Philip Rive	"	4	39 00
92417	Evangeline	"	11	Philip Luce	Lit. Shippegan	4	40 00
103001	Falcon	"	10	Thos. Ahier	Shippegan	4	39 00
103077	Fame	"	10	W. S. Loggie Co	Chatham	4	39 00
100298	Fisher	"	12	Elie Chiasson	Little Lameque	4	41 00
61445	Flavie	"	13	Theophile Duguay	Lameque	5	49 25
111468	Fleetwing	"	14	Wm. Fruing & Co	Caraquet	3	35 75
61405	Fly	"	11	Alex'r. McLaughlin	Tracadie	2	25 50
112151	Flying Foam	"	18	Peter Fiott	Caraquet	4	47 00
100782	Flying Foam	"	12	Robert Young	"	4	41 00
100912	Foam	"	10	Joseph Z. Chiasson	"	4	39 00
111467	Four Brothers	"	13	Sarah LeBouthillier	"	4	42 00
100778	Gambetta	"	13	C. Hubbard	"	4	42 00
111464	Gazelle	"	13	Peter Fiott	"	4	42 00
100954	Gazelle	"	10	C. Hubbard	"	4	39 00
100968	Gem	"	11	C. Robin, Collas & Co.	"	3	32 75
103766	Genesta	"	12	Theotime Poirier	"	3	33 75
103282	Gilknockie	"	11	Robert Young	"	3	32 75
111848	Gipsy	"	15	Wm. Fruing & Co.	"	3	36 75
103086	Gipsy	"	20	W. S. Loggie Co	Chatham	5	56 25
100964	Gladstone	"	10	Philip Rive	Caraquet	4	39 00
100910	Gleaner	"	13	Luc Lanteigne	"	4	42 00
107775	Gold Seeker	"	13	C. Robin, Collas & Co.	"	3	34 75
92418	Grip	"	12	Gervais Chenard	"	5	48 25
100790	Guiding Star	"	11	Robert Young	"	3	32 75
111849	Happy Home	"	16	Hyac. LeBouthillier	"	4	45 00
100956	Harold N	"	12	W. S. Loggie Co	Chatham	4	41 00
100994	Hercules	"	10	Pierre M. Lanteigne	Caraquet	3	31 75
107771	Heron	"	11	Wm. Fruing & Co.	"	4	42 00
103765	Hirondelle	"	11	Thos. Ahier	Shippegan	3	32 75
61425	Hope	New Carlisle	13	C. Robin, Collas & Co.	Caraquet	3	34 75
100903	Hope	Chatham	12	Robert Young	"	4	41 00
103939	Hope	"	11	Chas. Resle	Lit. Shippegan	4	40 00
100906	Hotspur	"	10	Philip Rive	Caraquet	5	46 25
103931	Irene	"	12	Wm. Fruing & Co	"	3	33 75
96724	Isabel	"	11	" "	"	5	47 25
103289	Jersey Lily	"	12	Thos. Ahier	Shippegan	4	41 00
100958	John B	"	11	W. S. Loggie Co	Chatham	4	40 00
100965	Josephine	"	11	Philip Rive	Caraquet	3	32 75
111466	King Edward	"	14	James X. Lanteigne	"	5	50 25
103949	King Fisher	"	13	Wm. Fruing & Co.	"	4	42 00
100981	Kite	"	11	André D. Gionet	"	4	40 00
103288	Kite	"	10	Thomas Ahier	Shippegan	4	39 00
107774	Klondyke	"	14	C. Robin, Collas & Co.	Caraquet	5	50 25
103283	Koh-i-noor	"	13	Philip Rive	"	4	42 00
111461	Ladysmith	"	17	Eugene Robichaud	Shippegan I'd.	5	53 25
100303	Lark	"	10	Thos. Ahier	Shippegan	4	39 00

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LIST of Vessels which received Fishing Bounty, &c.—New Brunswick—*Con.*

GLOUCESTER COUNTY.—*Continued.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid. $ cts.
107773	L'Etoile	Chatham	15	Prudent Gallien	Caraquet	5	51 25
112152	Lillian	"	15	Peter Fiott	"	4	44 00
100972	Lizzie D.	"	11	Robert Young	"	3	32 75
88664	Lizzie D.	"	17	James Davidson	Tracadie	2	31 50
100902	Lord Stanley	"	10	Wm. Fruing & Co	Shippegan	4	39 00
100980	Lynx	"	11	C, Robin, Collas & Co.	Caraquet	4	40 00
112154	Mac	"	11	John M. Ward	Miscou	4	40 00
100955	Majestic	"	10	C. Hubbard	Caraquet	4	39 00
72100	Marie	"	11	Onesime Chiasson	Lameque	4	40 00
107779	Marie	"	15	Gaspard Savoy	Shippegan	4	44 00
103278	Marie Celia	"	13	Jos. N. LeBouthillier	Caraquet	4	42 00
100292	Marie Joseph	"	12	Lazare Ganvin	Little Lemeque	4	41 00
100295	Marie Louisa	"	18	Joseph A. Paulin	Caraquet	4	47 00
111847	Mary	"	14	David Albert	"	4	43 00
103084	Mary Emma	"	11	Wm. Fruing & Co	"	3	32 75
100781	Mary Louise.	"	11	C. Hubbard	"	3	32 75
100957	Mary R	"	12	W. S. Loggie Co	Chatham	5	48 25
112150	Mary Star of the Sea	"	15	Luke Friolet	Caraquet	4	44 00
111844	Mary Star of the Sea	"	14	Jos. N. LeBouthilier	"	4	43 00
103088	Max	"	10	Maxime Cormier	"	4	39 00
111462	Mayflower	"	10	John A. Bezeau	Miscou	4	39 00
103768	May Flower	"	13	C. Robin, Collas & Co.	Caraquet	4	42 00
107777	May Flower	"	11	Octave Benoit	Lameque	4	40 00
61447	Merida	"	13	Ferdinand Duguay	Shippegan	4	42 00
100779	Mermaid	"	11	C. Hubbard	Caraquet	4	40 00
100300	Mikado	"	13	C. Robin, Collas & Co.	"	4	42 00
88669	Morning Star	"	12	Gustave Gionet	Ste Rose	3	33 75
103004	Oriole	"	11	Thos. Ahier	Shippegan	4	40 00
103005	Osprey	"	10	Thos. Ahier	"	5	46 25
100297	Palma	"	14	Oliver Duguay	Lameque	6	57 50
100776	Patrick	"	11	Philip Rive	Caraquet	3	32 75
103778	Pelican	"	13	Wm. Fruing & Co.	Shippegan	3	34 75
103764	Petrel	"	12	Thos. Ahier	"	4	41 00
96740	Providence	"	13	Jos. N. LeBotuhillier	Caraquet	4	42 00
96732	Providence	"	11	Wm. Fruing & Co	Shippegan	4	40 00
72076	Providence	"	12	Thos. Ahier	"	4	41 00
100904	P.T.S.	"	11	Jos. N. LeBouthillier	Caraquet	4	40 00
100979	Ranger	"	10	C. Robin, Collas & Co.	"	4	39 00
103287	Raven	"	11	Thos. Ahier	Shippegan	3	32 75
100775	Redgauntlet	"	11	Philip Rive	Caraquet	3	32 75
103586	Remus	"	17	W. S. Loggie Co.	Chatham	4	46 00
100952	Replevin	"	10	C. Robin, Collas & Co.	Caraquet	3	31 75
103078	Reward	"	13	James De Grace	Shippegan	4	42 00
97191	Rita	"	12	C. Robin, Collas & Co.	Caraquet	4	41 00
111470	River Branch	"	11	Joseph Paulin	Little River	5	47 25
103946	Robin	"	12	Peter Fiott	Caraquet	4	41 00
103587	Romulus	"	18	W. S. Loggie Co.	Chatham	4	47 00
92404	Rosa	"	17	Fabien Aché	Lameque	5	53 25
100908	Rosalie	"	10	Ed. O. LeBouthellier	Caraquet	3	31 75
100773	Rupert	"	12	Philip Rive	"	3	33 75
103273	Russel	"	10	Maxime Cormier	"	5	46 25
100907	Sarah	"	10	Robert Young	"	4	39 00
92408	Sarah A. W.	"	15	Robt. J. Wilson	Miscou	4	44 00
103010	Sarah B.	"	10	Jos. N. E. Lanteigne	Caraquet	4	39 00
103584	Saxon	"	13	Philip Rive	"	3	34 75
100959	Sea Bird	"	10	W. S. Loggie Co.	Chatham	4	39 00
100914	Sea Flower	"	11	C. Robin, Collas & Co.	Caraquet	4	40 00
100901	Sea Flower	"	12	Robert Young	"	4	41 00
96731	Sea Star	"	13	Joseph M. Savoy	Shippegan	4	42 00
100961	Silver Moon	"	14	W. S. Loggie Co.	Chatham	4	43 00
100788	Sir Charles	"	11	Robt. Young	Caraquet	2	25 50
100963	Stanley	"	10	Philip Rive	"	3	31 75
103087	Stanley	"	10	Joseph A. Beaudin	Miscou	4	39 00

LIST of Vessels which received Fishing Bounty, &c.—New Brunswick—*Con.*

GLOUCESTER COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							$ cts.
103193	Startle	Chatham	11	Agapit Blanchard	Caraquet	3	32 75
103767	Stella Maris	"	19	Jos. N. LeBouthillier	"	5	55 25
111469	St. John	"	13	Jean Aché	Lameque	4	42 00
103008	St. Joseph	"	12	Adolphe Aché	"	4	41 00
107776	St. Peter	"	12	"	"	4	41 00
111845	Superior	"	14	Jos. N. LeBouthillier	Caraquet	4	43 00
103772	Surprise	"	10	Thos. Blanchard	Mizonette	3	31 75
103947	Swallow	"	13	C. Robin, Collas & Co.	Caraquet	3	34 75
103006	Swallow	"	11	Thos. Ahier	Shippegan	4	40 00
103762	Swan	"	14	"	"	4	43 00
100986	Swift	"	11	Augustin Lanteigne	Lt. Shippegan	4	40 00
103761	Swing	"	11	John A. Albert	Caraquet	3	32 75
100777	Teutonic	"	11	C. Hubbard	"	4	40 00
96738	Three Brothers	"	12	John S. Albert	"	5	48 25
100918	Tickler	"	12	C. Robin, Collas & Co.	"	3	33 75
103082	Thrush	"	10	Wm. Mallet (D)	Shippegan	4	39 00
103583	Two Brothers	"	11	W. S. Loggie Co	Chatham	3	32 75
103285	Valkyrie	"	12	Philip Rive	Caraquet	4	41 00
103274	Vesuvius	"	10	George D. Mallet	Shippegan	4	39 00
103775	Victoria	"	16	W. S. Loggie Co	Chatham	4	45 00
100995	Voltaire	"	10	Philip Rive	Caraquet	3	31 75
100966	Von Moltke	"	11	"	"	3	32 75
103588	Vulture	"	13	W. S. Loggie Co	Chatham	4	42 00
96735	White Fish	"	12	Joseph Savoy, sr	Lameque	4	41 00
100953	White Wings	"	10	Robt. Young	Caraquet	4	39 00
100973	Worlds Fair	"	11	"	"	4	40 00
103079	Wren	"	11	Thos. Ahier	Shippegan	4	40 00
100920	Zephyr	"	12	C. Robin, Collas & Co.	Caraquet	3	33 75

NORTHUMBERLAND COUNTY.

96725	Bessie T	Chatham	10	Donald Loggie	Church Point	3	31 75
100969	John Bull	"	10	James Anderson	"	4	39 00
92420	Mary Louise	"	13	Donald Loggie	"	4	42 00

RESTIGOUCHE COUNTY.

103779	Ibis	Chatham	11	Andre Arsenault	Dalhousie	4	40 00
94959	Winnie G. S.	Lunenburg	26	Donald McGregor	"	4	55 00

ST. JOHN COUNTY.

90660	Alice May	Yarmouth	18	Patrick Murray	Dipper Harbour.	4	47 00
88253	E. B. Colwell	St. John	19	Joseph S. Galbraith	Pisarinco	5	55 25
59373	E. M. Oliver	St. Andrews	14	Charles Harkins	Dipper Harbour.	2	28 50
77783	Lost Heir	St. John	15	Richard Maguire, *et al.*	Pisarinco	3	36 75
83426	Louisa	"	16	Bristall Hargrove	Dipper Harbour.	3	37 75
52159	Mary E	"	21	Fred Buchanan	St. John	2	35 50

LIST of Vessels which received Fishing Bounty, for the Year 1902—*Con.*

PROVINCE OF PRINCE EDWARD ISLAND.

KINGS COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
							$ cts.
103604	A. H. Hardy	Sydney	45	John Dicks	Georgetown	3	66 75
71310	Black Watch	Charlottetown	23	John Rafuse	"	3	44 75
103322	Bonnie Brier Bush	Hawkesbury	38	Geo. Dunn	Murray Hbr., S.	7	88 75
94643	Carrie M. C.	Lunenburg	39	Ernest S. Johnston	Peters Road	8	97 00
100445	Carrie O.	Canso	12	Wm. Harris	Beach Point	3	33 75
83196	Ethel Blanche	Charlottetown	17	Michael Poole	Souris East	3	38 75
100691	Frances E. Willard	Pictou	23	Louis Herring	Murray Hbr, Sth	3	44 75
83318	Genesta	Charlottetown	29	Henry Dicks	Georgetown	4	58 00
107759	Hustler	"	13	Hugh Jackson	Murray Hbr Sth	5	49 25
75566	Julia A.	"	15	Gabriel Billard	"	6	58 50
94670	Katie A. Burns	Halifax	36	Joseph White	Beach Point	9	101 25
100696	Marion Emerson	Pictou	30	Reuben Cahoon	"	7	80 75
107757	Mayflower	Charlottetown	18	Josiah Baker	Marie	6	61 50
90206	Minnie Mack	"	15	Wm. Poole	Souris East	3	36 75
64869	Sarah L. Oxner	Halifax	34	Edw'd Delorie	Georgetown	4	63 00
74160	Seabird	Charlottetown	20	Wm. Reynolds	Murray Hbr Sth	4	49 00
107185	Stroller.	"	12	Peter Moser	Fortune Bridge.	3	33 75
96488	Wave	"	19	James Delorie	Georgetown	3	40 75

PRINCE COUNTY.

107766	Annie M	Charlottetown	20	Henry Perry	Palmer Road	5	56 25
107758	Daisy	"	13	Daniel Fraser	Alberton	4	42 00
111850	Johnny M	Chatham	12	John T. Murphy	Campbellton	4	41 00
92473	Lucy Louise	"	19	James Roach	Malpeque	5	55 25
94992	Sarah P. Ayer	"	64	John Champion	Alberton	10	136 50
96926	Sea Foam	"	15	George McBeth	"	3	36 75

QUEEN'S COUNTY.

107763	Guinea	Charlottetown	10	Boyce Harding	French River	2	24 50
96727	Ryse	Chatham	11	Daniel Dunning	Clinton	4	40 00
92745	Surprise	Charlottetown	18	Neil McLeod	French River	5	54 25
88518	W. F. Elizabeth	Sydney	10	Bradford Lepage	Rusticoville	5	46 25

LIST of Vessels which received Fishing Bounty, for the Year 1902—*Con.*

PROVINCE OF QUEBEC.

GASPE COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew paid.	Amount of Bounty paid.
71302	Alice	Charlottetown	10	Ignace Arsenault	House Harbour	1	17 25
96766	Golden Rule	Pt. Hawkesbury	42	J. P. Savage	Amherst, M.I.	....	42 00
88464	Mary E	Arichat	10	Wm. Rankin	Grindstone	5	46 25
85399	Minnie May	Amherst, M. I.	10	Ernest Cormier	Amherst, M. I.	4	39 00
94675	Success	Halifax	16	R. J. Leslie	"	5	52 25

SAGUENAY COUNTY.

85756	Aristile	Quebec	19	Phileas Vezina	St. Michel	2	33 50
92579	Cambridge	Halifax	43	John Stubbert, sr.	Kegashka	4	72 00
85750	H. B.	Quebec	57	Alfred Boudreau	Pt. Esquimaux	11	136 75
111624	Marie Anna	"	31	Paul Landry, sr.	Natashquan	5	67 25
111500	Marie Clarisse	"	21	Joseph Harvey	Ile aux Coudres.	3	42 75
75445	Phœnix	Gaspé	28	Ulric Gagné	Caribou Ids.	2	42 50
75680	Sea Star	Quebec	52	Louis S. Cormier	Pt. Esquimaux	6	95 50
92589	Vigilant	Gaspé	11	Luke Cormier	"	3	32 75

APPENDIX No. 3.

NOVA SCOTIA.

District No. 1.—Comprising the four counties of the Island of Cape Breton.
Inspector A. C. Bertram, North Sydney, C.B.

District No. 2.—Comprising the counties of Cumberland, Colchester, Pictou, Antigonish, Guysborough, Halifax and Hants.
Inspector Robert Hockin, Pictou.

District No. 3.—Comprising the counties of King's, Annapolis Digby, Yarmouth, Shelburne, Queen's and Lunenburg.
Inspector L. S. Ford, Milton.

DISTRICT No. 1.

ANNUAL REPORT ON THE FISHERIES OF CAPE BRETON ISLAND.

NORTH SYDNEY, C. B., January 31, 1903.

To the Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I have the honour to submit herewith my annual report of the fisheries covering the Island of Cape Breton and coastal waters for the year 1902, together with statistical tables showing in detail the catch of each kind of fish in each section and county, the total value of said catch, the number of people engaged in the work, and the classification and value of materials employed.

FLUCTUATIONS BY COUNTIES.

This year's statistics show a decrease in the value of the total catch of $55,897. Of the four counties, Cape Breton County alone, shows an increase in total value, which amounts to $78,272.82. The reason of this marked increase in Cape Breton County is owing to the demand for fresh fish, in the Sydneys and mining towns, a result of the increased population. Four years ago these towns did not support more than one fish-market in each. To-day there are half dozen fish markets in each of the towns, and the consumption of fresh fish has increased 800 per cent. While the statistics show a decreased number of vessels, boats and men engaged in the fishery in Cape Breton County over the previous year, this can be explained by the fact that vessels belonging to other districts, and which engage in fishing on the outside banks, have been in the habit of selling fresh fish to shore boats for the supply of the local markets. Besides quantities of fresh fish have come from Newfoundland by steamer from Port Au Basque. The in-

crease in Cape Breton County is made up in fresh mackerel, cod, haddock, hake, halibut, pollock and trout. The decrease occurred in two branches, namely : salmon and herring.

There is a decrease in the total value of the catch in Inverness County of $24,155.70. This decrease is made up in a falling off in the catch of salmon, herring, lobsters, haddock, hake, pollock and halibut. The increase has occurred in cod and smoked herring. There were two vessels, forty seven boats and one hundred and nine men less engaged in this county this year than the previous year. The development of new coal mines in the county, as well as the working of a new copper mine at Cheticamp, caused the falling off in the number of men previously employed in the prosecution of the fisheries.

The statistics of the County of Richmond exhibit the largest falling off in the total value of the fisheries of any of the counties in the Cape Breton district. The branches which show the decrease are salmon, herring, mackerel and lobsters, while there is an increase in cod, haddock, hake, pollock, halibut, and lobsters (fresh in the shell). The greatest falling off has occurred in the product of the lobster canning establishments. Scarcity of lobsters and stormy weather in June is the cause of the falling off in this important branch. No doubt the construction of the railway between the Strait of Canso and St. Peters caused a drain on the fishery districts of men, as I notice there were three hundred and sixty-two more people engaged in the fisheries in 1901 than during the present year.

The decrease in the total value reported in the statistics from the County of Victoria is $13,040.53. Salmon, mackerel, lobsters and pollock show a falling off in catch, while cod, haddock and halibut show an increase. There were fifteen fishing vessels employed this year against three last year, and four hundred and twenty-three boats employed this year against six hundred and fourteen in 1901. There were one hundred and eighty-four persons less employed in the fisheries in this county this season than during the previous season. In this county also, there has been a notable decrease in the product of the lobster canning establishments. A large percentage of those employed in canning establishments are females. The increase in the vessels employed in the fisheries in this county is due to the organization of the Cape Breton Fishing Co., Ltd., which have their headquarters at Southern Ingonish, and which own a class of small fishing craft. A considerable quantity of their fresh fish product was marketed at North Sydney which was included in the Cape Breton County statistics.

THE DOG-FISH PEST.

The greatest drawback of late years to the successful prosecution of the fisheries is the dog fish pest. What is to be done to exterminate them must engage the attention of the department. No doubt the home of this species of the shark family is the southern waters. Fifty years ago they were as numerous and destructive to other fish in the coastal waters of the maritime provinces as they are to-day. At that time large numbers were captured by the fishermen. A gallon of dog-fish oil was worth then from forty to fifty cents. To-day less than half of that sum could be realized. Not only were those fish captured in the fifties and early sixties for their oil, but the flesh was fed to hogs, and sometimes dried, ground and fed to horses and cattle. They frequented our coastal waters during the summer months for about twelve years when they disappeared until ten years ago. Since then they appear to increase in numbers year by year. They make their first appearance each summer in the month of June, or about the time the mackerel make their appearance from the southern waters. The dog-fish remain all summer. In autumn they disappear, or about the time the mackerel schools begin journeying to their southern haunts. Like mackerel they cannot exist in our waters in winter.

Not only are the dog-fish a hindrance to the successful prosecution of the fisheries on account of their destruction of the gill-nets, and devouring the fish caught in nets and on trawls, but they frighten the food fish from our coast. Early in June I visited some of the cod banks off Sydney harbour. Equipped with cod gear I fished on these banks and experienced no difficulty in catching cod. An occasional dog-fish was

hooked, but they were not numerous on these banks at that time. In August I again visited the same banks, and no sooner did the baited hook reach near the bottom than a dog fish would bite. There were no cod-fish on the banks, evidently driven away by the voracious dog-fish. A number of the mother fish caught were opened and young taken out. From three to five young, six or eight inches in length, proved to be very much alive. They would squirm about the deck of the steamer as lively as the full grown fish. Each of the young had a sack on one side near the neck.

The dog-fish multiply very rapidly, and unless fished or some means adopted to exterminate them, they will ultimately ruin our commercial fisheries. There is no doubt dog-fish are the direct cause of the failure in recent years of the midsummer herring fishery. This excellent food fish, before dog-fish made their appearance on our coast, came into our bays and harbours in immense numbers. They were captured by fishermen and farmers by means of gill-nets. Of late years, or since dog-fish made their appearance, these valuable fish have disappeared from our coast. A bounty offered by the government of twenty cents per gallon for their oil would induce their capture by fishermen.

GENERAL REMARKS.

In former reports I have discoursed at length upon the condition of the various branches of our fisheries. I cannot add anything in this report to what has already been written. The opening up and development of coal mines, the building of the two large iron and steel plants, and the construction of railways in Cape Breton have tended to drain our fishery districts, as thousands of people have been given employment at the different industrial centres where liberal wages are paid.

The regulations have been well observed. The tendency to poach has not been as great of late years as formerly.

I have the honour to be, sir,
Your obedient servant,

A. C. BERTRAM,
Inspector of Fisheries.

DISTRICT No. 2

ANNUAL REPORT ON THE FISHERIES OF DISTRICT No. 2, NOVA SCOTIA, COMPRISING THE COUNTIES OF ANTIGONISH, COLCHESTER, CUMBERLAND, GUYSBOROUGH, HALIFAX, HANTS AND PICTOU.

PICTOU, N.S., January 2, 1903.

To the Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I have the honour to submit my annual report of the fisheries of district No. 2, Nova Scotia, together with tabulated returns showing the increase or decrease of each kind of fish.

The estimated value of the total catch for the past season is $1,598,208, the value of the total catch for season 1901 being estimated at $1,969,241, thus showing a decrease of about nineteen per cent. However, the fishing for the years 1900 and 1901 was exceptionally good, so that notwithstanding this decrease, compared with last year, the result is still slightly higher than the average catch for the past thirteen years.

Of the anadromous fishes the reports show :

a decrease in the catch of	salmon of	7	per cent.
" "	smelts of	55	"
an increase "	alewives of	25	"
" "	shad of	15	"

Of the deep-sea fishes :

Codfish shows an increase of less than		1	"
Haddock " a decrease of about		50	"
Hake " an increase "		6	"
Pollock " " "		27	"
Halibut " " "		90	"

Comparing the catch of the whole cod family (including cod, haddock, hake and pollock) with that of last year, it will be found that there is a decrease of about 10 per cent.

SALMON.

The catch reported last year was the largest since this district was set off. This season's catch, although seven per cent less than in 1901, is still larger than any other since 1889 ; however, this position has been maintained by the Bay of Fundy portion of the district, where the catch was 63 per cent over that of last year.

On the Atlantic coast (Guysborough and Halifax), there was a decrease of about 50 per cent, and in the Straits of Northumberland (Antigonish, Pictou and part of Cumberland), a decrease of seven per cent.

Looking over the returns for the past twenty years, it seems to warrant the assertion that in those parts of the district where the fry have been planted regularly these fish seem to be as plentiful as they were twenty years ago.

SHAD.

The catch of shad was larger by about twelve per cent than that of last year, although it is still much under an average catch, as the following table of the reported catch for each year since this district was established will show :—

	Barrels.		Barrels.
1889	535	1896	1,079
1890	750	1897	1,352
1891	1,178	1898	2,777
1892	1,811	1899	3,208
1893	1,346	1900	1,375
1894	951	1901	749
1895	1,185	1902	948

The quantities reported as taken in the same waters twenty-five and thirty years ago are about double the figures shown above, so that any measures which would restore these waters so as to bring the catch up to its former figures would be welcomed by the fishermen in Cumberland, Colchester and Hants.

The local overseers recommend a close season in May and June so that the parent fish may be protected when they are in the river for spawning purposes. The Shubenacadie river is one to which the fish resort every year for this purpose, and it has been suggested that for a period of three years there be a close season for this river from May 1 to June 30 for shad, and it is claimed that at the end of the period there would be ten barrels for every one now taken in the Bay of Fundy. This would mean an increase in the value of the products of these waters of from $75,000 to $100,000 per annum.

ALEWIVES.

The quantity reported as taken this year is larger than that of last season by about 25 per cent, and is slightly over the average catch of the past seven years. The catch, however, is 25 per cent less than the average annual catch from 1889 to 1895.

SMELTS.

Owing to a very mild and open winter during 1901-2 it was not possible to market these fish, and it was more difficult to catch them with bag nets, so that fewer were taken, and the decrease is about 55 per cent. This should, however, have a beneficial effect upon the future of the fishery, for there were more fish in the rivers during the spawning season. The catch of herring shows a decrease of about 46 per cent, and it is 54 per cent less than the average catch of the past ten years.

MACKEREL.

The mackerel fishery also shows a large decrease, being 60 per cent less than last year, and is 40 per cent under the average of the past thirteen years. This is the most precarious of all the fisheries; the catch has fluctuated from 8,000 barrels to 44,000 barrels, since the year 1889 the average catch being about 20,000 barrels. Owing to the chances of a take of 300 to 500 barrels of mackerel when they are plentiful, much time is wasted in off years looking for these fish by the fishermen, and if this time were devoted to the surer but less remunerative cod fishery it would probably have equal results. The scarcity of herring and mackerel is attributed on the coast to the very large number of dog fish, which, it is claimed, frighten the fish away from the coast waters.

LOBSTERS.

Over the whole district there has been a decrease of about 10 per cent from the catch of last year, and this falling of is about the same on the Atlantic coast and in the Straits of Northumberland. The close season was well observed as a whole; the portion of the district in which there was the most illegal fishing was in the county of Cumberland, bordering New Brunswick. Much gear was destroyed and a conviction obtained in one case, and prosecution commenced in another, but the offender left the province. The number of complaints laid for violations of the Fisheries Act during the year was 30, and convictions were obtained in all but one case. A number of nets were seized for violations of the salmon regulations; one boat for violation of the lobster regulations.

SYNOPSIS OF OVERSEERS' REPORTS.

Overseer A. R. McAdam, of Antigonish says he thinks the slight decrease in the catch of salmon is attributable to the stormy weather in June, which damaged the nets. The lobster catch would have been equal, if not greater, than last year, had not the storms of June 20 and 29 destroyed a great number of traps, so that some canneries closed earlier than usual. Those factories that continued to pack until the close of the season did better than last year. There was a scarcity of bait, and dog fish were in abundance, so that the hake fishery was less than in former years.

Fishways should be built in dams on the South river at Fraser's mills, also at Fisher's dam on the Antigonish branch of the St. Mary's river, which prevent fish having access to the spawning resorts.

Overseer Davison of Colchester, remarks, that while there is an increase in the shad fishing the catch is very small indeed when compared with former years, when it was not uncommon to take from 3,000 to 5,000 barrels of these fish where now only as many hundred barrels are taken, and he believes the fishery could be restored to its former abundance if there were a close season for shad when they are in the river for spawing pur-

poses. The catch of salmon in the Bay of Fundy was about double that of the preceding year. He believes the close season for salmon is generally observed, but three cases of violation came to his notice, and the parties were convicted by the Inspector of Fisheries and fined.

Overseer John Campbell, of Cumberland says, herring were as plentiful as usual, but owing to the closing of some smoking establishments that had cured these fish for export, the quantity taken was not so large.

The extension of the lobster fishing season for ten days helped to bring up the products of this fishery. Owing to lumbering operations the rivers are obstructed by dams and gaspereaux do not reach their spawning resorts, and consequently they are scarce. He believes that in parts of the county not under his control that smelts are taken in close season in large quantities. These fish were not so plentiful as in former years, and a larger proportion of small fish seem to be among those that are taken. Salmon are not now in the small rivers owing to dams obstructing them.

The fishway which once existed on the Shinimicas River has long since decayed, and should be renewed, for the dams which formerly existed above have gone out, so that if fish got past the first dam they could reach the spawning grounds. He has had to confiscate gear for illegal lobster fishing and also for violation of the smelt regulations.

Overseer George Rowling, of Halifax, says, that from the commencement of the lobster fishery season until the last week in May, the fishing for lobsters was fairly satisfactory but rough weather set in on the last week of May and continued to the end of the lobster season, about fifty per cent of the fishermen lost half of their gear and all of them suffered more or less.

Had the weather been favourable he believes that more lobsters would have been taken than in 1901. He believes that the fish are about as productive as is necessary to keep up the supply. Quite a large business was done in shipping live lobsters to Boston, Mass. He finds the close season for lobsters was well observed. Gaspereaux were more plentiful than formerly. Quite a number of vessels are employed in the fishery in his division and more are building. These vessels get nearly all their fish in North Bay. The fishermen themselves are of opinion that their small boats in which they have been fishing are not suitable for the cod and haddock fisheries for they find they are in deeper waters further out from the coast than they can venture in such craft.

Halibut were much more plentiful than usual. When the herring and mackerel were on the coast, the dog-fish were very plentiful and an annoyance to the fishermen.

A fishway should be placed in Kuhn's dam, and a better one than now exists in that of A. Crook—on the Laurencetown river. This is a good river for salmon, trout and gaspereau.

Overseer Wm. Kennedy of West Halifax, says, that the Dominion Lumber Company built a large dam across the Ingram river, one of the most important salmon rivers in the county but it also built a fishway, after designs furnished by Inspector Hockin. That he has seen gaspereaux in the fishway and in the lake above. Salmon have also been seen in and above the fishway, and it is affording access to the headwaters to any of these fish. A fishway was also built in the dam on Hoosier River.

Overseer James R. Mosher, of Hants County, deplores the great decrease in the shad fishery which is the most important in that part of the district, and considerable capital is invested in weirs and gear for this purpose, which has been 'worse than thrown away.' He believes one of two things necessary; either prohibit all fishing for shad by seines, nets and weirs for a period of years, say five, or else resort to the artificial spawning of shad (as is done in the United States). Otherwise he predicts the extinction of these fish. The fishing for other fish than shad was not quite as vigourously prosecuted as formerly.

A fishway is needed in an obstruction upon the River Herbert. The close season regulations were well observed.

Overseer A. J. Macdonald, of Pictou County, notes a slight increase in the catch of salmon. Some poachers were seen on Barneys river, but in disguise, and the guardian could not identify them. On the Sutherland river there was so much poaching that an additional guardian was necessary. In the spring the herring were plentiful in the coast waters.

Overseer Pritchard of Pictou County, regrets that there was evidence of considerable poaching upon the West River, but failed to get any evidence to convict the offenders. On one occasion he came on some poachers, but as he was on shore and they were in a boat they escaped..

Overseer Kitchen urges the necessity of fishways in two dams on River John, which would open up extensive spawning areas for the salmon.

I have the honour to be, sir,
Your obedient servant,

ROBT. HOCKIN,
Inspector of Fisheries.

DISTRICT No. 3.

MILTON, QUEEN'S COUNTY, N.S.,
January 18, 1903.

To the Dominion Commissioner of Fisheries.

SIR,—I have the honour to inclose statistics of the fisheries of District No. 3, Nova Scotia, together with a comparative statement as to yield of the several kinds of fish in said district for 1902.

Although the aggregate value amounts to $4,609,900, there is a decrease from last year of nearly $350,000. This difference is entirely made up by a falling off of the cod fisheries and mackerel.

CODFISH.

In 1901, the amount	$ 2,118,064
In 1902 "	1,898,780
	$ 219,284

There is no particular reason for this decrease. The bankers did not do as well as last year; the want of bait and the dog-fish nuisance have lowered the record as far as shore fishery is concerned.

Haddock show a decrease of $108,220, hake a decrease of $31,418, and mackerel were nearly a complete failure; as compared with 1901 $203,481, 1902 $83,127, a decrease of $120,354, thus showing that the decrease for the year in cod, haddock, hake and mackerel alone amounts to nearly $480,000.

With the exception of mackerel, the decrease can be traced to natural causes, but the manner in which this valuable fish is leaving the coast calls for investigation. All kinds of theories are extant, but an intelligent investigation would, we believe, suggest some remedy to meet this exodus, which is not natural by any means.

SALMON.

This valuable fish shows an improvement, but needs more attention. We know the cause of its failure in any river. Given a fair chance past dams and other artificial obstructions and a reasonable amount of protection on their passage to and from the lake there will be no difficulty in keeping the rivers well stocked with this great sporting fish.

In this connection I wish to call the attention of the department to a proposed regulation passed almost unanimously at the convention of fishery officers at Yarmouth last autumn:—That no kind of fishing be allowed from Saturday morning 6 o'clock until the Tuesday morning of the next week, 6 o'clock, thus giving the fish three clear days to get to their spawning grounds; this to include fly fishing as well as nets, and to be applied to harbours and bays on the coast.

HERRING

Show an increase of nearly $3000.

POLLOCK

An increase of $27,880.

HALIBUT

An increase of $22,373.

SHAD FISHING

Was nearly a failure, the whole catch valued at only $1,650. Here is another valuable fish becoming extinct. Experts say that they must be protected in their breeding season and their falling off is owing to that want.

ALEWIVES

Show an increased catch. The figures are given at $30,755. The protection that we ask for salmon would preserve this fish as well, which although not as pretentious as the salmon, is a valuable fish for all that.

TROUT

Are about the same as last year. It is quite impossible to secure accurate figures as regards the catch of this sportsman's fish. Again the protection we ask for the salmon will also be applied to trout.

All other fish common to this district show an average catch.

LOBSTERS

Apart from the cod family lobster fishing is the most important in our district, aggregating $1,392,242, detailed as follows:

Canned	$ 382,672
Fresh in shell	1,009,570
	$1,392,242

Showing an increase of $50,344 as compared with 1901, when the figures were $1,841,897. This increase of $50,000 over 1901 is not on account of increased canneries or traps to any great extent, as there were only a few thousand more traps at work and but one more cannery. We may, therefore, congratulate ourselves that the lobsters show no evident signs of decrease, in this district at least. It is to be regretted that in a few sections there seems to be, to say the least, a very careless manner of handling or measuring these fish, resulting in a suicidal policy of destruction. Despite care of the officers, I fear that fishermen and canners, in some localities, are not as careful as they might be in these matters. The overseers of fisheries have from time to time at their annual convention, suggested improved regulations to put a stop to illega fishing which, in their opinion as practical men, would avail. They think that if a second offense involved the closing of the cannery, there are few who would handle illegal fish.

Dogfish are a terrible nuisance to the fishing industry. In fact, many people claim that they keep the mackerel away from the coast. It is to be hoped that something can be done in time to lessen the evil.

A bounty on phosphate manures that would enable the manufacturers to pay the fishermen to catch the dogfish seems to be the only practical scheme in sight.

I would again call the attention of the department to the necessity of revising the regulations relating to the river fisheries, as they are in most rivers practically useless.

All of which is respectfully submitted.

Your obedient servant,

L. S. FORD,
Inspector, District No. 3.

DISTRICT No. 1.

ISLAND OF CAPE BRETON.

RETURN Showing the Number and Value of Vessels, Boats, Nets, &c., also the Kinds of Fish Caught in the County of **Richmond**, Province of **Nova Scotia** for the year 1902.

Number.	FISHING DISTRICT.	Number.	FISHING VESSELS AND BOATS.						FISHING GEAR AND MATERIALS.					Lobster Canneries, No.	KINDS OF FISH.										Number.
			Vessels.			Boats.			Gill Nets.			Trawls.														
			Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.		Salmon, fresh, lbs.	Salmon, preserved in cans, lbs.	Salmon, smoked, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.		
	Richmond.			$			$				$		$												
1	Canso to Port Malcolm	4	140	2100	24	45	450	50	800	16000	3200	..	..	..	..	..	..	700	..	..	500	..	..	..	1
2	River Inhabitants to St. Louis	1	42	800	6	120	1200	135	1200	24000	4800	20	100	..	..	..	..	1150	..	..	60	..	..	..	2
3	River Bourgeois	13	333	3985	86	30	240	35	300	6000	1200	8	40	1	..	..	..	20	..	..	10	20930	..	..	3
4	Jauvrin Island to Cape Auguet	1	14	200	2	139	1135	176	825	16500	5800	134	590	2	..	..	..	689	12500	4400	41	27000	358	4	4
5	Arichat and Petit de Grat	8	116	2200	38	117	870	146	600	12000	3600	175	875	2	1500	..	..	962	18000	3400	144	39600	253	5	5
6	Rocky Bay and vicinity	..	..	..	..	65	950	100	520	10400	3600	45	225	1	..	..	..	131	7500	2200	105	7390	..	..	6
7	Descousse to Martinique	3	157	2400	44	12	128	18	168	7840	980	56	280	..	..	..	..	99	1700	3000	48	..	..	..	7
8	St. Peter's	4	80	1450	17	10	80	14	70	1400	210	10	50	..	..	..	..	40	..	..	..	..	..	..	8
9	Grande Greve and vicinity	..	..	..	..	42	830	103	92	1400	980	4	42	1	..	..	..	70	4000	2300	25	20400	992	9	9
10	Rockdale and vicinity	2	36	500	14	60	890	136	130	3200	850	37	380	1	..	..	..	400	3600	27000	500	29100	..	..	10
11	L'Ardoise lower & west	4	82	2050	31	244	8300	460	2300	5390	20200	68	640	..	1000	700	300	90	6000	3700	5500	..	..	..	11
12	Pt. Michaud and Grand River	..	..	..	..	50	1075	113	600	12000	3240	27	250	1	5000	..	600	56	3000	3000	400	20590	..	..	12
13	L'Archevêque	..	..	..	..	27	320	72	120	2400	800	6	40	1	..	..	..	4	..	900	120	24960	1280	13	13
14	St. Esprit	..	..	..	..	12	230	34	60	1580	400	8	50	..	..	..	..	10	300	450	100	..	..	..	14
15	Framboise & vicinity	..	..	..	..	33	720	100	95	2800	750	26	135	..	..	..	..	7	1750	1000	150	..	..	..	15
16	Fourchu	..	..	..	..	30	2000	91	150	3000	800	40	200	..	275	400	..	30	2000	1000	275	..	..	..	16
17	Irish Cove to Black River, including Indian Reserve and Linchy river	..	..	..	..	92	440	107	80	1580	640	16	110	..	..	..	..	396	32000	..	..	..	..	..	17
	Totals	40	1000	15685	262	1128	19858	1896	8110	127490	52050	680	4007	10	7775	1100	900	4854	92350	52350	7978	189970	2883		
	Values $	..	..	..	..	..	..	..	..	..	..	..	..	..	1550	165	180	19416	923	6282	119670	37994	14415		

RETURN Showing the Kinds and Quantities of Fish and Fish Products in the County of **Richmond**, Province of **Nova Scotia** for the Year 1902.

Number.	Fishing District.	Kinds of Fish.																		Total Value of all Fish.	Number.
		Cod, dried, cwt.	Cod, tongues, and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Haddock, Smoked Finnan Haddies, Lbs.	Hake, dried, cwt.	Hake, sounds, lbs.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Alewives or gaspereau, brls.	Eels, brls.	Flounders, lbs.	Tom cod or frost fish, lbs.	Squid, brls.	Coarse and mixed fish, brls.	Fish oils, galls.	Fish as bait, brls.		
	Richmond.																				$ cts.	
1	Canso to Port Malcolm	400	...	.....	150	....	....	....	100	.....	.....	1000	50	...	.....	.....	500	50	160	50	15,023 00	1
2	River Inhabitants to St. Louis	400	...	.....	250	....	....	..	100	.....	.....	11000	20	....	30000	.....	....	150	160	200	10,828 00	2
3	River Bourgeois	4400	...	.....	250	....	....	..	200	.....	.....	.....	...	...	20000	.....	....	100	1760	120	25,074 00	3
4	Jauvrin Island to Cape Auguet	1343	9	....	982	.....	18	13	236	4450	.....	15220	93	93	42650	.....	286	504	810	785	28,354 00	4
5	Arichat and Petit de Grat	2721	5	392000	1565	273300	37	60	320	3000	....	450	3	23	34450	.....	268	548	1000	595	66,268 75	5
6	Rocky Bay and vicinity	314	...	.....	150	..	10	4	80	150	.....	580	16	25	47020	.....	84	380	420	425	10,375 00	6
7	Descousse to Martinique	3084	5	.....	59	.....	...	....	12	1150	...	4000	20	43	18800	.....	85	138	1515	537	18,756 00	7
8	St. Peter's	800	...	.....	60	.....	...	....	120	.....	.....	1000	.....	6	12000	....	..	40	300	75	4,772 50	8
9	Grande Greve and vicinity	405	1	6500	130	...	7	4	98	1300	1500	.....	50	83	40000	1400	10	56	200	67	16,762 25	9
10	Rockdale and vicinity	650	10	17000	480	....	14	10	400	8000	1150	.....	97	56	33000	7000	75	78	500	50	28,226 50	10
11	L'Ardoise lower and west	6200	10	9000	3800	....	17	11	1400	7800	700	.....	475	19	70000	6000	145	59	5700	170	132,545 75	11
12	Pt. Michaud and Grand River	650	4	4000	165	.....	11	6	110	5000	250	.....	37	22	7500	1000	37	33	800	32	17,174 75	12
13	L'Archevêque	270	2	900	60	.....	10	7	30	3000	200	.....	19	13	3000	200	30	16	300	16	15,661 00	13
14	St. Esprit	150	....	800	80	.....	3	2	13	900	300	.....	40	14	4000	600	20	20	200	20	3,354 75	14
15	Framboise and vicinity	320	3	1500	100	....	16	11	52	1100	480	.....	10	26	13000	1900	70	38	420	130	6,096 00	15
16	Fourchu	1220	7	1700	90	.....	20	15	90	900	200	.....	19	27	13000	6000	200	150	1200	300	13,319 50	16
17	Irish Cove to Black River including Indian Reserve and Linchy river	585	4	.....	.....	.....	10	7	....	.....	6800	.....	.....	38	.....	2700	....	190	290	24	6,008 00	17
	Totals	23912	60	433400	8371	273300	173	150	3361	47100	11580	33250	949	488	388420	39400	1810	2550	15735	3596		
	Values $	95648	600	13002	25113	16398	389	75	6722	4710	1158	1663	3796	4880	19421	1970	7240	5100	4721	5394	418,599 75	

RETURN showing the Number, Tonnage and Value of Vessels, Boats, Nets, &c and the quantity and Value of Fish in the County of **Cape Breton—Nova Scotia**—*Continued.*

Numbers.	Fishing Districts.	Fishing Vessels and Boats.							Fishing Gear or Materials.					No.	Kinds of Fish.							
		Vessels.				Boats.			Gill Nets.			Trawls.											
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.	Lobster Canneries,	Salmon, fresh, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, lbs.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Number.
	Cape Breton.			$			$				$		$									
1	Gabarus and vicinity					34	2700	100	290	1680	2910			3		350			300	73290	1020	1
2	Louisburg	4	91	1550	20	29	580	45	160	4160	1600	20	100	1		126	2200	9600	169	37630	300	2
3	Big Lorraine and vicinity					24	650	50	192	4992	1920	24	120	1	1250	145	2600	12600	293	15460	40	3
4	Little Lorraine to Mira River, including Main-à-Dieu	2	26	450	7	64	1245	160	450	13700	5090	33	369	2	13470	251	200	5200	206	62600		4
5	Scatarie Island					14	2100	56	84	2182	840	14	280			14	2500	2000	15			5
6	Port Morien and vicinity	2	35	1600	14	49	570	55	154	3080	1140	26	6800		1400	270	2000	725	94			6
7	Schooner Pond and Glace Bay					34	450	35	200	4000	1000	20	200			200	4000	5000	20			7
8	Lingan	4	60	800	18	22	300	30	300	6000	1500	50	500	1		200	2000	500	15			8
9	South Bar to Low Point					15	175	19	100	2000	500	20	200	1	1000	300	1000	1500	4			9
10	Sydney					6	60	8	50	1000	250					100	2000	1500				10
11	Little Bras d'Or	2	28	700	11	65	1080	110	220	5800	860	72	580	3	1300	1005				82272		11
12	Piper Cove and East Bay					72	1011	90	93	1956	600	47	149		100	392					16	12
	Totals	14	240	5100	70	428	10921	758	2293	50550	18210	326	9298	12	18520	3353	18500	38625	1116	271252	1376	
	Values $														3704	13412	185	4635	16740	54250	6880	

RETURN showing Quantity and Value of Fish, &c.—**Nova Scotia**—*Continued.*

Fishing Districts.	Kinds of Fish.																Fish Products.		Seal skins, number.	Total Value of all Fish.	Number.
	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Hake, dried, cwt.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Shad, brls.	Smelts, lbs.	Alewives or Gaspereau, brls.	Eels, brls.	Oysters, brls.	Flounders, lbs.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.			
Cape Breton.																				$ cts.	
1 Gabarus and vicinity	2800	....	....	100	34	.....	400	1200	..	10000	30	40	....	....	....	...	1200	40	..	38,834 50	1
2 Louisburg	1168	....	.....	343	...	29	....	....	....	.....	....	....	.....	....	160	....	1080	80	..	20,082 00	2
3 Big Lorraine and vicinity	728	....	.....	412	....	10	.....	....	....	....	.....	....	.....	....	70	....	700	60	..	14,803 00	3
4 Little Lorraine to Mira River, including Main-à-Dieu	3005	....	.....	250	.....	215	2650	...	20	.....	115	....	.....	....	4	....	1500	304	..	34,991 00	4
5 Scatarie Island	900	...	12000	80	70	50	2400	....	...	.....	8000	....	.....	....	200	....	560	130	15	38,415 25	5
6 Port Morien	947	....	1200	65	.....	.....	9000	....	....	.....	.....	....	.....	....	.....	....	195	296	..	8,298 50	6
7 Schooner Pond and Glace Bay	4000	3	.....	500	125	70	5000	....	....	....	.....	....	..	....	6	....	850	85	..	20,597 75	7
8 Lingan	1400	...	.....	90	60	80	4000	....	....	.....	.....	....	.....	...	10	...	900	200	..	8,280 00	8
9 South Bar to Low Point	1400	....	.....	100	10	40	3000	....	....	.....	15	....	..	....	.....	...	500	150	..	8,387 50	9
10 Sydney	50	..	1000	.....	.....	.....	.....	....	....	.....	5	....	...	....	.....	...	....	20	..	880 00	10
11 Little Bras d'Or	42940	....	.....	12100	600	75	5700	....	....	4200	.....	50	....	1300	21	35	280	575	..	232,739 90	11
12 Piper Cove and East Bay	683	....	.....	.....	....	.....	.....	2400	....	4000	62	116	65	..	....	16	100	90	..	6,795 00	12
Totals	60021	3	14200	14040	899	569	32150	3600	20	18200	8227	206	65	1300	471	51	7865	2030	15	....	
Values $	240084	30	426	42120	2023	1138	3215	360	200	910	32908	2060	260	65	1884	102	2359	3045	19	433,014 40	

RETURN showing the Number and Value of Vessels, Boats, Nets, etc., and the Quantity of all Fish, etc., in the County of **Victoria**, Province of **Nova Scotia**, for the Year 1902.

Number.	Fishing Districts.	Fishing Vessels and Boats.							Fishing Gear or Materials.					No. of Lobster Canneries.	Kinds of Fish.					Number.
		Vessels.				Boats.			Gill Nets.			Trawls.								
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men	Number.	Fathoms.	Value.	Number.	Value.		Salmon, fresh, lbs.	Salmon, preserved in cans, lbs.	Salmon, salted, brls.	Herring, salted, brls.	Herring, fresh, lbs.	
	Victoria Co.			$			$				$		$							
1	Baddeck Bay and vicinity	...	...	...	...	32	646	30	76	2200	801	6	43	...	4220	...	...	42	15800	1
2	Barachois	1	15	400	6	18	200	36	36	1080	360	8	60	...	3600	...	...	20	...	2
3	Indian Brook to French River	...	...	...	...	58	1140	122	186	5580	1860	35	275	2	3300	900	...	240	...	3
4	Wreck Cove to Smokyhead	...	...	...	...	30	500	60	71	2130	710	11	88	2	3600	100	...	59	...	4
5	South Bay	14	115	2900	42	34	476	68	136	3400	1100	22	176	...	250	...	...	...	...	5
6	North Bay and Middle Head	...	...	...	...	75	1680	150	300	7500	2400	40	320	...	1700	...	25	10	...	6
7	Green Cove and South Point	...	...	...	...	18	270	29	30	600	150	7	70	1	5400	...	...	...	...	7
8	Neil's Harbour	...	...	...	...	50	1000	55	70	1400	420	12	120	2	...	...	...	4	...	8
9	New Haven	...	...	...	...	32	640	52	60	1200	300	6	40	1	...	...	...	...	...	9
10	Dingwall	...	...	...	...	12	192	36	55	2610	1200	...	...	1	6200	...	...	14	...	10
11	White Point	...	...	...	...	15	300	35	34	1400	690	15	90	1	7800	300	10	35	...	11
12	Sparling Brook to Money Pt	...	...	...	...	14	112	28	29	970	325	4	24	1	700	...	...	26	...	12
13	Bay St. Lawrence and vicinity	...	...	...	...	35	350	70	67	2500	1380	4	40	1	3700	...	3	25	...	13
	Totals	15	130	3300	48	423	7506	771	1150	32570	1696	170	1346	12	40470	1300	38	475	15800	
	Values $	...	...	...	...	...	...	...	...	...	...	...	...	..	8094	195	570	1900	158	

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of **Victoria**, Province of **Nova Scotia**, for the Year 1902.

Number.	Fishing Districts.	Kinds of Fish.													Fish Products.		Seal skins, No.	Total Value of all Fish.	Number.
		Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Cod, dried, cwt.	Haddock, dried, cwt.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Alewives or Gaspereau, lbs.	Eels, brls.	Oysters, brls.	Squid, brls.	Fish Oil, galls.	Fish as bait, brls.			
	Victoria Co.																	$ cts.	
1	Baddeck Bay and vicinity		11		154	7	1		400	900	17	19	14		50	25	1	2,426 75	1
2	Barachois		30		300	20	5							21	150	10		2,664 00	2
3	Indian Brook to French River		141	19200	455	200	32	4200						29	330	155		11,061 50	3
4	Wreck Cove to Smoky Head		75	14092	160	55	13	800						9	140	60		5,993 40	4
5	South Bay		340		2574	880	105								2550	290		19,496 00	5
6	North Bay and Middle Hd		212		1610	858									1000	490		13,984 00	6
7	Green Cove and South Pt		20	4080	225									40	150	30		3,346 00	7
8	Neil's Harbour	1300	10	9168	3975	150		1500						50	2000	75		19,568 10	8
9	New Haven		8	14016	1370	152		2000						60	800	150		9,764 20	9
10	Dingwall		115	6048	150	40	35	8000							130			5,859 60	10
11	White Point		4	4608	450	210	30	4000				20		60	600			6,386 60	11
12	Sparling Brook to Money Pt		71	9408	86	24		1000							30			3,715 60	12
13	Bay St. Lawrence and vicinity		40	9744	423	99		9800				20		28	280			6,798 80	13
	Totals	1300	1077	90364	11932	2695	221	31300	400	900	17	59	14	297	8210	1285	1		
	Values $	156	16155	18073	47728	8085	442	3130	40	45	68	590	56	1188	2463	1928	1	111,064 55	

RETURN showing the Number, Tonnage and Value of Vessels, Boats and Nets and the Quantity and Value of Fish in the County of **Inverness**, Province of **Nova Scotia**, for the Year 1902.

Number.	Districts.	Fishing Vessels and Boats.							Fishing Gear or Materials.					No.	Kinds of Fish.									
		Vessels.				Boats.			Gill Nets.			Trawls.													
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.	Lobster Canneries.	Salmon, fresh, lbs.	Salmon, preserved in cans, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Number.
	Inverness County.			$			$				$		$											
1	Meat Cove to Fishing Cove	..	....	.....	....	58	800	125	37	2900	1635	..	....	4	11400	....	.....	.....	.....	.....	48	41580	.....	1
2	Eastern Harbour to Cape Rouge	21	257	7540	96	80	3165	236	146	2185	860	14	140	3	4800	....	475	.....	.....	.....	5	31200	.....	2
3	Cheticamp Pt. and Lake	2	22	300	8	12	515	31	18	400	60	7	55	2	2000	480	83	.....	.....	700	7	13720	.....	3
4	Chimney Cor. and vicinity	..	....	.....	...	22	525	42	15	1035	337	5	119	2	....	....	131	.....	.....	.....	26	10815	463	4
5	Margaree district	..	....	.....	....	32	500	47	23	1320	600	....	....	1	31500	....	53	.....	.....	.....	40	3060	122	5
6	Doucet's Cove and vicinity	..	....	.....	....	46	1950	144	52	3400	2600	14	250	2	.....	....	76	.....	.....	.....	74	4440	176	6
7	Broad Cove to Side Pt	..	....	.....	....	9	110	23	17	410	135	3	20	1	.....	....	44	1300	.....	900	2	1500	.....	7
8	Mabou district	..	....	.....	....	31	392	66	50	1356	450	23	115	1	500	240	186	1600	.....	1000	28	14400	.....	8
9	Port Hood	..	....	.....	....	40	800	60	200	6000	2000	200	1000	1	.....	....	200	8000	.....	1000	100	52150	.....	9
10	Judique districts	..	....	.....	....	40	400	80	70	2100	700	60	600	2	.....	....	130	48000	.....	720	70	38110	.....	10
11	Long Point to Low Point	..	....	.....	....	50	600	100	70	2100	700	66	330	1	1500	....	340	4500	.....	1800	55	11100	.....	11
12	Port Hastings to Hawkesbury	2	60	1400	14	20	300	20	20	600	200	20	100	..	....	....	260	1500	.....	300	105	.....	.....	12
13	West Bay & Malagawatch	..	....	.....	....	78	936	127	322	4471	1610	34	102	..	.....	....	95	.....	350000	.....	.....	.....	.....	13
14	River Dennis	..	....	.....	....	50	592	69	184	3780	943	19	48	..	.....	....	55	.....	230000	.....	.....	.....	.....	14
15	Whycocomagh	..	....	.....	....	26	260	38	28	560	196	....	.....	..	.....	....	33	700	.....	.....	.....	.....	.....	15
	Totals	25	339	9240	118	594	11845	1208	1252	32617	13026	365	2579	20	51700	720	2161	65600	580000	6420	560	222075	761	
	Values .....$	..	...	.....	....	....	.....	....	...	.....	.....	...	...	..	10340	108	8644	656	11600	770	8400	44415	3805	

RETURN showing the quantity and value of fish, &c.—**Nova Scotia**—*Continued.*

Number.	Districts.	Kinds of Fish.														Fish Products.			Total Value of all Fish.	Number.
		Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Hake, dried, cwt.	Hake, sounds, lbs.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Alewives or gaspereau, brls.	Eels, brls.	Oysters, brls.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.		
	Inverness County.																		$ cts.	
1	Meat Cove to Fishing Cove	354			46									12		160	725		14,053 50	1
2	Eastern Harbour to Cape Rouge	7225	3		300	110		75	1000			20		315	50	2460	170		42,055 50	2
3	Cheticamp Pt. and lake	1210	8		118	90		28	700			4		214	54	800	85		10,711 00	3
4	Chimney Corner and vicinity	930			172	113			750					58	37	255	165	100	10,637 25	4
5	Margaree district	2900	3		100	58	100		1000		500	55		100	150	250	300	150	24,394 50	5
6	Doucet's Cove and vicinity	2050			120	133	140		1450					180	90	330	230	120	13,660 25	6
7	Broad Cove and Side Pt	65		1600	5	11		6			13			8		34	24		1,116 95	7
8	Mabou and vicinity	200		2300	55	58		7						20		58	40	5	5,654 40	8
9	Port Hood	1000		5000	800	1200				200				50		400	100	10	22,675 00	9
10	Judique districts	80		1000	30	30				1400		3		10			40	5	10,538 40	10
11	Long Point to Low Point	60		1000						4000						40	55	5	5,733 00	11
12	Ports Hastings to Hawkesbury	40		500						3000		2		10		60	15		3,241 50	12
13	West Bay and Malagawatch	115										25				60	380		8,678 00	13
14	River Dennis	110									11	45	265			60	195		7,124 50	14
15	Whycocomagh	130														30	16		692 00	15
	Totals	16469	14	11400	1746	1803	240	116	4900	8600	524	154	265	977	381	4997	2540	395		
	Values	$65876	140	342	5238	4057	120	232	490	860	2096	1540	1060	3908	762	1499	3810	198	180,965 75	

RECAPITULATION.

OF the Yield and Value of the Fisheries of the **Island of Cape Breton** for the year 1902.

Kinds of Fish.	Quantity.	Rate.	Value.	Total Value.
		$ cts.	$ cts.	$ cts.
Salmon, fresh ... Lbs.	118,465	0 20	23,693 00	
" preserved in cans ... "	3,120	0 15	468 00	
" pickled ... Bbls.	38	15 00	570 00	
" smoked ... Lbs.	900	0 20	180 00	
				24,911 00
Herring salted ... Bbls.	10,843	4 00	43,372 00	
" fresh ... Lbs.	192,250	0 01	1,922 50	
" smoked ... "	580,000	0 02	11,600 00	
				56,894 50
Mackerel, fresh ... "	98,695	0 12	11,843 40	
" salted ... Bbls.	10,731	15 00	160,965 00	
				172,808 40
Lobsters, preserved in cans ... Lbs.	773,661	0 20	154,732 20	
" fresh or alive ... Cwt.	5,020	5 00	25,100 00	
				179,832 20
Cod, dried ... "	112,334	4 00	449,336 00	
" tongues and sounds ... Bbls.	77	10 00	770 00	
				450,106 00
Haddock, dried ... Cwt.	26,852	3 00	80,556 00	
" fresh ... Lbs.	459,000	0 03	13,770 00	
" smoked (finnan haddies) ... "	273,300	0 06	16,398 00	
				110,724 00
Hake, dried ... Cwt.	2,875	2 25	6,468 75	
" sounds ... Lbs.	390	0 50	195 00	
				6,663 75
Pollock ... Cwt.	4,267	2 00	... ...	8,534 00
Halibut ... Lbs.	115,450	0 10	... ...	11,545 00
Trout ... "	24,180	0 10	... ...	2,418 00
Shad ... Bbls.	20	10 00	...	200 00
Alewives ... "	9,717	4 00	... ...	38,868 00
Eels ... "	907	10 00	... ...	9,070 00
Oysters ... "	344	4 00	...	1,376 00
Smelts ... Lbs.	52,350	0 05	...	2,617 50
Flounders ... "	389,720	0 05	... ...	19,486 00
Tom cod or frost fish ... "	39,400	0 05	... ...	1,970 00
Squid ... Bbls.	3,555	4 00	...	14,220 00
Coarse and mixed fish ... "	2,982	2 00	... ...	5,964 00
Fish oil ... Galls.	36,807	0 30	...	11,042 10
Fish as bait ... Bbls.	9,451	1 50	...	14,176 50
" as manure ... "	395	0 50	...	197 50
Seal skins ... No. 1.	16	1 25	... ...	20 00
Total for 1902 ...	...	...	... ...	1,143,644 45
" 1901 ...	...	...	...	1,065,371 63
Increase ...	...	...	...	78,272 82

RECAPITULATION

STATEMENT showing the Number and Value of Fishing Boats, Nets, &c., in the **Island of Cape Breton** for the Year 1902.

Articles.	Value.	Total.
	$ cts.	$ cts.
94 fishing vessels, 1,709 tons (498 men)	33,325 00	
2,573 fishing boats (4,633 men)	50,130 00	
12,805 gill-nets, 243,227 fathoms)	84,982 00	
3 seines (550 fathoms)	350 00	
19 trap-nets	510 00	
1,541 trawls	17,230 00	
23 weirs	500 00	
20 smelt nets	785 00	
10,815 hand lines	6,421 00	
		194,236 00
54 lobster canneries (841 persons employed)	34,060 00	
137,130 " traps	68,285 00	
		102,345 00
31 freezers and ice-houses	9,378 00	
1,481 smoke and fish-houses	41,730 00	
425 piers and wharfs	71,742 00	
53 tugs, steamers and smacks	8,620 00	
		131,470 00
Total		428,051 00

NOVA SCOTIA—*Continued.*—DISTRICT No. 2, FOR THE YEAR 1902.

RETURN showing the Number, Value of Vessels and Boats, Nets, &c., and Quantity of all Fish &c.—**Nova Scotia**—*Continued.*

Number.	Districts.	Fishing Vessels and Boats.							Fishing Gear, &c.					Kinds of Fish.										
		Vessels.				Boats.			Gill Nets.			Trawls.												
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.	Salmon, fresh, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smkd, lbs.	Mackerel, fresh, lbs	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Haddock, fresh, lbs	Haddock, dried cwt
	Cumberland County.			$			$				$		$											
1	Malagash, Gulf Shore and Pugwash	1	14	250	2	183	3552	91	202	4950	1084	2	10	.....	50	.....	.....	1000	..	357600	....	1500	600	....
2	Port Philip, Northport and Amherst Shore	....	....	....	....	112	2320	156	275	8500	1450	....	....	.....	100	30000	100000	10000	25	78192	38	...	....	....
3	Wallace	....	....	....	....	19	195	19	17	285	136	....	....	.....	....	.....	.....	.....	....	.....	....	.....	.....	....
4	River Philip	....	....	....	....	12	175	12	20	320	200	....	....	1000	....	.....	.....	.....	....	.....	....	.....	.....	....
5	La Planche, Maccan and Nappan	....	....	....	....	3	45	7	15	300	150	....	....	750	....	.....	.....	.....	....	.....	....	.....	.....	....
6	Minudie to Apple River	1	11	300	3	5	200	6	31	630	165	8	100	6800	70	.....	.....	.....	....	.....	....	150	....	10
7	Advocate	....	....	....	....	5	130	12	8	300	60	2	40	500	30	.....	.....	.....	....	.....	....	50	....	15
8	Spencers Island	....	....	....	....	4	80	8	6	240	42	2	40	.....	20	.....	.....	.....	....	.....	....	20	....	25
9	Port Greville	....	....	....	....	2	40	4	2	80	40	2	16	2500	50	.....	.....	.....	....	.....	....	70	..	20
10	Parrsboro'	....	....	....	....	5	100	10	5	100	60	....	....	1600	25	.....	.....	.....	....	.....	....	40	....	10
11	Two Islands	....	....	....	....	2	21	4	1	50	20	....	....	1000	25	.....	.....	.....	....	.....	....	15	....	5
	Totals	2	25	550	5	352	6858	329	582	15755	3407	16	106	14150	370	30000	100000	11000	25	435792	38	1845	600	85
	Values $	....	....	....	....	....	....	....	..	.....	....	.....	....	2830	1480	300	2000	1320	375	87158	190	7380	18	255

RETURN showing the Quantity and Value of Fish, &c.—**Nova Scotia**—*Continued.*

Number.	Districts.	Kinds of Fish.																	Total Value of all Fish.	Number.
		Hake, dried, cwt.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Shad, brls.	Smelts, lbs.	Alewives or Gaspereau, brls.	Bass, lbs.	Eels, brls.	Oysters, brls.	Flounders, lbs.	Tom Cod or Frost Fish, lbs.	Coarse and Mixed Fish, lbs.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	Clams, brls.		
	Cumberland County.																		$ cts.	
1	Malagash, Gulf Shore and Pugwash	800					15700	50			382					2406	5000		88,280 00	1
2	Port Philip, Northport and Amherst Shore				500		10000	50	1000	25			10000	330		2475	1234	100	26,892 90	2
3	Wallace						11670	235			419			48					3,295 50	3
4	River Philip				100			400		40	2								2,218 00	4
5	La Planche, Maccan and Nappan						2000	450					1000						2,100 00	5
6	Minudie to Apple River	20			1000	175	2000	175					500						4,990 00	6
7	Advocate	10	10	110								500			40	4			561 50	7
8	Spencers Island		18	180								400			30	3			322 50	8
9	Port Greville	10	10	1400	100										20	3			1,243 00	9
10	Parrsboro'		5	1500	150										20	3			795 50	10
11	Two Islands	5	3	600								200							462 25	11
	Totals	845	46	3790	1850	175	41370	1360	1000	65	803	1100	11500	378	110	4894	6234	100		
	Values $	1901	92	379	185	1750	2068	5440	100	650	3212	55	575	756	33	7341	3117	200	131,161 15	

RETURN showing the Number of Boats, Nets, &c., and the Quantities of Fish—**Nova Scotia**—*Continued.*

Number.	Districts.	Fishing Boats.			Fishing Gear or Materials.							Kinds of Fish.						
					Gill Nets.			Trawls.		Weirs.								
		Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.	Salmon, fresh, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Lobsters, preserved in cans, lbs.	Cod, dried, cwt.	Number.
	Colchester County.		$				$		$		$							
1	Sterling	30	1000	30	....	....	....	....	....	....	....	....	....	....	....	49872	....	1
2	Stewiacke	120	1150	210	205	6100	1525	....	....	....	....	46000	....	....	....	....	....	2
3	Five Islands	5	150	10	....	....	....	7	200	2	400	300	4	4000	....	....	150	
4	Economy	5	140	15	5	1800	250	....	....	6	1200	7700	8	2000	3000	....	20	4
5	Little Bass River to Highland Village	19	540	42	19	6600	1300	....	....	2	600	29930	....	....	....	....	....	5
6	Great Village to Queen's Village	21	525	42	21	5800	1250	....	....	....	....	18800	....	....	....	....	....	6
	Totals	200	3505	349	250	20300	4325	7	200	10	2200	102730	12	6000	3000	49872	170	
	Values $	....	....	....	....	....	....	....	....	....	....	20546	48	60	60	9974	680	

RETURN showing the Quantity and Value of Fish, &c.—**Nova Scotia**—*Continued.*

Number.	Districts	Kinds of Fish.														Total Value of all Fish.	Number.
		Haddock, fresh, lbs.	Haddock, dried, cwt.	Hake, dried, cwt.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Shad, brls.	Smelts, lbs.	Alewives or Gaspereau, brls.	Bass, lbs.	Oysters, brls.	Fish oil, galls.	Fish as bait, brls.	Clams, brls.		
	Colchester County.															$ cts.	
1	Sterling	....	....	....	....	....	.....	...	8000	....	....	325	....	100	....	11,824 40	1
2	Stewiacke	....	....	....	....	....	6500	310	....	150	8000	....	....	....	....	14,350 00	2
3	Five Islands	2200	17	1300	5	2800	1000	2	....	....	....	....	150	20	....	4,243 00	3
4	Economy	800	....	....	....	....	8000	48	....	....	....	....	15	7	....	3,051 00	4
5	Little Bass River to Highland Village	....	....	....	....	....	800	197	....	....	275	....	....	....	575	8,313 50	5
6	Great Village to Queen's Village	....	....	....	....	....	200	67	....	....	....	....	....	....	....	4,450 00	6
	Totals	3000	17	1300	5	2800	16500	534	8000	150	8275	325	165	127	575	.....	
	Values ..... $	90	51	2925	10	280	1650	5340	400	600	827	1300	49	190	1150	46,231 90	

RETURN showing the number of Boats, Nets, &c., and the quantity and value of Fish in Pictou Co.—**Nova Scotia**—*Continued.*

Number.	Districts.	Fishing Boats.			Fishing Materials.					Kinds of Fish.								Number.
					Gill Nets.			Trawls.										
		Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.	Salmon, fresh, lbs.	Herring, salted, lbs.	Herring, fresh, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	
	Pictou County.		$				$		$									
1	West Pictou	160	4480	172	125	3800	1000	4	40	2900	...	14000	4000	.....	236448	...	80	1
2	Pictou Island	48	1460	94	12	320	150	...	....	.....	.....	.....	....	50	128112	....	50	2
3	Central Division	10	250	12	20	400	100	....	....	3000	50	.....	.....	25	.....	.....	...	3
4	Southern Division	36	471	34	54	2716	1168	15	55	25100	....	47000	....	....	.....	.....	21	4
5	Merigomish Island	13	250	14	27	1225	665	....	..	7600	....	3000	....	.....	14784	10	....	5
6	North Beach	11	168	11	28	1657	1337	2	10	11800	....	25500	1800	...	5428	....	...	6
7	Ponds	16	330	18	37	1164	584	4	25	7400	....	19000	500	...	28512	140	...	7
8	Lismore	3	37	3	4	440	400	....	....	2900	..	.....	....	.....	.....	40	....	8
	Totals	297	7446	358	307	11722	5404	25	130	60700	50	108500	6300	75	413184	190	151	
	Values $	....	.....	...	....	.....	.....	..	....	12140	200	1085	756	1125	82636	950	604	

RETURN showing the Quantity and Value of Fish—**Nova Scotia**—*Continued.*

Number.	Districts.	Kinds of Fish.														Total Value of all Fish.	Number.
		Haddock, fresh, lbs.	Hake, dried, cwt.	Hake, sounds, lbs.	Trout, lbs.	Smelts, lbs.	Alewives or Gaspereau, brls.	Eels, brls.	Oysters, brls.	Squid, brls.	Coarse and Mixed, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	Clams, brls.		
	Pictou County.															$ cts.	
1	West Pictou	....	40	....	300	5000	40	8	10	400	15	40	1000	3500	30	54,411 60	1
2	Pictou Island	....	....	....	....	....	....	....	....	....	....	20	200	2500	....	28,128 40	2
3	Central Division	....	500	250	5000	2000	50	159	40	....	....	200	50	....	....	5,110 00	3
4	Southern Division	1100	....	....	500	1600	55	7	....	....	....	10	....	....	....	6,030 00	4
5	Merigomish Island	....	....	....	....	1500	....	....	....	....	....	....	100	250	....	4,906 80	5
6	North Beach	....	12	....	500	2000	....	42	....	....	....	....	40	90	..	4,598 60	6
7	Ponds	....	5	....	300	....	....	12	....	....	....	....	145	420	....	8,721 15	7
8	Lismore	....	....	....	100	....	....	....	....	....	....	....	15	....	....	812 50	8
	Totals	1100	557	250	6700	12100	145	228	50	400	15	270	1550	6760	30	....	
	Values	33	1253	125	670	605	580	2280	200	1600	30	81	2325	3380	60	112,719 05	

RETURN Showing the Number, and Value of Vessels, Boats, Nets, &c., and the Quantity and Value of all Fish in the County of **Antigonish,** Province of **Nova Scotia,** for the Year 1902.

Number.	Districts.	Fishing Vessels and Boats							Fishing Gear or Materials.										Lobster Plant.					
		Vessels.				Boats.			Gill Nets.			Trap Nets.		Trawls.		Hand Lines.			Canneries.		Traps.		Persons employed in Canneries.	
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.	Number.	Value.		Number.	Value.	Number.	Value.		Number.
	Antigonish County.			$			$				$		$		$		$			$		$		
1	Hbr. Bouché, Linwood & Cape Jack	1	10	100	3	70	800	80	324	6360	1214	2	200	56	190	103	48		1	1000	3500	1700	71	1
2	Tracadie, Bayfield, Monk's Head and South Side Antigonish Harbour					62	700	65	234	5850	1148	16	2250	20	72	47	24		1	300	3200	971	38	2
3	North Side Antigonish Hbr, Lakevale, and South Side Cape George					59	766	73	135	2725	684	11	1190	48	225	38	19		2	2500	5800	3480	98	3
4	North Side Cape George and Georgeville					24	321	33	58	1180	255	1	100	24	124	18	9		1	900	2060	1200	30	4
5	Malignant Cove, Doctor's Brook, Arisaig, Moidart and Knoidart					24	286	29	61	1248	290	5	560	18	82	23	11		1	1600	2900	1740	42	5
	Totals	1	10	100	3	239	2873	280	812	17363	3591	35	4300	166	693	229	111		6	6300	17400	9091	279	

RETURN Showing the Quantity and Value of Fish, in Antigonish, Nova Scotia—*Continued.*

Number.	DISTRICTS.	KINDS OF FISH.																					FISH PRODUCTS.			TOTAL VALUE OF ALL FISH.	Number.
		Salmon, fresh, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Mackerel, fresh, lbs	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Cod, dried, cwt.	Haddock, fresh lbs.	Haddock, dried cwt.	Hake, dried, cwt.	Hake, sounds, lbs.	Pollock, cwt.	Trout, lbs.	Smelts, lbs.	Alewives, or Gaspereau, brls.	Bass, lbs.	Eels, brls.	Oysters, brls.	Flounders, lbs.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.		
	Antigonish County.																									$ cts.	
1	Hbr Bouché, Linwood and Cape Jack.....	2700	189	105000	8440	144	24000	306	....	15	117	230	15	...	500	4	...	9	...	5600	10	209	113	840	450	14,383 95	1
2	Tracadie, Bayfield Monk's H'd & South Side Antigonish Harbour.....	14400	103	2500	34000	163	10080	67	2000	52	84	406	....	250	5000	10	2000	39	141	2100	2	38	161	240	400	14,997 30	2
3	North Side Antigonish Hbr, Lakevale & S. Side Cape George..	11350	81	.....	4000	50	53808	372	2500	42	328	550	....	250	2000	29	....	20	....	5500	21	35	290	367	800	19,195 10	3
4	North S. Cape George and Georgeville ...	1000	36	.....	.....	20	13248	50	1000	30	294	650	...	50	....	2	....	5	..	1300	12	18	270	98	210	5,145 10	4
5	Malignant Cove, Doctor's Brook, Arisaig Moidart & Knoidart	6800	58	....	....	36	27120	54	2500	75	397	700	2	75	....	....	500	....	....	1600	12	22	386	117	450	10,065 05	5
	Totals.....	36250	467	107500	46440	413	128256	849	8000	214	1220	2530	17	625	7500	45	2500	73	141	16100	57	322	1220	1662	2310	.. ..	
	Values.....$	7250	1868	1075	5572	6195	25651	3396	240	642	2745	1265	34	62	375	180	250	730	564	805	228	644	366	2493	1155	63,786 50	

RETURN showing the Number, Tonnage and Value of Vessels and Boats, Nets and the Quantity and Value of Fish in the County of **Guysborough**, Province of **Nova Scotia**, for the Year 1902.

Number.	DISTRICTS.	FISHING VESSELS AND BOATS.							FISHING GEAR OR MATERIAL.							KINDS OF FISH.											
		Vessels.				Boats.			Gill Nets.			Trap Nets.		Trawls.														
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.	Salmon, fresh, lbs.	Salmon, preserved in cans, lbs.	Salmon, smoked, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Number.
	Guysboro' County.			$			$				$		$		$												
1	Ecum Secum					48	900	50	38	750	250			10	100	300			40	1000		800	15	9120	70	1
2	Marie Joseph					60	1300	55	50	1000	300			12	85	75			30	900		500	6	23568	182	2
3	Liscomb Spanish Ship Bay and Gegogin	2	76	2500	12	120	2800	110	90	2000	600			35	280	3000	40		150	3000		1000	15	31632	189	3
4	St. Mary's Bay & River					36	700	38	60	1800	450			6	50	10000	50	1000	50	1000		800	8	17616	20	4
5	Wine Harbour	1	30	800	6	20	600	30	45	1500	300			7	40	800		200	15	1000		600	8			5
6	Indian Harbour & Lake					36	650	48	80	1650	450			6	45	600			30	1500		800	20			6
7	Holland's Harbour & Indian River					16	250	20	35	700	180			5	75	100			15	500		500	6		15	7
8	Port Beckerton	2	47	2000	11	56	1400	85	120	2500	700			50	400	180			80	1200		600	50	20016	190	8
9	Fisherman's Harb.					30	950	36	75	1600	400			10	60	200			40	500		3000	40	18720	80	9
10	Country Harbour					10	160	15	20	500	200					2200			20	300		500	3			10
11	Isaac's Harbour					25	600	30	80	1800	500			8	100	500			40	600		2000	15	19824		11
12	Drum Head					48	1600	40	100	2000	600			45	400				120	500		9000	50			12
13	Seal Harbour					35	1100	40	100	2000	600			15	100				50	1000		2000	20	23088	189	13
14	Coddle's Harbour					30	800	30	80	1600	500			10	60				20			500	20	15264	8	14
15	New Harbour					80	2000	90	230	4600	1150			20	150	300			80			1000	120	14304		15
16	Tor Bay					26	700	30	150	3000	1240			8	56				20			400	46	16320		16
17	Larry's River	6	124	3700	33	100	3500	95	670	13400	6700			30	210				255				231			17
18	Charlos Cove	3	57	950	16	70	2200	60	360	7200	3420			40	240				178				89	39408	17	18
19	Cole Harbour	1	10	200	6	45	1000	40	450	9000	4500	2	200	38	228				90				65			19
20	Port Felix	5	92	2500	25	105	2900	100	970	19400	9700			160	1120				300			4250	150	19344		20
21	Whitehead	4	59	1300	18	110	3000	100	675	13500	6800	2	1000	190	1140	1000			50	13100		17850	100	49152	263	21

22	Raspberry & Dover	1	12	400	6	60	1200	48	160	3200	1440	2	500	45	315	300	....	..	35	19450	.....	9600	30	72652	304	22
23	Canso and Canso Tittle.....	14	245	12600	76	200	5100	160	590	11800	7080	13	5600	380	3040	10000	1500	4500	529	400000	40000	205430	300	101904	805	23
24	Fox Island Main ..	..	...	.....	....	16	260	16	110	2200	1220	5	1000	18	116	50	....	....	10	5700	....	10400	10	.....	.....	24
25	Half Island Cove..	..	....	.....	....	52	1040	50	500	10000	5500	7	1600	75	600	300	....	....	100	14150	.....	59256	20	....	.....	25
26	Philips Harbour..	..	....	.....	....	35	925	30	200	4000	2400	2	800	60	480	.....	....	....	25	10200	....	18250	15	.....	.....	26
27	Queensport. ...	1	15	700	5	52	870	50	470	9400	5640	10	2000	100	700	2000	....	....	30	10650	.....	27220	40	58740	60	27
28	Peas Brook.....	..	....	.....	..	25	475	32	230	4600	2760	1	500	45	315	....	....	....	50	12250	....	1690	20	.....	.....	28
29	Halfway Cove....	..	....	.....	....	70	1000	70	580	11600	6720	3	850	95	665	.....	....	....	25	9890	....	11540	35	....	....	29
30	Sandy Cove and Cook's Cove....	2	25	800	8	50	850	50	600	12035	9336	3	1200	50	348	12000	....	....	40	18200	.....	36790	27	.....	....	30
31	Guysborough and Manchester.....	1	11	400	5	22	360	20	280	5780	3470	1	900	30	210	4500	....	....	18	10650	....	10300	10	....	.....	31
32	Port Shoreham...	..	...	.....	....	35	475	35	340	6800	3740	..	.....	30	210	....	....	....	30	7275	.....	9310	30	.....	....	32
33	St. Francis.... .	..	....	.....	....	40	650	45	460	9200	5000	..	.....	38	276	....	....	....	60	3150	....	60050	50	....	....	33
34	Oyster Ponds.....	..	..	.....	....	32	460	35	375	7500	4500	..	.....	25	175	250	....	....	68	20550	...	18350	25	.....	.....	34
35	Sand Point.....	..	....	.....	....	30	500	34	350	7000	4200	..	.....	30	180	....	....	....	100	36300	.....	20850	40	.....	....	35
36	Middle Melford & Steep Creek....	..	....	.. .	....	53	1160	44	1000	20000	12000	..	.....	40	280	.....	....	...	100	105200	.....	69300	120	.....	....	36
37	Mulgrave & Auld's Cove..... .	1	34	700	5	10	210	8	200	4000	2400	..	...	8	56	....	....	....	25	21150	.. ....	.....	38	37824	.. ....	37
	Totals..	44	837	29550	232	1888	44645	1869	10923	220615	116896	51	16150	1774	12905	48655	1590	5700	2918	732465	40000	614436	1887	588496	2392	
	Values..... $	..	....	.....	....	....	.....	...	.....	.....	.....	..	....	....	.....	9731	238	1140	11672	7324	800	73739	28305	117699	11960	

RETURN showing the Quantities of Fish, &c., in Guysborough—**Nova Scotia**—*Continued.*

Number.	Districts.	Kinds of Fish.																	Fish Products.					Total Value of all Fish.	Number.
		Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Haddock, smoked finnan haddies, lbs.	Hake, dried, cwt.	Hake, sounds, lbs.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Alewives or gaspereau, brls.	Eels, brls.	Sardines, brls.	Flounders, lbs.	Tom cod or frost fish, lbs.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	Seal skins, number.	Clams, brls.		
	Guysborough County—Continued.																								$ cts.	
1	Ecum Secum	400	4	500	50				30	2000	1500	400	15	20	8	800	1000	40	40	400	200	150	8	8	6,071 00	1
2	Marie Joseph	450	3	800	60				40	2000	200	300	10	25		1000	1200	50	60	500	250	400	10	8	9,740 10	2
3	Liscomb, Spanish Ship Bay and Gegoggin	1600	8	3000	400				100	5000	900	800	60	15		1200	3000	120	100	1500	360	800	12	6	20,149 40	3
4	St. Mary's Bay and River	60		1000	15				8	500	500	2000	75	25		800	400	10	20	60	120	450		15	8,350 70	4
5	Wine Harbour	140		800	20				10	600	300		10	15		1000	200	5	15	100	100			15	1,726 00	5
6	Indian Harbour and Lake	120		800	25				10	600	600	3000	15	10		500	600	15	25	100	150				2,100 00	6
7	Holland's Harbour and Indian River	100		200	20				10	1000	1000		4	8		1000	500	8	10	80	120			30	1,483 00	7
8	Port Beckerton	1300	6	25000	250				75	3000			6	30		2000	1600	100	25	1200	200	500	15	15	15,235 95	8
9	Fisherman' Harbour	500	4	500	60				65	2000			4	10		1000	800	80	10	400	150	300	10	8	8,943 50	9
10	Country Harbour	20		300	8				5	500	2000	1000	20	8		400		4	2	20	20				1,287 00	10
11	Isaac's River	150		1500	20				40	6500	1000	400	4	10		1000	800	15	12	140	100	350			6,907 80	11
12	Drum Head	540	6	6000	80				150	20000			6	8		2000	1200	60	35	500	200		8		8,294 00	12
13	Seal Harbour	440	6	600	100				230	2500	600		6	8		2000	1200	40	25	500	200	400	6		10,348 10	13
14	Coddle's Harbour	165	2	400	30				80	1000	200		4	20		1000	800	30	20	160	100	250	4	4	5,401 80	14
15	New Harbour	900	4	500	175				340	3000	1200	4000	30	20		1000	2000	80	75	600	120	250			12,075 80	15
16	Tor Bay	204			54				80	1550			3					20	30	300	100	262			5,898 00	16
17	Larry's River	1394			185		6		236	9460	200	400	24	30				150	100	1400	450	75			14,416 00	17
18	Charlos Cove	988			184		12	12	130	2170	250	360	18	35				75	20	830	275	625			16,806 60	18
19	Cole Harbour	312			211		3		46	1150	300		50	8				80	10	200	160	60			4,404 75	19
20	Fort Felix	1431		15800	672		47	60	147	2850	750	900	100	40				200	55	1300	600	400			20,077 55	20
21	Whitehead	1622		19100	616		179	200	257	4190	300		64	10				215	35	1800	1000	820			29,429 15	21
22	Rasberry and Dover	679		12800	56		6	5	120	1000			6	25				185		1760	200	1200			24,112 90	22

23	Canso and Canso Tittle	5450	40	2000000	2120	369200	500	650	9540	330200	1000	1800	10	4	5000		7000	625	40580	7000	2450			281,529 40	23
24	Fox Island Maine	133		66400	17		4		12	150							300	5	180	60	20			5,492 00	24
25	Half Island Cove	848		53900	67		6		20								500	15	1400	300	90			16,236 72	25
36	Philip's Harbour	238		31400	28		31		10				3				175	10	500	190	85			5,894 25	26
27	Queensport	342		28200	196		110	90	16				4				4850	8	1500	270	1100			40,504 40	27
28	Peas Brook	213		11900	101		55	40	13				2				90	16	600	160	60			3,357 05	28
39	Halfway Cove	344		15500	336		56	50	218				7				275	18	800	350	95			7,521 20	29
30	Sandy Cove and Cook's Cove	95		21300	98		76	80	112	250		2300	17	25			140	4	180	290	10			10,829 80	30
31	Guysborough and Manchester	115		4700	9		48	30	146			4000	3	18			5	20	100	125	2			4,178 00	31
32	Port Shoreham	72		1800	79		17		10				12	6			50		80	190	8			3,018 20	32
33	St. Francis	67		1100	78		21						35	4					90	225				9,354 25	33
34	Oyster Ponds	78		6400	67		60	60	4				78	4					100	200	2			4,665 50	34
35	Sand Point	28			18								71						50	70	10			1,440 00	35
36	Steep Creek	11		1100			8						6					8	30	50	45			11,809 50	36
37	Mulgrave and Auld's Cove	4		600					59				4						30	40	900			9,133 30	37
	Totals	21553	83	2333900	6505	369200	1245	1277	12369	403170	17300	21660	790	441	8	21700	14700	14967	1453	60070	14695	12169	73	109		
	Values	$ 86212	830	70017	19515	22152	2801	638	24738	40317	1730	1083	3160	4410		1085	735	59868	2906	18021	22042	6084	91	218	651,257 67	

RETURN showing the Fishing Materials and the Quantity and Value of Fish, &c.—**Nova Scotia**—*Con.*

Number.	Districts.	Fishing Vessels and Boats.							Fishing Gear or Materials.							Kinds of Fish.									
		Vessels.				Boats.			Gill Nets.			Seines.													
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Lobster Canneries, No.	Salmon, fresh, lbs.	Salmon, smoked, lbs.	Herring salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Number.
	Halifax County.			$			$				$			$										
1	North Shore	2	89	2600	29	120	1000	200	600	12000	1800	62	6200	18000	..	1000	500	100	1000	1000	30000	75	.....	1
2	East St. Margarets	3	159	5000	28	130	1250	210	562	12200	2100	23	2300	4100	1	1200	300	100	2000	1000	100000	29	.....	2
3	Indian Harbour	4	60	1700	16	390	4000	250	3020	62000	2000	22	2200	1900	..	1000	150	600	3000	1000	150000	75	.....	3
4	Peggy's Cove	1	25	300	7	80	1000	75	345	8500	1850	8	800	1200	..	800	200	250	1000	....	20000	40	.....	4
5	Dover	4	83	2000	23	230	2500	250	721	18100	5300	40	4000	10000	..	2000	500	700	1500	1000	800000	600	.....	5
6	Prospect	1	21	500	6	150	2000	200	810	18000	5850	38	3800	15200	..	1000	....	300	2000	....	20000	100	.....	6
7	Terence Bay	4	57	900	16	180	2000	275	307	10400	3000	26	2600	10400	2	500	....	400	3800	....	18000	50	16848	7
8	Pennant	7	108	2000	32	10	1000	20	206	6400	1100	8	800	3200	..	600	....	300	1000	....	10000	10	.....	8
9	Sambro	8	140	3500	40	45	180	90	353	9300	2560	6	600	2400	1	500	....	200	1000	....	6000	50	42792	9
10	Ketch Harbour	1	40	800	10	60	900	90	302	8100	2100	10	1000	4000	..	400	....	50	1500	....	20000	10	.....	10
11	Portuguese Cove	1	26	700	5	40	600	75	365	9800	3000	11	1100	4400	..	500	....	20	3000	....	21000	10	.....	11
12	Herring Cove	5	195	3500	40	60	800	75	101	3000	850	28	2800	11200	..	400	....	50	1000	....	4000	12	.....	12
13	Ferguson's Cove	1	31	400	10	30	590	50	62	1400	600	6	600	2400	..	300	....	70	2000	....	2000	10	.....	13
14	Bedford	..	....	....	....	..	....	....	3	300	180	5	500	2000	..	....	....	....	1000	....	1000	....	.....	14
15	Halifax	5	170	800	50	25	500	40	42	600	165	12	1200	4800	..	400	....	25	2600	2000	2000	....	.....	15
16	Eastern Passage and Devil's Island	1	17	750	5	80	1500	72	285	17100	1140	....	....	....	..	140	....	47	8000	....	10500	30	.....	16
17	Cow Bay and Laurencetown	..	....	....	....	22	245	16	70	4200	280	....	....	....	..	460	....	15	750	....	700	8	.....	17
18	Seaforth and Three Fathom Harbour	..	....	....	....	26	290	14	80	4800	320	....	....	....	1	266	....	11	600	....	400	5	870	18
19	West Chezetcook	4	186	4100	53	132	1400	60	380	22800	1520	....	....	....	..	....	....	255	....	....	....	22	.....	19
20	East Chezetcook	1	47	1000	13	46	435	31	90	5400	360	....	....	....	..	....	....	55	250	....	200	4	.....	20
21	Petpiswick Harbour	..	....	....	....	43	775	35	66	3960	264	....	....	....	1	....	....	12	300	....	150	13	16898	21
22	Musquodoboit Harbour	1	16	400	4	56	1100	42	100	6000	400	....	....	....	..	1600	375	13	400	....	....	14	.....	22
23	Jeddore	2	54	1000	16	75	1125	60	180	10800	720	1	75	40	2	100	45	25	500	....	500	35	22032	23
24	Clam Harbour and Owl's Head	2	56	500	6	77	1680	62	290	17400	1160	3	3100	525	2	160	175	260	....	....	....	66	24600	24
25	West Ship Harbour	2	28	350	9	29	460	17	100	1000	400	....	....	....	..	....	....	26	....	....	....	18	.....	25

26	East Ship Harbour	1	23	300	5	41	776	44	117	2340	468	....	....	....	..	....	....	75	....	....	50	8	....	26
27	Pleasant Harbour and Tangier	1	13	200	4	37	1230	45	118	2360	421	....	....	....	..	500	....	282	....	....	....	50	....	27
28	Pope's Harbour and Gerrard Island	1	16	400	4	47	1167	49	215	4600	860	....	....	....	1	....	....	425	....	....	....	70	21936	28
29	Spry Bay, Taylor's Head and Mushaboon	1	56	400	9	82	2472	96	453	9060	1812	....	....	....	2	....	....	955	....	....	....	170	50400	29
30	Sheet Harbour and Sober Island	1	22	900	7	56	1541	68	234	4680	936	6	540	285	1	800	800	230	....	....	....	43	31680	30
31	Beaver Harbour and Port Dufferin	..	....	....	....	12	274	15	37	740	148	1	100	20	2	....	....	22	....	....	....	19	44928	31
32	Quoddy and Harrigan Cove	..	....	....	....	7	167	6	2	40	6	....	....	....	2	....	....	....	....	....	....	1	90048	32
33	Moser River and Smith's Cove	1	15	500	5	6	85	6	6	120	24	....	....	....	..	....	....	6	....	....	....	....	....	33
34	Mitchell's Bay and Ecum Secum	..	....	....	....	31	387	31	54	1080	216	6	490	240	2	....	....	30	....	....	....	5	53872	34
	Totals	66	1753	35500	452	2455	35339	2669	10676	298580	43910	322	34805	96310	20	14626	3045	5909	38200	6000	1216500	1652	416854	
	Values ... $	..	....	....	....	....	....	....	....	....	....	....	....	....	..	2925	609	23636	382	120	145980	24780	83370	

RETURN showing the Quantity and Value of Fish, &c.—**Nova Scotia.**—*Con.*

Number.	Districts.	Kinds of Fish.																	Fish Product.				Total Value of all Fish.	Number.
		Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Tongues and sounds, bbls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Haddock, smoked finnan haddies, lbs.	Hake, dried, cwt.	Hake, sounds, lbs.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Alewives or Gaspereau, brls.	Eels, bbls.	Flounders, lbs.	Tom cod or frost fish, lbs.	Squid, bbls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, bbls.	Fish as manure, bbls.	Seal skins, number.	Clams, bbls.		
	Halifax County.																							$	
1	North Shore	500	200	3	1000	50	....	100	..	500	...	4000	.....	100	10	4000	150	200	100	500	40	80	..	30	12,607 50	1
2	East St. Margaret's	1000	1500	7	1000	200	....	1200	..	1500	3000	1000	..	40	40	5000	3000	400	50	1000	75	100	..	70	34,237 50	2
3	Indian Harbour	1000	1500	7	1500	300	....	400	..	1200	1000	100	..	20	2	3000	7000	400	50	1000	100	....	..	5	39,990 00	3
4	Peggy's Cove	500	300	1	500	75	....	100	..	300	500	.....	.....	10	2	1000	1000	300	5	150	20	....	..	....	10,480 00	4
5	Dover	2000	1300	15	7000	500	....	500	..	700	3000	500	.....	140	9	6000	5000	300	100	800	90	....	..	60	131,365 00	5
6	Prospect	500	1000	5	1100	100	....	50	..	500	1000	100	....	25	7	2500	2000	200	....	200	50	....	..	10	14,775 50	6
7	Terrance Bay	1000	1000	7	1000	80	....	150	..	500	1000	200	....	50	10	3000	3000	200	....	500	70	260	..	20	20,640 10	7
8	Pennant	50	1000	5	1000	40	....	200	..	300	1000	100	....	25	1	900	600	100	....	500	80	....	..	10	9,165 00	8
9	Sambro	1700	4000	3	2000	100	....	100	..	1000	10000	300	.....	5	....	600	600	200	....	1200	100	700	..	40	40,903 40	9
10	Ketch Harbour	30	2000	3	1500	5	....	10	..	1000	500	200	.....	20	....	400	300	50	....	500	30	....	..	10	13,707 50	10
11	Portuguese Cove	15	75	1	1000	.....	....	10	..	300	400	100	....	1	....	500	1000	50	....	300	20	....	..	20	4,406 50	11
12	Herring Cove	10	7000	6	70000	.....	....	300	..	200	90000	.....	.....	2	....	2000	600	200	....	1200	100	....	..	10	42,703 00	12
13	Ferguson's Cove	10	600	3	20000	.....	....	10	..	20	6000	.....	.....	1	....	500	700	20	....	150	30	....	..	15	4,756 50	13
14	Bedford	10	20	....	5000	.....	....	5	..	25	.....	.....	..	1	....	500	600	10	....	.....	.....	.....	..	5	580 25	14
15	Halifax	100	1000	....	20000	.....	....	.....	..	75	500	1000	.....	.....	.....	.....	500	10	....	.....	.....	.....	..	10	6,271 00	15
16	Eastern Passage and Devil's Island	60	785	1	30000	90	....	.....	..	110	5880	..	..	40	9	8000	..	.....	...	588	100	5	..	60	8,532 90	16
17	Cow Bay and Lawrencetown	.....	34	...	.....	3	....	.....	..	10	127	450	.....	40	3	3000	....	.....	....	12	4	....	..	27	989 80	17
18	Seaforth and Three Fathom Harbour	149	86	....	.....	20	....	.....	..	8	300	100	12000	34	4	8000	....	.....	....	44	9	26	..	80	2,980 90	18
19	West Chezetcook	.....	2629	1	..	228	....	.....	..	80	9000	.....	4000	115	4	7500	....	.....	....	1400	300	....	..	600	16,765 00	19
20	East Chezetcook	..	735	....	..	135	....	.....	..	28	540	550	1200	40	7	9000	.....	.....	....	465	95	....	..	300	5,438 50	20
21	Petpeswick Harbour	252	413	....	2000	97	....	.....	..	78	590	350	1000	15	8	6000	.....	.....	....	230	48	280	..	65	8,047 60	21
22	Musquodoboit Harbour	.....	600	....	1800	90	....	.....	..	75	4075	1400	9600	3	9	6000	....	.....	....	340	80	....	..	80	5,346 50	22
23	Jeddore	418	1890	....	125	....	....	.....	..	130	2200	300	1000	1	8	10000	....	.....	....	1000	217	350	..	90	16,903 65	23

24	Clam Harbour and Owl's Head	526	1060			90		4	5	33	6170	300	1200	4	3	17000				477	120	600		110	16,680	60	24
25	West Ship Harbour		260			28				20	1550	200	1000	75	4	4000				138	30			30	2,449	40	25
26	East Ship Harbour		534			65				35	4220			10				16	15	241	20				3,485	30	26
28	Pleasant Harbour and Tangier		665			70				28	4000							23	20	530	40				5,655	00	27
27	Pope's Harbour and Gerrard's Island	135	615			78				65	3220							21	43	525	32	324	24		11,525	70	28
29	Spry Bay Taylor's Head Mushaboon	633	1049			86		4		90	6485				5			23	30	779	40	800			25,802	20	29
30	Sheet Harbour and Sober Island	118	1320			84		21	18	62	4234		4000		20			53	50	516	45	500			16,130	95	30
31	Beaver Harbour and Port Dufferin	413	172			10				9	340				1			3	1	92	10	750	14		12,652	70	31
32	Quoddy and Harrigan Cove	829	80			2				1								2		40	3				22,522	10	32
33	Moser River and Smith's Cove		202			3				1	200							2		75	6	1500			1,652	50	33
34	Mitchell's Bay and Ecum Secum	347	310			33				7	4410							7	5	103	10	900			15,032	30	34
	Totals	12305	35934	68	167525	2662	5000	3164	23	8990	175441	11250	35000	817	166	108400	26050	2790	469	15595	2014	7175	38	1757				
	Values $	61525	143736	680	5025	7986	300	7119	11	17980	17544	1125	1750	3268	1660	5420	1302	11160	938	4678	3021	3587	47	3514	585,182	35		

RETURN showing the Number and Value of Vessels, Boats, &c., and the Quantity of all

Number.	Districts.	Fishing Vessels and Boats.							Fishing Gear or		
		Vessels.				Boats.			Gill Nets.		
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.
	Hants County.										
1	Hantsport to Windsor..					5	120	5	7	1200	170
2	Windsor to Noel	1	18	100	2	14	320	20	18	2775	377
3	Noel to Maitland					15	375	17	15	4800	510
4	Maitland to Shubenacadie					17	170	17	34	850	238
5	Shubenacadie to Grand Lake					20	100	20	30	510	120
	Totals	1	18	100	2	71	1085	79	104	10135	1475
	Values $										

SESSIONAL PAPER No. 22

Fish, &c., in the County of **Hants**, Province of **Nova Scotia**, for the Year 1902.

Materials.		Kinds of Fish.										Total Value of all Fish.	
Weirs.		Salmon, fresh, lbs.	Herring, salted, brls.	Cod, dried, cwt.	Pollock, cwt.	Trout, lbs.	Shad, brls.	Alewives or Gaspereau, brls.	Bass, lbs.	Flounders, lbs.	Clams, brls.		
Number.	Value.												Number.
												$ cts.	
....	.....	615	.. ..	15	...	1000	31	16	...	.. ..	. .	657 00	1
2	90	805	25	18	12	2500	48	19	150	.... ..	75	1328 00	2
3	250	8400	.... .	.....	.... .	200	150	38	.....	1500	....	3427 00	3
.....	.....	7000	.....	.. . .	.....	500	.....	102	.....	.....	.....	1858 00	4
.....	.....	800	.....	....	... .	1000	10	60	....	.....	.....	600 00	5
5	340	17620	25	33	12	5200	239	235	150	1500	75	....	
. ...	.....	3524	100	132	24	520	2390	940	15	75	150	7870 00	

RECAPITULATION

OF Yield and Value of the Fisheries in District No. 2, **Nova Scotia** with Comparative Statements of the Increase or decrease for the Years 1901 and 1902.

Kinds.		Quantity in 1902.	Rate.	Totals.	Quantities.	
					Increase.	Decrease.
			$ cts.	$ cts.		
Salmon, fresh	Lbs.	294,731	0 20	58,946 20	.....	27,525
" preserved in cans	"	1,590	0 15	238 50	1,390	.....
" smoked	"	8,745	0 20	1,749 00	3,350	.....
Herring, salted	Brls.	9,751	4 00	39,004 00	.....	3,538
" fresh	Lbs.	1,022,665	0 01	10,226 65	.....	1,516,895
" smoked	"	149,000	0 02	2,980 00	.....	476,800
Mackerel, fresh	"	1,894,676	0 12	227,361 12	326,503	.....
" salted	Brls.	4,052	15 00	60,780 00	.....	21,351
Lobsters, preserved in cans	Lbs.	2,032,454	0 20	406,490 80	.....	223,250
" fresh in shell	Cwt.	14,925	5 00	74,625 00	.....	1,235
Cod, dried	"	60,535	4 00	242,140 00	.....	484
" tongues and sounds	Brls.	151	10 00	1,510 00	50	.....
Haddock, fresh	Lbs.	2,514,125	0 03	75,423 75	73,209	.....
" dried	Cwt.	9,483	3 00	28,449 00	.....	23,554
" smoked finnan haddies	Lbs.	374,200	0 06	22,452 00	19,300	.....
Hake, dried	Cwt.	8,331	2 25	18,744 75	508	.....
" sounds	Lbs.	4,080	0 50	2,040 00	.....	2,926
Pollock	Cwt.	21,439	2 00	42,878 00	4,650	.....
Halibut	Lbs.	585,201	0 10	58,520 10	291,107	.....
Trout	"	59,425	0 10	5,942 50	13,291	.....
Shad	Brls.	948	10 00	9,480 00	119	.....
Smelts	Lbs.	125,630	0 05	6,281 50	.....	150,352
Alewives or gaspereau	Brls.	3,542	4 00	14,168 00	702	.....
Bass	Lbs.	11,925	0 10	1,192 50	.....	4,025
Eels	Brls.	973	10 00	9,730 00	350	.....
Oysters	Brls.	1,319	4 00	5,276 00	.....	38
Flounders	Lbs.	148,800	0 05	7,440 00	7,864	.....
Tom cod	Lbs.	52,250	0 05	2,612 50	.....	28,250
Squid	Brls.	18,214	4 00	72,856 00	2,341	.....
Coarse or mixed fish	Brls.	2,637	2 00	5,274 00	283	.....
Fish oil	Galls.	77,430	0 30	23,229 00	623	.....
Fish used as bait	Brls.	24,942	1 50	37,413 00	5,424	.....
Fish products used as manure	Brls.	34,648	0 50	17,324 00	25,928	.....
Seal skins	each.	111	1 25	138 75	91	.....
Clams	Brls.	2,646	2 00	5,292 00	14,811	.....
Total				1,598,208 62		

RECAPITULATION

SHOWING the Number and Value of Fishing Vessels, Boats, &c., in the District No. 2, Province of **Nova Scotia** for the Year 1902.

Material.	Value.	Total.
	$	$
114 fishing vessels, 2,643 tons	65,800	
5,502 do boats	101,751	
23,654 gill nets, (594,470 fathoms)	179,008	
361 seines, (37,900 fathoms)	101,275	
88 trap nets	21,050	
2,808 trawls	18,369	
20 weirs	2,590	
202 smelt nets	2,328	
9,259 hand lines	5,494	
		497,665
117 lobster canneries	101,375	
298,275 lobster traps	168,136	
		269,511
55 freezers and ice houses	34,235	
1,694 smoke and fish-houses	60,283	
844 wharfs and piers	48,106	
17 fishing smacks and steamers	28,830	
		171,454
Total		938,630

COMPARATIVE STATEMENT of the Value of the Fisheries in each County of District No. 2, **Nova Scotia** for the Years 1901 and 1902.

County.	Value in 1901.	Value in 1902.	Increase.	Decrease.
	$	$	$	$
Antigonish	69,009	63,786	.....	5,223
Colchester	29,974	46,232	16,258	.....
Cumberland	158,792	131,161	.....	27,631
Guysborough	928,668	651,258	.....	277,410
Halifax	661,426	585,182	.....	76,244
Hants	4,630	7,870	3,240	.....
Pictou	116,745	112,719	.....	4,026
Totals	1,969,244	1,598,208	19,498	390,534
	1,598,208	.....	.....	19,498
Total decrease	371,036	.....	.....	371,036

NOVA SCOTIA—DISTRICT No. 3.

RETURN showing the Number and Value of Vessels and Boats, Nets, &c., and the Quantity of all Fish caught in the County of **Lunenburg,** Province of **Nova Scotia,** for the Year 1902.

Number.	Districts.	Fishing Vessels and Boats.							Fishing Gear or Materials.								Lobster Canneries, No.	Kinds of Fish.								
		Vessels.				Boats.			Gill Nets.			Seines.			Trap Nets.			Salmon, fresh, lbs.	Salmon, smoked, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Number.
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.										
	Lunenburg County.			$			$				$			$		$										
1	Fox Point	....	....	....	....	112	2700	110	330	6600	1600	27	2800	10300	11	2200	..	100	....	30	....	1000	1000	.....	1
2	Mill Cove	1	16	500	5	190	2800	210	500	10000	2500	24	2700	11000	10	2000	..	150	....	25	.....	1000	1000	.....	2
3	The Lodge	....	....	....	....	33	460	33	100	2000	200	9	1000	850	4	800	..	50	....	20	....	300	150	.....	3
4	North-west Cove	....	....	....	....	45	438	45	70	1400	150	8	1000	820	4	600	..	50	....	14	....	100	100	.....	4
5	Aspotogan	....	....	....	....	36	310	36	150	3000	490	8	1000	1000	2	400	1	75	....	25	.....	25	100	43000	5
6	Bayswater	....	....	....	....	44	400	44	200	4000	700	8	800	700	2	200	..	50	....	25	.....	150	50	.....	6
7	Blandford	....	....	....	....	137	1228	139	253	5050	1300	30	2800	2460	7	600	..	50	....	100	....	100	100	.....	7
8	Little and Big Tancook	....	....	....	....	305	7420	305	560	11200	2100	41	5000	6100	12	2030	..	400	....	800	.....	800	400	.....	8
9	Deep Cove	....	....	....	....	18	164	18	90	1900	210	5	600	600	2	150	..	50	....	25	...	100	20	.....	9
10	Chester	2	121	4200	23	167	3200	75	325	17900	4500	21	1580	4700	18	6000	2	5000	300	200	400	2000	100	55000	10
11	Mahone Bay and Martin's River	24	2000	81500	400	212	3000	255	750	15000	4000	11	1100	3100	5	1250	..	3000	100	100	1000	8000	300	.....	11
12	Lunenburg Harbour to Kingsbury	77	6680	400800	1286	632	12820	143	1150	23000	11500	15	1500	3000	30	3000	2		....	169	2500	1000	353	35905	12
13	La Have River District	52	4318	259080	835	510	11180	118	1300	26000	13000	5	500	900	20	4000	1	3420	...	109	6000	5000	201	1870	13
14	Petite Riviere to Port Medway Harbour	13	896	53760	172	150	3980	56	700	14000	5500	4	400	800	....	..	..	3060	...	201	3000	500	15	....	14
	Totals	169	14031	799840	2721	2591	50100	1587	6478	141050	47750	216	22780	45330	127	23230	6	15455	400	1843	12900	20075	3889	135775	
	Value $	....	.....	...	....	....	....	...	....	.....	....	....	..	.....	....	.....	.	3091	80	7372	129	2409	58335	27155	

RETURN showing the Kinds and Quantities of Fish in **Lunenburg Co., District No. 3 —Nova Scotia**

Number.	DISTRICTS.	KINDS OF FISH AND FISH PRODUCTS.																				TOTAL VALUE OF ALL FISH.	Number.
		Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Haddock, smoked finnan haddies, lbs.	Hake, dried, cwt.	Hake, sounds, lbs.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Alewives or gaspereau, brls.	Eels, brls.	Flounders, lbs.	Tom cod or frost fish, lbs	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	Clams, shelled, brls.		
	Lunenburg County.																						$ cts.	
1	Fox Point	10	500	....	50	100	....	200	35	50	.....	....	....	....	6	40000	150	250	1000	300	500	20	....	24,146 50	1
2	Mill Cove	7	200	2	.....	135	....	50	....	26	.....	....	....	10	5	40000	100	100	1300	200	500	50	....	22,639 50	2
3	The Lodge	5	100	1	300	35	....	25	....	14	.....	....	....	....	2	2800	....	20	80	50	80	....	5	3,604 25	3
4	North-west Cove	10	50	....	....	30	....	20	....	15	....	....	....	8	4	2000	....	20	60	30	70	..	....	2,529 00	4
5	Aspotogan	13	25	....	.....	15	....	30	..	25	.....	....	....	....	....	1200	....	25	80	30	100	....	2	11,103 50	5
6	Bayswater	5	18	....	.....	8	....	40	....	35	.....	....	....	....	....	1000	....	25	100	15	60	....	2	1,642 50	6
7	Blandford	18	300	....	.....	150	....	100	....	80	....	....	....	....	....	2200	200	25	210	100	300	....	10	6,317 00	7
8	Little and Big Tancook	52	2200	2	600	910	....	310	....	150	2100	....	....	....	....	37300	....	70	1090	850	2200	400	....	30,751 50	8
9	Deep Cove	5	500	....	.....	30	....	12	....	11	....	....	....	....	....	18000	....	30	40	12	30	....	....	3,759 60	9
10	Chester	5	800	8	2000	30	....	30	....	12	500	600	4000	100	15	50000	1450	140	250	200	300	20	15	23,293 00	10
11	Mahone Bay and Martin's River	13	50000	95	16000	70	100	400	200	225	35000	200	2000	25	9	10000	800	50	120	14000	900	....	7	220,105 00	11
12	Lunenburg Harbour to Kingsbury	142	95119	50	....	8500	....	750	....	800	90000	....	....	....	10	.....	....	600	....	55000	....	....	....	452,480 50	12
13	La Have River District	230	88500	40	....	720	1000	....	....	585	3475	....	3500	15	12	.....	300	....	5000	50000	....	....	....	380,976 50	13
14	Petite Riviere to Port Medway Harbour	128	14788	9	.....	1500	....	....	....	8	200	....	....	....	8	....	800	....	....	800	....	....	....	67,149 00	14
	Totals	643	253100	207	18950	12233	1100	1967	235	2036	131275	800	9500	158	71	224300	3800	1355	4330	121587	5040	490	41		
	Values $	6430	1012400	2070	569	36699	66	4426	117	4072	13128	80	475	632	710	11215	190	5420	8660	36476	7560	245	287	1,250,497 35	

RETURN showing the Number and Value of Vessels and Boats, Nets., &c., and the Quantity and Value of Fish, in the County of **Queens**, Province of **Nova Scotia**, for the Year 1902.

Number.	Districts.	Fishing Vessels and Boats.							Fishing Gear or Material.						No. of Lobster Canneries.	Kinds of Fish.					Number.
		Vessels.				Boats.			Gill Nets.			Seines.										
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.		Salmon, fresh, lbs.	Salmon, salted or smoked.	Herring, salted, brls.	Herring, smoked, lbs.	Mackerel, salted, brls.	
	Queen's County.																				
1	Ports Herbert and Jolli	..	..	..	..	66	1290	30	120	2396	600	..	..	..	2	..	..	31	2000	1	1
2	Port Mouton	1	11	400	4	83	1295	75	180	3600	900	..	..	..	4	..	..	70	..	..	2
3	White and Hants Pt. and Summerville	1	22	450	5	44	242	42	140	2800	700	..	..	..	1	..	..	85	..	85	3
4	Western Head to Black Pt	..	..	..	..	75	1500	70	300	6000	1500	2	230	600	..	..	..	..	..	400	4
5	Liverpool, Brooklyn and Gull Islands	1	18	150	5	30	425	45	60	1200	300	3	345	800	..	1400	..	25	..	450	5
6	Eagle Head and Beach Meadows	..	..	..	..	26	275	26	30	600	150	..	..	..	1	200	..	10	..	8	6
7	Berlin and Milton	..	..	..	..	52	850	35	100	2000	500	..	..	..	1	2150	..	2	..	..	7
8	Port Medway	2	95	4500	21	82	1280	205	244	4400	1880	..	..	..	..	4750	280	6	..	6	8
9	Mill Village	..	..	..	..	25	125	30	30	650	110	..	..	..	..	8830	760	..	..	..	9
10	Greenfield	..	..	..	..	15	150	25	..	..	..	..	..	..	..	1600	230	..	..	..	10
	Totals	5	146	5500	35	498	7432	583	1204	23646	6640	5	575	1400	9	18930	1270	229	2000	950	
	Values $	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3786	254	916	40	14250	

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of **Queens**, Province of **Nova Scotia**, for the Year 1902.

Number.	Districts.	Kinds of Fish.													Fish Products.		Total Value of all Fish.	Number.
		Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Haddock, dried, cwt.	Hake, dried, cwt.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Alewives or Gaspereau, brls.	Eels, brls.	Squid, brls.	Coarse and Mixed Fish, brls.	Fish Oil, galls.	Fish as bait, brls.		
	Queen's County.																$ cts.	
1	Ports Herbert and Jolli	11712	80	80	60	2	21		200	500		15	15	5	50	40	4,207 90	1
2	Port Mouton	7894	300	630	45		70	75					450		125	100	9,648 80	2
3	White and Hants Pt. and Summerville	19200	100	400	75	15	80	2700					20		100	30	8,898 75	3
4	Western Head to Black Pt			425	55		25	400					30		200	60	8,225 00	4
5	Liverpool, Brooklyn and Gull Islands			225	40	1	36	100		400			8		90	55	8,395 75	5
6	Eagle Head and Beach Meadows	44700	200	90	20		12						3		20	40	11,662 00	6
7	Berlin and Milton			40	10		5		1500		19				10	10	882 00	7
8	Port Medway			2378	525		22			4000	448	22			1025		14,770 50	8
9	Mill Village								3000	1100	990	11					6,343 00	9
10	Greenfield								3400		700	8					3,586 00	10
	Totals	83506	680	4268	830	18	271	3275	8100	6000	2157	56	526	5	1620	335		
	Values $	16701	6800	17072	2490	41	542	327	810	300	8628	560	2104	10	486	503	76,619 70	

RETURN showing the Number, Tonnage and Value of Vessels and Boats, Nets, &c., and Quantities of Fish—**Nova Scotia**—*Continued.*

Number.	Districts.	Fishing Vessels and Boats.							Fishing Gear or Materials.					Lobster Canneries, No.	Kinds of Fish.							
		Vessels.				Boats.			Gill Nets.			Trap Nets.										
		Number.	Tonnage.	Value.	Men.	Number.	Fathoms.	Men.	Number.	Fathoms.	Value.	Number.	Value.		Salmon, fresh, lbs.	Herrings, salted, brls.	Herrings, fresh, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Number.
	Shelburne County.			$							$		$									
1	Woods Harbour	5	77	3500	34	150	6500	180	430	20000	1900	1	1500	8	.....	1000	....	3000	....	147840	11000	1
2	Shag Harbour	3	60	1600	25	55	3300	55	665	17500	1400	....	.....	3	.....	700	....	1000	....	95370	1250	2
3	Bear Point	1	15	600	6	25	1000	30	580	1200	900	....	.....	..	.....	200	....	.....	....	.....	500	3
4	Cape Island	3	62	1500	29	500	20160	850	40	95000	10000	6	10000	4	.....	5000	....	2000	....	138240	13627	4
5	Barrington	3	60	3000	25	62	1800	66	3160	13000	1200	....	.....	1	300	350	....	.....	...	29830	1400	5
6	Port La Tour and Baccaro	6	182	5500	70	415	7300	250	2385	71600	925	....	.....	2	.....	5100	....	.....	...	15070	3500	6
7	Cape Negro and Island	3	51	1300	20	148	3160	148	1080	32500	2700	1	1500	1	.....	850	....	3800	...	23230	6000	7
8	Port Clyde	....	....	....	....	8	500	9	25	800	50	....	....	1	2250	650	....	.	...	29470	800	8
9	North East Harbour to Port Saxton	3	121	5000	32	25	700	30	200	6000	1000	21	210	..	900	220	300	300	4	.....	600	9
10	Black Point to Round Bay	3	54	1500	17	50	1250	125	650	19500	3250	20	200	..	.....	300	1000	500	42	.....	1225	10
11	Roseway and McNutt's Island	1	17	500	6	50	2500	125	540	16200	2700	15	150	..	.....	390	700	400	30	.....	725	11
12	Gunning Cove to Birchton	1	12	300	5	50	1500	100	277	8310	1375	10	120	..	50	250	1000	200	24	.	450	12
13	Shelburne and Sandy Point	7	528	25000	115	45	1300	100	600	18000	3000	107	1070	1	650	102	1000	300	28	10080	550	13
14	Jordan	1	17	300	8	40	1000	60	400	12000	2000	17	170	..	800	120	2500	1000	3	.....	225	14
15	Lockeport	14	760	30400	163	140	2000	300	600	20000	3300	125	1250	2	200	775	2500	500	22	54240	2710	15
	Totals	54	2016	80000	555	1763	53970	2428	11632	341610	35700	323	16170	23	5150	16007	9000	13000	153	543370	44562	
	Values $	....	....	.....	....	....	....	....	.....	.....	...	....	.....	..	10306	64023	90	1560	2295	108674	445620	

RETURN showing the Kinds, Quantities and Value of Fish, &c,—**Nova Scotia**—*Continued.*

Number.	Districts.	Kinds of Fish.																Fish Products		Total Value of all Fish.	Number.
		Cod, dried, cwt.	Cod, tongues and sounds, bbls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Haddock, smoked finnan haddies, lbs.	Hake, dried, cwt.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Alewives or Gaspereau, brls.	Eels, brls.	Flounders, lbs.	Tom cod, or frost fish, lbs.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.		
	Shelburne County.																			$ cts.	
1	Woods Harbour	4000	...	600	100	...	...	200	250	...	...	...	...	...	...	...	...	175	7500	171,973 50	1
2	Shag Harbour	2300	...	1100	125	...	...	1050	950	...	...	35	...	...	...	...	...	350	800	47,742 00	2
3	Bear Point	2400	...	150	75	...	...	80	90	...	...	...	...	...	...	...	...	45	550	16,637 00	3
4	Cape Island	39000	...	9000	4500	...	...	1650	17000	...	...	...	...	...	...	...	...	2500	10000	374,678 00	4
5	Barrington	10500	...	1400	250	...	...	325	350	...	...	400	...	...	550	...	...	175	2600	70,483 00	5
6	Port La Tour and Baccaro	24400	...	1650	2900	...	...	4150	4500	...	...	140	...	...	...	...	...	400	2200	177,493 50	6
7	Cape Negro and Island	29875	...	1100	1250	...	...	1300	1250	...	...	...	...	...	...	...	...	700	1600	197,120 00	7
8	Port Clyde	1500	...	...	30	...	...	...	...	...	...	150	...	...	...	...	...	...	600	24,534 00	8
9	North East Harbour to Port Saxton	1298	4	1000	228	...	133	206	400	500	...	50	3	500	500	15	...	335	100	14,496 75	9
10	Black Point to Round Bay	750	2	1180	180	...	...	60	2750	1000	1500	300	10	2000	2000	30	20	400	90	20,230 40	10
11	Roseway and McNutt's Island	500	2	750	225	...	...	75	525	300	800	35	25	3000	2500	35	15	350	50	13,320 00	11
12	Gunning Cove to Birchtown	375	1	300	110	...	...	122	900	500	100	75	7	1200	2000	15	...	275	35	8,867 00	12
13	Shelburne and Sandy Point	7000	6	4500	705	11000	...	1140	1300	5000	300	275	7	1500	1500	15	12	2065	700	45,488 50	13
14	Jordan	270	1	400	55	200	4	35	250	1000	1200	18	5	1000	1400	12	...	200	30	5,018 00	14
15	Lockeport	11000	12	2500	573	...	47	625	9500	600	500	60	12	1200	600	25	12	1000	860	91,971 75	15
	Totals	135168	28	25630	11306	11200	184	11018	40015	8900	4400	1538	69	10400	11050	147	59	8970	27615		
	Values $	540672	280	769	33918	672	414	22036	4002	890	220	6152	690	520	552	588	118	2691	41572	1,280,053 40	

RETURN showing the Number, Tonnage and Value of Vessels and Boats, and the Quantity of Fish, &c.—**Nova Scotia**—*Continued.*

Number.	DISTRICTS.	FISHING VESSELS AND BOATS.							FISHING GEAR OR MATERIALS.							No.	KINDS OF FISH.							
		Vessels.				Boats.			Gill Nets.			Trap Nets.		Trawls.		Lobster Canneries,	Salmon, fresh, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, fresh, lbs	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.										
	Yarmouth County.			$			$				$		$		$										
1	Yarmouth	11	588	49440	118	66	1320	103	440	8800	2640	4	16000	255	2550	5	3000	700	634780	1000	11000	362880	34320	1
2	Port Maitland	9	138	3700	43	20	400	40	53	1060	530	2	8000	11	550	1	1500	375	32800	500	10000	19776	....	2
3	Sandford	....	....	.....	....	31	620	53	227	4540	1364	2	9000	9	450	..	1500	700	374760	500	9000	.....	.....	3
4	Arcadia	....	....	.....	....	38	760	52	45	1200	270	..	....	.....	....	3	.....	880	367940	....	.....	.....	....	4
5	Pubnico	19	890	34400	244	60	1200	90	155	3100	930	1	3000	.....	.....	5	300	500	158320	....	....	333024	.....	5
6	Tusket Wedge	4	273	4800	54	82	1640	120	188	3760	1128	.....	.....	17	170	4	300	500	1303600	....	....	219840	....	6
7	Tusket	....	.....	....	....	260	3900	260	1800	6600	10000	....	.....	.....	.....	..	3000	1000	100000	2000	....	.....	.....	7
8	Eel Brook	....	....	..	....	47	705	94	154	3080	693	.....	.....	.....	.....	..	.....	500	20000	500	.....	.....	.....	8
9	Salmon River	....	.....	.....	....	24	360	24	99	1980	495	.....	.....	.....	.....	..	1000	500	40000	700	.....	.....	.....	9
10	Argyle	1	15	500	2	60	900	65	125	2500	750	....	....	.....	.....	2	....	150	157800	....	.....	91680	....	10
	Totals	44	1904	92840	461	688	11805	901	3286	36620	18800	9	36000	292	3720	20	10600	5805	3210000	5200	30000	1027200	34320	
	Values....$	....	.....	.....	....	....	.....	....	....	.....	.....	....	....	....	.....	..	2120	23220	32100	104	3600	205440	343200	

RETURN showing the Quantity and Value of Fish, &c.—**Nova Scotia**—*Continued.*

Number.	Districts.	Kinds of Fish.																Fish Product.			Total Value of all Fish.	Number.
		Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lbs	Haddock, dried, cwt.	Smoked Finnan Haddies, lbs.	Hake, dried, cwt.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Alewives or Gaspereau, brls.	Eels, brls.	Flounders, lbs.	Tom Cod or frost fish, lbs.	Squid, brls.	Coarse and Mixed Fish, brls.	Fish Oil, galls.	Fish as bait, brls.	Fish as manure, brls.		
	Yarmouth County.																				$ cts.	
1	Yarmouth	9917	5	6600	4180	4000	675	1682	73752	4000	17000	.....	.....	3000	.....	12	100	3800	260	300	495,345 75	1
2	Port Maitland	2220	4	79750	.....	16500	80	3118	3970	.....	.....	.....	.....	.....	.....	10	1300	1650	50	530	29,883 70	2
3	Sandford	184	..	.....	275	5500	75	77	1388	.....	2000	.....	.....	.....	.....	.....	350	200	70	260	11,385 15	3
4	Arcadia	43	..	.....	165	.....	.....	19	.....	.....	2500	.....	20	.....	.....	.....	.....	95	.....	.....	9,833 90	4
5	Pubnico	18454	5	.....	2940	....	.....	7295	1000	.....	7100	30	.....	.....	6000	60	50	3200	195	.....	169,991 50	5
6	Tusket Wedge	2202	...	.....	1100	.....	135	850	22000	.....	.....	.....	.....	.....	3000	45	400	1400	100	.....	77,075 75	6
7	Tusket	.....	...	.....	.....	.....	.....	.....	.....	7000	1000	1500	40	.....	6000	.....	.....	.....	340	.....	13,600 00	7
8	Eel Brook	.....	...	.....	.....	.....	.....	.....	.....	.....	500	700	45	.....	.....	.....	.....	.....	100	....	5,635 00	8
9	Salmon River	.....	...	.....	.....	.....	.....	.....	.....	.....	700	500	35	.....	3000	.....	.....	.....	95	....	5,291 50	9
10	Argyle	118	...	.....	.....	.....	.....	100	100	.....	.....	75	20	.....	1500	.....	.....	.....	175	.....	22,033 50	10
	Totals	33532	14	86350	8660	26000	965	13141	102210	11000	30800	2805	160	3000	19500	127	2200	10345	1385	1090	.....	
	Values....$	134128	140	2591	25980	1560	2171	26282	10221	1100	1540	11220	1600	150	975	508	4400	3104	2077	545	840,075 75	

RETURN showing the Number, Tonnage and Value of Vessels and Boats, and the Quantity of Fish, &c.—**Nova Scotia**—*Continued.*

Number.	Districts.	Fishing Vessels and Boats.							Fishing Gear or Materials.								No.	Kinds of Fish.									
		Vessels.				Boats.			Gill Nets.			Seines.			Trawls.		Lobster canneries.	Salmon, fresh, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, fresh, lbs.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Number.
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.											
	Digby County.			$			$				$			$		$											
1	Digby	12	565	26050	143	124	3100	231	60	1200	300	2	300	550	472	11800	..	250	50	10000	2000	400	.....	11750	6753	15	1
2	Bay View and Culloden	..	...	.....	....	26	830	45	36	740	190	2	100	250	50	540	..	250	20	6000	.....	....	.....	345	618	10	2
3	Gullivei's Cove	..	....	.....	....	30	1050	38	38	760	190	..	....	....	38	456	..	300	....	14300	.....	.....	.....	250	1534	6	3
4	Rossway and Waterford	..	....	.....	....	22	300	22	8	160	32	4	110	115	....	....	..	....	50	296000	220000	2000	....	410	90	3	4
5	Centreville and Sandy Cove	..	....	.....	....	63	1600	53	58	1160	290	3	210	330	44	880	3	150	120	2000	322800	1000	23360	800	2445	6	5
6	Mink Cove	1	12	350	2	11	500	22	55	1100	265	2	150	125	22	440	1	....	60	22600	.....	....	4800	162	507	6	6
7	Little River and Whale Cove	..	....	.....	....	51	1380	48	54	1180	270	3	200	350	54	1080	1	....	....	16000	96000	..	.....	425	955	12	7
8	Tiddville and East Ferry	..	....	.....	....	23	460	22	18	360	90	..	....	....	20	400	..	....	....	8500	.....	....	.....	190	830	7	8
9	Tiverton and Central Grove	3	83	2350	25	157	5830	124	118	2365	595	3	250	550	116	2208	2	....	100	103900	141000	....	24700	1605	6234	13	9
10	Freeport	13	378	7500	110	105	2600	150	100	2000	500	3	250	190	150	750	..	....	50	10500	.....	..	.....	920	11000	15	10
11	Westport	15	375	8900	101	150	3950	210	120	2400	600	11	600	2525	60	2100	..	....	50	21000	.....	....	.....	1580	9800	20	11
12	Smith's Cove, Brighton, Plympton	..	.....	.....	....	23	400	38	24	480	220	5	128	98	11	100	..	....	120	3500	14000	150	....	150	156	....	12
13	Doty's Landing and Weymouth	..	....	.....	....	15	300	25	10	200	50	..	....	....	9	60	..	....	....	12900	.....	....	.....	120	45	2	13
14	New Edinburg	..	....	.....	....	18	380	36	30	900	180	..	....	....	....	.....	1	....	....	67000	..	....	15500	.....	36	....	14
15	Belliveau Cove	..	....	.....	....	24	480	45	54	1620	325	..	....	....	....	.....	..	....	....	32000	.....	....	.....	....	70	....	15
16	Grosses Coques and Church Pt	1	31	900	11	42	825	44	25	750	150	..	....	....	....	.....	..	....	....	64000	.....	....	.....	.....	745	....	16
17	Comeauville and Saulnierville	..	....	.....	....	29	435	46	20	600	120	..	....	....	....	.....	1	....	....	3800	.....	....	28460	.....	375	....	17
18	Meteghan and River	3	64	1200	18	27	450	33	30	800	180	..	....	....	....	.....	1	....	....	17100	.....	....	15745	.....	690	....	18
19	Cape St. Mary to Beaver River	5	98	2500	30	10	150	20	43	1290	258	..	....	....	....	.....	1	....	....	6000	.....	....	10945	.....	448	....	19
	Totals	53	1606	49750	440	950	25020	1252	901	20065	1795	38	2298	5083	1046	20814	11	950	620	717100	795800	3550	123510	18707	43331	115	
	Values $	..	....	.....	....	...	.....	....	...	.....	....	..	....	....	....	.....	..	190	2480	7171	15916	426	24702	187070	173324	1150	

RETURN showing the Quantity and Value of Fish, &c.—**Nova Scotia**—*Continued.*

Number.	Districts.	Kinds of Fish.																Fish Products.				Total Value of all Fish.	Number.
		Haddock, fresh, lbs.	Haddock, dried, cwt.	Smoked Finnan Haddies, lbs.	Hake, dried, cwt.	Hake, sounds, lbs.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Shad, brls.	Smelts, lbs.	Alewives or gaspereau, brls.	Eels, brls.	Flounders, lbs.	Tom cod or frost fish, lbs.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	Clams, brls.		
	Digby County.																					$ cts.	
1	Digby	239300	2336	950000	17056	5140	5322	64000	2009	2	3000	200	...	...	...	1000	10000	5030	620	3000	1650	314936 00	1
2	Bay View and Culloden	13500	1065	...	1404	1250	372	1490	20	...	...	...	...	750	...	83	300	930	600	500	....	16889 50	2
3	Gulliver's Cove	10500	1953	...	3008	1000	696	890	20	...	...	...	...	350	...	350	300	1220	250	800	...	26982 50	3
4	Rossway and Waterford	5400	...	...	40	50	40	150	25	14	2500	20	8	850	...	502	250	...	70	250	25	16045 00	4
5	Centreville and Sandy Cove	49000	260	200000	2868	1860	991	48700	...	...	...	...	...	900	...	556	525	750	344	1150	25	62913 00	5
6	Mink Cove	30000	1198	18000	2140	1000	350	100	10	...	1000	...	...	300	...	5	....	1300	120	400	...	17589 00	6
7	Little River and Whale Cove	120000	2650	96000	6700	5110	245	1350	...	...	...	...	...	1100	...	80	2200	2000	650	3500	....	53935 00	7
8	Tiddville and East Ferry	25000	695	...	1605	1250	300	1100	25	...	...	...	...	250	...	98	1050	1050	625	250	...	17040 75	8
9	Tiverton and Central Grove	68000	3479	134000	11326	8050	4906	43060	110	...	...	...	...	650	...	153	4200	5200	1160	2300	...	127964 00	9
10	Freeport	90000	2550	...	2040	3000	13005	25170	30	...	...	...	...	500	...	512	3500	5360	875	3500	20	112508 50	10
11	Westport	55000	3400	8000	2500	5500	20237	55000	25	...	...	45	...	600	2000	525	3500	10000	845	4000	...	137969 00	11
12	Smith's Cove, Brighton, Plympton	15800	...	...	109	90	29	150	70	25	2000	22	30	1150	...	7	325	40	285	475	199	7324 75	12
13	Doty's Landing and Weymouth	39000	....	...	...	...	95	..	...	115	...	15000	..	11	250	23500	...	17	50	280	250	2550	23392 00	13
14	New Edinburg	190000	...	...	2	...	65	....	..	...	...	...	...	...	...	...	...	...	150	...	...	290	11823 50	14
15	Belliveau Cove	28000	....	...	1	...	290	..	..	...	...	...	...	...	...	...	...	...	...	...	...	172	3226 25	15
16	Grosses Coques and Church Pt	40000	...	...	7	...	427	..	..	...	...	...	...	...	...	65	...	100	...	..	75	6504 75	16
17	Comeauville and Saulnierville	29000	...	...	...	...	170	...	...	...	...	...	...	...	...	2	...	...	...	...	145	9463 00	17
18	Meteghan and River	50000	....	...	2	...	150	1900	...	...	...	...	...	...	...	74	...	120	...	...	140	9386 50	18
19	Cape St. Mary to Beaver River	31500	....	...	2	...	380	710	...	...	...	...	...	...	...	70	...	150	...	...	85	6741 50	19
	Totals	1129000	19586	1406000	50810	33300	48070	243770	2450	41	23500	287	49	7650	25500	4082	26167	33450	6724	20375	5376	... .	
	Values $	33870	58758	84360	114323	16650	96140	24377	245	410	1175	1148	490	382	1275	16328	52334	10035	10086	10188	37632	982634 50	

RETURN showing the Fishing Material and the Quantity and Value of Fish, &c.—**Nova Scotia**—*Continued.*

Number.	Districts.	Fishing Vessels and Boats.							Fishing Gear or Materials.					Kinds of Fish.					
		Vessels.				Boats.			Gill Nets.			Trawls.							
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.	Salmon, fresh, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Lobsters, fresh in shell, cwt.	Number.
	Annapolis County.			$			$				$		$						
1	Margaretville	2	37	800	10	10	200	15	20	700	200	20	80	1500	300	500	.....	.....	1
2	Point George	.....	.....	.....	.....	20	400	25	30	1000	300	30	120	1500	400	1000	....	50	2
3	Port Lorne	2	27	600	8	20	400	30	80	2400	800	25	100	....	500	1000	.....	70	3
4	Hampton	.....	.....	.....	.....	12	240	20	20	700	200	20	80	.....	250	1200	....	20	4
5	Phinny and Young's Cove	1	21	400	4	25	400	30	30	1000	300	50	200	.....	400	800	....	250	5
6	Parker's Cove	1	48	500	6	30	500	35	30	1000	300	60	240	.....	300	1000	.....	200	6
7	Hilsburn	.....	.....	.....	.....	30	500	32	28	900	280	60	240	.....	200	800	.....	375	7
8	Litchfield and Delaps Cove	1	10	200	3	28	460	30	23	800	250	96	384	....	100	....	....	280	8
9	Victoria Beach	1	48	800	12	40	800	40	20	1000	300	100	400	.....	10	.....	.....	300	9
10	Thorne's Cove to Ferry	1	66	800	10	6	120	8	.....	.....	.....	40	160	....	.....	.....	.....	.....	10
11	Clementsport to Bear River	....	.....	.....	.....	8	160	10	20	700	200	15	60	.....	25	.....	7000	.....	11
12	Annapolis to County line	.....	.....	.....	.....	.....	.....	.....	100	1000	500	.....	.....	600	.....	.....	.....	.....	12
13	*Rivers Lequille & Round Hill & inland waters	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	600	.....	.....	.....	.....	13
	Totals	9	257	4100	53	229	4180	275	401	11200	3630	516	2064	4200	2485	6300	7000	1545	
	Values $	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	840	9940	63	140	15450	

* Angling and trolling.

RETURN showing the Fishing Material and the Quantity and Value of Fish, &c.—**Nova Scotia**—*Continued.*

Number.	Districts.	Kinds of Fish.												Fish Products.		Total Value of all Fish.	Number.
		Cod, dried, cwt.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Hake, dried, cwt.	Hake, sounds lbs.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Shad, brls.	Alewives or gaspereau, brls.	Bass, lbs.	Coarse and mixed fish, brls.	Fish oils, galls.	Fish as bait, brls.		
	Annapolis County.															$ cts.	
1	Margaretville	500	1000	400	400	100	400	400						100	50	6,630 00	1
2	Point George	200	2000	500	500	200	500	3000						120	75	7,443 50	2
3	Port Lorne	500	1500	200	400	200	100	1400						200	60	6,845 00	3
4	Hampton	200	1000	50	400	150	100	1200						300	100	3,727 00	4
5	Phinny and Young's Cove	200	1000	300	400	200	30	200						300	100	7,158 00	5
6	Parker's Cove	275	1600	225	550	300	100	1500						200	100	6,980 50	6
7	Hilsburn	150	1000	350	800	300	70	200						300	120	8,618 00	7
8	Litchfield and Delaps Cove	300		400	700	300	15	300						500	200	7,835 00	8
9	Victoria Beach	720	10000	1500	1700	900	150							1000	200	15,895 00	9
10	Thorne's Cove to Ferry	250		250	800	400		1200						200	100	4,080 00	10
11	Clementsport to Bear River	30		40	60		50		500		6	110				800 00	11
12	Annapolis to County line								1000	25	25		200			970 00	12
13	*Rivers Lequille & Round Hill & inland waters								2300		10	200				410 00	13
	Totals	3325	19100	4215	6710	3050	1515	9400	3800	25	41	310	200	3220	1105		
	Values $	13300	573	12645	15097	1525	3030	940	380	250	164	31	400	966	1658	77,392 00	

* Angling and trolling.

RETURN showing the Number of Boats, Nets., &c., and the Quantities of Fish—**Nova Scotia**—*Continued.*

Number.	Districts.	Fishing Vessels and Boats.							Fishing Gear or Materials.										Kinds of Fish.			Number.
		Vessels.				Boats.			Gill Nets.			Seines.			Trawls.		Weirs.					
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.	Salmon, fresh, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	
	King's County.			$			$				$			$		$		$				
1	Avon River and vicinity	....	....	....	....	12	175	12	12	1600	650	....	....	....	....	....	....	....	1600	....	....	1
2	Oak, Boat and Little Islands	....	....	....	....	3	30	6	30	3300	830	....	....	....	....	....	....	....	630	....	....	2
3	Starrs' Point and Kingsport	2	40	300	6	6	110	17	1	20	20	3	2760	950	....	....	3	650	600	10	1000	3
4	Medford and Pereau	....	....	....	....	5	50	8	2	40	40	1	1000	300	....	....	1	300	200	22	....	4
5	Blomidon	2	20	600	4	1	20	2	....	....	....	2	500	100	....	....	2	400	200	50	1200	5
6	Scott's Bay	....	....	....	....	15	615	38	30	4300	225	4	7150	2300	6	100	4	1100	5000	175	20000	6
7	Wells' and Whaler's Coves	....	....	....	....	3	30	7	....	....	....	2	355	425	....	....	2	450	8000	30	3000	7
8	Baxter's Harbour	....	....	....	....	20	300	25	40	1200	350	3	450	300	6	100	3	750	3250	300	40000	8
9	Sheffield Vault Race Point	....	....	....	....	4	48	6	....	....	....	2	355	425	....	....	2	550	5500	70	24000	9
10	Hall's Harbour	2	30	300	6	16	300	38	20	700	200	3	450	300	20	300	3	750	14000	800	45000	10
11	Hunting Point and Chipman Brook	1	18	200	3	12	190	26	11	330	95	4	700	375	....	....	4	900	5500	145	37000	11
12	Canada Creek	1	10	100	3	10	185	20	9	275	75	2	350	175	....	....	2	425	8800	190	21000	12
13	Harbourville	1	13	100	3	6	60	12	14	140	60	2	200	100	....	....	....	....	2000	50	14000	13
14	Ogilvie Wharf, Victoria Harbour	....	....	....	....	6	80	16	9	450	90	....	....	....	....	....	1	200	2000	60	4500	14
15	Mordon and Bishop's Brook	....	....	....	....	8	110	20	12	360	120	6	400	325	....	....	5	750	7000	70	5000	15
	Totals	9	131	1600	25	127	2303	253	190	12715	2755	34	14670	6075	32	500	32	7225	64280	1972	215700	
	Values $	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	12856	7888	2157	

RETURN showing the Quantity and Value of Fish, &c.—**Nova Scotia**—*Concluded.*

Number.	Districts,	Kinds of Fish.													Fish Products.			Total Value of all Fish.	Number.
		Herring, smoked, lbs.	Mackerel, fresh, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Hake, dried, cwt.	Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Shad, brls.	Alewives or Gaspereau, brls.	Coarse and mixed fish, brls.	Clams, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	
	King's County.																	$ cts.	
1	Avon River and vicinity										1300		500						2,450 00	1
2	Oak, Boat and Little Islands				30				3		1200	40	200					1000	2,072 00	2
3	Starrs' Point and Kingsport				90	1200			64	200		52	9	500			10		2,285 00	3
4	Medford and Pereau				83	1500			25	100		2		300	600		5		5,392 50	4
5	Blomidon				5	600			8	200		1	2	860			4		1,950 00	5
6	Scott's Bay	14000	600	110	60	7500	13		60	400		4		800		20	600	400	6,762 00	6
7	Wells' and Whaler's Coves			6	5	1500			30					1450			20		4,865 00	7
8	Baxter's Harbour			4	225	40000	25		500	500				2000		50	250	800	10,305 00	8
9	Sheffield Vault Race Point			55	13	1350			45					2900			95		8,295 00	9
10	Hall's Harbour	14000		95	200	98000	50	20	400	600				6000		70	450	1200	25,721 00	10
11	Hunting Point and Chipman Brook	2000	1500	80	35	2400	11	16	800	200				3750		80	320	800	13,375 00	11
12	Canada Creek	25000		64	175	8000	10	4	35					1400		50	210	600	8,349 00	12
13	Harbourville	6000			20	2000	12	6	20	150				500			75	500	2,467 00	13
14	Ogilvie Wharf, Victoria Harbour			50	60	1500	6	4	35					25			125	500	2,054 50	14
15	Mordon and Bishop's Brook			36	60	2000	4		45	450				1500			65	1200	6,234 50	15
	Totals	61000	2100	500	1061	167550	131	50	2070	2800	2500	99	711	21925	600	270	2229	7000		
	Values $	1220	252	5000	4244	5027	393	112	4140	280	250	990	2844	43850	4200	81	3344	3500	102,627 50	

RECAPITULATION.

Of the Yield and Value of the Fisheries in District No. 3, Province of Nova Scotia, for the Year 1902.

Kinds of Fish.	Quantity.	Rate.	Value.	Total.
		$ cts.	$ cts.	$ cts.
Salmon, fresh ..... lbs.	119,565	0 20	23,913 00	
" smoked ..... "	1,670	0 20	334 00	
				24,247 00
Herring, salted ..... brls.	28,961	4 00	115,844 00	
" fresh ..... lbs.	4,171,000	0 01	41,710 00	
" smoked ..... "	871,000	0 02	17,420 00	
				174,974 00
Mackerel, fresh ..... "	68,725	0 12	8,247 00	
" salted ..... brls.	4,992	15 00	74,880 00	
				83,127 00
Lobster, canned ..... lbs.	1,913,361	0 20	382,672 20	
" fresh in shell ..... cwt	100,957	10 00	1,009,570 00	
				1,392,242 20
Cod, dried ..... "	473,785	4 00	1,895,140 00	
" tongues and sounds ..... brls.	364	10 00	3,640 00	
				1,898,780 00
Haddock, dried ..... cwt.	56,961	3 00	170,883 00	
" fresh ..... lbs.	1,446,580	0 03	43,397 40	
" smoked (finnan haddies) ..... "	1,444,300	0 06	86,658 00	
				300,938 40
Hake, dried ..... cwt.	60,704	2 25	136,584 00	
" sounds ..... lbs	37,585	0 50	18,292 50	
				154,876 50
Pollock ..... cwt.	78,121	2 00	.....	156,242 00
Halibut ..... lbs.	532,745	0 10	.....	53,274 50
Trout ..... "	37,550	0 10	.....	3,755 00
Shad ..... brls	165	10 00	.....	1,650 00
Smelts ..... lbs	74,200	0 05	.....	3,710 00
Alewives ..... brls	7,697	4 00	.....	30,788 00
Bass (sea) ..... lbs.	310	0 10	.....	31 00
Eels ..... brls.	405	10 00	.....	4,050 00
Flounders ..... lbs.	245,350	0 05	.....	12,267 50
Tom cod or frost fish ..... "	59,850	0 05	.....	2,992 50
Squid ..... brls.	6,237	4 00	.....	24,948 00
Clams (shelled) ..... brls.	6,017	7 00	.....	42,119 00
Coarse and mixed fish ..... "	54,886	2 00	.....	109,772 00
Fish oil ..... galls	179,462	0 30	.....	53,838 60
Fish as bait ..... brls.	44,533	1 50	.....	66,799 50
Fish as manure ..... "	28,955	0 50	.....	14,477 50
Total for 1902	.....	.....	.....	4,609,900 20
" 1901	.....	.....	.....	4,954,932 40
Decrease	.....	.....	.....	345,032 20

RECAPITULATION.

Of the Value of Fishing Vessels, Nets, &c., in **District No. 3, Nova Scotia,** for the Year 1902.

Material.	Value.	Total.
	$ cts.	$ cts.
343 fishing vessels (20,091 tons)	1,033,630	
6,846 fishing boats	154,810	
24,092 gill nets (586,906 fathoms)	117,070	
296 seines (40,623 fathoms)	58,188	
462 trap nets	78,800	
3,570 trawls	63,188	
79 weirs	13,835	
23 smelt nets	710	
12,956 hand lines	12,597	
		1,532,828
61 lobster canneries	57,300	
222,16 " traps	199,688	
		256,988
156 freezers and ice houses	32,705	
1,572 smoke and fish houses	77,937	
525 piers and fishing wharfs	148,530	
113 fishing tugs or smacks	69,820	
		328,992
Total		2,118,808.

Number of persons employed in the fisheries of the same district, 1902:

Men in fishing vessels	4,290
" " boats	7,279
Hands in lobster canneries	2,471
Total	14,040

RECAPITULATION.

SHOWING the Number, Tonnage and Value of Vessels and Boats, Nets and other Fishing Materials, &c., used in the whole Province of **Nova Scotia** for the Year 1902.

Number.	Fishing Districts.	Fishing Vessels and Boats.							Fishing Gear or Materials.											Number.
		Vessels.				Boats.			Gill Nets.			Seines.			Trap Nets.		Trawls.		
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.	
				$			$				$			$		$		$	
	District No. 1—																		
1	Richmond	40	1000	15685	262	1128	19858	1896	8110	127490	52050	...	...	...	1	400	680	4007	1
2	Cape Breton	14	240	5100	70	428	10921	758	2293	50550	18210	1	100	50	...	...	326	9298	2
3	Victoria	15	130	3300	48	423	7596	771	1150	32579	1696	...	...	...	18	110	170	1346	3
4	Inverness	25	339	9240	118	594	11845	1208	1252	32617	15026	2	450	300	...	...	365	2579	4
	District No. 2—																		
5	Cumberland	2	25	550	5	352	6858	329	582	15755	3407	3	75	100	...	...	16	106	5
6	Colchester	...	...	...	...	200	3505	349	250	20300	4325	...	...	...	...	...	7	200	6
7	Pictou	...	...	...	...	297	7446	358	307	11722	5404	...	...	...	...	...	25	130	7
8	Antigonish	1	10	100	3	239	2873	280	812	17363	3591	...	...	...	35	4300	166	693	8
9	Guysborough	44	837	29550	232	1888	44645	1869	10923	220615	116896	36	3020	4865	51	16150	1774	12905	9
10	Halifax	66	1753	35500	452	2455	35339	2669	10676	298580	43910	322	34805	96310	2	600	820	4335	10
11	Hants	1	18	100	2	71	1085	79	104	10135	1475	...	...	...	...	...	...	...	11
	District No. 3—																		
12	Lunenburg	169	14031	799840	2721	2591	50100	1587	6478	141050	47750	216	22780	45330	127	23230	1176	34040	12
13	Queen's	5	146	5500	35	498	7432	583	1204	23646	6640	5	575	1400	1	200	6	15	13
14	Shelburne	54	2016	80000	555	1763	53970	2428	11632	341610	35700	2	250	250	323	16170	502	2035	14
15	Yarmouth	44	1904	92840	461	688	11865	901	3286	36620	18800	1	50	50	9	3600	292	3720	15
16	Digby	53	1606	49750	440	950	25020	1252	901	20065	1795	38	2298	5083	2	3200	1046	20814	16
17	Annapolis	9	257	4100	53	229	4180	275	401	11200	3630	...	...	...	...	...	516	2064	17
18	Kings	9	131	1600	25	127	2303	253	190	12715	2755	34	14670	6075	...	...	32	500	18
	Total	551	33443	1132755	5482	14921	306691	17845	60551	1424603	381060	660	79073	159813	569	100360	7919	98787	

RECAPITULATION—*Continued.*

SHOWING the Number, the Quantity and Value of Fishing Materials, &c.—*Continued.*

Number.	Fishing District.	Fishing Gear or Material.						Lobster Plant.					Other Fixtures used in Fisheries.								
		Weirs.		Smelt Nets		Hand Lines.		Canneries.		Traps.		Number of hands employed.	Freezers and Icehouses.		Smoke and Fishhouses		Piers and Wharves.		Tugs Steamers and Smacks		
		Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.		Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.
			$		$		$		$		$			$		$		$		$	
	District No. 1—																				
1	Richmond	....		20	785	4784	2472	10	6950	41080	22100	90	1	1400	939	20565	194	11305	17	1900	1
2	Cape Breton	....	..	....	....	2145	1357	12	14900	39050	17055	223	5	360	183	5674	133	8570	20	6045	2
3	Victoria	....	..	....	....	2084	1429	12	3180	15550	7155	127	7	2775	137	9131	27	2300	4	140	3
4	Inverness	23	500	....	....	1802	1166	20	9030	41450	21975	401	18	4843	222	6360	71	49567	12	535	4
	District No. 2—																				
5	Cumberland	5	50	167	1548	94	57	36	22300	54390	35545	357	....	....	35	1556	....	....	....	....	5
6	Colchester	10	2200	8	80	15	20	3	1600	4400	2200	90	9	725	34	1230	....	....	....	....	6
7	Pictou	....	....	9	295	50	35	25	26275	47660	2600	352	....	....	20	325	1	30	....	....	7
8	Antigonish	....	....	....	....	229	111	6	6300	17400	9091	279	4	3000	102	1115	....	....	....	....	8
9	Guysborough	....	....	17	380	4212	3001	27	31300	97800	65780	483	32	26250	634	31030	216	32265	5	18150	9
10	Halifax	....	....	1	25	4619	2254	20	13600	76625	29520	346	10	4260	865	24952	627	15811	12	10680	10
11	Hants	5	340	..	..	40	16	..	....	....	....	....	....	....	4	75	....	....	....	....	11
	District No. 3—																				
12	Lunenburg	....	....	....	....	3520	1930	6	2100	15295	7742	463	8	1950	351	10550	217	32400	15	1410	12
13	Queen's	....	....	....	....	1067	543	9	2050	17085	9350	345	29	5455	259	5772	5	1000	9	3680	13
14	Shelburne	....	....	5	225	5856	5354	23	16700	112500	108140	170	15	3750	385	24140	162	27200	22	5450	14
15	Yarmouth	7	1000	4	60	39	1765	20	18200	38035	38035	858	30	14500	95	8050	38	47600	50	47275	15
16	Digby	23	3810	14	425	1518	2049	11	18250	29120	28580	516	47	5380	216	22430	103	40330	17	9005	16
17	Annapolis	17	1800	....	....	427	427	....	....	9100	6850	119	10	1000	161	3140	....	....	....	....	17
18	Kings	32	7225	....	....	529	529	....	....	991	991	....	17	570	105	3855	....	....	....	....	18
	Total	122	16925	245	3823	33030	24515	240	192735	657531	436109	5219	242	76318	4747	179950	1794	268378	183	107270	

RECAPITULATION—*Continued.*

RETURN showing the Kinds and Quantities of Fish and Fish Products in the Province of **Nova Scotia**, &c.—*Continued.*

Number.	Fishing Districts.	Kinds of Fish.																	Number.
		Salmon, fresh, lbs.	Salmon, preserved in cans, lbs.	Salmon, smoked, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Haddock, smoked finnan haddies, lbs.	Hake, dried, cwt.	Hake, sounds, lbs.	
	District No. 1.																		
1	Richmond	7775	1100	900	4854	92350	.....	52350	7978	189970	2883	23912	60	433400	8371	273300	173	150	1
2	Cape Breton	18520	...	.....	3353	18500	.....	38625	1116	188980	1376	60021	3	14209	14040	.....	899	...	2
3	Victoria	40470	1300	*38	475	15800	.....	1300	1077	90364	...	11932	...	.....	2695	.....	.....	.....	3
4	Inverness	51700	720	.....	2161	65600	580000	6420	560	222075	761	16469	14	11400	1746	.....	1803	240	4
	District No. 2.																		
5	Cumberland	14150	....	.....	370	30000	100000	11000	25	435792	38	1845	....	600	85	.....	845	.....	5
9	Colchester	102730	....	.....	12	6000	3000	.....	.....	49872	.....	170	...	3000	17	.....	1300	.....	6
7	Pictou	60700	....	.....	50	108500	.....	6300	75	413184	190	151	..	1100	.....	.....	557	250	7
8	Antigonish	36250	....	.....	467	107500	.....	46440	413	128256	.....	849	..	8000	214	.....	1220	2530	8
9	Guysborough	48655	1590	5700	2918	732465	40000	614436	1887	588496	2392	21553	83	2333900	6505	369200	1245	1277	9
10	Halifax	14626	....	3045	5909	38200	6000	1216500	1652	416854	12305	35934	68	167525	2662	5000	3164	23	10
11	Hants	17620	....	.....	25	.....	.....	.....	...	.....	.....	33	....	.....	.....	.....	.....	.....	11
	District No. 3.																		
12	Lunenburg	15455	....	400	1843	12900	.....	20075	3889	135775	643	253100	207	18950	12233	1100	1967	235	12
13	Queens	18930	...	1270	229	.....	2000	.....	950	83506	680	4268	....	.....	830	.....	18	.....	13
14	Shelburne	5150	....	..	16007	9000	.....	13000	153	543370	44562	135168	28	25630	11306	11200	184	.....	14
15	Yarmouth	10600	....	.....	5805	3210000	5200	30000	....	1027200	34320	33532	14	86350	8660	26000	965	.....	15
16	Digby	950	....	.....	620	717100	795800	3550	.....	123510	18707	43331	115	1129000	19586	1406000	50810	33300	16
17	Annapolis	4200	....	.....	2485	6300	7000	...	.....	.....	1545	3325	...	19100	4215	.....	6710	3050	17
18	Kings	64280	....	.....	1972	215700	61000	2100	.....	.....	500	1061	....	167550	131	.....	50	....	18
	Totals	532761	4710	11315	49555	5385915	1600000	2062096	19775	4637204	120902	646654	592	4419705	93296	2091800	71910	41055	

* 38 barrels salted.

RECAPITULATION—*Concluded.*

RETURN showing the Kinds and Quantities of Fish and Fish Products in the Province of **Nova Scotia**, &c.—*Concluded.*

Number.	Fishing Districts.	Kinds of Fish—*Con.*																	Total Value of all Fish.	Number.
		Pollock, cwt.	Halibut, lbs.	Trout, lbs.	Shad, brls.	Smelts, lbs.	Alewives or Gaspereau, brls.	Bass, lbs.	Eels, brls.	Oysters, brls.	Flounders, lbs.	Tom Cod or Frost Fish, lbs.	Squid, brls.	Coarse and Mixed Fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	Seal Skins, No.	Clams, brls.		
	District No. 1.																			$ cts.	
1	Richmond	3361	47100	11580	....	33250	949	.....	488	....	388420	39400	1810	2550	15735	3596	.....	....	....	418,599 75	1
2	Cape Breton	569	32150	3600	20	18200	8227	.....	206	65	1300	.....	471	51	7865	2030	...	15	....	433,014 40	2
3	Victoria	221	31300	400	....	900	17	.....	59	14	.....	.....	297	.....	8210	1285	.....	1	....	111,064 55	3
4	Inverness	116	4900	8600	...	.....	524	.. ..	154	265	.....		977	381	4997	2540	395	...	....	180,965 75	4
	District No. 2.																				
5	Cumberland	46	3790	1850	175	41370	1360	1000	65	803	1100	11500	.....	378	110	4894	6234	....	100	131,161 15	5
6	Colchester	5	2800	16500	534	8000	150	8275	..	325	...	.....	...	.....	165	127	.....	....	575	46,231 90	6
7	Pictou	.....	.....	6700	....	12100	145	...	228	50	.....	.....	400	15	270	1550	6760	....	30	112,719 05	7
8	Antigonish	17	.....	625	..	7500	45	2500	73	141	16100	.....	57	322	1220	1662	2310	..	...	63,786 50	8
9	Guysborough	12369	403170	17300	....	21660	790	...	441	....	21700	14700	14967	1453	60070	14695	12169	73	109	651,257 67	9
10	Halifax	8990	175441	11250	....	35000	817	.....	166	....	108400	26050	2790	469	15595	2014	7175	38	1757	585,182 35	10
11	Hants	12	.....	5200	239	.....	235	150	....	....	1500	.....	....	.....	.. ..	.....	.....	....	75	7,870 00	11
	District No. 3.																				
12	Lunenburg	2036	131275	800	...	9500	158	.....	71	....	224300	3800	1355	4330	121587	5040	490	.. .	41	1,250,497 35	12
13	Queens	271	3275	8100	....	6000	2157	.....	56	....	.....	.....	526	5	1620	335	.....	...	....	76,619 70	13
14	Shelburne	11018	40015	8900	....	4400	1538	.....	69	....	10400	11050	147	59	8970	27715	.....	....	....	1,280,053 40	14
15	Yarmouth	13141	102210	11000	....	30800	2805	....	160	...	3000	19500	127	2200	10345	1385	1090	....	....	840,075 75	15
16	Digby	48070	243770	2450	41	23500	287	.....	49	....	7650	25500	4082	26167	33450	6724	20375	....	5376	982,634 50	16
17	Annapolis	1515	9400	3800	25	.....	41	310	..	...	.....	...	.....	200	3220	1105	.	.....	....	77,392 00	17
18	Kings	2070	2800	2506	99	.....	711	.....	....	....	.....	.....	.....	21925	270	2229	7000	....	600	102,627 50	18
	Totals	103827	1233396	121155	1133	252180	20956	12235	2285	1663	783870	151500	28006	60505	293699	78926	63998	127	8663	7,351,753 27	

RECAPITULATION

Of the Yield and Value of the Fisheries of the whole Province of Nova Scotia for the Year 1902.

Kinds of Fish.	Quantity.	Rate.	Value.	Total Value.
		$ cts.	$ cts.	$ cts.
Salmon, fresh ..... Lbs.	532,761	0 20	106,552 20	
" preserved ..... Cans.	4,710	0 15	706 50	
" smoked ..... Lbs.	11,315	0 20	2,263 00	
" salted ..... Brls.	38	15 00	570 00	
				110,091 70
Herring, salted ..... Brls.	49,555	4 00	198,220 00	
" fresh ..... Lbs.	5,385,915	0 01	53,859 15	
" smoked ..... "	1,600,000	0 02	32,000 00	
				284,079 15
Mackerel, salted ..... Brls.	19,775	15 00	296,625 00	
" fresh ..... Lbs.	2,062,096	0 12	247,451 52	
				544,076 52
Lobsters, preserved in cans ..... Lbs.	4,637,204	0 20	943,895 20	
" alive or fresh ..... Cwt.	120,902	5 00	1,109,295 00	
				2,053,190 20
Cod, dried ..... Cwt.	646,654	4 00	2,586,616 00	
" tongue and sounds ..... Brls.	592	10 00	5,920 00	
				2,592,536 00
Haddock, dried ..... Cwt.	93,296	3 00	279,888 00	
" fresh ..... Lbs.	4,419,705	0 03	132,591 15	
" smoked (finnan haddies) ..... "	2,091,800	0 06	125,508 00	
				537,987 15
Hake, dried ..... Cwt.	71,910	2 25	161,797 50	
" sounds ..... Lbs.	41,055	0 50	20,527 50	
				182,325 00
Pollock ..... Cwt.	103,827	2 00	.....	207,654 00
Halibut ..... Lbs.	1,233,396	0 10	.....	123,339 60
Trout ..... "	121,155	0 10	.....	12,115 50
Smelts ..... "	252,180	0 05	.....	12,609 00
Shad ..... Brls.	1,133	10 00	.....	11,330 00
Alewives ..... "	20,956	4 00	.....	83,824 00
Eels ..... "	2,285	10 00	.....	22,850 00
Bass ..... Lbs.	12,235	0 10	.....	1,223 50
Flounders ..... "	783,870	0 05	.....	39,193 50
Tom Cod or frost fish ..... "	151,500	0 05	.....	7,575 00
Squid ..... Brls.	28,006	4 00	.....	112,024 00
Oysters ..... "	1,663	4 00	.....	6,652 00
Clams ..... "	8,663	.....	.....	47,411 00
Coarse fish ..... Brls.	60,505	2 00	.....	121,010 00
Fish oil ..... Galls.	293,699	0 30	.....	88,109 70
" as bait ..... Brls.	78,926	1 50	.....	118,389 00
" as manure ..... "	63,998	0 50	.....	31,999 00
Seal skins ..... No.	127	1 25	.....	158 75
Total for 1902				7,351,753 27
Total for 1901				7,989,548 03
Decrease				637,794 76

RECAPITULATION

OF the Fishing Boats and gear and other material used in the fishing industry in the **whole** Province of **Nova Scotia** for the Year 1902.

	Articles.	Value.	Total.
		$ cts.	$ cts.
551	fishing vessels (33,443 tons)	1,132,755 00	
14,921	" boats	306,691 00	
60,551	gill nets (1,424,603 fathoms)	381,060 00	
660	seines (79,073 fathoms)	159,813 00	
569	trap nets	100,360 00	
122	weirs	16,925 00	
7,919	trawls	98,787 00	
33,030	hand lines	24,515 00	
245	smelt nets	3,823 00	
			2,224,729 00
240	lobster canneries	192,735 00	
657,531	" traps	436,109 00	
			628,844 00
242	freezers and ice houses	76,318 00	
4,747	smoke and fish houses	179,950 00	
1,794	fishing piers and wharfs	268,378 00	
183	" smacks and tugs	107,270 00	
			631,916 00
	Total capital in fisheries		3,485,489 00

Statement of Men employed in the Fishing Industry of **Nova Scotia**, 1902.

Number of men in fishing vessels	5,482
" " boats	17,845
" persons in lobster canneries	5,219
Total	28,546

APPENDIX No. 4.

NEW BRUNSWICK.

District No. 1, comprising the counties of Charlotte and St. John. *Inspector J. H. Pratt, St. Andrews.*

District No. 2, comprising the counties of Albert, Westmorland, Kent, Northumberland, Gloucester and Restigouche. *Inspector R. A. Chapman, Moncton.*

District No. 3, comprising the counties of Victoria, Carleton, York, Sunbury. Queen's and King's. *Inspector H. E. Harrison, Maugerville.*

DISTRICT No. 1.

REPORT ON THE FISHERIES OF DISTRICT No. 1, NEW BRUNSWICK, COMPRISING THE COUNTIES OF CHARLOTTE AND ST. JOHN, FOR THE YEAR 1902.

ST. JOHN, N. B., January 31, 1903.

To the Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I have the honour to submit herewith my annual report on the fisheries of No. 1 district, New Brunswick, for the year 1902, as well as the statistics of the several fisheries officers showing the catch in each district, with a synopsis of their annual reports.

The year just closed has been one that can be called fairly prosperous for the fishermen of my district, although the total value of the catch is given at $1,064,126, which is $220,947 less than that of the previous year. While there was a slight decrease in nearly all the fisheries, the bulk of the shortage was in the herring catch, especially that of the small herring put up as sardines, which alone shows a shortage amounting to $135,474. This a quite a decrease but not unexpected, as the history of the herring fishery shows that these marked fluctuations may be expected at any season.

The value of the catch in St. John County shows a decrease for the past season of over $28,000, but this I attribute in a large measure to a more careful collection of the fisheries statistics by the officers for that county.

The principal falling off in my district will be noticed in the catch of the St. Andrew's bay division, where over $100,000 is given as the amount of the decrease, which will be found in the returns for the herring catch alone. However, the weir owners in the vicinity of St. Andrews do not murmur, as their weirs generally pay a good return on their investment.

I insert herewith the value of the catch of the district for the past six years which will more readily show the annual fluctuation in the value of the catch.

Total for	$
1897	870,287
1898	1,145,361
1899	1,216,394
1900	638,890
1901	1,285,073
1902	1,064,126

Dog fish.

The dog fish pest is fast forcing its way to the front as one of the most important questions affecting our fisheries. Each year finds them appearing earlier in greater numbers on the fishing grounds and remaining longer with us than in any previous time, causing a loss to our fishermen in each district of thousands of dollars. The United States coast is being also invaded by them as well as our own coasts, and suggestions of a more or less feasible nature as to the best methods of annihilating them are to be heard in every port which we may visit.

GENERAL REMARKS.

The law prohibiting seining for herring was violated by a number of our fishermen during September and October in St. Andrew's bay and Back Bay; but the imposition of a number of fines of $100 on each offender and the confiscation of their seines had a strong tendency to discourage them in this work and compel the necessary respect for the fishery laws. Notwithstanding all the regulations that are at present enacted governing the fisheries, the number of fishermen who desire more legislation of a special nature for different localities is surprising, but they fail to study out the unpleasant consequences, should the department act on all the numerous requests of the above nature.

The addition of a steam tender to the "Curlew's" equipment has been of very great assistance to us in our work and has been the means of bringing to justice quite a number of evil doers which was quite difficult when it had to be done by endeavoring to cover the long distances in a row boat, more especially after dark. Many illegal fishermen who have been surprised by her at their work can testify to her extreme usefulness for this service, for while it may be possible for them to watch the cruiser's movements it was impossible to locate the launch.

The usual cruising on the coasts of Nova Scotia and Cape Breton was kept up and the treaty regulations were strictly enforced in our dealings with the numerous United States fishing vessels met with. No trouble was experienced in enforcing the provisions of this treaty, as the masters of those American vessels were well aware of the results of non-compliance. On those cruises the local fishery laws were enforced in the various ports visited and every assistance was rendered the local officers in carrying out their important duties.

HERRING.

I regret to report a decrease in the catch of herring for this year, more noticeably in the smaller sizes for sardine and smoking purposes. Numerous large schools were reported by fishermen as hovering off shore; but they failed to strike in, being prevented from doing so, as the fishermen said, by the large schools of dog fish, squid and silver hake that were reported to be in shore of them. It was interesting to notice the immense school of small sized herring that struck into Back bay during August and September and notwithstanding the hundreds of hogsheads taken by the weirs and *spudgers* operating there for nearly two months, the schools seemed to diminish but slightly indeed, and not until about the middle of October did they disappear from that bay.

The sardine herring packed in the canneries of the adjoining state of Maine was over 200,000 cases less than the previous season of 1901, quite a large decrease which is wholly due to the shortage in the catch of the Canadian weirs which, as you are doubtless aware, supply over three-quarters of the herring used by those canneries. The value of this pack for this past season is given at $3,539,980 and was the product of 89 canneries.

The foregoing figures will show what an immense and profitable industry we are supplying the raw material for in the adjoining state of Maine but the Canadian market being very limited in comparison with that of the United States nothing can be done at the present time to alter those unfavourable conditions. The syndicate that has held a strong grip on nearly all of the canneries in Maine for the past few years is gradually losing its hold and during this past season a large number of independent factories were operated, competing against each other in their efforts to secure our herring, much to the financial benefit of our weir owners. During the coming season of 1903 many more independent factories will be operated and a higher price will be paid our fishermen for their catch.

SALMON.

The principal salmon fisheries of my district are in the Bay of Fundy, between Point Lepreau and Mispeck, and the catch was up to the average of previous seasons. One fishery officer reports each of the boats engaged in this industry will set fully one mile of nets, therefore, one need not express any surprise at the immense amount of nets that the annual report shows are owned by the St. John county fishermen. Salmon ascended the St. Croix river in large numbers and although the hardened poachers who reside along that river endeavoured to put into practice their thieving propensities, the vigilance of the two night guardians made their efforts quite barren of satisfactory financial results.

Several good salmon rivers empty into the Bay of Fundy, many of which are of vast assistance as spawning rivers to perpetuate the salmon fisheries in the bay. Selfish interest are preventing some of those rivers from being opened up for the ascent of salmon, but it is sincerely hoped that in the very near future the fishery laws will be allowed to prevail.

COD AND HADDOCK.

Quite a decrease will be noticed in the catch of the above named fish, more especially in that of the haddock, which is entirely due, in the minds of most fishermen, to the ravages of the dog fish. Some of the more hopeful fishermen predict that in a few years time the numbers of this voracious fish will lessen with the same rapidity as they have increased, and it is most sincerely hoped that those optimistic propheties will be fulfilled.

LOBSTERS.

About the same catch of lobsters will be noticed as last season, with only 68,676 cans packed, compared with 109,440 cans packed during the previous season of 1901. There is no denying the fact that lobsters are decreasing in numbers and size in this district. An increased number of traps are being used annually and as the lobster fishery offers greater facilities for illegal fishing than any other, more of it is attempted than in other fisheries. The giving to lobster fishermen when detected fishing illegally the full penalty allowed by law would be one of the best methods in preventing this work; but it is hard for a local officer to act when the community in which the offender resides sympathizes with the offender. The raising of the size limit to 10½ inches in order to bring it in line with the adjoining county of St. John would be one good method of saving this valuable fishery from being ruined by utterly selfish fishermen. To prevent this almost certain ruin I might mention here that the United States authorities now distribute annually several hundred thousand lobster fry, in the waters

near Eastport, and owing to the strong tides that surround that town there is not the slightest doubt that our waters receive a generous benefit from the fry planted in those waters.

POLLOCK.

A decrease of over four hundred quintals will be noticed in the returns showing the catch of this fish for the past season. The dynamite fishermen of Grand Manan attribute this decrease naturally to their being prevented from slaughtering pollock by dynamite, in consequence of the order in Council wisely enacted by your department in April last. On the other hand the fishermen on the pollock grounds in Quoddy river attribute the scarcity of pollock to the presence of the voracious dog fish. Prices, however, were good, which had a tendency to make a satisfactory season's work for the large number of men engaged in this fishery.

CAMPOBELLO FISH FAIR.

The annual exhibition of this society took place at Campobello on October 9th and the hotly contested boat races with other festivities took place on that day. Large numbers of visitors gathered there and enjoyed the good programme prepared, also examining the splendid fisheries exhibits laid out in the exhibition building for their inspection. It is quite safe to say that those exhibits could not be excelled by any fishermen in the world and the exhibitors richly deserved the generous prizes awarded them by this excellent society. The annual dinner took place in the evening terminating with the usual grand ball. The results of this society's annual sailing regatta can be noticed in the better class of fishing boats that are being built during late years in Passamaquoddy waters and there is not the slightest doubt that those sailing competitions are for the most part largely responsible for the radical changes for the betterment of the fishing boats in these waters.

SYNOPSES OF FISHERY OFFICERS' REPORTS.

Guardian Daily, of New River, states that the catch in his district has not amounted to more than one fifth of that of 1901. Herring were very scarce, supposed to be caused by the dog-fish and silver hake getting inshore of them and thus preventing them from entering the weirs. Cod and haddock fishing was very good and during the month just closing some of the boats made as high as $30.00 per day, off Point Lepreau, in the pursuit of those valuable fish. The catch of lobsters was about the same as last year, less men and less traps were engaged. He thinks they received more money for their catch, as lobsters were a better price. Some of the men in his district have a tendency to report less than their usual catch, they having a feeling that fees will be raised. Clams are the only fish that have increased in numbers, which is attributed to a less number of Nova Scotia vessels coming here for cargoes.

Guardian Catharin, states that the cod fishing for the season only shows a medium catch, likewise the catch of haddock ; but the hake fishing has been exceptionally good. The pollock fishing has been only an ordinary one, the pollock were plentiful, but they would not take the bait. Sardine fishing has not been very good, there seemed to be plenty of herring, but the squid were more than ordinarily active and prevented the herring from coming in shore, thus injuring the weir fishing. The lobster fishing has not been very good this season and I think there should be a change made raising he size limit to 10½ inches.

Guardian McLaughlin, of St. George, says that the trout fisheries of the several lakes have been well up to the average. Many strangers have visited the lakes, especially American tourists, and they have departed in good humour having been rewarded with good catches.

Overseer Hall, of St. George, who has charge of the fish-ways there, states that the one at the lower falls was never in better condition than at the present time. The middle fish-way requires repairs which could be done at a very small cost. A great quantity of trout was taken in his district last season, there being a large number of people from the United States and elsewhere camping on the several streams and lakes. There were no salmon taken, but lots were seen in the river. One afternoon while working on the middle fish-way he observed three salmon endeavouring to pass through it. Smelts and gaspereaux in their several seasons abound in this river.

Guardian Mealy, of Pennfield, report that line fishing began the latter part of May, and continued fairly good for about two months, or until the dog-fish made their appearance, causing a scarcity on the fishing grounds. Herring were scarce during the season and many weirs were not seined at all. Lobsters were not plentiful and the fishermen differ very much about the best methods to be adopted to preserve this fishery. Some suggest that the fishermen be allowed to fish the whole year and to stop the sale of small lobsters. If this were allowed, he suggests that all lobster fishermen be compelled to have a license and have a certain day for the sale of lobsters caught, say once a week, and that the local officer be required to be present on the day of sale to inspect the cars. This day of sale should be set by the inspector, so that the local officer could be there on the days named.

Guardian Lord, of West Isles, states in his annual report that all the fisheries show a slight decrease when compared with last season, not only on account of the scarcity of fish, but also on account of the industry being less vigorously pursued. The herring fishery employs the majority of our fishermen. When the herring are scarce the catch of other fish shows a decline, as all kinds of fish are most abundant in the neighbourhood of the herring. Early in the season we had a run of herring for a short time and as the syndicate took no herring outside their contract weirs there was no opposition to the purchasing of our fish, which brought only $4 per hogshead, a very small price for early fish; however, a little later the fish got more plentiful and we had a fair run; but they were too large for canning purposes. Only a small percentage were sold to the canneries and a good part of the rest went for smoking purposes, at only $1 and $2 per hogshead. Had we been able to sell all the weirs caught, the fishermen would have had a fair season's work; but the herring stayed plentiful only a short time and then ceased entirely and did not return again during the year, with the exception of a few brit which came late in the fall. Very few herring were caught in nets, in fact, very few nets are used in my district now, as our large net herring have been abandoned.

Lobsters show a slight falling off; they are very much fished for as that is the only industry to pursue in the winter, for then the weir men and boatmen, at other times busy at the sardine industry, have to catch lobsters along with the other fishermen, which makes a large number of trappers for the few lobsters caught. The price continued high during the season, thus giving about the same returns as last year, or even a little better. Pollock shows a decrease owing to the scarcity of fish, none at all being taken in the weirs this last season. The catch of cod will show a decrease, owing to there being a less number of fishermen engaged in this fishery. It was a good year in the sardine factories and a large number of people went to them for work. The price of cod was high, averaging about $4 per quintal. Haddock shows a decrease, owing to same reason as the shortage in the cod catch, not many fishing for them. Trawling this fall was good; but the men being at other work did not benefit by the high prices prevailing. Smelts were scarce this season, not many being taken, although prices were good. Taking the season as a whole it was rather below the average, chiefly owing to the low price paid for sardine herring.

Guardian Savage, of Campobello, reports that no large herring were caught in his district and what are shown in this return were brought in by vessels from the off shore fishing grounds. Small herring for sardine purposes were scarcer than any previous year, due not only to the scarcity of the fish, but also to the presence of large

schools of squid, which drove the herring before them into the shallow barbours and bays where large quantities were taken. Cod are never plentiful in this district, only a few quintals per man are caught among haddock and hake. Hake made their appearance at about the usual time and were much more plentiful than last year. Good catches were made and high prices were paid for them until the dog fish made their appearance in August, in such numbers that the fishermen were obliged to abandon the business and seek other employments. Pollock appeared in large schools about May 25th, but for some reason did not bite well, however, there was a fair catch until late in October. While the catch was not equal to that of last year it was fully up to the average of previous years. There was a good capture of haddock and good prices were paid for them. This branch of fishing is much more profitable than formerly, the fish being all used for finnan haddies and for shipping fresh. Fewer lobsters were caught than last year, owing to a smaller number of fishermen being engaged in the business. Good prices were paid for canning purposes and for shipment in the shell. There has been an average catch of all kinds of fish, except herring, good prices prevail and the season's work has been profitable to the fishermen.

Overseer Fraser, of the Island of Grand Manan, in his annual report states that he finds a decrease in the fisheries from last year amounting to $42,000. This decrease is most noticeable in the fresh and smoked herring; but the prices for this kind of fish were very much more than in the previous years. It is believed by some that the scarcity of herring was the cause of the decrease of other fish, for the reason that all kinds of fish are after the herring. As heretofore, about 90 per cent of our fisheries, both fresh and manufactured go to and via the United States.

The spawning ground law was very well observed this year but there was some illegal lobster fishing during the season, for which two fines of $30.00 and $20.00 each were imposed. It is quite difficult to prevent illegal lobster fishing, which as a rule is hard to detect, especially when buoys are not used. Regulations should be enacted, prohibiting the taking of brit, otherwise it will be only a question of time when the herring fisheries will be ruined. The present law is very ambiguous, when it deals with the taking of the young of any fish. He again calls attention to the matter of nets being left set in the water during the day time which is very injurious to the fisheries. He also recommends that weir owners be compelled to place buoys 1000 ft. from their respective weirs, in order that net fishermen can locate the distance in which to set their nets. Only by such a regulation can the bad feeling which now exists between the weir and net fishermen be checked, and also, when a patrol boat is furnished here to properly look after these alleged grievances, peace and harmony will prevail. There were more barrels of herring pickled and more kippered herring put up than last year and prices ruled about the same. There was a decrease in the haddock price but the catch was about the same as last season. There is a decrease in the catch of hake, when compared with last year, of over 250 quintals. This fish has not been so plentiful the last few years as formerly. The only reason he can give is that dog-fish come earlier and remain longer than in former years, and are very destructive to fish life. About the same quantity of cod were taken as last year, with prices ruling about the same. The catch of pollock will show a decrease of about 1500 quintals, but prices rule much higher. There was a large increase in the catch of halibut.

Boatman Silas Mitchell, who patrols the Coffil's Ledge fishing grounds states that he has thoroughly prevented any foreign boats from crossing the boundary line and fishing in Canadian waters. A large fleet of boats fished during the summer on the United States side of the line. The catch of pollock on the river was not as good as in 1901, although a fairly good catch was made and the price was better than that of last year. The catch of haddock up to August 1, was better than it has been for the last ten years, and then dogfish, that nuisance to fishermen, struck in and lasted until the first of December. The catch of cod was greater than that of 1901. The catch of sardine herring in Lubec Narrows and other parts of the island was small and that of other places may be called a complete failure. The large net herring known as Quoddy river herring appeared to be a thing of the past and none of those choice fish were taken

during the past season. The catch of lobsters was smaller than that of 1901, the close seasons were fairly well observed, and very little illegal fishing was attempted in the waters that we patrol. No American fishing vessels came to Eastport during the past season seeking bait.

Overseer Herbert Thomas, of Point Lepreau, in reporting for the year says the catch of hake was light but the catch of cod and haddock was very good, both to the south and west of the Point, during the months of December and January. There has not been any illegal lobster fishing at the Point, for all the Charlotte county lobster fishermen living near Maces Bay Ledges have been most anxious for some time that the limit should be 10½ inches. They find each year that the catch of lobsters is smaller than the previous one, while the annual catch in St. John county is improving wonderfully. He made a proposition last year to the lobster fishermen on the Charlotte county side of the Point to take nothing less than 10½ inch lobsters from the water. This they have agreed to do and they are returning all small sized lobsters to the water. If they continue to do so it will help them out wonderfully in the future.

Overseer Murray, of Dipper Harbour, states that it has been difficult for him to secure the catch of lobsters from the fishermen for the past season, but a fair average has been struck. The cod, haddock, and pollock, will show a very small catch and were sold in with the hake. Little or no illegal lobster fishing was attempted during the year and he has sharply searched the numerous lobster buying vessels, but failed in securing any evidence of violation of the law. He also visited all the lobster cars in his district once or twice a week.

Guardian Belding, of Chance Harbour, states in his annual report that he took all possible care to watch and prevent illegal lobster fishing and does not believe that any occurred during the season in his district. The catch of lobsters seems to be improving. The catch for 1901 amounted to 21,900 shipping lobsters for 31 boats, while only 27 boats fished during the past season and report a catch of 42,941 shipping lobsters. It would seem that this phenomenal increase must be owing to the liberation of the smaller lobsters during the past two years. The salmon catch for the past year has been away below that of 1901. We think it must have been owing to the cold stormy weather in the first part of the season that has prevented this valuable fish from striking in shore. It seems to be difficult to come to any definite conclusion about this fish for the catch increases and decreases without any apparent reason. On the whole he would say that they were on the decrease in this bay. There were only ten boats engaged in the catch of gaspereau during the past two seasons and like the salmon they show a marked falling off for the past year. The catch of shad seems to depend on the salmon catch, for as a rule there is a good catch of salmon when there is also a good catch of shad. The spring catch for 1902 was fairly good while the fall catch was very poor. The hake fishing amounts to quite an industry in his district during the summer months. There was a large increase in the number of boats fishing this past year. But the dog fish are a great drawback to these fishermen and they claim that they are on the increase. If the fishermen do not get some remuneration for taking these fish they will stop hake fishing altogether in a short time.

Guardian Skillen, of the district, *from Teigmouth Creek* to the *Albert county* line states in his annual report that 'the catch of lobsters was large, aggregating nearly 100 per cent over the catch of 1901; but while the catch was large the fish were generally small, making the average weights less than those of last year. The total catch of lobsters for 1901 was 4,900, weight 22,050 pounds, and for 1902, 9,321, weight 37,284 pounds, showing a decrease in size throughout the ca ch. But while this was true, those who fish around the central part of the district had an average of 6½ pounds to the fish, catching 1,690 of such fish, they being the largest he ever saw, but at the same time they caught a great number of undersized fish that they had to throw away. The catch for 1902 would have been very large had the fishermen been informed that they could fish during the month of June, but they had nearly all their traps up

before being informed of this extension. The salmon fishing was in a manner nothing during the season, but in the fall the streams were literally swarming with them, more than seen for years and especially at Salmon river. Had there been a fish-way in the dam there, the river would have been full of salmon. He took a good deal of time and observed that those valuable fish could be seen in the mouth of every little stream. The line fishing generally was away off, the entire catch being about 60 per cent of 1901, which is generally accounted for in the same manner as the shortage in the herring catches in late years, namely, sawdust being sent adrift from all the mills on this shore. The catch of herring was only about 80 barrels, whereas years ago the catch was many hundreds of barrels, and there is no doubt we would have the same catches here again if there was any way of stopping the sawdust and rubbish from being thrown into the streams.

Guardian Kirsup, the officer controlling the district betwe.n Mispeck and Teignmonth Creek, in his annual report, states, 'there were eleven men fishing in his district and they report the fishing was much better than in previous years.'

Overseer Belyea, of the harbour of St. John, states that 'the harbour fisheries were atten led to with as much vigour as last year, but owing to bad weather and very little freshet, which is a strong factor in the weir fishing, the catch fell off about 30 per cent. The price paid for gaspereau was away below that of last year, owing to a heavy catch the year before in the States, and the unsettled state of affairs in Hayti, those islands being in a state of revolution and the largest consumers of Canadian gaspereaux. Fishing for shad during the last few years has not been as vigorous as formerly, owing to the scarcity of fish and want of a big river which is very necessary for the netters. The fish being strong come in early on the tide, getting up above the island before the netters can drift for them with safety. Most of the successful fishermen in this branch of the fisheries having gone out of the business as well as a number of them being too old to follow in the work, has had a tendency to diminish the catch. The harbour salmon fisheries this year were about up to the average, with a fair price all through the season. The outside or bay fishing is not as good as usual owing to bad weather and increasing traffic, the fishermen being eager to try to fish more nets than they can properly attend to. Smelt fishing as an industry in St. John has hardly begun, but there are plenty of these fish and they are yearly increasing. The main trouble is too much dead water in the haunts of those fish, the water not being swift enough for the fishing by the means of bag nets.

The regulations governing the close seasons are followed to the letter of the law by the fishermen, but the same cannot be said with reference to the observance of the Sunday close time regulations. The fines imposed by the magistrate always being light, the fishermen owning weirs never close them when there is a chance of catching $20 worth of fish. The netters always obey the regulations or else manage to avoid the fisheries officer.

I am, sir, your obedient servant,

JOHN H. PRATT.
Inspector of Fisheries.

DISTRICT No. 2.

MONCTON, N. B., February 28, 1903.

To the Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I have the honour to submit my report of the Fisheries in District No. 2 of the Province of New Brunswick consisting of the *Counties of Restigouche, Gloucester, Northumberland, Kent, Westmorland* and *Albert,* together with the Parish of Stanley in the County of York, and the Parish of Aberdeen in the County of Carleton for the year 1902 with tabulated statement, giving the products and values by districts and counties, together with an estimate of the capital employed in the prosecution of these fisheries.

These returns show a small decrease in the aggregate values for the year, caused chiefly by the large falling off in the take of mackerel and bass, in almost every other kind of fish there would have been a marked increase but for the uncommonly rough weather that prevailed during the summer and autumn. I will now briefly refer to the several leading kinds of fish caught.

SALMON.

Notwithstanding the stormy weather before referred to which carried away many nets especially those set on the sea coast, the catch is very nearly up to the large one of the previous year, which was some 200,000 lbs. above that of 1900. Angling was also reported good on all the rivers.

SHAD.

This is yearly getting to be a less important fishery though at one time it gave profitable employment to a large number of men and boats, I reported fully on the cause and remedy last year.

HERRING

Were never more plentiful in the spring and large quantities were salted for food, bait, etc. There was also quite an increase in those smoked, which is comparatively a new industry. On the Caraquet and Miscou banks where they are caught during August and September, and are of superior quality. The storms broke up nets and consequently not so many were taken as in 1901.

MACKEREL

Were not nearly so plentiful as during the previous year, therefore a great falling off in the catch is reported. These fish appear to be very erratic in their movements.

COD.

Notwithstanding the stormy weather more were taken I believe than ever before, late last fall the waters were literally swarming with these fish so that boats even a few hundred yards from the shore would fill up in a few hours.

BASS.

The great decline in this fishery still continues, the catch of the past season not being two-thirds that of previous year, hook and line fishing should certainly be prohibited during spawning time.

SMELTS.

The catch of these fish is only a little below that of the unprecedented one of 1901 and as there appears to be a good market for all that can be taken, this fishery has certainly become a very important one.

LOBSTERS.

There is an increase reported in the past year in the pack of these fish for the time in many years, due no doubt to the extension granted last summer. With the hatcheries building at Shemogue and Shippegan islands all parties interested are looking for a marked change within the next eight or ten years, and hope to see this fishery fully restored.

OYSTERS.

The quantity raked is below that of last year in the aggregate caused by the great falling of in the catch at Bay du Vin, and other points on the Miramichi river where they are of inferior quality. Boats from Caraquet, Shippegan, etc., formerly visited those places and took large quantities, but cod fishing now pays better, and this fishery has consequently dwindled away. Rather more were taken at Buctouche, Cocagne, Shediac and Shemogue where the oysters are of the best quality.

I have very few reports from the local officers, and these contains no matters not fully covered by my own report.

I have the honour to be sir,
Your obedient servant,

R. A. CHAPMAN.
Inspector.

DISTRICT No. 3.

REPORT ON THE FISHERIES COMPRISING THE COUNTIES OF KING'S, QUEEN'S, SUNBURY, YORK, CARLET ONAND VICTORIA.

MAUGERVILLE, N.B., March 30, 1903.

To the Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I have the honour to submit herewith my first annual report of the fisheries of District No. 3, New Brunswick, for the year 1902, with statistics showing the value of the catch of fish, also value of material used in the prosecution of the fisheries.

A comparative statement given below, shows a decrease, both in the value of fish taken and in material used in connection therewith, viz:—

VALUE OF FISH.

For 1901	$67,527 00
" 1902	57,204 00
A decrease of	$10,323 00

VALUE OF MATERIAL.

For 1901	$64,370 00
" 1902	56,585 00
	$ 7,785 00

The reason for this falling off in the value of material is because of a smaller valuation being put upon it.

While this result (the falling off in the value of fish taken) may seem regrettable, leading one not acquainted with the facts to think that fish were becoming less plentiful, I hesitate to say that such is the case. Probably the true cause is, an unusal demand for help on the farms and lumber camps where men can get steady employment and better wages for less disagreeable work than they can in the prosecution of the fisheries,

SALMON.

This strong and active fish, given any kind of a fair chance, seems well able to take care of itself. The fishermen in the counties of King's, York and Carleton seem to have made excellent catches. Queen's and Sunbury fishermen were not so fortunate. As this noble fish is unable to ascend the St. John river past Grand Falls, only land locked salmon are taken beyond that point. As the Tobique river, a tributary of the St. John in Victoria county, is the only really good spawning ground accessible to salmon at the present time, it seems to me very necessary if we are to have salmon in the St. John river, that they get every protection on the Tobique. This river is practically controlled by the 'Tobique Salmon Club,' chiefly Americans, and be it said to their credit, they observe our fishery laws, and give the salmon in that river every possible protection, having a superintendent and eighteen or twenty guardians scattered along the river all season. Our native fishermen complain that in many instances they are not allowed to fish for salmon, but that the fish are allowed to pass, and go to the Tobique where the Americans enjoy the profit and pleasure. In my opinion, if it were not for the adequate protection given on the Tobique, in a very few years, salmon would be depleted in the St. John river. I wish to call the department's attention to another and smaller tributary in Victoria county. 'Salmon river,' mentioned by Overseer Wilson in his report. This river is dammed three miles from its mouth, salmon ascend to the dam but can get no further. I would like to see a fish-way put in there.

The south-west Miramichi, at least that part running throught York and Carleton counties, is a fine salmon fishing river, and under Inspector Chapman's protection it seems to be a fisherman's paradise.

SHAD.

This very valuable fish was late in appearing last season, and many fishermen were afraid that they were not going to arrive, however when they did come, fairly good hauls were made. Shad season is looked forward to as quite a harvest season by a large number of people. A ready market for fresh and salt shad is nearly always assured. Probably on account of remunerative work in the day-time, shad fishing is to a certain extent neglected, because of its having to be prosecuted in the night. This I think accounts for the falling off from the catch of 1901.

HERRING.

This fishery only interests the people of King's county. None being reported further from the mouth of the river.

WHITEFISH.

These fish are reported from the two counties at the extreme parts of my district, King's and Madawaska. So far as I can learn, there seems to have been misunderstanding with regard to the kind of fry, when put in the lakes. I have been told that people thought salmon fry were being put in, but the fish have turned out to be whitefish.

TROUT.

Probably no other sort of fish found in my district gives so much profit and pleasure as this little game fish. Nearly every brook, stream and lake yields its quota of trout, from $\frac{1}{4}$ to 3 lbs. in weight, to those wishing to indulge in the sport. There are some really fine trout lakes, probably the best are situated in Kings and York counties, and are much visited by sportsmen.

BASS.

These fish are only reported from the county of King's, where fishing for them is carried on diligently by a few persons. They are not, so far I know, fished for in any other part of my district.

PICKEREL.

Pickerel fishing has assumed quite large proportions in this district, and is a profitable industry, many farmers giving it a good deal of attention, at a season when it does not interfere with farm work. Some good trout lakes have been spoiled for trout fishing, for when pickerel are put in, trout diminish quickly.

ALEWIVES,

As will be observed by the statistics presented, these are one of the most valuable of the fish that inhabits our waters. Notwithstanding the immense quantities taken each year, they return the following year, seemingly in as considerable numbers as in the previous one. The market was somewhat dull in 1902, (cause ascribed in my preliminary report) and fishermen since then have been afraid that they would be cut off from that source of revenue in 1903, but as the season again comes round, and reports are received from the fish dealers, they are again beginning to prepare for the run which they expect this year.

STURGEON.

Sturgeon fishing is one of the industries of the past, on the St. John river; well do I remember, not many years ago either, when this river seemed literally alive with this very valuable fish. It was almost a continual leap and splash, a source of amusement to the bolder and often of fright to the more timid spirits when boating on the river, but alas, a year or two of unrestricted netting and all was changed. It is now a very unusual occurrence to hear a sturgeon 'jump'. Perhaps they have become wiser and keep out of sight, but the report from the only county where they are fished for leads me to believe that very few are left in the river.

The products of both sturgeon and eel fisheries are shipped in ice to the United States market.

Reports from my officers in King's county refer more particularly to the difficulty of enforcing fishery regulations with regard to the sawdust nuisance, mill-men have been spoken to by both my guardians and myself. They always promise to be more particular in the future.

Overseer I. T. Hethrington of the North-eastern division of Queen's Co., comprising Washademoak lake and river and Canaan and Salmon rivers, says, the fishery law was fairly well observed with the exception of the weekly close season. He suggests that the law be changed to read, 'From Saturday night at sundown to Monday morning at sunrise.' The quantity taken is about the same as in other years, pickerel much more numerous, but of much smaller size. He urges that a mesh of not less than 3 inch extension measure, be allowed, for pickerel fishing. He also asks that the government give his district a freezer so that alewives may be preserved for bait.

Overseer J. P. Belyea, of South-western division, comprising the St. John river, Grand lake and that part of Maquapit lake in Queens county, reports the fishery regulations well observed in his district. The catch somewhat below former years, on account of continued high water. The result was, generally speaking, satisfactory.

In Sunbury county the law was very well observed, one or two parties were warned about Sunday fishing. The catch, with the exception of salmon was quite satisfactory.

Overseer Robt. Orr, for York Co., who was incapacitated through age, was unable to render me any assistance the past season.

On November 28th 1902, Mr. Orr died. He was a faithful servant for many years. With the exception of the St. John river section in that county, the law was well enforced. I might say here, that with only two guardians for 50 miles of water, it is impossible to prevent illegal fishing. The results to the fishermen were very satisfactory in this county. There is great dissatisfaction about the point fixed as the head of tidal-water, and with other causes, not found to nearly so great an extent in any other county in my district, a lot of illegal feeling is engendered, and serious threats are sometimes made against fishery officers when trying to carry out their instructions.

The regulations were fairly well observed in Carleton Co. I have instructed the officers to have the law carried out as well as possible, but illegal fishing is done to some extent. I have no overseer in this county.

Overseer Leonord Wilson in Victoria county, reports having spent considerable time the past season, looking after his district, and that the law was well enforced. Four parties were prosecuted and fined for illegal salmon fishing. Salmon and whitefish more plentiful and of a larger size than usual. He urges that a fishway be put in a mill-dam, three miles from mouth of Salmon river, which would allow fish to reach very excellent spawning beds.

Overseer Hector Nadeau, in Madawaska county, and his staff of guardians looked well after the fisheries in that district. The result is, many of the poorer class of people derive much benefit from the watchfulness of the Government officers.

I have the honour to be, sir,
Your obedient servant,

H. E. HARRISON,
Inspector.

NEW BRUNSWICK—District No. 1.

RETURN showing the Number and Value of Vessels, Boats, Nets, &c., used in the Fishing Industry in the Counties of **St. John** and **Charlotte,** Province of **New Brunswick,** for the Year 1902.

Number.	Districts.	Fishing Vessels and Boats.							Fishing Gear or Materials.											Number.
		Vessels.				Boats.			Gill-nets.			Seines.			Trawls.		Weirs.		
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.	
	Charlotte County.			$			$				$			$		$		$	
1	Red Head to Pt. Lepreau	2	28	700	15	59	1020	56	3	900	80	20	640	1190	30	120	20	11,500	1
2	Red Head to Middle L'Etang	10	165	3000	25	80	2980	76	76	200	870	46	1276	2260	153	1150	46	13,800	2
3	L'Etang to St. George	8	150	3575	20	185	4854	240	21	650	173	98	2851	5305	95	351	78	33,900	3
4	St. Géorge to St. Stephen	1	47	450	4	100	5200	100	2	200	100	104	3465	5445	30	190	99	29,700	4
5	Grand Manan	63	960	36300	232	189	19300	351	503	14150	4350	48	1680	4800	55	1100	50	49,800	5
6	Câmpobello	11	280	6380	57	205	8618	230	57	2300	1332	32	793	1210	93	1207	32	7,700	6
7	West Isles	....	.....	.....	6	100	4000	190	20	1000	350	30	3000	6000	50	500	89	35,600	7
	Totals	95	1630	50405	359	918	45972	1243	682	21300	7255	274	13705	26210	506	4618	414	182,000	
	St. John County.																		
1	St, John Harbour	7	135	4500	15	90	2700	473	2300	75100	11600	65	3220	5470	....	....	23	2,500	1
2	Lepreau to Chance Harbour	4	91	1350	15	27	700	138	2500	1200	1440	....	....	.....	.....	.....	...	.....	2
3	Chance Harbour to Mispec	5	82	2000	16	130	9750	220	3000	78400	9408	5	250	450	80	810	11	2,200	3
4	Teignmouth Creek to Mispec Light	....	...	.....	....	28	448	30	....	.....	.....	....	.....	....	...	....	....	.....	4
5	Teignmouth Creek to Albert Co. Line	....	.....	.....	....	15	300	25	40	1000	300	....	....	.....	4	25	....	.....	5
	Totals	16	308	7850	46	290	13898	886	7880	155700	22748	70	3470	5920	84	835	34	4,700	

RETURN showing the Quantity and Value of Fish, &c.—**New Brunswick**—*Continued.*

Number.	Districts.	Kinds of Fish.																Number.
		Salmon, fresh, lbs.	Herring, kippered, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, fresh or frozen, lbs.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Haddock, smoked finnan haddies, lbs.	Hake, dried, cwt.	Hake, sounds, lbs.	Pollock, cwt.	Halibut, lbs.	
	Charlotte County.																	
1	Lepreau to Red Head							613	30			30		140		50		1
2	Red Head to L'Etang		75000	213			4500	3200	226	3420	12700	250	55000	3800	5325	310		2
3	L'Etang to St. George		48000	177	2900			723	249	73656	178606	39		1225	35	1375		3
4	St. George to St. Stephen			154	35000	20000		588	150	16694	174070	200	42802	500	400	150	1000	4
5	Grand Manan		220000	4700	4391000	4238360	40176	2890	3840	263000	23500	200		1535	2200	5840	13100	5
6	Campobello			1023			24000	240	562		546000		1200	3132	5000	7557	10000	6
7	West Isles			10		10000		400	200		80000					6000		7
8	St. George and vicinity																	8
	Totals		343000	6277	4428900	4268360	68676	8654	5257	356750	1014876	719	99002	10332	12960	21282	24100	
	St. John County.																	
1	St. John Harbour	124600																1
2	Port Lepreau to Chance Harbour	17565						225						650				2
3	Chance Harbour to Mispec	109560						859			50000			1000				3
4	Teignmouth to Mispec Light							650	30							87½		4
5	Teignmouth Creek to Albert Co. Line	200						380	10							20		5
	Totals	251925						2114	40		50000			1650		107½		

RETURN showing the Quantity and Value of Fish, &c.—**New Brunswick**—*Continued.*

Number.	Districts.	Kinds of Fish.													Fish Products.				Total Value of all Fish.	Number.
		Trout, lbs.	Shad, brls.	Smelts, lbs.	Alewives or Gaspereau, brls., fresh.	Alewives, smoked, brls.	Alewives, pickled, brls.	Sardines, preserved, cans.	Sardines, brls.	Corn cod or frost fish, lbs.	Squid, brls.	Scallops, number.	Clams, in shell, brls.	Clams preserved, cans.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	Dulse, lbs.		
	Charlotte County.																		$ cts.	
1	Lepreau to Red Head								3500				35000	75000	90	300		4000	55,746 00	1
2	Red Head to L'Etang							930000	3600			5000	4354	6000	6050	75			113,487 80	2
3	L'Etang to St. George			910					90209			24000			333	800	1600		211,884 77	3
4	St. George to St. Stephen								32090				52360			200		600	134,328 98	4
5	Grand Manan							9500							45000	3850		25000	254.461 15	5
6	Campobello			2800					11092		425				7045	785	130		82,553 00	6
7	West Isles			700					21500						1500	300			62,575 00	7
8	St. George and vicinity	7000		1500	25					10000									1,375 00	8
	Totals	7000		5910	25			935500	161991	10000	425	25400	91714	81000	19518	6310	1730	29600	916,411 70	
	St. John County.																			
1	St. John Harbour		640		1900	750	11000												86,670 00	1
2	Port Lepreau to Chance Harbour																		6,775 50	2
3	Chance Harbour to Mispec		250				195		4900										45,614 00	3
4	Teignmouth to Mispec Light																		5,495 00	4
5	Teignmouth Creek to Albert C. Light																		3,160 00	5
	Totals		890		1900	750	11195		4900										147,714 50	

RECAPITULATION

OF the Yield and Value of the Fisheries in District No. 1, New Brunswick, comprising the Counties of St. John and Charlotte, for the Year 1902.

Kinds of Fish.	Quantity.	Price.	Value.
		$ cts.	$ cts.
Salmon, fresh in ice ..... Lbs.	251,925	0 20	50,385 00
Scallops, preserved ..... Cans.	25,400	0 15	3,810 00
Herring, pickled ..... Brls.	6,277	4 00	25,108 00
" fresh or frozen ..... Lbs.	4,428,900	0 01	44,289 00
" smoked ..... Lbs.	4,268,360	0 02	85,367 20
" kippered ..... Cans.	343,000	0 10	34,300 00
Lobsters, canned ..... Cans.	68,676	0 20	13,735 20
" fresh ..... Cwt.	10,768	8 00	86,144 00
Cod, dried ..... Cwt.	5,297	4 00	21,188 00
" fresh or frozen ..... Lbs.	356,750	0 04	14,270 00
Clams in shell ..... Brls.	91,714	1 00	91,714 00
" canned ..... Cans.	81,000	0 10	8,100 00
Haddock, fresh ..... Lbs.	1,064,876	0 03	31,946 28
" dried ..... Lbs.	719	3 00	2,157 00
Finnan haddies, smoked ..... Lbs.	99,002	0 06	5,940 12
Hake, dried ..... Cwt.	11,982	2 25	26,959 50
" sounds ..... Lbs.	12,960	0 50	6,480 00
Pollock, dried ..... Cwt.	21,389½	2 00	42,779 00
Halibut, fresh ..... Lbs.	24,100	0 10	2,410 00
Trout ..... Lbs.	7,000	0 10	700 00
Smelts, fresh ..... Lbs.	5,910	0 05	295 50
Alewives, pickled ..... Brls.	11,195	4 00	44,780 00
" smoked ..... Brls.	750	5 00	3,750 00
" fresh ..... Brls.	1,925	4 00	7,700 00
Sardines, fresh ..... Brls.	166,891	2 00	333,782 00
" canned ..... Cans.	939,500	0 05	46,975 00
Shad, fresh ..... Brls.	890	10 00	8,900 00
Tom cod or frost fish ..... Lbs.	10,000	0 05	500 00
Squid ..... Brls.	425	4 00	1,700 00
Fish oil ..... Galls.	19,518	0 30	5,855 40
Dulse ..... Lbs.	29,600	0 06	1,776 00
Fish used as bait ..... Brls.	6,310	1 50	9,465 00
" " manure ..... Brls.	1,730	0 50	865 00
Total value of catch for 1902	.....	.....	1,064,126 20

RECAPITULATION

OF the Number and Value of Vessels, Boats, Nets, Weirs, &c., engaged in the Fisheries of District No. 1, **New Brunswick,** comprising Counties of St. John and Charlotte, for the Year 1902.

Number.	Material.	Value.
		$ cts.
111	Fishing Vessels, tonnage 4938	58,255 00
1,208	" Boats	59,870 00
8,562	Gill nets, fathoms 177,000	30,003 00
274	Weir seines, fathoms 17,175	32,130 00
590	Trawls	5,453 00
448	Weirs	186,700 00
1,766	Hand lines	1,205 00
9	Lobster canneries	19,500 00
23,439	Lobster traps	20,030 00
12	Freezers and ice houses	7,950 00
775	Smoked fish houses	143,340 00
233	Piers and wharfs	64,885 00
58	Tugs and smacks	11,365 00
5	Sardine factories	41,000 00
4	Fish curing houses	7,000 00
85	Weir scows	5,000 00
60	Pile drivers	5,000 00
25	Fish presses	3,000 00
20	Clam canneries	600 00
1	Fish guano factory	5,000 00
27	Smelt nets	233 00
	Total value of material	707,519 00

NEW BRUNSWICK—District No. 2.

RETURN showing the Number, Tonnage and Value of Vessels, Boats, Nets, &c., in District No. 2, **Province of New Brunswick**, for the year 1902.

Number.	Districts.	Fishing Vessels and Boats.							Fishing Gear or Materials.			Lobster canneries, number.	Kinds of Fish.											
		Vessels.				Boats.			Gill Nets.															
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.		Salmon, fresh, lbs.	Salmon, preserved in cans, lbs.	Salmon, smoked, lbs.	Herring, salted, brls.	Herring fresh, lbs.	Herring, smoked, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Number.
	Restigouche County.			$			$				$													
1	Above Dalhousie	....	....	....	....	32	640	42	35	7320	6000	....	125000	....	....	....	....	....	....	....	....	130	....	1
2	Below Dalhousie	2	37	1650	8	200	4000	372	135	18850	20000	2	179000	....	....	1400	124000	38000	....	....	27000	950	130	2
	Totals	2	37	1650	8	232	4640	414	170	26170	26000	2	304000	....	....	1400	124000	38000	....	....	27000	1080	130	
	Gloucester County.																							
3	Beresford, &c	1	10	800	4	430	10000	875	1500	60500	30500	7	108000	400	500	15300	165000	3000	5000	20	8500	250	2600	3
4	Caraquet, New Bandon and part of Bathurst	125	1430	50400	410	540	16000	950	1960	68000	38000	18	220900	....	....	35000	110000	....	12000	20	185400	300	46060	4
5	Saumarez, Inkerman and Shippegan mainland	21	240	8800	80	250	6000	400	3100	83000	30000	8	58000	....	....	9000	20000	....	12000	20	68120	175	9600	5
6	Shippegan and Miscou Islands	62	760	32000	230	460	21000	980	1100	35000	12000	31	....	6000	1000	11500	60000	....	20000	30	445100	150	23000	6
	Totals	219	2440	92000	724	1680	53000	3205	7660	246500	110500	64	386000	6400	1500	70800	355000	3000	49000	90	707120	875	81200	
	Northumberland County.																							
7	Neguac, &c	3	33	1250	11	200	7000	300	600	50000	45000	9	102000	....	....	4000	20000	15000	6000	20	59200	130	1250	7
8	Bay du Vin, &c	2	30	900	7	250	7500	450	800	80000	70000	4	85000	....	....	5000	10000	5000	250000	25	40000	150	400	8

9	Chatham, &c	....	....	....	....	150	4000	200	400	35000	30000	1	88000	....	....	300	10000	.....	1000	...	.....	....	400	9
10	South-west and North-west Miramichi Rivers	....	....	....	....	125	2000	130	370	15000	8000	...	95000	....	3000	....	.....	.....	.....	....	.....	....	.....	10
	Totals	5	63	2150	18	725	20500	1080	2170	180000	153000	14	370000	....	3000	9300	40000	20000	257000	45	99200	280	2050	
	Kent County.																								
11	Richibucto, &c	1	20	500	3	309	10360	450	4350	84900	13900	14	39400	500	1250	14200	133000	5000	200000	130	153500	3200	1200	11
12	Buctouche, &c	....	....	....	....	510	15000	800	3500	72000	17500	16	.....	...	....	11000	120000	.....	1000	....	150000	200	50	12
13	Cocagne, &c	....	....	....	....	320	9000	480	950	27000	9000	5	.....	...	....	7000	40000	.....	2000	20	15000	150	50	13
	Totals	1	20	500	3	1139	34360	1730	8800	183900	40400	35	39400	500	1250	32200	293000	5000	203000	150	318500	3550	1300	
	Westmorland County.																								
14	Shediac, &c	....	....	....	....	390	12000	720	690	30000	13000	24	3000	....	...	30000	600000	100000	5000	20	190000	300	50	14
15	Botsford	....	....	....	....	400	10500	750	500	17500	7500	50	.....	.....	....	10000	1000000	660000	.....	....	550000	2500	.....	15
16	Sackville and Westmorland	....	....	....	...	225	5000	300	350	8000	2500	....	.....	.....	....	1000	40000	4000000	1000	...	4800	1500	.....	16
17	Dorchester	....	...	.....	..	32	2000	64	200	8100	3500	....	2600	..	....	100	.....	.....	.....	...	.....	....	.....	17
	Totals	....	....	....	....	1047	29500	1834	1740	63600	26500	74	5600	....	....	41100	1640000	5660000	6000	20	744800	4300	50	
18	*Albert County*	....	....	....	....	5	200	8	10	1700	800	....	2500	....	....	200	3000	.....	...	....	.....	....	.....	19

RETURN showing the Quantity and Value of Fish, &c.—**New Brunswick**—*Continued.*

Number.	Districts.	Kinds of Fish.																Fish Products.					Number.
		Cod, tongues and sounds, brls.	Haddock, dried, cwt.	Hake, dried, cwt.	Hake, sounds, lbs.	Halibut, lbs.	Trout, lbs.	Shad, brls.	Smelts, lbs.	Alewives or gaspereau, brls.	Bass, lbs.	Eels, bls.	Oysters, brls.	Flounders, lbs.	Tom cod or frost fish, lbs.	Squid, brls.	Coarse and mixed fish, brls.	Clams, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	Seal skins, number.	Total Value of all Fish.	
	Restigouche County.																						$ cts.	
1	Above Dalhousie	....	...	....	...	.....	8000	....	550000	....	.....	40	....	30000	20000	....	80	10	.....	10	40	....	57,065 00	1
2	Below Dalhousie	....	....	....	..	....	4100	....	80000	....	.....	40	...	15500	10000	....	....	20	20	350	450	....	60,951 00	2
	Totals	....	....	....	....	....	12100	...	630000	....	....	80	....	45500	30000	...	80	30	20	360	490	....	118,016 00	
	Gloucester County.																							
3	Beresford, &c	....	....	140	....	.....	8000	....	4500	....	1500	25	..	19000	3000	15	300	100	270	1300	12000	....	110,651 00	3
4	Caraquet, New Bandon and part of Bathurst	120	....	1000	1500	50000	12000	....	400000	...	8500	200	600	25000	120000	410	1000	1100	17000	8200	20000	22	48,558 00	4
5	Saumarez, Inkerman and Shippegan mainland	15	....	2800	1500	12000	4000	50	400000	2000	2500	150	40	8000	12500	700	3000	6000	2000	2000	2000	100	168,174 00	5
6	Shippegan and Miscou Islands	50	....	1600	2500	31000	500	....	210000	...	7000	100	50	5000	10000	200	1000	1000	8000	5500	8000	30	273,450 00	6
	Totals	185	....	5540	5500	93000	24500	50	1014500	2000	19500	475	690	57000	145500	1325	5300	8200	27270	17000	42000	152	1,037,857 00	
	Northumberland County.																							
7	Neguac, &c	....	240	1500	1000	2900	6000	150	810000	120	4000	120	2000	10000	25000	....	....	400	300	700	800	20	117,085 00	7
8	Bay du Vin, &c	...	200	500	....	3000	1550	170	900000	500	4000	150	4000	12000	120000	....	500	150	.....	5000	5000	..	164,600 00	8
9	Chatham, &c	....	..	....	...	.....	5500	500	1300000	450	13000	30	1300	20000	900000	....	....	50	....	20	3000	....	147,400 00	9
10	South-west and North-west Miramichi Rivers	....	...	..	....	.....	26000	1250		1100	65000	400	....	..	10000	...	..	.....	.....	.....	.....	....	50,100 00	10
	Totals	....	440	2000	1000	5900	39050	2070	3010000	2170	86000	700	7300	42000	1055000	....	500	600	300	5720	8800	20	479,190 00	11

	Kent County.																						
11	Richibucto, &c	4	1500	2580	1180	4250	3000	190	998000	1020	19500	450	405	26400	156000	10	220	200	650	2600	3000	20	235,110 00	12
12	Buctouche, &c.	...	....	500	1000	.....	2000	....	620000	400	1400	100	2000	.....	80000	....	1000	11000	180	4000	4000	2	156,141 00	13
13	Cocagne, &c.	....	....	100	....	.....	2500	...	280000	300	1500	100	1600	3000	56000	....	450	6000	....	2000	8000	....	78,965 00	14
	Totals	4	1500	3180	2180	4250	7500	190	1898000	1720	22400	650	4005	29400	292000	10	1670	17200	830	8600	15000	22	470,216 00	
	Westmorland County.																							
14	Shediac, &c	...	.....	20	....	.....	15000	20	850000	500	3000	150	400	....	20000	....	800	2500	.....	18000	40000	....	291,445 00	15
15	Botsford	...	....	....	....	.....	2000	20	260000	120	.....	30	200	....	10000	1000	....	100	.....	25000	20000	....	252,880 00	16
16	Sackville and Westmorland	....	....	....	....	.....	2500	500	160000	100	2000	50	200	1000	10000	1000	...	100	.....	5000	3000	15	121,895 00	17
17	Dorchester	....	....	....	....	.....	2500	1250	.....	....	.....	30	....	.....	3000	....	....	.....	100	.....	.....	....	14,150 00	18
	Totals	....	...	20	....	.....	22000	1790	1270000	720	5000	260	800	1000	43000	2000	800	2700	100	48000	63000	15	680,370 00	
18	*Albert County*	....	....	....	....	.....	8500	150	2000	....	400	40	....	.....	20000	....	50	.....	50	.....	.....	....	5,535 00	19

RECAPITULATION

OF the Yield and Value of the Fisheries in District No. 2, **New Brunswick**, for the Year 1902.

Kinds of Fish.		Quantity.	Price.	Value.
			$ cts.	$
Salmon, fresh	Lbs.	1,107,500	0 20	221,500
" in cans	"	6,900	0 15	1,035
" smoked	"	5,750	0 20	1,150
Herring	Brls.	155,000	4 00	620,000
" fresh	Lbs.	2,455,000	0 01	24,550
" smoked	"	5,726,000	0 02	114,520
Mackerel fresh	"	515,000	0 12	61,800
" salted	Brls.	305	15 00	4,575
Lobsters preserved	Cans.	1,896,620	0 20	379,324
" fresh or alive	Cwt.	10,085	5 00	50,425
Cod	"	84,780	4 00	339,120
" tongues and sounds	Brls.	189	10 00	1,890
Haddock	Cwt.	1,940	3 00	5,820
Hake	"	10,740	2 25	24,165
" sounds	Lbs.	8,680	0 50	4,340
Halibut	"	103,150	0 10	10,315
Trout	"	113,650	0 10	11,365
Shad	Brls.	4,250	10 00	42,500
Smelts	Lbs.	7,824,500	0 05	391,225
Alewives	Brls.	6,610	4 00	26,440
Bass	Lbs.	133,300	0 10	13,330
Eels	Brls.	2,205	10 00	22,050
Oysters	"	12,795	4 00	51,180
Flounders	Lbs.	174,900	0 05	8,745
Frost fish	"	1,585,500	0 05	79,275
Squids	Brls.	3,335	4 00	13,340
Coarse fish	"	8,400	2 00	16,800
Fish oil	Galls.	28,570	0 30	8,571
Fish as bait	Brls.	79,680	1 50	119,520
" manure	"	129,290	0 50	64,645
Seal skins	No.	209	1 00	209
Clams	Brls.	28,730	2 00	57,460
Total				2,791,084

RECAPITULATION.

NUMBER and Value of Vessels, Boats, Nets, Traps, &c., employed in the Fisheries in District No. 2, **New Brunswick**, in the Year, 1902.

Material.	Value.	Total.
	$	$
227 Fishing vessels (aggregate tonnage 2,560)	96,300	
4,828 do boats	142,200	
701,870 fathoms of nets	357,200	
2,214 smelt nets	112,980	
187 bass scoop nets	1,210	
2 mackerel trap nets	2,000	
330 trawls	1,800	
5,085 hand lines	3,940	
		717,630
189 lobster factories	105,600	
206,300 " traps	180,280	
		285,880
189 freezers and ice houses	56,500	
452 fish and smoke houses	48,720	
54 piers and wharfs	32,200	
70 steamers and smacks	23,200	
875 smelt shanties	13,120	
		175,740
Total		1,179,250

NEW BRUNSWICK—District No. 3.

RETURN of the Number of Vessels, Boats, Nets, &c., and the Quantity and Value of Fish caught in the Fishing District No. 3, Province of **New Brunswick**, for the Year 1902.

Number.	Counties.	Fishing Material.												Kinds of Fish.		
		Vessels.				Boats.			Gill Nets.			Hand Lines.				
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.	Salmon, lbs.	Shad, salted, brls.	Number.
				$			$				$					
1	King's					100	3000	250	500	15000	10000	200	400	22000	300	1
2	Queen's	1	26	300	2	208	3120	510	610	18300	10000	200	400	1500	460	2
3	Sunbury	1	40	400	4	50	1000	100	400	12000	4000	100	200	1500	60	3
4	York					157	2000	333	360	10000	6000	375	1500	39500	100	4
5	Carleton					45	475	125	37	1110	600	250	500	14100	25	5
6	Victoria					160	1240	185	6	100	100	385	1100	5000		6
	Totals	2	66	700	6	720	10835	1503	1913	56510	30700	1510	4100	84100	945	

RETURN showing the Kinds and Quantities of Fish caught in District No. 3, Province of **New Brunswick**.

Number.	Counties.	Kinds of Fish.													Total Value.	Number.
		Herring, salted, brls.	Herring, smoked, lbs.	Whitefish, lbs.	Trout, lbs.	Bass, lbs.	Pickerel, lbs.	Shad, fresh, lbs.	Alewives, salted, brls.	Alewives, smoked, lbs.	Sturgeon, lbs.	Eels, brls.	Perch, lbs.	Mixed and coarse fish, brls.		
1	King's	300	30000	500	20000	5000	15000	10000	300	2500	1000	50	.....	150	15,170	1
2	Queen's	....	.....	.....	6200	.....	25300	4900	1110	1200	....	20	.....	40	11,829	2
3	Sunbury	.....	.....	.....	3000	.....	25000	1000	1000	1500	..	5	.....	40	6,660	3
4	York	.....	.....	.....	29000	.....	35000	3000	160	3000	.....	20	6000	100	15,100	4
5	Carleton	.....	.....	....	7500	.....	.....	1000	....	....	....	10	.....	50	4,070	5
6	Victoria	.....	.....	5000	20000	.....	500	2000	....	.....	.....	15	.....	100	4,375	6
	Totals	300	30000	5500	85700	5000	100800	21000	2570	8200	1000	120	6000	480	57,204	

RECAPITULATION.

SHOWING the Kinds and Quantities of Fish in District No. 3, Province of **New Brunswick,** 1902.

Kinds of Fish.	Quantity.	Price.	Value.
		$ cts.	$ cts.
Salmon, fresh.....Lbs.	84,100	0 20	16,820 00
Shad, salted.....Brls.	945	10 00	9,450 00
Shad, fresh.....Lbs.	21,000	0 05	1,050 00
Herring, salted.....Brls.	300	4 00	1,200 00
" smoked.....Lbs.	30,000	0 02	600 00
Whitefish..... "	5,500	0 18	990 00
Trout..... "	85,700	0 10	8,570 00
Bass..... "	5,000	0 10	500 00
Pickerel..... "	100,800	0 05	5,040 00
Alewives, salted.....Brls.	2,570	4 00	10,280 00
" smoked.....Lbs.	8,200	0 02	164 00
Sturgeon..... "	1,000	0 08	80 00
Eels.....Brls.	120	10 00	1,200 00
Perch.....Lbs.	6,000	0 05	300 00
Coarse fish.....Brls.	480	2 00	960 00
Total.....			57,204 00

RECAPITULATION

OF Fishing Materials in District No. 3, **New Brunswick,** 1902.

Materials.	Value.	Totals.
	$ cts.	$ cts.
1,509 men employed.....		
2 fishing vessels (66 tons).....	700 00	
720 fishing boats and canoes.....	10,835 00	
1,913 gill nets, (56,510 fathoms).....	30,700 00	
1,510 hand lines (fly fishing).....	4,100 00	
50 eel traps.....	50 00	
		46,385 00
18 sportsmen's cottages.....	6,000 00	
63 ice houses.....	1,650 00	
95 smoke houses.....	2,500 00	
1 fishing wharf.....	350 00	
		10,500 00
Total.....		56 885 00

RECAPITULATION showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials, &c., used in the whole Province of **New Brunswick**, for the Year 1902.

Number.	COUNTIES.	FISHING VESSELS AND BOATS.							FISHING GEAR OR MATERIALS.										Number.
		Vessels.				Boats.			Gill Nets.			Seines.			Trawls.		Weirs.		
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.	
	District No. 1.			$			$				$			$		$		$	
1	Charlotte	95	1630	50405	359	918	45972	1243	682	21300	7255	274	13705	26210	506	4618	414	182000	1
2	St. John	16	308	7850	46	290	13898	886	7880	155700	22748	70	3470	5920	84	835	34	4700	2
	District No. 2.																		
3	Albert	...	...	...	...	5	200	8	10	1700	800	...	...	...	...	...	...	...	3
4	Westmorland	...	...	...	...	1047	29500	1834	1740	63600	26500	...	...	...	...	...	...	...	4
5	Kent	1	20	500	3	1139	34360	1730	8800	183900	40400	...	...	...	40	550	...	...	5
6	Northumberland	5	63	2150	18	725	20500	1080	2170	180000	153000	...	...	...	...	...	...	...	6
7	Gloucester	219	2440	92000	724	1680	53000	3205	766	246500	110500	...	...	...	290	1250	...	...	7
8	Restigouche	2	37	1650	8	232	4640	414	170	26170	26000	...	...	...	...	...	...	...	8
	District No. 3.																		
9	Victoria	...	...	...	...	160	1240	185	76	100	100	...	...	...	...	...	...	...	9
10	Carleton	...	...	...	...	45	475	125	37	1110	600	...	...	...	...	...	...	...	10
11	York	...	...	...	...	157	2000	333	360	10000	6000	...	...	...	...	...	...	...	11
12	Sunbury	1	40	400	4	50	1000	100	400	12000	4000	...	...	...	...	...	...	...	12
13	Queen's	1	26	300	2	208	3120	510	610	18300	10000	...	...	...	...	...	...	...	13
14	King's	...	...	...	...	100	3000	250	500	15000	10000	...	...	...	...	...	...	...	14
	Totals	340	4564	155255	1164	6756	212905	11903	24131	935380	417903	344	17175	32130	920	7253	448	186700	

RECAPITULATION showing the Number, Tonnage and Value of Vessels and Boats and other Fishing Materials, &c.

New Brunswick—*Continued.*

Number.	COUNTIES.	FISHING GEAR OR MATERIALS—*Con.*				LOBSTER PLANT.					OTHER FIXTURES USED IN FISHERIES.								
		Smelt Nets.		Hand Lines.		Canneries.		Traps.		Persons employed in canneries.	Freezers and Ice Houses.		Smoke and Fish Houses.		Piers and Wharfs.		Tugs, Steamers & Smacks.		Number.
		Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.		Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	
	District No. 1.		$		$		$		$			$		$		$		$	
1	Charlotte	27	233	1666	1130	9	19500	18189	15460	234	5	5550	739	138930	225	64485	33	8365	1
2	St. John	...	...	100	75	...	...	5250	4570	...	7	2400	36	4410	8	400	25	3000	2
	District No. 2.																		
3	Albert	...	...	...	...	...	...	...	...	...	...	...	1	20	...	...	...	...	3
4	Westmorland	236	11500	240	120	74	27000	59000	50000	1200	65	1300	177	12850	18	8300	2	2000	4
5	Kent	625	25500	700	330	35	13000	37000	32000	540	16	8100	32	3700	18	700	3	8000	5
6	Northumberland	880	55300	170	250	14	14000	14700	11800	395	46	19400	112	10600	1	10000	18	6000	6
7	Gloucester	318	12080	3925	3225	64	50000	91400	83180	1788	54	15200	126	20950	16	13000	43	4000	7
8	Restigouche	155	8660	50	15	2	1600	4200	3300	81	8	14500	4	600	1	200	4	3200	8
	District No. 3.																		
9	Victoria	...	...	385	1100	...	...	...	...	...	3	50	...	...	...	...	...	...	9
10	Carleton	...	...	250	500	...	...	...	...	...	...	...	...	...	...	...	...	...	10
11	York	...	...	375	1500	...	...	...	...	...	5	150	5	150	...	...	...	...	11
12	Sunbury	...	...	100	200	...	...	...	...	...	5	150	5	150	...	...	...	...	12
13	Queen's	...	...	200	400	...	...	...	...	...	35	500	65	1000	...	...	...	...	13
14	King's	...	...	200	400	...	...	...	...	...	15	800	20	1200	1	350	...	...	14
	Totals	2241	113213	8361	9245	198	125100	229739	200310	4238	264	68100	1322	194560	288	97435	128	34565	

RECAPITULATION showing the Quantity and Value of Fish, &c.—**New Brunswick**—*Continued.*

Number.	Counties.	Kinds of Fish.																			Number.
		Salmon, fresh, lbs.	Salmon, preserved in cans, lbs.	Salmon, smoked, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Haddock, smoked finnan haddies, lbs.	Hake, dried, cwt.	Hake, sounds, lbs.	Pollock, cwt.	Halibut, lbs.	
	District No. 1.																				
1	Charlotte	.....	.....	.....	6277	4428900	4268360	.....	.....	68676	8654	‡5257	.....	1014876	719	99002	10332	12960	21282	24100	1
2	St. John	251925	.....	.....	.....	.....	.....	.....	.....	.....	2114	40	.....	50000	.....	.....	1650	.....	107½	.....	2
	District No. 2.																				
3	Albert	2500	.....	.....	200	3000	.....	.....	.....	.....	.....	50	.....	.....	.....	.....	.....	.....	.....	.....	3
4	Westmorland	5600	.....	.....	41100	1640000	5660000	6000	20	744800	4300	50	.....	.....	.....	.....	20	.....	.....	.....	4
5	Kent	39400	500	1250	32200	293000	5000	203000	150	318500	3550	1300	4	.....	1500	.....	3180	2180	.....	4250	5
6	Northumberland	370000	.....	3000	9300	40000	20000	257000	45	99200	280	2050	.....	.....	440	.....	2000	1000	.....	5900	6
7	Gloucester	386000	6400	1500	70800	355000	3000	49000	90	707120	875	81200	185	.....	.....	.....	5540	5500	.....	93000	7
8	Restigouche	304000	.....	.....	1400	124000	38000	.....	.....	27000	1080	130	.....	.....	.....	.....	.....	.....	.....	.....	8
	District No. 3.																				
9	Victoria	5000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9
10	Carleton	14100	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
11	York	39500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11
12	Sunbury	1500	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12
13	Queen's	2000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13
14	King's	22000	.....	.....	300	.....	30000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14
	Totals	1443525	6900	5750	161577	6883900	10024360	515000	305	1965296	20853	90077	189	1064876	2659	99002	22722	21640	213891½	127250	

In No. 1, add 356,750 lbs. of fresh cod.

RECAPITULATION showing the Quantity and Value of Fish, &c.—**New Brunswick**—*Concluded.*

Number.	Counties.	Kinds of Fish.													Fish Products.					Total Value of all Fish.	Number.
		Trout, lbs.	Shad, brls.	Smelts, lbs.	Alewives or gaspereau, brls.	Bass, lbs.	Pickerel, lbs.	Eels, brls.	Sardines, brls.	Oysters, brls.	Flounders, lbs.	Tom cod or frost fish, lbs.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	Seal skins, number.	Clams, brls.		
	District No. 1.																			$ cts.	
1	Charlotte	7000	....	5910	25	...	...	....	161991	.....	.....	10000	425	....	19518	6310	1730	....	91714	916,411 70	1
2	St. John	.....	890	.....	13845	.....	.....	....	4900	.....	.....	.....	....	..	.....	.....	...	....	.....	147,714 50	2
	District No. 2.																				
3	Albert	8500	150	2000	.....	400	.....	40	.....	.....	.....	20000	....	50	50	.....	.....	....	....	5,535 00	3
4	Westmorland	22000	1790	1270000	720	5000	.....	260	.....	800	1000	43000	2000	800	100	48000	63000	15	2700	680,370 00	4
5	Kent	7500	190	1898000	1720	22400	.....	650	.....	4005	29400	292000	10	1670	830	8600	15000	22	17200	470,216 00	5
6	Northumberland	39050	2070	3010000	2170	86000	.....	700	.....	7300	42000	1055000	....	500	300	5720	8800	20	600	479,190 00	6
7	Gloucester	24500	50	1014500	2000	19500	.....	475	.....	690	57000	145500	1325	5300	27270	17000	42000	152	8200	1,037,857 00	7
8	Restigouche	12100	....	630000	.	....	.....	80	.....	.....	4	30000	....	80	20	360	490	...	30	118,016 00	8
	District No. 3.																				
9	Victoria	20000	10	.....	... ..	.....	500	15	.....	.....	....	.....	....	100	.... .	.... .	.....	....	.. ..	4,375 00	9
10	Carleton	7500	30	.....	.....	.....	.....	10	.....	.....	.....	.....	....	50	... .	. ...	.. ..	....	.....	4,070 00	10
11	York	29000	115	.....	160	.....	35000	20	.....	....	.....	.. ..	....	250	.....	...	....	....	.... ..	15,100 00	11
12	Sunbury	3000	65	.....	1000	.....	25000	5	.....	.....	...	.....	....	40	.....	.....	.....	....	.....	6,660 00	12
13	Queen's	6200	480	.....	1110	.....	25300	20	.....	.....	.....	.....	....	40	... ..	.....	.....	....	.....	11,829 00	13
14	King's	20000	350	.....	300	5000	15000	50	.... .	.....	...	.....	....	150	....	.....	.....	...	.....	‡ 15,170 00	14
	Totals	206350	6190	7830410	23050	138300	100800	2325	166891	12795	174900	1595500	3760	9030	48088	85990	131020	209	120444	3,912,514 20	

‡ In No. 14 the value of 5,000 lbs. of bass, 1,000 lbs. of sturgeon, 500 lbs. of white fish and 2,500 lbs. of smoked alewives should be added.

RECAPITULATION

OF the Yield and Value of the Fisheries of the **whole** Province of **New Brunswick**, for the Year 1902.

Kinds of Fish.	Quantity.	Rate.	Value.	Total Value.
		$ cts.	$ cts.	$ cts.
Cod, dried ... Cwt.	90,077	4 00	360,308 00	
" fresh ... Lbs.	356,750	0 04	14,270 00	
" tongues ... Brls.	189	10 00	1,890 00	
				376,468 00
Haddock, dried ... Cwt.	2,659	3 00	7,977 00	
" fresh ... "	1,064,876	0 03	31,946 28	
" smoked (finnan haddies) ... Lbs.	99,002	0 06	5,940 12	
				45,863 40
Hake ... Cwt.	22,722	2 25	51,124 50	
" sounds ... Lbs.	21,640	0 50	10,820 00	
				61,944 50
Pollock ... Cwt.	21,389½	2 00	...	42,779 00
Tom cod or frost fish ... Lbs.	1,595,500	0 05	...	79,775 00
Halibut ... "	127,250	0 10	...	12,725 00
Flounders ... "	174,900	0 05	...	8,745 00
Salmon, fresh ... "	1,443,525	0 20	288,705 00	
" preserved in cans ... "	6,900	0 15	1.035 00	
" smoked ... "	5,750	0 20	1,150 00	
				290,890 00
Trout ... "	206,350	0 10	...	20,635 00
Smelts ... "	7,830,410	0 05	...	391,520 50
White fish ... "	5,500	0 18	...	990 00
Herring, salted ... Brls.	161,577	4 00	646,308 00	
" fresh or frozen ... Lbs.	6,883,900	0 01	68,839 00	
" smoked ... "	10,024,360	0 02	200,487 20	
" kippered in cans ... "	343,000	0 10	34,300 00	
				949,934 20
Sardines ... Brls,	166,891	2 00	333,782 00	
" preserved ... Cans.	939,500	0 05	46,975 00	
				380,757 00
Shad ... Brls.	6,190	10 00	...	61,900 00
Alewives ... "	23,091	...	...	93,114 00
Eels ... "	2,325	10 00	...	23,250 00
Pickerel ... Lbs.	100,800	0 05	...	5,040 00
Bass (sea) ... "	138,300	0 10	...	13,830 00
Mackerel, salted ... Brls.	305	15 00	4,575 00	
" fresh ... Lbs.	515,000	0 12	61,800 00	
				66,375 00
Sturgeon ... "	1,000	0 08	...	80 00
Oysters ... Brls.	12,795	4 00	...	51,180 00
Clams in shells ... "	120,441	...	149,174 00	
" preserved ... Cans.	81,000	0 10	8,100 00	
				157,274 00
Scollops, preserved ... "	25,400	0 15	...	3,810 00
Squid ... Brls.	3,760	4 00	...	15,040 00
Lobsters, preserved in cans ... Lbs.	1,965,296	0 20	393,059 20	
" alive or in shell ... Cwt.	20,853	...	136,569 00	
				529,628 20
Coarse and mixed fish ... Brls.	9,030	2 00	18,060 00	
" " ... Lbs.	29,600	...	1,776 00	
				19,836 00
Fish as bait ... Brls.	85,990	1 50	...	128,985 00
" manure ... "	131,020	0 50	...	65,510 00
Fish oil ... Galls.	48,088	0 30	...	14,426 40
eal skins ... No.	209	1 00	...	209 00
Total for 1902	...	...	...	3,912,514 20
Total for 1901	...	...	...	4,193,264 50
Decrease	...	...	...	280,750 30

RECAPITULATION

OF the number of Fishing Vessels, Boats, Nets, &c., showing the total value of Fishing Material in **New Brunswick**, during the Year 1902.

	Articles.	Value.	Total.
		$	$
340	Fishing vessels (4,564 tons)	155,255	
6,756	" boats	212,905	
24,131	Gill nets (935,380 fathoms)	417,903	
344	Seines (17,175 fathoms)	32,130	
448	Weirs	186,700	
2	Trap nets	2,000	
2,241	Smelt nets	113,213	
187	Bag nets for bass	1,210	
920	Trawls	7,253	
8,361	Hand lines	9,245	
50	Eel traps	50	
			1,137,864
198	Lobster canneries	125,100	
229,739	" traps	200,310	
			325,410
5	Sardine canneries	41,000	
20	Clam "	600	
1	Guano factory	5,000	
4	Curing establishments	7,000	
25	Fish presses	3,000	
264	Fish freezers and ice houses	68,100	
1,322	Fish and smoke houses	194,560	
128	Fishing tugs or smacks	34,565	
288	Piers and wharfs	97,435	
875	Smelt fishing shanties	13,120	
18	Angling shanties	6,000	
85	Scows for weirs	5,000	
60	Pile drivers	5,000	
			480,380
	Total		1,943,654

Statement of men employed in the New Brunswick fisheries.

Number of	fishing vessels	1,164
"	" boats	11,903
"	persons in canneries	4,238
	Total	17,305

APPENDIX No. 5.

PRINCE EDWARD ISLAND.

REPORT ON THE FISHERIES OF PRINCE EDWARD ISLAND FOR THE YEAR 1902, BY INSPECTOR J. A. MATHESON.

CHARLOTTETOWN, P.E.I., January 2, 1903.

To the Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I have the honour to submit my annual report of the fisheries of this province for the year ending December 31, 1902.

Mackerel.

The catch shows a large decrease. In the early part of the season, the prospect for good fishing was favourable but few, if any, were taken till October when a small number of very large fish were caught at North Cape and Nail Pond.

Twenty-five years ago the American fishing fleet of one hundred and fifty to two hundred vessels fished in our waters. Now it is unusual to see one vessel. Many opinions are offered to account for the mackerel having left our coast. It is claimed by some, that the large number of nets used in catching the spring mackerel breaks up the schools and drives them from inshore into deeper waters. I am of opinion that it is to some extent caused by the fact that much smaller quantities of bait are thrown to the fish now than in former years when the American fleet fishing in our waters distributed about one thousand barrels of fat poggies and clams daily, thereby making this coast a good feeding ground.

Oysters.

I have to report a decrease in the quantity taken, caused by the stormy weather in the latter part of the season.

As a further protection to this shell fish, I would recommend that spring fishing be disallowed and also that the size limit be increased from two inches as at present to three inches.

This would meet with the approval of fishermen and dealers.

Lobsters.

You will notice that the pack of this crustacean has decreased about seven thousand cases, due principally to the fact that the number of traps in use this year was a sixth less than last year, and that over twenty factories closed down and did not operate this season. I find that while the quantity of fish is decreasing the quality and size are improving especially on the south side.

Herring.

This fishing shows a further decrease from former years owing to the rough weather during the spring season when they are generally netted.

Cod.

An increase in the catch of this fish is due to the fishermen's energy, stimulated by the enhanced value in foreign and home markets.

Smelts.

Owing to the mild season, the usual effort was not made to fish them as the weather would not permit of their being exported through fear of spoiling in transit.

Trout.

About the same quantity was taken and this fishing afforded the usual amount of pleasure to our sportsmen and to tourists who visited the province during the summer.

Hake.

The fishing was an average catch, but I regret to say that very little interest was taken in this branch of the industry.

I have the honour to be, Sir;
Your obedient servant.

J. A. MATHESON,
Inspector of Fisheries.

PRINCE EDWARD ISLAND.

RETURN showing the Number, Tonnage and Value of Vessels and Boats, and the Quantity and Value of all Fishing Materials, &c., County of **King's**, Province of **Prince Edward Island**, for the Year 1902.

Number.	Districts.	Fishing Vessels and Boats.							Fishing Gear or Materials.					No. of Lobster Canneries.	Kinds of Fish.								Number.
		Vessels.				Boats.			Gill Nets.			Trawls.												
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.		Salmon, fresh, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Cod, dried, cwt.	
	King's County.			$			$				$		$										
1	Souris and Red Point	3	60	1000	12	75	1300	100	200	4000	1600	100	1000	4	....	200	36000	.....	1000	75	61296	2000	1
2	Bay Fortune	....	..	....	....	30	600	76	80	1600	640	5	50	2	250	40	24000	.	...	10	15552	100	2
3	Annandale	....	....	....	....	120	1850	280	300	6000	2400	10	100	7	....	100	30000	....	500	20	119136	200	3
4	Georgetown	5	150	2800	28	115	2600	265	500	10000	3500	50	500	4	....	125	300000	75000	2000	10	103296	450	4
5	Murray Harbour North	....	....	....	..	95	1300	150	300	5500	2000	5	50	12	....	120	60000	.....	1000	5	172416	480	5
6	" " South	9	225	4656	62	75	1650	148	200	3200	1600	80	800	7	....	150	102000	.....	....	15	58464	3143	6
7	Morell and St. Peters	2	54	800	9	90	1800	160	280	4480	2240	25	250	8	1450	125	....	.....	1000	100	102672	1000	7
8	Naufrage	....	....	....	....	45	850	90	100	2400	800	....	....	3	....	40	.....	....	500	60	50640	200	8
9	North Lake	....	....	....	....	55	825	120	150	3000	1200	5	50	3	...	60	. . .	. .	500	30	49872	250	9
10	East Lake	....	....	....	....	46	740	100	100	2000	800	20	200	1	....	100	....	.....	1000	350	21024	350	10
	Totals	19	489	.. .	111	746	.....	1489	2210	42180	.....	300	....	51	1700	1060	552000	75000	7500	675	754368	8173	
	Values $	....	....	9256	....	....	13515	....	....	.....	16780	....	3000	....	340	4240	5520	1500	900	10125	150873	32692	

RETURN showing the Number and Value of Vessels, Quantities of Fish and Fish Products, &c.—**Prince Edward Island**—*Continued.*

Number.	Districts.	Kinds of Fish.																Fish Products.			Seal skins, No.	Clams, brls.	Total Value of all Fish.	Number.
		Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Hake, dried, cwt.	Hake, sounds, lbs.	Pollock, cwt.	*Halibut, lbs.*	Trout, lbs.	Smelts, lbs.	Alewives or Gaspereau, brls.	Eels, brls.	Capelin, brls.	Oysters, brls.	Tom cod or frost fish, lbs.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure.				
	King's County.																						$ cts.	
1	Souris and Red Point	15	2000	150	1000	2000	....	200	1000	2000	....	15	200	....	1000	150	150	1500	700	50	....	30	29,964 20	1
2	Bay Fortune	....	500	....	50	100	..	....	2000	2500	....	5	25	15	...	50	30	75	400	20	.....	25	5,775 40	2
3	Annandale	....	1000	....	100	200	....	....	500	1650	100	5	....	....	1000	100	100	150	1480	50	.....	10	29,629 70	3
4	Georgetown	10	1000	....	200	400	25	500	600	10000	...	160	...	....	2000	100	120	325	1200	100	.....	25	33,726 70	4
5	Murray Harbour North	...	....	...	150	300	....	1000	500	4000	30	5	20	....	....	50	50	315	2200	....	.....	....	42,420 20	5
6	" " South	40	1000	100	2060	4000	30	400	700	25000	20	125	....	....	1200	150	100	2600	1000	150	.....	15	39,574 80	6
7	Morell and St. Peters	15	500	50	400	800	20	300	4000	8000	75	40	10	...	1000	50	50	700	1400	....	2000	..	36,809 40	7
8	Naufrage	....	...	10	...	....	....	2000	1000	500	10	2	5	...	.....	...	40	100	540	....	5000	....	23,393 00	8
9	North Lake	....	...	15	...	...	....	500	2000	1000	60	.	10	....	.....	...	30	125	430	...	.....	....	13,071 90	9
10	East Lake	....	....	100	250	500	..	300	600	500	10	15	25	....	500	40	100	300	350	50	.....	....	13,892 30	10
	Totals	80	6000	425	4210	8300	75	5200	12900	55150	305	372	295	15	6700	690	770	6190	9700	420	7000	105		
	Values $	800	180	1275	9472	4150	150	520	1290	2757	1220	3720	590	60	335	2760	1540	1857	14550	420	14000	420	268,257 60	

RETURN Showing the Number and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials, &c., in the County of **Queen's**, Province of **Prince Edward Island**, for the Year 1902.

Number.	Districts.	Fishing Boats.			Fishing Gear or Materials					Lobster Canneries, No.	Kinds of Fish.					Number.
					Gill Nets.			Smelt Nets.								
		Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.		Herring, salted, brls.	Herring, fresh, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	
	Queen's County.		$				$		$							
1	Tracadie	80	2400	125	400	8000	2500	30	600	4	2000	.....	30000	250	85440	1
2	New London	75	2250	130	200	4000	1250	4	100	4	2500	.....	.....	160	53568	2
3	Crapaud	30	850	65	15	125	100	15	375	6	150	.....	.....	.....	57072	3
4	Point Prim	90	2250	200	.....	.....	.....	6	150	20	150	.....	.....	.....	94848	4
5	Rustico	90	2500	200	90	250	680	30	600	5	4500	.....	25000	125	82224	5
6	Charlottetown	40	600	80	.....	.....	.....	10	250	.....	.....	25000	.....	.....	.....	6
7	Wheatley River	3	150	6	20	100	40	.....	.....	.....	150	.....	.....	.....	.....	7
8	Lot 65	90	1700	150	15	125	100	4	100	9	200	.....	.....	.....	87024	8
9	Pownal	35	300	60	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	24768	9
10	Bays and Rivers	40	400	80	.....	.....	.....	.....	.....	.....	2500	.....	.....	.....	.....	10
	Totals	573	13400	1096	740	12600	4670	99	2175	51	12150	25000	55000	535	484944	
	Values $	.....	.....	.....	.....	.....	.....	.....	.....	.....	48600	250	6600	8025	96988	

RETURN Showing the Kinds and Quantities of Fish and Fish Products in the County of **Queen's**, Province of **Prince Edward Island**, for the Year 1902.

Number.	Districts.	Kinds of Fish.									Fish Products.			Total Value of all Fish.	Number.
		Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Trout, lbs.	Smelts, lbs.	Alewives or Gaspereau, brls.	Eels, brls.	Oysters, brls.	Tom cod or frost fish, lbs.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.		
	Queen's County.													$ cts.	
1	Tracadie	20	3500	40	700	60000	1000	300	2500		2400	1200	100	69,628 00	1
2	New London		2000	25	800	25000	150	15	100		1200	500	75	35,028 60	2
3	Crapaud	25				10000	10	10				300	60	13,289 40	3
4	Point Prim				2500	5000	20	12	600			300	100	23,219 60	4
5	Rustico	30	4500	45	500	12000	20				2000	250	140	59,764 80	5
6	Charlottetown				2000	10000								950 00	6
7	Wheatley River		2000	10	300	6000		25			700			9,490 00	7
8	Lot 65	10				5000			655			300		21,574 80	8
9	Pownal	5										50		5,053. 60	9
10	Bays and Rivers				5000	30000	1000	100	500	1000				19,050 00	10
	Totals	90	12000	120	11800	163000	2200	462	4355	1000	6300	2900	475		
	Values $	450	48000	1200	1180	8150	8800	4620	17420	50	1890	4350	475	257,048 80	

RETURN showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials, &c., in the County of **Prince**, Province of **Prince Edward Island**, for the Year 1902.

Number.	Fishing Districts.	Fishing Vessels and Boats.							Fishing Gear and Materials.							Number Lobster Canneries.	Kinds of Fish					
		Vessels.				Boats.			Gill Nets.			Smelt Nets		Hand Lines.			Herring, salted, brls.	Herring, fresh, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Number.
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.							
	Prince County.			$			$				$		$		$							
1	Tignish	....	....	....	....	30	300	60	40	1000	200	4	80	12	12	6	500	.....	....	300	64560	1
2	Nail Pond	....	....	....	....	43	1865	90	48	930	450	....	.....	.....	.....	4	1870	.....	....	192	58848	2
3	Skinners Pond	....	....	....	....	42	740	46	39	860	260	....	.....	.....	.....	4	825	.....	3080	8	67056	3
4	Miminigash	1	12	200	5	47	1812	93	125	4068	1098	3	75	110	47	5	795	.....	....	262	40484	4
5	Alberton	4	157	3400	31	27	900	56	185	3900	1850	16	240	105	105	8	1900	.....	....	297	73344	5
6	Narrows Lot 11	....	....	....	....	30	1010	56	10	200	50	4	120	6	6	2	50	.....	....	.....	26248	6
7	Ellerslie Lot 12	....	....	....	....	40	1500	75	100	2000	400	10	200	50	25	5	500	.....	....	.....	35280	7
8	Bidford	....	....	....	....	36	450	55	5	100	20	....	.....	16	8	1	125	.....	....	.....	4800	8
9	Grand River	....	....	....	....	67	1150	108	29	410	135	11	190	14	7	4	100	.....	5800	.....	11760	9
10	Malpeque	1	15	300	5	100	3500	205	21	200	105	13	325	40	20	3	100	.....	....	.....	15320	10
11	Richmond Bay	1	10	350	4	80	1000	100	10	190	70	....	.....	10	10	..	200	2000	....	60	.....	11
12	Roxbury Lot 6	....	....	....	....	28	500	40	9	180	34	8	120	20	20	..	109	.....	....	.....	.....	12
13	Fifteen Point	....	....	....	....	108	4270	224	284	3847	699	....	.....	.....	.....	25	500	...	....	.....	200383	13
14	Brae	....	....	....	....	7	350	14	8	160	32	10	300	.....	.....	2	....	.....	....	.....	19200	14
15	West Point	....	....	....	....	15	4500	30	30	360	1200	1	20	30	30	4	50	.....	....	.....	32256	15
16	Travellers Rest	....	....	....	....	100	1500	170	8	160	32	7	105	10	10	1	100	.....	....	.....	5370	16
17	Summerside	....	....	....	....	20	300	30	3	60	15	10	200	.....	....	..	.....	4000	....	.....	.....	17
18	Carleton	....	....	....	....	23	1130	63	35	560	125	8	160	.....	...	7	.....	4000	..	....	51270	18
15	Tryon	....	....	....	....	39	3235	78	59	1380	315	8	75	.....	.....	9	.....	.....	....	.....	94112	19
	Totals	7	194	....	45	882	....	1593	1048	20565	.....	113	.....	423	.....	90	7724	10000	8880	1119	800291	
	Values $	....	....	4250	....	....	30012	....	.....	.....	7090	....	2210	.....	330	..	30896	100	1065	16785	160050	

RETURN showing the Kinds and Quantities of Fish and Fish Products in the County of **Prince**, Province of **Prince Edward Island**, for the Year 1902.

Number.	Fishing District.	Kinds of Fish and Fish Products.															Total Value of all Fish.	Number.
		Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Haddock, dried, cwt.	Hake, dried, cwt.	Hake, sounds, lbs.	Trout, lbs.	Smelts, lbs.	Alewives or gaspereau, brls.	Eels, brls.	Oysters, brls.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Seal skins, No.	Clams, brls.	
	Prince County.																	$ cts.	
1	Tignish		500	200	500	2000		2000						1000	1500			26,787 00	1
2	Nail Pond		1062	300	600	800								720	1350	20		37,308 60	2
3	Skinners Pond		130		23	11								155	1000	500		20,324 55	3
4	Miminigash		1606		739	1859	500	11600		5		15	30	1155	2000			28,369 55	4
5	Alberton		285	13	96			32000						75	1120			31,421 30	5
6	Narrows Lot 11		200					42000						50	450			9,039 60	6
7	Ellerslie Lot 12		100					10400		15	1200			50	2000		600	20,341 00	7
8	Bidford	34						1600		6	900				125			5,557 50	8
9	Grand River		50				250	7000		5	2025				510			12,938 00	9
10	Malpeque		4000					3000			2250			200	400			29,274 00	10
11	Richmond Bay	30	120							2	2450			40	175			12,444 50	11
12	Roxbury Lot 6		200	12				5000		14	389			82				3,242 60	12
13	Fifteen Point														5065			49,674 10	13
14	Brae							20000	12	4	300				300		500	8,578 00	14
15	West Point														1010			8,166 20	15
16	Travellers Rest			50				10000		15	6000			20	150			26,505 00	16
17	Summerside	70						10000		5	200				50			1,815 00	17
18	Carleton							16000		3	250				890			13,459 00	18
19	Tryon							13000							2000			22,472 40	19
	Totals	134	8253	575	1958	4670	750	183600	12	74	15964	15	30	3547	20095	520	1100		
	Values $	670	33012	1725	4405	2335	75	9180	48	740	63856	60	60	1064	30142	1040	4400	361,717 90	

RETURN showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of all Fishing Materials and other Fixtures used in the Fishing Industry in the Province of **Prince Edward Island**, for the Year 1902.

Number.	County.	Fishing Vessels and Boats.							Fishing Gear or Material.												Number.
		Vessels.				Boats.			Gill Nets.			Seines.			Trap Nets.		Trawls.		Dip Nets.		
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	
				$			$				$			$		$		$		$	
1	King's	19	489	9256	111	746	13515	1489	2210	42180	16780	.....	.....	.....	220	440	30	3000	440	440	1
2	Queen's	.....	.....	.....	.....	573	13400	1096	1740	12600	4670	2	270	250	.....	.....	.....	.....	.....	.....	2
3	Prince	7	194	4250	45	882	30012	1593	1048	20565	7090	4	470	1200	1	1000	66	793	.....	.....	3
	Totals	26	683	13506	156	2201	56927	4168	4998	75345	28540	6	740	1450	221	1440	96	3793	440	440	

Number.	County.	Fishing Gear or Materials.				Lobster Plant.					Other Fixtures Used in Fisheries.								Value of Whole Fishing Gear.	Number.
		Smelt Nets.		Hand Lines.		Canneries.		Traps.		Persons Employed in Canneries.	Freezers and Ice Houses.		Smoked and Fish Houses.		Piers and Wharves.		Tugs, Smacks and Steamers.			
		Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.		Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.		
			$		$		$		$			$		$		$		$	$ cts.	
1	King's	46	310	1740	1740	51	31810	98576	64680	628	1	2150	164	4075	18	1800	12	2250	152,246 00	1
2	Queen's	99	2175	750	185	51	17930	54930	30385	792	.....	.....	.....	.....	7	600	.....	.....	69,595 00	2
3	Prince	113	2210	423	300	90	34125	88390	58027	832	4	1900	5	500	10	32400	.....	.....	173,807 00	3
	Totals	258	4695	2913	2225	192	83865	241896	153092	2252	5	4050	169	4575	35	34800	12	2250	395,648 00	

RETURN showing the Kinds and Quantities of Fish and Fish Products in the Province of **Prince Edward Island**, for the Year 1902.

Number.	County.	Kinds of Fish.															Number.
		Salmon, fresh, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Hake, dried, cwt.	Hake, sounds, lbs.	Pollock, cwt.	Halibut, lbs.	
1	Kings	1700	1060	552000	75000	7500	675	754368	.....	8173	80	6000	425	4210	8300	75	5200	1
2	Queens	.....	12150	25000	.....	55000	535	484944	90	12000	120	.....	.....	.....	.....	.....	.....	2
3	Prince	.....	7724	10000	.....	8880	1119	800291	134	8253	.....	.....	575	1958	4670	.....	.....	3
	Totals	1700	20934	587000	75000	71380	2329	2039603	224	28426	200	6000	1000	6168	12990	75	5200	

Number.	County.	Kinds of Fish.									Fish Products.					Total value of all Fish.	Number.
		Trout, lbs.	Smelts, lbs.	Alewives or Gaspereau, brls.	Eels, brls.	Caplin, brls.	Oysters, brls.	Tom cod or frost fish, lbs.	Squid, brls.	Coarse and mixed fish, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	Seal skins, No.	Clams, brls.		
																$ cts.	
1	Kings	12900	55150	305	372	295	15	6700	690	770	6190	9700	420	7000	105	268,257 60	1
2	Queens	11800	163000	2200	462	.....	4355	1000	.....	.....	6300	2900	475	.....	.....	257,048 80	2
3	Prince	750	183600	12	74	.....	15964	.....	15	30	3547	20095	.....	520	1100	361,717 90	3
	Totals	25450	401750	2517	908	295	20334	7700	705	800	16037	32695	895	7520	1205	887,024 30	

RECAPITULATION

SHOWING Yield and Value of the different Fisheries of the Province of **Prince Edward Island** during the Year 1902.

Kinds of Fish.	Quantity.	Price.	Value.
		$ cts.	$ cts.
Salmon, fresh ..... Lbs.	1,700	0 20	340 00
Herring, salted ..... Brls.	20,934	4 00	83,736 00
" fresh. ..... Lbs.	587,000	0 01	5,870 00
" smoked ..... "	75,000	0 02	1,500 00
Mackerel, fresh ..... "	71,380	0 12	8,565 60
" salted ..... Brls.	2,329	15 00	34,935 00
Lobsters, preserved in cans. ..... Lbs.	2,039,603	0 20	407,920 60
" fresh in shell ..... Cwt.	224	5 00	1,120 00
Cod, dried ..... "	28,426	4 00	113,704 00
" tongues and sounds. ..... Brls.	200	10 00	2,000 00
Haddock, fresh ..... Lbs.	6,000	0 03	180 00
" dried ..... Cwt.	1,000	3 00	3,000 00
Hake, dried ..... "	6,168	2 25	13,878 00
" sounds .. .. Lbs.	12,970	0 50	6,485 00
Pollock ..... Cwt.	75	2 00	150 00
Halibut ..... Lbs.	5,200	0 10	520 00
Trout ..... "	25,450	0 10	2,545 00
Smelts ..... "	401,750	0 05	20,087 50
Alewives or gasperaux ..... Brls.	2,517	4 00	10,068 00
Eels ..... "	908	10 00	9,080 00
Caplin ..... "	295	2 00	590 00
Oysters ..... "	20,334	4 00	81,336 00
Tom cod or frost fish. ..... Lbs.	7,700	0 05	385 00
Squid ..... Brls.	705	4 00	2,820 00
Coarse and mixed fish ..... "	800	2 00	1,600 00
Fish oil ..... Galls.	16,037	0 30	4,811 10
Fish as bait ..... Brls.	32,695	1 50	49,042 50
Fish as manure ..... "	895	1 00	895 00
Seal skins ..... No.	7,520	2 00	15,040 00
Clams ..... Brls.	1,205	4 00	4,820 00
Total	....	....	887,024 30

RECAPITULATION

SHOWING the number and Values of Vessels, Boats, Nets, Lobster Canneries, Traps, &c., used in the fisheries of the Province of **Prince Edward Island**, for the season of 1902.

Articles.	Value.	Total.
	$ cts.	$ cts.
26 fishing vessels (683 tons)	13,506 00	
2,201 fishing boats	56,927 00	
4,998 gill nets (75,345 fathoms)	28,540 00	
6 seines (740 fathoms)	1,450 00	
221 trap nets	1,440 00	
96 trawls	3,793 00	
440 dip nets	440 00	
258 smelt nets	4,695 00	
2,913 hand lines	2,225 00	
		113,016 00
192 lobster canneries	83,865 00	
241,896 lobster traps	153,092 00	
		236,957 00
5 freezers and ice houses	4,050 00	
169 smoke and fish houses	4,575 00	
35 piers and wharves	34,800 00	
12 steamers and smacks	2,250 00	
		45,675 00
Total		395,648 00

Number of persons employed in the fisheries of Prince Edward Island.—

Men in fishing vessels	156
" boats	4,168
Persons in lobster canneries	2,252
Total	6,576

APPENDIX No. 6.

PROVINCE OF QUEBEC.

REPORT ON THE GULF OF ST. LAWRENCE DISTRICT, INSPECTOR W. WAKEHAM, M.D., GASPÉ BASIN, P.Q.

SOUTH SHORE DISTRICT, INSPECTOR N. LAVOIE, M.D., L'ISLET, P.Q.

INLAND DISTRICT, INSPECTOR A. H. BELLIVEAU, OTTAWA.

GASPE, March 25 1903.

To the Dominion Commissioner of Fisheries.

SIR,—I herewith present the annual report, and statistics of the fisheries in my division, for the season of 1902. As was foreshadowed in the preliminary statement which accompanied the report for 1901, the season of 1902 shows a slight falling off in value, as compared with the previous one. This is due altogether to a decrease in the catch of salmon and lobsters. The total decrease as compared with 1901 amounts to $62,784. The salmon fishery presents a decrease of $60,918, and the lobster pack one of $23,431, the two combined showing a falling off of slightly over $84,000, by which, it is apparent that the balance of the fisheries were quite up to the average.

The fall of 1902 was an exceedingly rough one, and at many of the large fishing centres practically nothing was done after September 20. Had we had an average fall catch of herring and cod, the statement of values would have shown one of the best fisheries ever made in the Gulf division.

The condition of the fisheries for the season will be best shown by a short statement dealing with each under a separate head in the order of its consequence, to these I beg to append synopses of the reports furnished me by some of the local officers.

COD.

The spring of 1902 opened early, and following as it did a mild winter, with very little snow, it was only natural to expect that the codfishing would begin early, fish were taken inshore abundantly early in May, and the catch continued with fair regularity, at most of the stations well into August. Bait was fairly abundant, and all hands looked forward to a phenomenal catch for the season, as at the end of August when the summer fishing closes, the yield was greatly above an average, the weather so far had been favorable, fish and bait were plentiful, and prices ruled high. At the close of the summer fishing the arrangements between the large outfitters and the men change, and for the rest of the season known as the fall fishing, most of the men fish purely on their own account. There is generally a lull between the two fisheries of at least two weeks, the boats are put ashore to be cleaned and refitted, the men go home and assist at the haymaking &c. Those who have been fishing at the large station on the north coast, return to their homes on the south shore, and fish for the balance of the season in their own boats. As I have said, at the close of the summer season all promised well, and we were expecting an unusually heavy catch, but it was not to be, about the time in September when the harvest was gathered, and the fishing should begin again

the weather became rough, steadily so, many of the boats that had been ashore to be refitted were never launched again, and it was only in some sheltered localities, that any attempt was made to fish, there was practically no off shore fishing.

Cod were particularly abundant on the north shore, but on the Labrador, that part of the coast east of and below Natashquan, we had during June, July and the early part of August an epidemic of small pox, which greatly curtailed the fishing made by the shore people.

We were fortunately able to keep the disease from spreading among the crews of the fishing fleet, so that the fishing made by the fleet from Newfoundland was an unusually good one. The crews of two small vessels did contract the disease, before our arrival on the coast, and before it was generally known what the disease was. These vessels of course lost their season. Vaccination and isolation were pretty generally practised, and attended to, thus the epidemic was quickly stamped out. I always dreaded a return of the disease in winter, when the people *cruise* about and congregate in their small, ill ventilated winter houses, as I was afraid that the cleaning up, and disinfections made could not be very thorough. I have, however, at this date (25th March) not heard of any recurrence of the disease. Owing to the fact that the vessels have done well on our Labrador for the past two seasons, I expect a very large fleet from Newfoundland for the season of 1903. In all 227,818 cwt. of cod, of a value of $911,272, was taken by the shore fishermen of the gulf division in 1902. This does not include the catch of 300 vessels from Newfoundland, and two from Nova Scotia, made on the Labrador, mostly taken in trap nets set from the shore. The catch of these vessels I estimate at the very moderate quantity of 105,700 cwt. (this is a low estimate) this would bring the total value of the cod taken within the shore waters of the division up to $1,334,072.

SALMON.

The salmon fishing on the whole was below that of last season, though in the county of Bonaventure the returns show an excess of nearly 50,000 lbs., the decrease was greatest in Saguenay county where we only had 457,146 lbs., as compared with 782,733 lbs. in 1901. This latter year was however a phenomenal one on the north coast, so that it is not by any means surprising that we had a poor catch this year, as we seldom have two good years in succession, though there is no question that many parts of the coast, and some estuaries, are overnetted. Yet a glance at the returns for the past thirty years shows that on the whole our salmon rivers are holding their own, and this is especially the case on the north shore from Godbout down.

LOBSTERS.

The lobster pack continues to show a falling off. How much of this was due to the overfishing which has been going on for years, and how much to the loss of traps and gear, caused by two severe lasting gales, which occurred during the height of the fishing in June, it would be difficult to say. At Anticosti and the Magdalen islands those fishing off shores exposed to the eastward suffered an almost total loss of the traps they had in the water on June 23. They had barely recovered from this gale, and got their spare traps in the water, when on the 26th they were again all broken up. The loss of gear, and the disorganization caused by these two storms was so complete that many canners, and fishermen were unable to continue fishing. It was the very extensive and general loss caused by these gales which induced me to recommend to your department the extension of the season which I did. Some packers did avail themselves of this extension, and benefitted greatly by it, others who had closed down before the end of the regular season did not reopen. It will be noticed by the returns that the number of canneries in the division is steadily decreasing, the drop this season is a very considerable one, from 151 in 1901 to 93 for 1902. This decrease has been at the Magdalen islands and on the north shore, those who have given up are the small packers, people with no capital, who have been unable to stand the drain. The grounds where these people fished have however been covered by the larger canners who continue to fish an

increasing number of traps. The lobsters regulations were well observed this season, and as far as I know there was no fishing or packing done out of season. We had on extra guardians in the Lagoons at the Magdalen islands, as soon as the season closed. The excellent mackerel fishing gives employment to all those who might otherwise have tried to do a little illegal canning on the sly.

MACKEREL.

This fishery is now only prosecuted at the Magdalen islands, but there it was good—12,333 brls. having been exported from the islands—towards the fall the competition among buyers became keen, and the prices paid to the island fishermen were better than they have been for many years. It would seem to be clear that the failure of the U.S. purse seine fishermen to made good catches at the spring fishery of the Nova Scotia coast which has occurred for some years back, owing to the weather conditions in April and May, has permitted a larger number of spawning mackerel to reach the gulf, and that our fishermen are benefiting accordingly. Nothing is more certain than the fact that prior to the introduction of this purse seine fishery mackerel were found abundantly all over the gulf and that very soon after its introduction, they began to disappear in the Bay Chaleur and in the western and northern waters of the gulf where they formerly were found spawning in the early summer. Their disappearance was not due to any over fishing on our part, and the natural conditions of the waters have not changed, so that it seems perfectly reasonable to attribute their almost complete extinction to the destruction of the schools of ripe fish by these purse seines, off the Nova Scotia shore in the spring, when the fish are coming in from sea and hastening to their spawning grounds in the gulf.

HERRING.

Spring herring struck as usual about the end of April. They were abundant on their in-shore spawning grounds at the Magdalen islands, Bay Chaleur, Anticosti, and in the larger bays on the Labrador, during their run large quantities were taken for bait and manure. At Fox bay, Anticosti, M. Menier has put up a large ice house for the storage of this bait, which he uses for the supply of his own fishermen, and holds for sale to such fishing vessels as call there.

The catch of fall or fat herring was below the average, as the weather was generally too rough to permit of the setting of gill nets or drifting, except in a few favoured localities where the fishing grounds are sheltered. The decrease in the catch was entirely due to natural causes, and it is quite safe to say that in the Gulf of St. Lawrence herring as well as cod, are as abundant as ever they were.

SEALS.

The catch of seals shows a slight increase, this was due to a better spring hunt at the Magdalen islands, where the young seals were carried on shore on the field ice in March and April, and killed by people going out from the shore. On the Labrador also the fall catch of running seals was good. These adult seals come down from the Arctic during the latter part of December and pass westward along the coast as far up as Saguenay. These are the seals that pup on the gulf ice in March; they follow certain well known and definite channels or *runs*, where they are intercepted by sedentary nets locally known as *frames*, or caught in heavy gill or trammel nets, called *shoal* nets. A few years ago we had a fleet of 40 or 50 schooners engaging at the seal hunt in the ice in March and April, as the price of seal oil fell, this fleet gradually dwindled, until now we have only four or five small vessels engaged in it, as these vessels, which require to be solidly built to resist the ice pressure, are lost or get worn out they are not replaced, so that a very few years will see the end of this industry, unless from some cause, not now apparent, the price of seal oil should rise.

The smelt and trout fisheries were hardly up to an average. Halibut were taken in considerable numbers, but only as an accident of the cod fishery as no distinct halibut fishery is carried on.

I beg to append synopses of the reports of such of the local fishery officers who have furnished any.

Officer Forest, of Bonaventure, reports that the fishery as a whole was better than last year. In the eastern part of his division from Paspebiac to Black Capes, the salmon fishery was poor, but excellent in the rivers and along the coast to the west. Cod fishing was good, especially in the fall. Spring and fall herring were abundant and fishermen got all they could handle. The lobster fishing was below that of 1901, largely due to rough weather; only an odd mackerel was caught and very few halibut. Trout and eels were plentiful

Overseer F. X. Chapados, of Gascons, reports that the cod fishing which began early in May, was abundant. The salmon fishery fell off greatly; the lobster pack was about the same as that of 1901. Fall and spring herring were plentiful.

Overseer Langlois, of Gaspé, reports a decrease in the salmon fishing of 38,000 lbs. as compared with 1901. Spring herring were abundant until June. Herring for bait were scarce during the summer months; very few were salted until after the middle of October; they were then abundant. Squid were not plentiful until after the 15th September. Only an odd mackerel was caught in the herring nets. The pack of lobsters was slightly better than that af last year. The cod fishing began during the first week of May and continued good until the end of June, when it slacked off, and continued so until October when it again became good, but by this time many boats had been put ashore, and the younger fishermen had left for the lumber camps. On August 18, a heavy gale did great damage at Point St. Peter, many nets, boats and stages being either totally destroyed or damaged. This shows the urgent need of the breakwater which the government intend building at this station. The smelt fishing shows a decrease of about one third as compared with last year.

Overseer Letourneau, of Mont Louis reports that the only lobster cannery in his division was closed this season. The sea coast salmon nets did well, but the fish were late in entering the rivers. Herring were scarce in the eastern part of his division, and the codfishing was greatly hampered in June and July by the scarcity of this bait, but in the western part of his division herring were generally abundant, a good fishing was made and large quantities of salt herring were shipped to market in Montreal and Quebec. The codfishing was generally good except for those fishermen who having no sheltered harbours in which to keep boats, were obliged to fish in small flats, thus of course were not able to go out in rough weather. For 30 years there has not been a better fishing, in spite of the fact that owing to the stormy weather nothing at all was done in the fall. No mackerel and very few halibut were taken. Large quantities of turbot were taken by codfishermen fishing in about 60 fathoms of water. Prices were good and the season was a profitable one all over. The harvest also was good and plenty reigns in the division.

Overseer J. A. Chevrier, in charge of the southern half of the Magdalen islands, reports that the season has been a profitable one, better than has occurred for many years. A large number of seals were taken on the ice off Amherst island in March. The herring fishing in Pleasant bay, off Amherst island, was small this past spring due to the prevailing high and on shore winds. The spring mackerel net fishing was also poor due to the same cause, though the fish were known to be present in large quantities. The summer fat mackerel fishing was good, exceeding that of many former years, the price also was high. The lobster fishing was not what it should have been, due to a heavy storm during the time of the fishing which lasted several days and destroyed practically all the gear in the water; it took a long time to get to work again and the best of the season was over before this could be done; however, with the

extension which was granted, some of the packers did fairly well. The cod fishing was good all over the division, and the prices were good until the autumn when they fell. The fall fishing amounted to nothing on account of the rough weather.

No illegal lobster fishing took place this season. This was due to the good services of the guardians.

Overseer Procul Chevrier, in charge of the northern part of the Magdalen Islands, reports that the spring seal hunt from the shore on the northern side of the islands was exceptionally good. Spring herring were a little later then usual in arriving, but they were abundant and many cargoes were sold to vessels from the United States and the maritime provinces. Very little decrease is shown in the lobster pack except at the Bryon island where it was much less than usual, the fishery began late, in fact all kinds of fish were nearly three weeks later than usual in putting in an appearance. Codfish were first taken in April the fishing continued good up to September, after that the weather was too rough to do anything, the mackerel fishing was good, and the prices obtained were high.

Overseer Mignault, of Moisie, reports that only 182,178 lbs. of salmon were taken as against 305,829 lbs. in 1901. This failure in the catch was largely due to strong easterly winds and heavy rains during the best of the netting season, 204 salmon were taken with the fly in the Moisie river and 31 in Trout river; these fish averaged about 20 lbs. The cod fishing was better than that of 1901, and the prices received by the fishermen were higher. The herring fishing was a failure, only 43 brls. having been salted. Bait, in the shape of launce and squid, was plentiful. The immense pulp works being established at Seven islands, which gives employment to 500 men, has taken a good many away from the fishing. The fishing regulations were well observed, only two individuals having been fined for violation of the Sunday clause.

Overseer DuBerger, of Mingan, reports that the codfishing shows an increase of nearly 6,000 cwt. in his division, this augmentation is general all over this part of the coast from Rivière aux Graines to Esquimaux Point. The salmon catch was a long way below that of last year. This was due very largely to heavy freshets during the height of the fishing making it impossible to keep nets out. The sporting catch by anglers was however fair.

Overseer Scott, of Natashquan, reports that the seal hunt made by the vessels from Natashquan was poor owning to calm weather and broken ice. The first cod was taken off Natashquan on the May 25, fish were plentiful, but little fishing was done until the June 20 on account of rough weather, and in the division there is a decrease of 3,000 cwt. of cod as compared with 1901. Capelin struck on the June 10 and remained on shore until the July 26. Salmon fishing shows a very small return. Though the fish in the river Natashquan seem to be as plentiful as ever, the poor fishing was due to rough weather and high water, owing to these causes the nets could not be set until June 20. The herring fishing was good. The return show a very small lobster pack, only one-third of the quantity that was packed in 1901, this fishing is decreasing every year, and the fish are getting smaller and smaller. The regulations were well observed; no infraction having come to Mr. Scott's knowledge.

I have the honour to be, sir,
Your obedient servant,

W. WAKEHAM.

REPORT ON THE FISHERIES OF THE SOUTH SHORE OF THE RIVER ST. LAWRENCE, FROM LEVIS TO CLAUDE RIVER, WITH NOTES ON THE LOBSTER INDUSTRY OF BAY DES CHALEURS AND THE COUNTY OF GASPE, BY INSPECTOR N. LAVOIE, M.D.

L'ISLET, QUE., January 15, 1903.

To the Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I have the honour to submit the following report :—

The season just closed has been a poor one in certain localities, although the yield has been fair in others. Taken as a whole, there is a deficit of over $33,000 in the value of fish caught in my division for 1902.

From Point Lévis to L'Islet and around the islands facing the counties of Montmagny and Bellechasse, eel fishing may be said to have been a failure since there were only 9,000 lbs. caught against 20,550 lbs. last year. A slight improvement is noticed between Point Lévis and St. Valier, although the catch proved slightly inferior to that of previous years. Prices were, however, very remunerative, and this helped to make up for any deficiency in the catch. From L'Islet to Sandy Bay, I have no hesitation in saying that last season's fishing was amongst the most unremunerative experienced during the past twenty-five or thirty years. Everything seemed to be against the fishermen. Fish, especially herring, appeared abundant enough, but storms were of such frequency and duration, that nets and brush fisheries were being constantly injured or destroyed. People got tired of repairing them, and the fish had thus a free run. It may possibly be the reason why cod were so abundant on the north shore while very few were caught on the south side of the River St. Lawrence. Most of the fishermen were discouraged ; some of them did not even succeed in putting by a sufficient supply of fish for their winter's use.

From Sandy bay to Claude river, fishing has proved so successful during the past three years that people on the littoral and even those from concessions inland have been prone to neglect the cultivation of their farms in order to devote all their time to fishing pursuits. However, in spite of most unseasonable weather and a late spring, the limited quantity of grain sown came to maturity, and affluence reigns everywhere among the residents. The catch of fish was abundant ; prices ruled high ; lumber shanties have increased in number ; wages are better than ever, since a young man is able to earn $22 a month, besides his board. There is plenty of money, and people are satisfied.

COD.

The movements of cod were most uncertain. At Ste. Félicité, Sandy bay and River Blanche, the quantity of fish caught was so small that no fisherman could produce evidence of having caught enough to entitle him to claim the bounty.

Lower down, fish struck in early in June, to reappear about the end of August, but were rather scarce on the grounds. Large schools of porpoises were noticed between Sandy Bay and Méchins. This may account for disappearance of the fish in the upper places. Although the catch may be said to have been good between Ste. Anne de Monts and Claude river, the deficiency between Ste. Anne and Sandy bay makes it that only 4,807 quintals were taken against 7,408 in 1901. It must, however, be remarked that this poor catch is not so much due to a paucity of fish as to the difficulties which fishermen experience in going out fishing on account of stormy weather. Whenever it was possible to fish, the catch was abundant. Some compensation was felt for this comparative failure in the great success which attended the herring fishery. The price of cod ruled high ; from $4.50 to $5.00 being the usual quotations.

Herring.

Although these fish did not strike in equal abundance on all parts of the coast, they were so numerous in certain places, such as Ste. Anne de Monts and lower down to Claude river that the statistics show a gratifying increase, although last year's may be said to have been a very good one indeed. Most of the fishermen are now provided with very long nets which enable them to secure the fish when they first appear. Without taking into account the quantity of herring used for baiting cod lines and manuring the land, it will be seen that the number of barrels salted, amounts to 7,396, against, 7,376 last year and 5,598 in 1900. Sandy bay, River Blanche and Ste. Felicité were not so much favoured as other places, but on the whole, the catch may be said to have been good. The price was from $4.50 to $5.50 on the Quebec market. Unfortunately, some of the fish put up in the localities where fishing proved most successful, were not properly pickled, and upon reaching the market, turned out in poor condition and were declared to be of inferior quality by the inspectors. Hundreds of barrels were found spoiled. This entailed great loss upon local merchants who bought these fish at $4.50 cash. They were compelled to sell at $2.00 a barrel, and sometimes for less. A couple of merchants lost $2,000 each and another $7,500.

It is much to be regretted that the same flattering report cannot be made of the upper part of this division between Sandy bay and L'Islet. The poor success of last year which caused so many of the fishermen of these localities to promise they would spend no more time or devote more labour in building new fisheries or purchasing new gear was soon forgotten when spring arrived. Hoping to retrieve their former losses, these people were induced to make another effort, but it was of no avail, and the year's operations closed with a heavy deficit. The statistics show only 752,000 lbs. of fresh herring, that is to say 88,000 lbs. smoked and 854 salted—against 1,984,460 lbs. fresh last year and 4,738 salted. And this, too, occurred on a part of the coast which yielded 7,000,000 lbs. in 1901. Fish were certainly abundant, but storms were so frequent and of such violence, that everything was carried away before them. More than once were damages repaired, but it was of no avail, and in the end the fishermen gave up in despair. The most favoured localities were Cacouna, St. André and Green island which are somewhat sheltered by islands outside.

Eels.—It is impossible to say whether the productive eel fisheries of the counties of Lévis and Bellechasse have any influence on eel fishing lower down the coast, but the fact remains that this year, from L'Islet to Rimouski, the total catch of eels is only 28,626 lbs. against 29,894 lbs. in 1901, and 40,789 in 1900.

Sardines.—This fishery was an utter failure again this year. The best catch was at Green island which shows about 25,000 lbs. At other places, the figures vary from 1,000 to 2,000 lbs.

STURGEON AND SHAD.

Although the yield of sturgeons and shad is much under what it used to be, still it is the only one which shows a slight increase. The statistics show 64,525 pounds of sturgeon against 57,750 in 1901 and 7,795 lbs. of shad against 5,030 last year.

The catch seems to be gradually improving. River Ouelle and Kamouraska appear to be the best fishing grounds for sturgeon; 30,000 lbs. were caught at River Ouelle and 26,000 at Kamouraska. The places most frequented by shad appear to have been Green island and Kamouraska, 4,715 lbs. being caught at the former, and 1,050 lbs. at the latter place.

SALMON AND TROUT.

Salmon fishing continues to be prosperous at the several posts between Sandy bay and Claude river. In 1901, the yield was almost double that of 1900, and this year, it is again on the increase. Ste. Anne de Monts gives 4,600 lbs. against 4,091 in 1901; Claude river, 2,000 lbs. against 1,700; Marsouis and River à Marthe 3,400 against 800 lbs. It is reported that one sportsman killed 100 salmon, with the fly, in Ste. Anne

river. I found it impossible to interview the local guardians of Métis and Matane river, but was assured that sport had been splendid in these streams, and that the pools were full of fish. Cape Chatte river is not let, neither is it guarded. There must surely be a good deal of poaching on it. From reliable sources, I am informed that no less than 50 barrels of salmon and trout were taken from this stream during the season, by local fishermen. It is said that 25 salmon were caught with the fly in Rimouski river.

Although large quantities of speckled trout are said to be caught in the lakes back of St. Jean Port Joli, Ste. Anne la Pocatière and lower down, it is impossible to ascertain, with any degree of accuracy, what the real amount is. An old trapper, who spends most of his time in the bush hunting and fishing, told me that there had been as much as 18,000 lbs. of trout taken from the nearest lakes, such as those of St. Anne, Trois Saumons and St. Mathieu. The waters in which the greatest amount of illegal fishing is said to be carried on, is lake St. Mathieu, on account of its location right in the middle of a populous country. It is even reported that dynamite was used to kill fish, but of this, I could find no reliable proof such as would have enabled me to prosecute. I instructed the local warden to keep his eyes wide open and to prosecute any one he may detect violating the law.

PORPOISE FISHERY.

Although large schools of porpoises were on several occasions noticed up the St. Lawrence, the catch was very poor.

Altogether, there were only 33 killed, most of these being young ones. The quantity of oil realized was 2,500 gallons which sold at 24 cts. a gallon, and the skins fetched $3 each. At Métis and River du Loup, some 45 seals were captured, which yielded about 100 gallons of oil.

HALIBUT FISHERY.

Owing to the remunerative prices which these fish realize, when sent in a fresh state to market, this fishery appears to acquire greater importance. A few fishermen devoted all their attention to it. There were caught this year 39,802 lbs. against 25,070 last year. There has also been entered in the statistics a few hundred pounds of turbot; this fish which closely resembles halibut, though smaller, makes delicious eating, when salted.

It sold for 8 cents a pound. The principal fishing grounds are near Ste. Flavie; a few are also caught at almost every point on this coast.

Remarks on the Lobster Industry of Bay des Chaleurs and the County of Gaspé.

While there was a decrease in the number of canneries operating this year and a shortage of about 4,500 traps, the packers succeeded in putting up 874 more cases than during the previous season.

Had the weather been more favourable, and storms less frequent, I have no doubt the pack would have been larger, amounting at least to 500 cases more, as lobsters appeared to be quite plentiful on the grounds. Such as it is, I do not think that packers have any valid reasons to complain. Lobsters struck in one month earlier than usual, and so numerous were they, that fishing could profitably have been carried on as early as the end of March. In spite of delays and losses of every kind, caused by frequent storms which precluded fishing during half the time allowed by law, the pack was larger than that of 1901, with about 1,500 traps less used.

As already stated, lobster fishing, as well as all other kind of fishing, was carried on this year under great disadvantages, with the exception of a couple of weeks during the early part of the season. It was during that period that the largest bulk of the packing was done. Some cases may have been packed later on, but the gain thus

realized was more than offset by heavy losses occasioned by storms and the consequent destruction of traps and fishing gear. Messrs. Windsor, Hoegg, Alexander, etc., who packed some 740 to 800 cases, suffered damages amounting to $2,000 and more during the intervals between each storm. When everyone was trying to make up for previous losses, these losses thus became greater than ever. There seems to be a prevailing opinion among packers that a more advantageous arrangement would be to cease packing about June 10 or 15 instead of July 10.

Early in the spring, the weather is usually fair, whilst about the latter end of June storms are of frequent occurrence. I have noticed this fact myself on Bay des Chaleurs.

All fishermen agree in saying that lobsters were quite abundant on the grounds, and that they were of a large size. Very few small lobsters were noticed. It may be that the large ones chase them off from the traps or that the former dare not enter the traps when the large ones are near by. Very few females, with eggs attached, were caught. Some fishermen claim that they drop their eggs before leaving deep water. A fact was brought to my notice which I think a very unusual one. A female lobster, 7 inches long, was caught, with eggs attached.

Being anxious to do my very best in order to have the law strictly carried out, I made three separate visits to the coast.

Some places where I suspected packers might try and play me false, I visited four or five times, arranging my visits in such a way as to arrive on the grounds when least expected and just at the moment when the boats reached shore. I came across only one delinquent who was very promptly fined $5 for having in possession several lobsters measuring from 6 to 7 inches. He paid the fine and promised to fish no more.

It is my pleasant duty to have to report that I experienced no difficulty whatever in enforcing the fishery laws and the lobster regulations. Also that the best of feeling always prevailed between the fishermen, the packers and myself.

I have the honour to be, sir,
Your most obedient servant,

N. LAVOIE,
Inspector of Fisheries.

REPORT ON THE FISHERIES OF THE WESTERN OR INLAND DIVISION OF QUEBEC, FOR THE YEAR 1902 BY INSPECTOR, A. H. BELLIVEAU.

OTTAWA, March 7, 1903.

To the Dominion Commissioner
of Fisheries.

SIR,—The extensive district under my charge comprises all that part of the province of Quebec lying south west of the River Saguenay and the county of Bellechasse.

For more convenience in establishing comparisons in the yield of the different kinds of fish with those of former years, the old subdivisions have been mostly adhered to even when under different officers.

The collection of fishery data is becoming more difficult and less reliable since the provincial officials are not compelled to secure the same, not even from the licensees of their respective districts. The reluctance of fishermen to furnish the overseers with exact statements of their catch of fish, fearing an increased license fee, should not now exist, because while the statistical statements are required by one government the per-

mits to fish are issued by another. It is, however, difficult to make the suspicious fishermen understand that we only seek to publish this information to demonstrate the productiveness of our Canadian waters.

In that part of the inland district proper, comprising the three large lakes of *St. Pierre, St. Louis* and *St. Francis* (all enlargements of the St. Lawrence) with their numerous tributaries, there has been a general falling off in the fishery yield, especially in the best grades of fish.

The prohibition of all netting in lakes St Francis and St. Louis, will considerably reduce the production of fish in that part of the district. Not only are fish becoming scarcer in these somewhat depleted waters, but their size is also steadily diminishing. Should the immature fish regulation be strictly adhered to on the fish markets, many a specimen would be confiscated and relegated to the dumping pile. In many cases, a slightly more vigilant observance of the regulations would remedy this shameful waste of fish life, and the interested fisherman would be the first to benefit thereby. A minimum weight or length of the kinds of fish which the law seeks to protect, would simplify matters and greatly facilitate the duties of local fishery officers. If the fisherman were made to understand that he must desist in offering for sale the young of any fish, he would soon adopt means not to catch them or liberate them alive. The toleration of the small meshed gear by the authorities is also a question which will soon compel there attention, as it is mostly to blame for the capture of young fish.

In Montreal and other cities, the fishermen need not sell to the dealers thus dividing profits, but may retail directly to the consumers and therefore secure higher remuneration even for their inferior grades of fish. Parties residing in the vicinity of the border who ship their catch to the United States markets, realized still greater profits. Perch and bullheads will bring more on the Fulton market than bass and maskinongé on the Bonsecours.

In that part of my district extending *from Quebec to Lake St. John* a falling off is also noticed in its fisheries. The wire weirs around the Isle of Orleans now hardly capture anything but eels; in fact most of them are now only set in the fall for that very purpose. A few salmon were captured in these *pêches anglaises* during the last season.

While there are no licensed fishermen on the Saguenay river a great deal of netting is still practised by resident poachers, and the number of salmon thus illegally caught is estimated, by well informed parties, to be between twelve and fifteen hundred fish. By adding to this the catch of sportmen's clubs on the principal tributaries of this great river, the aggregate yield is given at 17,000 lbs. for that divison. These bold poachers are evidently under the impression that all the salmon of the famous Saguenay are their property, as they not only capture them surreptitiously with nets but they do not scruple to break in warehouses on wharfs and capture the anglers' catch in boxes awaiting shipment. I do not mention this to infer that the service of protection is neglected. On the contrary, I believed that Mr. Maher, of Tadoussac, is a fearless, painstaking and efficient officer. He owns a comfortable thirty foot yacht and is assisted by three men in patrolling this magnificent stream from its mouth to Chicoutimi. He informed me that poaching was on the decline as he had seized *only twenty-seven nets* last summer. Some were prosecuted, but it is difficult to prove the identity of culprits as they are generally masked and when surprised in their nefarious work will flee to the woods.

In Lake St. John, the general yield of fish is about the same as that of the previous year with the exception of the famous ouananiche which shows a slight diminution. Of recent years the provincial authorities have issued a few gill net licenses in this inland sea where we had refused to grant them before 1897. Last year the activity of these net fishermen was stimulated by a couple of fish traders who shipped to foreign markets. I have been informed that during the spring months over 500 lbs. of fish were shipped weekly from one station alone. I do not believe in netting permits being granted at all in this beautiful lake, but at least they should be confined to settlers for their domestic consumption only. Although it is illegal to capture ouananiche with nets, it is surmised that quite a few of those gamy fish are thus taken with other fish and easily disposed of.

In Missisquoi bay, the use of seines is now confined to the early spring, viz., before April 15. Pickerel and perch at present form the principal part of the catch. It is however regrettable that their capture takes place at a time when these species seek their spawning bed for the purpose of reproduction.

Missisquoi bay, which is the northern end of Lake Champlain, seems to be the natural breeding ground of these spring spawning species. While this bay covers an area of about five or six square miles in the county of Missisquoi, the remainder of Lake Champlain extends southward between the states of Vermont and New York for 130 miles varying in breadth from one to ten miles.

The question of an international regulation prohibiting all kinds of netting in these contiguous waters has been repeatedly on the tapis. This bay is now the only sheet of water in all the Eastern Townships where the use of seines is tolerated. The state of New York has already passed a prohibitive measure against all netting on that side of the lake. The state of Vermont has given its commissioner the power to issue or refuse fishery licenses in conformity with the Canadian authorities in the same matter. Last spring, about thirty-five seine licenses were granted by the Vermont commissioner at twenty dollars each. Their chief fishing ground in the vicinity of Alburg and Hog island should be a profitable one as the fish may be caught there, in their descent as well as their ascent to the spawning ground. In the autumn season between sixty and seventy whitefish seining permits are also issued by the same state.

Their spring catch was about one thousand barrels of fresh fish, pickerel or wall-eyed pike predominating, and in the fall about $5,000 worth of whitefish was the result. To this, add the Canadian catch and the aggregate will exceed one quarter of a million pounds of fish taken from the northern end of Lake Champlain, mostly in Missisquoi bay. How long will these beautiful waters stand such an annual drain is the question in point. Should Canada decide to adopt and enforce a prohibition of nets in our part of the bay, the above mentioned hundred licenses would not be renewed by the Vermont commissioner. Therefore under such a mutual agreement for those contiguous waters, the state of Vermont would sacrifice much more than Missisquoi county.

The chief contention of our interested fishermen seems to be, that, if they did not catch those fish as they approach their spawning beds, they would never take any, as they claim these fish, especially the pickerel, return to the deep water of the lake soon after their spawning season is over. They also claim that the supply of fish is not visibly diminishing. It is true a few hundred dollars realized by this mode of fishing, at a time when not much other labour prevails, is certainly a great boon to this class of citizens. Last year there were only fourteen licenses granted by the provincial authorities mostly to well-to-do farmers. These seines are set under the ice. They are from 80 to 110 fathoms long and it requires three men to handle them with the use of cranks.

Respectfully submitted,

A. H. BELLIVEAU,
Inspector of Fisheries.

PROVINCE OF QUEBEC—Gulf of St. Lawrence District.

RETURN showing the Number and Value of Boats, Nets, &c., and the Quantity and Value of Fish caught in the **Province of Quebec**, for the Year 1902.

RESTIGOUCHE SUBDIVISION (Tide Head to Maguasha).

Number.	Districts.	Fishing Boats.			Fishing Gear or Materials.										Kinds of Fish.					
					Gill Nets.			Seines.			Trawls.		Smelt Nets							
		Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.	Salmon, fresh, lbs.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, fresh, lbs.	Number.
	Bonaventure County.		$				$			$		$		$						
1	Restigouche	23	410	20	25	4750	4000	...	.....	.....	.....	.....	40	3500	35000	75	10000	.....	.....	1

BONAVENTURE SUBDIVISION (Maguasha to Paspebiac).

1	Maguasha and Nouvelle	55	800	110	155	3500	3250	....	.....	.....	.....	.....	....	.....	24000	200	5000	.....	....	1
2	Carleton	140	2100	280	450	11000	7100	5	150	125	.....	.....	....	.....	80000	100	7000	.....	....	2
3	Maria	135	1900	270	328	8000	5700	5	150	125	.....	.....	....	.....	68000	250	10000	4000	....	3
4	New Richmond and Black Capes	90	1530	165	140	4200	1680	1	30	35	.....	.....	....	.....	36500	125	7000	3000	....	4
5	Caplin	185	2600	400	650	12700	6500	9	230	215	.....	.....	.....	.....	2000	500	10000	10000	....	5
6	Bonaventure	330	4500	600	1152	21250	10600	45	1200	1100	10	90	.....	.....	18000	800	15000	20000	1000	6
7	New Carlisle	40	560	65	80	1750	950	12	400	360	3	30	.....	.....	300	75	6000	.....	.....	7
8	Paspebiac	160	4500	300	160	3200	2000	50	2000	1800	100	1200	.....	.....	560	450	8000	.....	....	8
	Totals	1135	18490	2190	3115	65600	37780	127	4160	3760	113	1320	....	.....	229360	2500	68000	37000	1000	

PORT DANIEL SUBDIVISION (Paspebiac Point to Point Macquereau).

1	Hopetown	70	2100	90	90	1480	1168	11	275	300	35	800	.....	.....	3700	250	.....	3500	....	1
2	Nouvelle	86	2580	142	80	1680	1400	12	325	360	30	750	.....	.....	2000	500	.....	4000	....	2
3	Chigawake	50	750	67	75	1500	1200	8	240	260	15	300	.....	.....	.....	425	....	5000	....	3
4	Port Daniel	185	5550	275	350	7000	5600	20	630	756	120	1200	.....	.....	13000	1200	.....	8000	....	4
5	Anse à Gascons	190	7600	280	400	8000	6400	16	480	690	140	2100	....	....	5366	1250	6000	....	....	5
	Totals	581	18580	854	995	19660	15768	67	1950	2366	340	5150	....	.....	24066	3625	6000	20580	...	

RETURN showing the Kinds and Quantities of Fish, &c.—**Province of Quebec**—*Continued.*

RESTIGOUCHE SUBDIVISION (Tide Head to Maguasha).

Number.	Districts.	Kinds of Fish.													Fish Products.			Clams, brls.	Total Value.	Number.
		Lobsters, preserved in cans, lbs.	Lobsters, fresh, in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Hake, dried, cwt.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Eels, brls.	Tom Cod or Frost Fish, lbs.	Squid, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.			
	Bonaventure County.																		$ cts.	
1	Restigouche	....	10	.....	....	.....	.....	.....	.....	9000	200000	10	30000	....	....	.....	750	....	20,325 00	1

BONAVENTURE SUBDIVISION (Maguacha to Paspebiac Point).

1	Maguasha and Nouvelle	..	....	150	.....	9000	.....	.....	...	12000	.....	4	4000	....	50	40	10000	....	13,035 00	1
2	Carleton	....	....	40	....	3000	.....	.....	....	500	....	6	3000	....	15	25	5000	....	19,522 00	2
3	Maria	2160	5	168	.....	10000	....	6	..	6000	....	20	5000	....	56	42	10000	....	22,352 30	3
4	New Richmond and Black Capes	.....	....	65	.....	7500	.....	.....	....	16400	.....	12	1000	....	22	17	2000	....	11,257 10	4
5	Caplin	1400	5	1900	3	10000	150	25	....	1200	.....	....	500	....	630	500	12000	....	18,525 25	5
6	Bonaventure	5500	20	4000	10	20000	225	60	600	14000	.....	15	5000	....	1330	1100	20000	....	40,089 00	6
7	New Carlisle	.....	10	300	1	2000	25	....	300	800	2000	...	1500	....	100	76	6000	....	5,244 00	7
8	Paspebiac	.....	5	5000	12	9000	325	82	1500	1000	18000	2	2000	....	1660	1300	10000	....	32,284 50	8
	Totals	9060	45	11623	26	70500	725	173	2400	51900	20000	59	22000	....	3863	3100	75000	....	162,309 15	

PORT DANIEL SUBDIVISION (Paspebiac Point to Point Macquereau).

1	Hopetown	16320	....	1860	10	.....	350	....	....	1000	.....	...	1000	50	1500	250	1800	100	15,939 00	1
2	Nouvelle	.....	....	2200	8	.....	300	....	1150	1000	.. ..	....	2500	40	1700	500	2000	....	15,020 00	2
3	Chigawake	8400	....	1000	6	.....	75	....	....	.....	.....	....	....	25	650	180	2200	....	9,430 00	3
4	Port Daniel	25536	....	3800	13	.....	300	....	2500	3000	13000	....	3000	200	2300	800	3000	200	34,837 20	4
5	Anse à Gascons	4656	....	5700	20	....	350	....	3000	1000	.....	....	.....	350	3800	1500	600	....	36,604 40	5
	Totals	54912	.. .	14560	57	.....	1375	....	6650	6000	13000	...	6500	665	9950	3230	9600	300	111,830 60	

3-4 EDWARD VII., A. 1904

RETURN showing the Number, Tonnage and Value of Vessels and Boats and the

County

GRAND RIVER SUBDIVISION

Number.	Districts.	Fishing Vessels and Boats.							Fishing Gear or Materials.							
		Vessels.				Boats.			Gill-nets.			Seines.			Trawls.	
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.
	Gaspé County.			$			$				$			$		$
1	Newport					148	2825	512	325	6600	2900	4	100	115	125	1550
2	Pabos					79	5095	209	239	3180	1815	4	106	140	41	550
3	Grand River					118	6340	444	421	8960	4720	2	46	50	86	1350
4	Cape Cove					143	6430	350	362	7840	5220	6	300	150	107	1428
5	Percé and Bonaventure Island					119	5450	270	269	5136	2087	1	40	25	18	144
6	Corner of Beach					23	500	46	46	920	1820	8	200	160	...	...
	Totals					630	26640	1831	1662	32636	18562	25	792	640	377	5022

GASPÉ BAY SUBDIVISION

1	Mal Bay					285	12800	295	131	3540	3450	18	900	785	....	....
2	Point St. Peter					80	2000	110	40	2900	1900	5	160	190	....	....
3	Chien Blanc to Sandy Beach					268	7800	215	220	6900	5200	13	550	475	...	..
4	Gaspé North and South					47	650	55	115	4500	3200	27	1200	1000	..	....
5	Peninsula and Little Gaspé					72	1000	100	120	3975	3255	3	60	20	...	...
6	Grande Grêve and Ship Head					82	2200	88	77	2200	1470	8	190	210	....	....
7	Cape de Rosier to Jersey Cove					244	4550	272	112	3179	1000	4	80	65	...	....
8	Griffin					132	2100	225	200	3100	1000	1	25	10	....	....
9	Big and Little Fox River					207	3300	275	250	4700	1400	6	200	95	..	....
10	Little Cape to Echourie					75	920	80	65	1345	400	..	....	....	...	....
11	Point Jaune to Fame Point					52	475	62	33	540	160	..	...	....	..	....
	Totals					1544	37795	1777	1363	36879	22435	85	3365	2850	....	....

SESSIONAL PAPER No. 22

Quantity and Value of Fish, &c., in the **Province of Quebec**—*Continued.*

of Gaspé.

(Point Macquereau to Mal Bay).

KINDS OF FISH.													TOTAL VALUE OF ALL FISH.	Number.
Salmon, fresh, lbs.	Herring, salted, brls.	Lobsters, preserved in cans, lbs.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, dried, cwt.	Hake, dried, cwt.	Trout, lbs.	Smelts, lbs.	Squid, brls.	Fish oil, galls.	Fish as bait, brls.	Clams, brls.	$ cts.	
4400	340	14400	6900	6	550	100	.....	11000	330	3450	500	20	38,350 00	1
18600	164	4800	2740	..	173	10	1500	13000	121	1743	300	....	19,094 40	2
4800	340	.....	10050	64	195	48	1200	.....	375	5000	1980	25	49,993 00	3
2500	244	15000	9260	.....	250	....	.....	.....	320	4600	1200	....	46,726 00	4
.....	139	7728	7535	.....	46	..	.....	.....	375	3750	650	....	35,979 60	5
12900	40	6000	1000	.....	...	...	500	.....	92	500	200	10	8,828 00	6
43200	1267	47928	37485	70	1214	158	3200	24000	1613	19043	4830	55	198,971 00	

(Mal Bay to Fame Point).

8000	500	5000	10090	.....	.....	....	1000	15000	250	6500	1150	50	50,585 00	1
....	100	....	4050	.....	....	....	.....	...	225	2500	620	..	19,180 00	2
23340	300	8300	4950	..	.....	...	.....	.....	140	2470	750	10	29,774 00	3
28671	10	.....	.....	.....	.....	....	3000	15000	.....	.....	...	....	6,824 20	4
23340	30	3600	1000	....		..	.....	.....	90	500	200	....	10,318 00	5
900	150	.....	2450	.....	..	.....	.....	...	140	1250	350	....	12,040 00	6
.....	200	2400	6300	.....	....	...	.....	.. ..	275	3150	550	....	29,350 00	7
.....	100	.....	5050	....	.....	...	....	.....	175	2525	360	....	22,597 50	8
.....	175	...	6200	..	.....	...	...	..	300	3100	600	....	28,530 00	9
.....	75	.....	2000	.. .	....	.....	. .	....	90	1000	375	..	9,522 50	10
...	40	.....	1400	.. ..	.. ..	...	.....	.....	80	700	250	....	6,665 00	11
84251	1680	19300	43490	.....	....	.....	4000	30000	1765	23695	5205	60	225,386 20	

RETURN showing the Number and Values of Vessels, Boats and Fishing Materials, &c.—**Province of Quebec**—*Continued.*

County of Gaspé.—*Continued.*

MAGDALEN SUBDIVISION—SOUTH.

Number.	Districts.	Boats.			Fishing Gear or Materials.						Kinds of Fish.							Fish Products.			Total Value of all Fish.	Number.
					Gill Nets.			Seines.														
		Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Salmon, fresh, lbs.	Herring, salted, brls.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Halibut, lbs.	Trout, lbs.	Squid, brls.	Fish as oil, galls.	Fish as bait.	Fish as manure.		
			$				$			$											$ cts.	
1	Grand Etang to Chlorydorme	119	3000	124	250	7800	5000	3	110	90	2200	400	6950	17	17000	500	90	3475	1000	400	34,862 50	1
2	Petite Anse and Frigate Point	37	810	55	75	2250	1500	..	...	...	.....	80	1650	5	3500	.....	35	825	270	90	8,157 50	2
3	Great and Little Vallée	67	2000	94	135	4050	2700	1	30	30	1100	300	3060	12	7000	.....	50	1530	600	80	16,079 00	3
4	Magdalen	38	700	48	55	1650	500	..	.....	....	3650	140	740	2	1100	200	10	370	155	35	4,801 00	4
7	Manche D'Epé and Gros Mâle	52	650	69	80	2200	1400	..	....	....	1450	490	1300	9	1600	....	15	650	280	20	8,385 00	5
6	Anse Pleureuse and Mont Louis	115	2750	169	280	8200	6750	3	90	100	9000	2475	2685	14	6600	.....	20	1342	450	270	24,532 60	6
	Totals	428	9910	559	875	26150	17850	7	230	220	17400	3885	16385	59	36800	700	220	8192	2755	895	96,817 60	

STE. ANNE DE MONTS SUBDIVISION (Claude River to Cape Chatte.)

1	Claude River	26	450	38	50	1000	725	..	....	....	1600	410	750	....	2000	.....	....	500	100	....	5,460 00	1
2	Marsoui and Martin River	10	150	15	15	400	300	..	....	....	850	211	230	....	1500	.....	....	175	50	....	2,211 50	2
3	Cap au Renard to St. Annes	145	2650	220	220	6000	5000	..	....	....	8120	5300	3110	....	9600	3500	....	2500	260	200	37,814 00	3
4	Ste. Anne and Cap Chatte	78	1100	106	70	1750	1500	..	....	....	3500	650	960	....	12000	5000	....	750	150	300	9,440 00	4
	Totals	259	4350	379	355	9150	7525	..	....	....	14070	6571	5050	....	25100	8500	...	3925	560	500	54,925 50	

RETURN showing the Number and Value of Vessels, Boats and Fishing Materials, &c.—**Province of Quebec**—*Continued.*

County of Gaspé—*Continued.*

MAGDALEN ISLANDS SUBDIVISION—SOUTH.

Number.	Districts.	Fishing Vessels and Boats.							Fishing Gear or Materials.								Kinds of Fish.										Fish Products.					Number.
		Vessels.				Boats.			Gill Nets.			Seines.			Trap Nets.				Herring, salted, brls.	Herring, fresh, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Cod, dried, cwt.	Cod, tong. & sds., brls.	Haddock, dried, cwt.	Smelts, lbs.	Eels, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	Seal skins, No.	Total Value of all Fish.	
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number of Trawls.	Value of Trawls.															
				$			$				$			$		$		$														$ cts.	
1	Entry Island	2	25	550	9	7	175	14	85	1850	510	..	..	..	..	..	..	..	20	..	..	180	..	22	..	..	..	910	20	..	300	3,546 00	1
2	Amherst Island	..	..	..	..	159	6360	364	1807	36140	9035	8	1200	2780	..	..	..	..	2267	17000	2500	2681	94992	5091	22	..	..	70	18100	1175	260	5200	103,857 90	2
3	Grindstone Isl'd.	..	..	..	..	228	11400	618	205	4100	1000	6	800	1950	4	2500	..	..	4068	12000	..	4479	93168	4068	18	..	..	25	4600	3340	600	860	126,677 60	3
	Totals	2	25	550	9	394	17935	996	2097	42090	10545	14	2000	4730	4	2500	..	..	6355	29000	2500	7340	188160	9181	40	..	..	95	23610	4535	860	6360	234,081 50	

MAGDALEN ISLANDS SUBDIVISION—NORTH.

1	All Right Island	2	28	400	7	116	2520	312	763	17090	4578	..	..	..	4	2800	30	600	2201	..	..	4060	38876	721	..	50	2000	10	6050	50	200	1900	85,078 20	1
2	Grand Entry	..	..	..	..	27	600	66	42	1260	340	..	..	..	9	3900	..	..	800	..	..	410	144048	186	..	..	..	11	1640	20	100	500	40,210 60	2
3	Grosse Isle	..	..	..	..	16	320	36	5	150	40	..	..	..	4	2000	..	..	154	..	..	320	28080	200	..	..	..	..	7600	25	100	2500	17,324 50	3
4	Byron Island	..	..	..	..	30	750	60	8	250	60	..	..	..	1	700	..	..	40	..	..	30	24326	25	..	..	..	..	..	10	100	..	5,640 20	4
5	Wolf Island	..	..	..	..	20	500	30	7	210	56	..	..	..	..	..	..	..	125	..	..	173	6336	123	..	..	..	..	1860	20	..	600	6,192 20	5
	Totals	2	28	400	7	209	4490	504	825	18960	5074	..	..	..	18	9400	30	600	3320	..	..	4993	241666	1255	..	50	2000	21	17150	125	500	5500	154,445 70	

3-4 EDWARD VII., A. 1904

RETURN showing the Number, Tonnage and Value of Vessels and Boats,

County of

GODBOUT SUBDIVISION

Number.	Districts.	Fishing Vessels and Boats.							Fishing Gear or Materials.							
		Vessels.				Boats.			Gill Nets.			Seines.			Trap Nets.	
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.
	Saguenay County.			$			$				$			$		$
1	Tadoussac to Jambons	6	105	975	13	200	4000	210	300	12000	10500	5	300	400	..	..

MOISIE SUBDIVISION

1	Ste. Marguerite	..	..	..	..	5	850	10	7	895	750	1	32	75	..	..
2	Seven Islands	3	45	1800	7	29	3300	55	25	1925	1200	3	100	238	..	..
3	Moisie and Pigou	1	25	1000	3	28	2700	60	52	4921	4500	3	90	175	..	..
	Totals	4	70	2800	10	62	6850	125	84	7741	6450	7	222	488	..	..

MINGAN SUBDIVISION

1	Riv. aux Graines to Thunder River	..	..	..	..	110	5500	194	3	300	300	15	725	650	2	800
2	Dock Ridge Point to Jupitagan	..	..	..	..	26	1300	53	1	100	100	4	106	157	..	..
3	Magpie	..	..	..	..	60	3000	150	8	240	75	7	245	240	..	..
4	St. Johns River	..	..	..	..	63	3150	140	20	3000	3000	2	75	80	..	..
5	Long Point, Mingan and Romaine	..	..	..	..	30	1300	55	6	2000	2000	6	125	100	..	..
6	Esquimaux Point	3	117	1800	12	116	17000	220	15	650	500	10	500	500	..	..
7	La Corneille	..	..	..	..	4	200	8	3	500	450	1	50	50	..	..
	Totals	3	117	1800	12	409	31450	820	56	6790	6425	45	1826	1777	2	800

NATASHQUAN SUBDIVISION

1	Watsheeshoo to Agwanus	..	..	..	..	22	1735	35	10	640	450	1	65	70	..	..
2	Ile à Michon and Pashasheeboo	..	..	..	..	44	4300	76	35	900	575	7	515	500	..	..
3	Natashquan River and Harbour	3	80	2000	7	70	4500	110	134	3590	3000	9	540	450	..	..
	Totals	3	80	2000	7	136	10535	221	179	5130	4025	17	1120	1020	..	..

ROMAINE SUBDIVISION

1	Kegashka River and Harbour	1	40	800	4	10	400	15	10	1000	500	2	80	80	..	..
2	Musquarro to Romaine	..	..	..	..	12	360	16	4	500	400	2	80	60	1	300
3	Coacoashoo	..	..	..	..	10	250	20	2	250	100	1	40	40	1	300
	Totals	1	40	800	4	32	1010	51	16	1750	1000	5	200	180	2	600

SESSIONAL PAPER No. 22

Nets, Kinds of Fish, &c.—**Province of Quebec**—*Continued.*

Saguenay.

(Tadoussac to Jambons).

Trawls.		Kinds of Fish.												Fish Products.				Total Value of all Fish.	
Number.	Value.	Salmon, fresh, lbs.	Salmon, salted, brls.	Herring, salted, brls.	Lobsters, preserved in cans, lbs.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Eels, brls.	Tom. cod or frost fish, lbs.	Squid, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	Seal skins, No.		Number.
	$																	$ cts.	
4	100	125000	....	1094	....	3000	10	30600	7500	3200	..	....	....	6200	1750	150	530	50,668 50	1

(Jambons to Pigou).

....	....	1300	....	....	....	158	....	....	....	....	..	....	....	160	40	....	15	1,018 75	1
....	....	24692	....	43	....	1184	10	2600	....	....	..	....	....	1086	250	....	84	11,012 20	2
....	....	156186	....	....	....	1425	8	1400	1500	....	..	....	....	1345	350	....	115	38,379 45	3
....	....	182178	....	43	....	2767	18	4000	1500	....	..	....	....	2591	640	....	214	50,410 40	

(Pigou to Watsheeshoo).

....	....	4000	....	....	....	11200	11	15000	2000	....	..	..	60	8000	1500	300	13	52,466 25	1
10	50	2100	....	....	....	2250	....	1500	800	....	..	....	18	2000	350	....	....	10,847 00	2
6	25	2540	....	150	....	4700	....	2000	1000	....	..	....	25	4000	750	100	6	22,690 50	3
2	15	28228	....	....	....	5504	5	4400	1300	..	..	....	20	5000	800	100	12	31,126 60	4
....	....	13600	....	....	....	2300	..	1800	2000	....	..	....	....	2372	300	....	124	13,616 60	5
....	....	300	....	359	12384	1800	4	6950	1000	....	..	....	50	6500	300	....	1300	16,232 80	6
....	....	3900	....	....	7200	....	....	....	1000	....	..	....	....	30	....	....	10	2,341 50	7
18	90	54668	....	509	19584	27754	20	31651	9100	..	..	....	173	27902	4000	500	1465	149,321 25	

(Watsheeshoo to English Point).

....	....	4600	....	....	6048	375	..	300	580	....	..	....	10	500	50	....	65	4,063 85	1
....	....	4600	....	70	....	2175	....	....	....	....	..	....	8	2500	300	....	180	11,357 00	2
....	....	27300	....	600	....	3000	....	....	400	....	4	....	12	4000	350	..	500	22,338 00	3
....	....	36500	....	670	6048	5550	....	300	980	....	4	....	30	7000	700	....	745	37,758 85	

(English Point to Coacoashoo.)

....	....	.....	20	10	600	500	....	3000	....	....	..	....	....	400	50	..	15	2,973 75	1
....	..	.....	30	35	9600	200	..	....	1000	....	..	....	....	300	20	....	33	3,571 25	2
....	....	.....	2	....	....	50	....	....	....	....	..	....	....	75	10	....	10	280 00	3
....	..	.. ...	52	45	10200	750	....	3000	1000	....	..	....	....	775	80	....	58	6,825 00	

RETURN showing the Number, Tonnage and Value of Vessels, Boats

County of

ST. AUGUSTIN DIVISION.

Number.	Districts.	Fishing Vessels and Boats.							Fishing Gear or Materials.							
		Vessels.				Boats.			Gill Nets.			Seines.			Trap Nets.	
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.
				$			$				$			$		$
1	Wolf Bay to St. Mary's	..	...	....	..	10	200	15	9	900	450	..	....	....	..	.....
2	Harrington	..	...	....	..	50	1000	96	12	1200	600	4	160	80	7	2100
3	Little Meccatina and Whale Head	..	...	....	..	38	750	60	15	1500	1000	8	320	160	8	2400
4	Mutton Bay	..	....	....	..	45	900	95	10	1000	750	6	240	120	8	2400
5	Meccatina to Kekapco	..	....	....	..	28	560	50	12	1200	800	3	150	100	4	1200
6	St. Augustin	..	....	....	..	23	360	40	15	1500	1000	2	80	60	2	600
7	Sandy Island to Chicatica	..	....	....	..	18	250	28	10	1000	750	2	80	60	2	600
	Totals	..	....	....	..	212	4020	384	83	8300	5350	25	1030	580	31	9300
	BONNE ESPERANCE SUBDIVISION															
1	Nabitippi to Burnt Island	2	74	1800	7	27	1395	50	20	1300	1130	3	140	285	10	3600
2	Bonne Esperance	2	190	4500	12	63	3000	121	18	900	900	4	350	650	16	6400
3	Pigeon Island to Salmon Bay	1	38	600	3	57	2850	84	39	1475	1115	12	620	905	18	7200
4	Little Fishery to Belles Amours	..	....	....	..	25	1250	48	16	730	325	4	150	300	8	3050
5	Bradore Bay to Blancs Sablons	..	....	....	..	107	4550	190	127	4240	4680	12	985	3000	34	13600
	Totals	5	302	6900	22	279	13045	493	220	8645	8150	35	2245	5140	86	33850
	ANTICOSTI															
1	The Island of Anticosti	..	...	....	..	55	1650	120	55	1500	750	6	300	300	4	1800

and the Kinds of Fish, &c.—**Province of Quebec**—*Continued.*

Saguenay,

'Coacoachoo to Chicatica).

Trawls.		Kinds of Fish.										Fish Products.				Total Value of all Fish.	
Number.	Value.	Salmon, fresh, lbs.	Salmon, salted, brls.	Herring, salted, brls.	Lobsters, preserved in cans, lbs.	Cod, dried, cwt.	Halibut, lbs.	Trout, lbs.	Eels, brls.	Tom cod or frost fish, lbs.	Squid, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	Seal Skins. No.		Number.
	$															$ cts.	
.. .	....	.. ..	30	....	3000	50	.....	2000	.....	....	.....	1400	10	.. .	450	2,447 50	1
....	....	. ...	6	30	480	3000	.....	....	.....	....	.....	3460	450	....	320	14,419 00	2
....	....	.....	35	30	4000	2900	.....	....	.....	....	... .	4690	260	....	730	15,754 50	3
....	....	....	10	...	.....	3000	.. ..	...	.....	....	.....	4100	390	...	500	14,590 00	4
....	....	.....	10	70	.....	2750	.....	....	.....	....	.. ..	17000	275	....	5000	23,192 50	5
....	....	. ..	50	....	... .	1300	.....	5000	.....	....	.....	1600	130	....	200	7,375 00	6
.. .	..	.....	10	....	.....	750	. ..	....	.....	....	.....	1600	70	....	300	4,110 00	7
....	...	.....	151	130	7480	13750	.....	7000	.. ...	....	.....	33850	1585	....	7500	81,888 50	

(Chicatica to Blancs Sablons).

4	24	.....	20	55	....	2000	.....	200	.....	1200	.....	2000	50	....	50	9,337 50	1
....	....	.....	8	120	.....	10000	.....	....	.....	....	.....	9500	150	....	....	43,675 00	2
....	....	.....	41	40	....	7050	.....	1600	.....	2000	.....	6700	120	...	....	31,425 00	3
....	....	...	3	...	.....	2685	.....	200	.....	600	.....	2390	75	....	....	11,664 50	4
32	312	....	3	17	. ...	12050	.....	1000	.....	1600	.....	11470	150	....	210	52,421 50	5
36	336	...	75	232	.. ..	33785	.....	3000	.....	5400	.....	32060	545	....	260	148,523 50	

SUBDIVISION.

10	300	. ....	16	50	0680	1433	11300	....	28	....	.....	1200	3826	....	....	34,417 00	1

RECAPITULATION.

SHOWING the Number of Vessels and Boats, Nets and Fishing Materials, &c., in the **Gulf Division, Province of Quebec,** for the year 1902.

COUNTY OF BONAVENTURE.

Number.	Divisions.	Fishing Vessels and Boats.							Fishing Gear or Materials.													Number.
		Vessels.				Boats.			Gill Nets.			Seines.			Trap Nets.		Trawls.		Weirs.			
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.	Number.	Value.		
				$			$				$			$		$		$		$		
1	Restigouche	....	...	...	.....	23	410	20	25	4750	4000	....	.....	...	.....	.....	.....	.....	.....	.....	.....	1
2	Bonaventure	....	...	.....	....	1135	18490	2190	3115	65600	37780	127	4160	3760	.....	.....	113	1320	.....	.....	.....	2
3	Port Daniel	....	....	....	....	581	18580	854	995	19660	15768	67	1950	2366	.....	.....	340	5150	.....	.....	.....	3
	Totals	....	....	.....	.....	1739	37480	3064	4135	90010	57548	194	6110	6126	.....	.....	453	6470	....	...		

COUNTY OF GASPE.

1	Grand River	....	....	.....	....	630	26640	1831	1662	32636	18562	25	792	640	.....	.....	377	5022	.....	.....	.....	1
2	Gaspé Bay	....	....	....	.....	1544	37795	1777	1363	36879	22455	85	3365	2850	.....	.....	.....	.....	.....	.....	.....	2
3	Mont Louis	....	...	.....	.....	428	9910	559	875	26150	17850	7	230	220	.....	.....	.....	.....	.....	.....	.....	3
4	Ste. Anne des Monts	....	...	.....	.....	259	4350	379	355	9150	7525	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
5	Magdalen Islands	4	53	950	16	603	22425	1500	2922	61050	15619	14	2000	4730	22	11900	30	600	.....	.....	.....	5
	Totals	4	53	950	16	3464	101120	5036	7177	165865	81991	131	6387	8440	22	11900	407	5622	.....	.....		

COUNTY OF SAGUENAY.

1	Godbout	6	105	975	13	200	4000	210	300	12000	10500	5	300	400	..	.....	4	100	20	800	1
2	Moisie	4	70	2800	10	62	6850	125	84	7741	6450	7	222	488	....	.....	....	.....	.....	...	2
3	Mingan	3	117	1800	12	409	31450	820	56	6790	6425	45	1826	1777	2	800	18	90	.....	.....	3
4	Natashquan	3	80	2000	7	136	10535	221	179	5130	4025	17	1120	1020	.....	...	.....	.....	..	.....	4
5	Romaine	1	40	800	4	32	1010	51	16	1750	1000	5	200	180	2	600	....	.....	....	...	5
6	St. Augustin	...	...	.....	....	212	4020	384	83	8300	5350	25	1030	580	31	9300	.....	.....	.....	.....	6
7	Bonne Esperance	5	302	6900	22	279	13045	493	220	8645	8150	35	2245	5140	86	33850	36	336	.....	.....	7
8	Anticosti	....	....	.....	.....	55	1650	120	55	1500	750	6	300	300	4	1800	10	300	.....	...	8
	Totals	22	714	15275	68	1385	72560	2424	993	51856	42650	145	7243	9885	125	46350	68	826	20	800	

GRAND TOTAL OF GULF DIVISION.

1	Bonaventure, County	...	....	.....	...	1739	37480	3064	4135	90010	57548	194	6110	6126	....	....	453	6470	.....	...	1
2	Gaspé "	4	53	950	16	3464	101120	5036	7177	165865	81991	131	6387	8440	22	11900	407	5622	..	...	2
3	Saguenay "	22	714	15275	68	1385	72560	2424	993	51856	42650	145	7243	9885	125	46350	68	826	20	800	3
	Grand totals	26	767	16225	84	8588	211160	10524	12305	307731	182189	470	19740	24451	147	58250	928	12918	20	800	

RECAPITULATION

SHOWING the Number of Vessels and Boats, Nets and Fishing Materials, &c., **Gulf Division, Province of Quebec**—*Continued.*

COUNTY OF BONAVENTURE—*Continued.*

Number.	Divisions.	Fishing Gear or Materials—*Con.*				Lobster Plant.					Other Fixtures Used in Fisheries.								Number.
		Smelt Nets.		Hand Lines.		Canneries.		Traps.		Persons employed in canneries.	Freezers and Ice houses.		Smoke and Fish houses.		Piers and Wharfs.		Tugs, Steamers and Smacks.		
		Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.		Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	
			$		$		$		$			$		$		$		$	
1	Restigouche	40	3500	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
2	Bonaventure	...	...	2850	1400	3	1300	1800	875	31	33	2225	338	29695	2	25000	...	...	2
3	Port Daniel	...	...	4520	1365	9	2850	9370	5000	236	13	1850	267	6825	...	...	1	200	3
	Totals	40	3500	7370	2765	12	4150	11170	5875	267	46	4075	605	36520	2	25000	1	200	

COUNTY OF GASPÉ—*Continued.*

1	Grand River	1	30	4301	2141	7	2000	4850	2550	115	18	1375	162	41810	9	2500	...	...	1
2	Gaspé Bay	13	1350	4920	2460	6	1800	2600	1300	68	5	700	89	40200	21	12900	...	...	2
3	Mont Louis	...	...	1128	2200	1	1000	500	250	...	7	2500	10	4000	3	2500	...	...	3
4	Ste. Anne des Monts	...	...	1036	468	...	...	...	...	...	...	...	...	...	...	...	...	...	4
5	Magdalen Islands	...	...	2936	974	43	20105	56500	38120	1197	9	789	48	20250	29	25400	2	350	5
	Totals	14	1380	14321	8243	57	24905	64450	42220	1380	39	5355	309	106260	62	43300	2	350	

COUNTY OF SAGUENAY—*Continued.*

1	Godbout	1	40	350	175	1	400	200	100	.	50	1250	30	1500	.....	...	.....	.....	1
2	Moisie	...	.....	212	106	.....	.....	.....	.....	.....	7	2300	30	5250	2	1000	.....	.....	2
3	Mingan	.....	...	1640	820	5	500	1000	500	30	3	350	67	19000	9	2060	.....	.....	3
4	Natashquan	...	.....	546	293	5	950	1760	975	22	2	400	69	11090	28	3080	.....	.....	4
5	Romaine	.....	.....	60	30	3	450	1100	550	23	.....	..	6	200	5	250	.....	.....	5
6	St. Augustin	...	.....	725	363	8	650	2600	1300	66	.....	.....	90	3200	55	1700	...	.....	6
7	Bonne Esperance	.....	.....	1858	592	.....	.....	.....	.....	.....	.....	.....	75	14500	75	11175	...	.....	7
8	Anticosti	.....	.....	200	100	2	9000	9800	3920	66	1	300	6	3000	3	15000	.....	.....	8
	Totals	1	40	5591	2479	24	11950	16450	7345	207	63	4600	373	57740	177	34265	.....	.....	

GRAND TOTAL OF GULF DIVISION—*Continued.*

1	Bonaventure County	40	3500	7370	2765	12	4150	11170	5875	267	46	4075	605	36520	2	25000	1	200	1
2	Gaspé "	14	1380	14321	8243	57	24905	64450	42220	1380	39	5355	309	106260	62	43300	2	350	2
3	Saguenay "	1	40	5591	2479	24	11950	16450	7345	207	63	4600	373	57740	177	34265	.....	.....	3
	Totals	55	4920	27282	13487	93	41005	192070	55440	1854	148	14030	1287	200520	241	102565	3	550	

RECAPITULATION.

SHOWING the Kind, Quantity and Value of Fish caught in the **Gulf Division, Prov. of Quebec,** for the year 1902—*Continued.*

COUNTY OF BONAVENTURE—*Continued.*

Number.	Divisions.	Kinds of Fish.														Number.
		Salmon, fresh, lbs.	Salmon, salted, brls.	Herring, salted, brls.	Herring, fresh, lbs.	Herring, smoked, lbs.	Mackerel, fresh, lbs.	Mackerel, salted, brls.	Lobsters, preserved in cans, lbs.	Lobsters, fresh in shell, cwt.	Cod, dried, cwt.	Cod, tongues and sounds, brls.	Haddock, fresh, lbs.	Haddock, dried, cwt.	Hake, dried, cwt.	
1	Restigouche	35000	....	75	10000	.....	.....	.....	.....	10	.....	.....	.....	.....	.....	1
2	Bonaventure	229360	....	2500	68000	37000	1000	.....	9060	45	11623	26	70500	725	173	2
3	Port Daniel	24066	....	3625	6000	20500	.... ..	.....	54912	..... .	14560	57	.....	1375	....	3
	Totals	288426	....	6200	84000	57500	1000	.....	63972	55	26183	83	70500	2100	173	

COUNTY OF GASPÉ—*Continued*

1	Grand River	43200	....	1267	.....	.....	.....	.....	47928	.....	37485	70	.. ....	1214	158	1
2	Gaspé Bay	84251	....	1680	... ..	.....	.....	.....	19300	.....	43490	... ..	... ..	.....	...	2
3	Mont Louis	17400	....	3885	.....	.....	.....	.....	.....	... .	16385	59	.....	.....	....	3
4	Ste. Anne des Monts	14070	....	6571	.....	.... ..	.....	.....	.....	.....	5050	.. ..	.. ....	.....	....	4
5	Magdalen Islands	.....	...	9675	29000	.....	2500	12333	429826	.....	10436	40	.....	50	...	5
	Totals	158921	....	23078	29000	.. ..	2500	12333	497054	.....	112846	169	.. ....	1264	158	

COUNTY OF SAGUENAY—*Continued.*

1	Godbout	125000		1094							3000	10				1
2	Moisie	182178		43							2767	18				2
3	Minigan	54668		509					19584		27754	20				3
4	Natashquan	36500		670					6048		5550					4
5	Romaine		52	45					10200		750					5
6	St Augustin		151	130					7480		13750					6
7	Bonne Esperance		75	232							33785					7
8	Aticosti		16	50					103680		1433					8
	Total	398346	294	2773					146992		88789	48				

GRAND TOTAL FOR GULF DIVISION—*Continued.*

1	Bonaventure, County	288426		6200	84000	57500	1000		63972	55	26183	83	70500	2100	173	1
2	Gaspé "	158921		23078	29000		2500	12333	497054		112846	169		1264	158	2
3	Saguenay "	398346	294	2773					146992		88789	48				3
	Grand totals	845693	294	32051	113000	57500	3500	12333	708018	55	227818	300	70500	3364	331	

RECAPITULATION.

SHOWING the Kind, Quantity and Value of Fish caught in the **Gulf Division, Prov. of Quebec,** for the year 1902—*Concluded.*

COUNTY OF BONAVENTURE—*Continued.*

Number.	Division.	Kinds of Fish—*Continued.* Halibut, lbs.	Trout, lbs.	Smelts, lbs.	Eels, brls.	Tom cod or frost fish, lbs.	Squid, brls.	Fish oil, galls.	Fish as bait, brls.	Fish as manure, brls.	Seal skins, No.	Clams, brls.	Total Value of all Fish.	Number.
1	Restigouche	.....	9000	200000	10	30000	.....	.....	.....	750	.....	.....	20,325 00	1
2	Bonaventure	2400	51900	20000	59	22000	.....	3863	3100	75000	.....	.....	162,309 15	2
3	Port Daniel	6650	6000	13000	.....	6500	665	9950	3230	9600	.....	300	111,830 60	3
	Totals	9050	66900	233000	69	58500	665	13813	6330	85350	.....	300	294,464 75	

COUNTY OF GASPÉ—*Continued.*

1	Grand River	.....	3200	24000	.....	.....	1613	19043	4830	.....	.....	55	198,971 00	1
2	Gaspé Bay	.....	4000	30000	.....	.....	1765	23695	5205	.....	.....	60	225,386 20	2
3	Mont Louis	36800	700	.....	.....	.....	220	8192	2755	895	.....	.....	96,817 60	3
4	Ste. Anne des Monts	25100	8500	.....	.....	.....	.....	3925	560	500	.....	.....	54,925 50	4
5	Magdalen Islands	.....	.....	2000	116	.....	.....	40760	4650	1360	11860	.....	388,527 20	5
	Totals	61900	16400	56000	116	.....	3598	95615	18010	2755	11860	115	964,627 50	

COUNTY OF SAGUENAY—*Continued.*

1	Godbout	30600	7500	3200	.....	.....	.....	6200	1750	150	530	.....	50,668 50	1
2	Moisie	4000	1500	.....	.....	.....	.....	2591	640	.....	214	.....	50,410 40	2
3	Mingan	31650	9100	.....	.....	.....	173	27902	4000	500	1465	.....	149,321 25	3
4	Natashquan	300	980	.....	4	.....	30	7000	700	.....	745	.....	37,758 85	4
5	Romaine	3000	1000	.....	.....	.....	.....	775	80	.....	58	.....	6,825 00	5
6	St. Augustin	.....	7000	.....	.....	.....	.....	33850	1585	.....	7500	.....	81,888 50	6
7	Bonne Esperance	.....	3000	.....	.....	5400	.....	32060	545	.....	260	.....	148,523 50	7
8	Anticosti	11300	.....	.....	28	.....	.....	1200	3826	.....	.....	.....	34,417 00	8
	Totals	80850	30080	3200	32	5400	203	111578	13126	650	10772	.....	559,813 00	

GRAND TOTAL FOR GULF DIVISION—*Continued.*

1	Bonaventure County	9050	66900	233000	69	58500	665	13813	6330	85350	.....	300	294,464 75	1
2	Gaspé "	61900	16400	56000	116	.....	3598	95615	18010	2755	11860	115	964,627 50	2
3	Saguenay "	80850	30080	3200	32	5400	203	111578	13126	650	10772	.....	559,813 00	3
	Grand totals	151800	113380	292200	217	63900	4466	221006	37466	88755	22632	415	1,818,905 25	

RECAPITULATION.

RETURN Showing Yield and Value of Fisheries of the **Gulf Division, Province of Quebec,** for the Season of 1902.

Description.	Quantity.	Price.	Value.
		$ cts.	$ cts.
Salmon, fresh in ice....Lbs.	845,693	0 20	169,138 60
" salted....Brls.	294	15 00	4,410 00
Herring, "....Brls.	32,051	4 00	128,204 00
" fresh....Lbs.	113,000	0 01	1,130 00
" smoked....Lbs.	57,500	0 02	1,150 00
Mackerel, fresh....Lbs.	3,500	0 12	420 00
" salted....Brls.	12,333	15 00	184,995 00
Lobsters, canned....Lbs.	708,018	0 20	141,603 60
" fresh....Cwt.	55	5 00	275 00
Cod, salted....Cwt.	227,818	4 00	911,272 00
Cod, tongues and sounds....Brls.	300	10 00	3,000 00
Haddock, fresh....Lbs.	70,500	0 03	2,115 00
" dried....Cwt.	3,364	3 00	10,092 00
Hake, dried....Cwt.	331	2 25	744 75
Halibut....Lbs.	151,800	0 10	15,180 00
Trout....Lbs.	113,380	0 10	11,338 00
Smelts....Lbs.	292,200	0 05	14,610 00
Eels....Brls.	217	10 00	2,170 00
Tom Cod....Lbs.	63,900	0 05	3,195 00
Squid....Brls.	4,466	4 00	17,864 00
Fish oil....Galls.	221,006	0 30	66,301 80
Fish as bait....Brls.	37,466	1 50	56,199 00
Fish as manure....Brls.	88,755	0 50	44,377 50
Seal skins....Number	22,632	1 25	28,290 00
Clams....Brls.	415	2 00	830 00
Total for 1902			1,818,905 25
" " 1901			1,881,689 35
Decrease in 1902			62,784 10

RECAPITULATION

SHOWING Number of Men, Vessels and Boats and Value of Material employed in **Gulf Division** Fisheries—Season of 1902.

	Description.	Value.
		$ cts.
26	fishing vessels of 767 tons (manned by 84 men)	16,225 00
8,588	" boats (fished by 10,524 men)	211,160 00
307,731	fathoms gill net	182,189 00
470	seines (of 19,740) fathoms)	24,451 00
147	trap nets	58,250 00
928	trawls	12,918 00
20	weirs	800 00
55	smelt nets	4,920 00
27,282	hand lines	13,487 00
93	canneries, (employing 1,854 hands)	41,005 00
192,070	lobster traps	55,440 00
148	freezers and ice houses	14,030 00
1,287	smoke and fish houses	200,520 00
241	private piers and wharfs	102,565 00
3	smacks and tugs	550 00
	Total value	938,510 00

RETURN of the Number of Boats, Nets, &c., and the Quantity and Value of Fish
Lévis, Province of Quebec,

Number.	Districts.	Fishing Material.								Salmon, lbs.	Shad, lbs.	Herring, salted, brls.	Herring, fresh, lbs.
		Boats.			Gill Nets.			Brush or Eel Weirs.					
		Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.				
			$				$		$				
1	Capucins	6	35	6	4	70	15	....	.....	.....	.....	30	300
2	Petits Mechins	8	70	15	12	145	95	....	....	....	.....	459	1000
3	Grand Mechins	13	153	13	19	350	160	....	.....	.....	.....	200	1000
4	Grosses Roches	11	120	15	12	275	145	2	40	....	....	50	500
5	Ste. Félicité	45	280	50	43	1180	430	1	20	400	.....	370	3000
6	Matane	7	80	7	11	230	165	6	225	2200	...	40	21000
7	Rivière Blanche	26	180	30	26	658	460	....	.. ..	....	.....	347	1040
8	Sandy Bay	40	350	48	87	2075	1000	....	.....	..	.....	537	17350
9	Métis	7	70	27	3	70	30	25	352	705	.....	55	51000
10	Ste. Flavie and Ste. Luce	24	134	24	26	745	550	12	340	1275	90	21	29800
11	Rimouski and Sacré-Cœur	16	396	30	40	110	80	18	1330	1830	500	46	39200
12	Bic and Rivière Hatée	6	60	8	10	40	30	8	380	920	.....	254	4400
13	St. Fabien and St. Simon	2	14	8	....	....	....	6	130	.....	.....	7	4400
14	Trois Pistoles	3	24	3	....	...	....	1	20	475	350	24	47000
15	Isle Verte	53	460	80	....	....	....	37	3000	1260	4710	635	346200
16	Cacouna and Rivière du Loup	22	175	22	....	...	...	22	1355	1470	700	62	71000
17	St. André	5	55	5	....	...	....	7	1130	.. ..	15	20	35000
18	Kamouraska	....	....	....	....	....	....	....	....	655	1050	.....	14600
19	St. Denis	2	10	10	...	...	..	13	1600	240	20	..	240
20	Rivière Ouelle	2	25	8	....	....	....	10	225	300	....	....	1000
21	Ste. Anne, St. Roch and St. Jean Port Joli	12	62	60	....	....	....	50	1000	.. ..	.....	.....	....
22	L'Islet	....	....	8	3	40	30	8	525	.....	..	....	.....
23	Cap St. Ignace, Crane and Goose Islands	....	....	16	....	....	....	16	2200	.....	.....	....	....
24	Montmagny	2	10	12	1	30	15	11	385	.....	.....	.....	.....
25	Berthier	19	100	45	11	385	175	34	2375	.....	.....	.. ..	.....
26	St. Valier	7	80	10	....	....	....	5	2350	120	11075	.... ..	.....
27	St. Michel	15	1450	20	....	....	....	8	2100	1070	3630	....	.....
28	Beaumont	18	100	22	....	...	....	9	4700	750	1600	.....	...
29	St. Joseph de Lévis	10	40	15	....	....	....	8	2900	620	1200	.. ....	....
30	St. Nicholas	1	10	2	....	....	....	1	400	100	100	.....	.....
	Totals	382	4543	619	308	6403	3380	318	29082	14390	25040	3157	689030
	Values $	....	...	....	....	....	....	..	.....	2878	1502	12628	6890

* In No. 20 add 33 white whale's skins, $132.

caught on the South Shore of the St. Lawrence, from **Cape Chat to Point** for the Year 1902.

Kinds of Fish.																Total Value of all Fish.	Number.
Herring, smoked, lbs.	Trout, lbs.	Bass, lbs.	Pickerel, lbs.	Cod, cwt.	Halibut, lbs.	Sturgeon, lbs.	Eels, lbs.	Whitefish, lbs.	Smelts, lbs.	Sardines, brls.	Fish oil, galls.	Mixed and coarse fish, lbs.	Fish as bait, brls.	Fish as manure, brls.	Seal skins, No.		
																$ cts.	
				58	1900						27	30	5			560 90	1
				158	200						113	24	15			2,554 64	2
				178	320						79	10	10			1,592 80	3
				150	1500						59	10	12			990 80	4
2000				130	6000				1000		75		8	50		2,859 50	5
2000				18	6200				200		5	20	2	150		1,631 70	6
				10	1800							40	2	200		1,721 80	7
					3450							2000		100		2,736 50	8
800										15		2000				952 00	9
7200					6900					6		920				1,503 60	10
	600					40				21		27300				1,370 40	11
1800										9					12	1,322 00	12
	7000						5000			8		800				1,104 00	13
						350				18					5	763 25	14
66000						560	1110			16		106400			15	9.087 55	15
600						1820	1500			125		19300			18	2,095 70	16
4000						2710	490			20		2600				788 90	17
						26600	500			60		20000				2,346 00	18
50						960	6250					800				493 20	19
100						30000	4500			50		200				*2,426 00	20
						520	15270					3070				978 10	21
	6000					200	4380					400				878 80	22
						1350	13430		3000			20400				1,240 80	23
						14800	3940					1600				1,140 40	24
						61300	26500					3800				5,306 00	25
		2750	10650			3000	21400	5000				600				3,572 50	26
		1500	160			1470	33800	1250				1250				2,845 10	27
		2900	2150			34400	47900	800				2600				5,709 00	28
		1650	1550			3200	14000	1650				500				1,656 00	29
		350	300			2500	5000	300				500				564 00	30
84550	13600	9150	14810	702	28270	185780	204970	9000	4200	348	358	217174	54	500	50		
1691	1360	915	888	2808	2827	11146	12298	900	210	1044	107	2171	81	250	62	62,791 94	

RETURN of the Number of Boats, Nets, &c., and the Quantity and Value of Fish in the **Quebec,** for

Number.	Districts.	Fishing Material.										
		Boats.			Gill Nets.			Seines.			Hoop Nets.	
		Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.
			$				$			$		$
1	* Lakes and streams in Eastern Townships	....	....	....	....	....	....	....	....	....	....	....
2	Missisquoi Bay and vicinity	14	140	28	....	....	..	14	1100	840	....	....
3	Richelieu River	80	1080	98	....	....	....	50	900	800	105	2500
4	Lake St. Francis and tributaries	50	500	50	....	....	....	....	....	....	....	....
5	Lake St. Louis and tributaries	60	600	60	....	....	....	10	300	200	....	....
6	Laprairie and Chambly counties	28	300	30	....	....	....	14	420	350	....	....
7	Vercheres county	20	200	20	....	....	....	8	240	200	3	20
8	Richelieu "	35	350	40	....	....	....	14	460	400	200	1000
9	Yamaska county and river	50	500	50	....	....	....	10	300	250	660	3300
10	Nicolet county	55	550	60	25	750	150	30	900	500	20	100
11	Portneuf to St. Maurice	70	700	75	35	1050	200	25	850	470	20	120
12	Maskinonge county	30	300	35	5	120	30	6	180	60	200	1000
13	Berthier and Joliette counties	50	400	50	15	300	120	10	300	90	400	2000
14	L'Assomption, Terrebonne and Laval	75	600	75	15	400	80	10	340	200	30	150
15	Lake Two Mountains	60	550	65	150	2000	500	5	150	75	10	50
16	Ottawa River and tributaries including the Gatineau district	115	920	160	135	2800	540	....	....	....	....	....
	Totals	792	7690	896	380	7420	1620	206	6440	4435	1648	10240
	Values $	....	....	....	....	....	....	....	....	....	....	....

* Angling, trolling and night lines.

Inland Districts extending from **Quebec City** to **Pontiac**, in the **Province of** the Year 1902.

Kinds of Fish.													Total Value.	Number.
Shad, lbs.	Whitefish, lbs.	Trout, lbs.	Bass, lbs.	Pickerel, lbs.	Pike, lbs.	Maskinonge, lbs.	Sturgeon, lbs.	Eels, lbs.	Perch, lbs.	Bullheads, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.	$ cts.	
.....	6000	60000	9600	42100	2000	1000	. . .	2000	8000	.....	.....	48000	12608 00	1
.....	.....	.....	.....	30000	4000	.....	....	.....	25000	.....	.. ..	18000	4210 00	2
.....	.....	.....	5000	6100	30600	200	1000	80100	63000	...	.....	206000	14674 00	3
.....	.....	. ..	6000	5200	3400	1000	15000	44500	3600	2000	1000	75000	6666 00	4
.....	...	..	2100	2900	5100	800	14600	13800	5300	26500	5500	31300	4862 00	5
600	2200	.....	1200	3000	3200	200	2600	900	3200	4100	800	105000	3519 00	6
.....	300	.....	500	1000	2000	150	1100	4200	5500	500	200	21000	1319 00	7
1000	900	....	700	3500	10800	800	7300	15800	9000	5000	1000	55700	4390 00	8
. . .	950	.....	3600	11400	23900	600	3500	20400	12900	20600	4000	103600	7923 00	9
3800	2000	. . .	2500	17600	6000	1300	6000	7500	4700	2000	3000	85300	5609 00	10
3000	4000	6000	3500	6300	15000	1000	13000	20600	24500	4000	12400	206200	† 17661 00	11
.....	.. .	5000	500	2500	5400	1400	1600	5000	4900	3100	2300	31000	2645 00	12
1000	500	3500	600	2300	10300	600	1300	5400	10000	5000	1200	63700	3781 00	13
700	.....	36600	4000	8400	7500	650	1600	4900	7100	5300	2900	35200	7043 00	14
500	.....	1500	4900	4000	13600	1300	5200	3300	8700	4800	5000	91600	4987 00	15
.....	25800	76900	29800	38500	88700	13600	33800	6400	8300	6400	10300	230000	30181 00	16
10600	42650	189500	74500	184800	231500	24600	107600	234800	203700	89300	49600	1406600	.. ..	
1060	4265	18950	7450	14784	11575	2460	6456	14088	10185	4465	1488	28132	132078 00	

† Add 11,200 bushels of tom cod, $6,720.

NORTH SHORE of the St. Lawrence from Quebec to the Saguenay, including Lake St. John District—1902.

FISHING MATERIALS.	County of Quebec.	Montmorency, & Isle d'Orleans.	Charlevoix & Isle aux Coudres.	Lake St. John & Tributaries.	Total Quantity.	Total Value.
						$ cts.
Boats, No.	4	6	10	12	32	255 00
Weirs, No.		130	65		195	12,300 00
Gill nets, fathoms	220		150	800	1,170	350 00
Seines, fathoms		50	40		90	50 00
Lines, No.	25	30	40	20	115	115 00
Total value						13,070 00
KINDS OF FISH.						
Salmon, lbs.		600	1,400	15,000	17,000	3,100 00
Herring, fresh, lbs.			4,200		4,200	42 00
Whitefish, lbs.	2,500	400		17,000	19,900	1,990 00
Trout, lbs.	12,000	2,200	16,600	32,000	62,800	6,280 00
Ouananiche, lbs				26,000	26,000	2,600 00
Pickerel, lbs.	1,150	400		79,500	81,050	4,863 00
Pike, lbs.				32,400	32,400	1,620 00
Sturgeon, lbs.	2,000				2,000	120 00
Eels, lbs.	600	285,000	52,300		337,900	20,274 00
Perch, lbs.	500			2,200	2,700	81 00
Coarse and mixed fish, lbs.	2,500	38,000	185,000	135,000	360,500	3,605 00
Sardines, brls.			175		175	525 00
Totals	21,250	326,600	294,500	339,100	981,450	
Values $	1,715	17,884	7,495	18,306		45,400 00

RECAPITULATION.

Of the Yield and Value of the Inland Fisheries of **Quebec** (exclusive of the **Gulf Division**) for the year 1902.

Kinds of Fish.		Quantity.	Price.	Value.
			$ c.	$ cts.
Cod	Cwt.	702	4.00	2,808 00
Halibut	Lbs.	28,270	.10	2,827 00
Salmon	"	31,390	.20	6,278 00
Ouananiche	"	26,000	.10	2,600 00
Trout	"	265,900	.10	26,590 00
Herring, fresh	"	693,230	.01	6,932 30
" smoked	"	84,550	.02	1,691 00
" salted	Brls.	3,157	4.00	12,628 00
Sardines	"	523	3.00	1,569 00
Shad	Lbs.	35,640	..	2,562 40
Eels	"	777,670	.....	46,660 20
Whitefish	"	71,550	.10	7,155 00
Bass	"	83,650	.10	8,365 00
Maskinonge	"	24,600	.10	2,460 00
Pickerel	"	280,660	....	20,535 60
Pike	"	263,900	.... ..	13,195 00
Perch	"	206,400	... .	10,266 00
Sturgeon	"	295,380	.06	17,722 80
Tom Cod	Bushels.	11,200	.60	6,720 00
Smelts	Lbs.	4,200	.05	210 00
Catfish	"	49,600	.03	1,488 00
Bullheads, dressed	"	89,300	.05	4,465 00
Coarse fish	"	1,984,274	....	33,908 74
Fish oil	Galls.	358	.30	107 40
White Whales (Beluga)	No.	33	4.00	132 00
Seal skins	"	50	1.25	62 50
Fish as bait	Brls.	54	1.50	81 00
" manure	"	500	.50	250 00
Total for 1902				240,269 94
" 1901				292,770 10
Decrease				52,620 16

STATEMENT

Showing the Fishing Material used in Quebec Inland Districts (exclusive of the **Gulf St. Lawrence Division**) for 1902.

Articles.	Value.
	$ cts.
1,206 Fishing boats (1715 Men)	12,488 00
746 Gill nets (14993 fathoms)	5,350 00
251 Seines (6705 fathoms)	4,635 00
513 Weirs (brush or wire)	41,382 00
1,648 Hoop nets	10,240 00
1,360 Fishing lines	1,563 00
Total	75,658 00

RECAPITULATION

OF the Yield and Value of the Fisheries of the whole Province of **Quebec** for the Year 1902.

Kinds of Fish.		Quantity.	Rate.	Value.	Total Value.
			$ cts.	$ cts.	$ cts.
Salmon, fresh	Lbs.	877,083	0 20	175,416 60	
" salted	Brls.	294	15 00	4,410 00	
					179,826 60
Ouananiche	Lbs.	26,000	0 10		2,600 00
Trout	"	379,280	0 10		37,928 00
Whitefish	"	71,550	0 10		7,155 00
Smelts	"	296,400	0 05		14,820 00
Cod, dried	Cwt.	228,520	4 00	914,080 00	
Cod, tongues and sounds	Brls.	300	10 00	3,000 00	
					917,080 00
Haddock, fresh	Lbs.	70,500	0 03	2,115 00	
" dried	Cwt.	3,364	3 00	10,092 00	
					12,207 00
Hake, dried	"	331	2 25		744 75
Tom cod	Lbs.	399,900			9,915 00
Halibut	"	180,070	0 10		18,007 00
Herring, fresh	"	806,230	0 01	8,062 30	
" smoked	"	142,050	0 02	2,841 00	
" salted	Brls.	35,208	4 00	140,832 00	
					151,735 30
Clams	"	415	2 00		830 00
Sardines	"	523	3 00		1,569 00
Shad	Lbs.	35,640			2,562 40
Bass	"	83,650	0 10		8,365 00
Pickerel	"	280,660			20,535 60
Perch	"	206,400			10,266 00
Pike	"	263,900			13,195 00
Maskinonge	"	24,600	0 10		2,460 00
Eels	Brls.	217	10 00	2,170 00	
" fresh	Lbs.	777,670		46,660 20	
					48,830 20
Sturgeon	"	295,380	0 06		17,722 80
Mackerel, fresh	"	3,500	0 12	420 00	
" salted	Brls.	12,333	15 00	184,995 00	
					185,415 00
Lobsters, canned	Lbs.	708,018	0 20	141,603 60	
" fresh or alive	Cwt.	55	5 00	275 00	
					141,878 60
Squid	Brls.	4,466	4 00		17,864 00
Coarse and mixed fish	Lbs.	2,123,174			39,861 74
White whales (Beluga) skins	No.	33	4 00		132 00
Seal skins	"	22,682	1 25		28,352 50
Fish oil	Galls.	221,364	0 30		66,409 20
Fish bait	Brls.	37,520	1 50		56,280 00
Fish as manure	"	89,255	0 50		44,627 50
Total for 1902					2,059,175 19
" 1901					2,174,459 45
Decrease					115,284 26

RECAPITULATION

Of the number of Vessels, Boats, &c., used in the Fisheries for the whole Province of **Quebec**, for the Year 1902.

Articles.	Value.	Total.
	$ cts.	$ cts.
26 fishing vessels (767 tons)	16,225 00	
9,794 fishing boats	223,648 00	
13,051 gill nets (322,724 fathoms)	187,539 00	
721 seines (26,445 fathoms)	29,086 00	
147 trap nets	58,250 00	
1,648 hoop nets (verveux)	10,240 00	
533 weirs (brush or wire)	42,182 00	
55 smelt nets	4,920 00	
928 trawls	12,918 00	
28,642 fishing lines	15,050 00	
		600,058 00
93 lobster canneries	41,005 00	
192,070 " traps	55,440 00	
		96,445 00
148 freezers and ice houses	14,030 00	
1,288 smoke and fish houses	200,520 00	
241 fishing piers and wharfs	102,565 00	
3 smacks and tugs	550 00	
		317,665 00
Total		1,014,168 00

APPENDIX No. 7.

ONTARIO.

GENERAL REMARKS SEASON 1902.

The fishing season opened earlier than for many years. The Georgian bay was practically clear of ice on the 10th April.

The season's operations, notwithstanding the extremely rough weather which was experienced at frequent intervals during the year, and to which is in a large measure attributed the falling off in the quantity of fish taken, have been, on the whole, in view of the high prices which obtained, more generally satisfactory than they would otherwise have been. Lake Erie herring are said to have one day during the season sold at 13 cents per pound.

Licenses to fish with 2,538,673 yards of gill net, 479 pound nets, 479 hoop nets, 98 seines, 22 dip nets and 3 machines, besides several thousand hooks, were issued.

The occupation has given employment to 2885 men, 124 tugs (inclusive of gasoline launches), and 1295 boats.

An estimated capital of $816,392 is invested in the industry.

The aggregate catch amounts to 23,715,070 pounds, as compared with 26,863,779 pounds in 1901, a decrease of 3,148,709 pounds.

The estimated value of the catch is $1,265,705.

PROTECTION.

The Provincial officers have rendered good service, and their efficiency is of course increasing as they become more familiar with their duties. They have been on the alert for violations, and especially for illegal shipments of fish. By a frequent examination of these shipments we are able to detect whether the laws are being observed as to size and kinds of fish permitted to be taken A number of seizures have been made during the year, and the offenders severely punished. Fishermen throughout the province have been warned so frequently against the shipment of trout and whitefish under two pounds in weight, a lesser size being prohibited to be taken, that no violations of this law have been reported. The statute is very severe on the point rendering the whole shipment liable to confiscation if any fish taken contrary to law are intermixed therewith

THE COMMERCIAL FISHERIES.

CLOSE SEASONS, ETC.

Many representations have again been received that the close seasons are inapplicable, and require revision; and that close seasons should be established for herring and sturgeon. The subject is, as has already been pointed out in former reports, within the entire jurisdiction of the Federal Government, and parties making such representations have been so advised; but at the same time it is one which seriously affects the fisheries of the province and the fishing industry, and in that connection the following observations are made.

Lake Trout.—Perhaps in the case of none of our fish does the spawning season vary so much as in that of lake trout. In some of the lakes of Muskoka, they are ripe in

NOTE.—The information re Ontario fisheries is taken from the provincial reports.

August; in Lake Superior they spawn in September, and during that month agents of the American hatcheries, located on the lake, have been in the habit of visiting the stations along the north shore for the purpose of collecting spawn: in Lake Huron, the North channel, the Georgian bay, in the vicinity of the Bustards, and in the Temiscamingue district, they begin to spawn about the middle of October: and it is only in the lower part of the bay that the season may be said to apply. In Lakes Erie and Ontario, spawning continues until late in December. Strong protests have been raised by fishermen of the Georgian bay against what they call an unfair discrimination in favor of the Lake Superior and Lake Huron fisherman, it being alleged that their biggest catches are made while the trout are "running," or are on the spawning grounds. A close season to fulfil its functions should cover at least a portion of the time when the fish are carrying their eggs, as well as the spawning period. The objection which has been heretofore presented to varying seasons is the difficulty of proving possession of fish taken in closed waters; but with the provision which the Ontario Government has made for the enforcement of the fishery laws, it is believed such objection does not hold.

Lake Herring and Whitefish.—The most potent argument in favour of a close season for herring is, that it is alleged, and no doubt with more or less truth, that large numbers of trout and whitefish are taken by the fishermen while nominally fishing for herring; and more especially is this said to be the case in the Georgian bay and Lake Erie. Herring have been everywhere unusually large this year, many having been take weighing 3 pounds and upwards, and they are said to have sold in the American retail market as 'choice whitefish.' The catch of herring during the season in Lake Erie shows an alarming decrease when compared with that of 1901, being 2,338,000 pounds less. Its extermination would therefore appear to be certainly approaching and to be a matter of time only unless radical measures are adopted for its preservation, such as the establishment of a close season, and perhaps a limitation of the implements used for its capture. The following is an extract from the annual report of Overseer Laird of Kent on the subject:

'The past season has brought ruin to more than one fisherman, and others have not made enough to pay expenses, all owing, I have no doubt, to the very great falling off of the herring fishing, which has been getting lighter every year for several years. I have no hesitation in saying that the decrease is owing to the wholesale destruction of the herring during the spawning season with gill nets. . . . If some means are not adopted at once for the better protection of herring and whitefish are on the spawning grounds, the fishing industry, as far as they are concerned, will, in the very near future, be a thing of the past.'

In the Georgian bay there does not appear to be the same cause for alarm, and but as a safeguard for the trout and whitefish the same precautions would evidently be unnecessary as to herring. Captain McAulay of the 'Gilphie' reported them to be 'as thick as water,' that more were taken each morning than could be dressed and salted during the day, and that all available packages were soon filled; district Overseer Pratt, that 'they began to appear on the inshore shoals about Oct. 11th, and were in countless millions, and that the total catch is but an infinitesimal fraction of their numbers.' A decrease in whitefish is everywhere reported, except in the North channel of Lake Huron. To rely upon its natural increase for re-establishment would, it has been said, be like a farmer relying upon the seeds which fall from the ripened grain for next year's crop; and perhaps this may be said of trout also. Indeed, it is a debatable question whether, under all the circumstances, it would not be better, rather than continue the close season for trout and whitefish, to abolish it altogether and rely for their maintenance on the two pound limit and an increased output from the hatcheries.

Sturgeon:—As has been already stated, the reports indicate a gradual decrease in almost every quarter. A few years ago they were so plentiful and in such small demand that Ontario fishermen threw them away without attempting to market them. To-day they are the highest priced of our fresh water fish, and the supply is unequal to the

demand. If, therefore, this valuable fish is not to entirely perish, some measure of protection must be accorded to it. Not only should a close season be established, but a weight or length under which none shall be taken should be stipulated. Many of the states have already taken steps in that direction, and attempts at artificial propagation have also been carried on for some years, not only in the United States, but in Germany and Russia, but so far with only indifferent success; and if restoration is to be accomplished, it would seem that it must be by natural increase. The result of issuing licenses for sturgeon fishing in Lake Nipissing for the last two years has been a very marked improvement in the size of the fish. In the Rainy River much poaching has been done for some years, and correspondence has been had with the state of Minnesota with a view to joint action to suppress it if practised next season. It is chiefly carried on in the months of May and June, while the fish are passing from the Lake of the Woods to the river to spawn. The Lake of the Woods was a few years ago the most famous sturgeon fishery in Canada; and the caviare made from the roe taken there is said to be fully equal to the renowned Russian caviare.

The Dominion Commissioner of Fisheries made a study of the sturgeon's food in view of the predacious qualities frequently attributed to it. He examined specimens captured near the breeding grounds of certain valuable commercial fishes. It was about the spawning time of these fishes and it was anticipated that portions of the egg-capsules of the species referred to, would have occurred in the food or that portions of larval fishes, which crowded the shallows, would have been present. The food, which was abundant, consisted solely of shell-fish and vegetable matter, with a few scattered unicellular algæ. A more prolonged investigation and the examination of the food contents in the stomachs of a large series of sturgeons would show, there is much ground for thinking, that the rapacious character commonly attributed to the sturgeon in not justifiable. The present limited study, so far as it goes, is conclusive enough, for no trace of eggs or fry was perceptible under the most minute and patient examination. In view of the existing system of planting fry of salmonoids and other valuable fish, and of the precautions for protecting parent fish on their spawning beds, such a conclusion is of some value, and it indicates the probability that the sturgeon is not to be credited with the predacious propensity and evil character so commonly attributed to it. Fish merchants and fishermen desirous, at all costs, of extensively pursuing the sturgeon fishery, and using the argument that in exterminating this valuable fish benefit must result to other fisheries, have no reliable evidence so far as to support their contention. Their view may have some ground in fact, but the depletion of sturgeon in many well-known waters has not sensibly resulted in a great increase in other fishes to which the sturgeon was specially thought to be inimical. Wherever the sturgeon fishery has been actively prosecuted, the supply has been rapidly depleted, and extensive destructive operations inevitably end in this result, as the fish are specially sought after when loaded with the ripe spawn, from which caviare is made, and the immature sturgeon are caught ruthlessly on account of the value of their flesh, and the waste products from which isinglass is made.

Pickerel:—In waters like the Thames river, many tons of pickerel have been annually taken as they ascend the river to spawn, and before the close season begins (15th April). Consequently, for these and similarly situated waters it has been pointed out that the season should commence earlier—some go so far as to say the 1st January. The decrease in the catch in contiguous waters to the Thames is about 25,000 pounds as compared with the quantity taken in 1901. The pickerel is a very valuable food fish and next to the sturgeon has brought the highest price in New York of any fresh water fish, namely, 12 cents per pound.

Carp:—Carp are reported to be rapidly increasing, and it is said they are destroying the rice and celery beds at Long point and in Lake Simcoe. The most successful implement with which to take them is the seine, and permits have been issued wherever this could be properly done. The demand for carp has been good, and the prices high, the average wholesale price in New York having being about six cents. A close season is not yet asked for carp. And there is no occasion for any apprehension that one will be needed for many a year. On the other hand, there seems to be a disposition on the part of every one to expedite its extermination.

Fishways.

Representations have been made as to the necessity for fishways in a number of dams in the province. Several new fishways are reported to have been erected, and officers have been directed to see that those in existence have been kept clear of debris and otherwise in good working order. In view of the urgent representations received as to the necessity of fishways in dams on the Humber river, a special officer was detailed to make a thorough examination of the dams, procure information, and report upon the subject. His report was forwarded to the department at Ottawa, the question of the necessity of fishways being, as has been pointed out in a former report, one for the Federal Government, and not for the Provincial Government, to decide. It may be said, however, that it is not always expedient to erect a fishway simply because one is desired, as it would in many cases afford a means of entrance of undesirable fish to our inland waters, which could not but be regarded as a calamity.

Sawdust.

The law with respect to the pollution of waters with sawdust and mill refuse has been rigidly enforced, and where persistent violations have been committed, after repeated warnings, fines have been imposed as an earnest of the department to stop the practice. The noxious gases which are emitted from the decaying deposits are not only most deadly to fish life, but they are a great menace to human health as well. It may be assumed that for this reason in waters in the vicinity of old mill sites no fish are usually to be found. With modern appliances for burning and disposing of mill refuse, and as fuel becomes scarcer and more valuable, complaints have been much less frequent.

The Fishing Season.

There is a growing conviction among fishermen that all fishing in our great lakes should cease on the first December; and that they would be hundreds of dollars in pocket every year if they were obliged to then shut down. It is usually after that date that the most disastrous storms prevail, gill nets are lost, and pound nets are blown out. But the work of destruction does not end here, for the gill net continues to fish, and may fish almost indefinitely; the decaying fish pollute the water, and fisheries have been practically ruined for years in this way. So that there is much to be said in favor of the fishing season for gill and pound nets closing on December the first.

ONT

RETURN of the Number of Fishing Tugs and Boats, the Quantity and Value of all the Year

Number.	Districts.	Fishing Material.											
		Tugs or Vessels.				Boats.			Gill-nets.		Pound nets.		
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Yards.	Value.	Number.	Value.
	Lake of the Woods and Rainy River District.			$			$			$		$
1	Lake of the Woods					15	1300	36	13500	1900		
2	Lake Manitou					1	75	2	1000	150		
3	Shoal Lake	1	8	600	2	4	325	9	6200	1100		
4	Big Sandy Lake					1	50	2	1000	150		
5	Lake Wabigoon					1	30	2	300	50		
6	Basswood Lake					1	75	2	1000	150		
7	Cross Lake					1	75	2	2800	400		
8	Peak Lake					1	75	2	1000	150		
9	Rainy Lake, &c.					3	80	5	4500	225		
10	District lying between the 5th and 7th meridian lines and south of a line running due east from One Side Lake to Whitefish Lake					3	300	5	2000	200		
	Totals	1	8	600	2	31	2386	67	33300	4475		
	Values $											
	Lake Superior.											
1	Thunder Bay	8	144	9250	32	35	3250	54	158500	8382	16	1350
2	Dog Lake					2	200	4	3000	260		
3	Pilot Harbour	1	10	1500	3						5	1500
4	Richardson Harbour	1	20	8000	12	2	400	4	18000	3600		
5	Indian Harbour	1	15	3000	10				12000	1600		
6	Caribou Island					1	100	2	6000	150		
7	Michipicoten Island	1	20	8000	12	2	300	5	29000	2600	5	1500
8	Point Mamainse	1	10	1800	5				24000	1800		
9	Batchewana Bay					2	200	4	6000	1200		
10	Goulais Bay					5	650	12	2000	200	4	2200
	Totals	13	229	31550	74	49	5100	85	258500	19792	30	6550
	Values $											

ARIO.

Fishing Materials and the Kinds of fish caught in the **Province of Ontario**, for 1902.

Kinds of Fish.													Value.	Number.
Herring, fresh, lbs.	Whitefish, lbs.	Trout, lbs.	Pickerel or doré, lbs.	Pike, lbs.	Sturgeon, lbs.	Caviare, lbs.	Sturgeon bladders. No.	Tullibee, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.	Trout, salted, brls.	Whitefish, salted, brls.		
													$ cts.	
.....	151308	7736	159125	34748	44049	1853	128	2313	240739	....	.....	.....	38,071 98	1
.....	1830	946	809	452	..	....	..	....	.....	..	...	.....	299 53	2
.....	36942	707	36442	8114	.....	....	....	....	.....	...	....	.....	5,172 72	3
....	972	319	538	227	.. ....	....	....	....	.....	....	....	....	145 64	4
....	500	50	600	800	....	....	....	....	.....	....	.....	....	107 00	5
.....	3000	.....	9000	3000	....	....	....	2000	.....	...	....	....	930 00	6
....	20423	4746	360	....	....	....	....	....	.....	....	.....	....	2,126 44	7
.....	2000	2000	.....	..	.....	...	....	....	.....	....	.....	....	360 00	8
.. .	45000	45000	....	4000	... .	....	....	....	.. ..	....	.....	.....	8,260 00	9
.....	2000	... .	200	.....	50	....	....	10	.....	....	.... .	.....	173 60	10
... .	263975	61504	207074	51341	44099	1853	128	4323	240739	.. .	.....	.... .		
.... .	21118	6150	10354	2053	2646	926	102	259	12037	....	.....	...	55,646 91	
105220	192393	543816	26105	1860	4560	.. ..	...	...	.....	980	138½	.....	74,935 29	1
. ...	12000	1800	7000	900	....	....	. .	....	....	....	...	.....	1,526 00	2
. .	53000	5000	2100	300	1000	...	....	....	... .	....	.....	.....	4,917 00	3
. ...	13200	258900	... .	..	.....	....	....	....	.....	....	..	..	26,946 00	4
.....	900	185300	.....	....	.....	....	....	....	.. ..	.. ..	..	151	20,112 00	5
...	.....	14500	.....	.....	.....	...	....	....	....	.. ..	.. ..	.. ..	1,450 00	6
.... .	57850	87500	.....	...	.....	....	....	....	....	....	.....	.....	13,378 00	7
... .	9000	71000	.....	...	.	....	....	....	....	....	.....	.....	7,820 00	8
....	16600	120000	..	....	.....	....	....	....	....	.	88	.....	14,208 00	9
..	44000	46000	.....	...	300	...	....	....	.. ....	....	...	..	8,138 00	10
105220	398943	1333816	35205	3060	5860	...	....	....	.....	980	226½	151	.....	
2104	31915	133381	1760	122	351	....	....	....	.....	19	2265	1510	173,430 29	

RETURN of the Number, Tonnage and Value of Tugs, Vessels, Boats, Nets, &c., and

Number.	Districts.	Fishing Material.												
		Tugs or Vessels.				Boats.			Gill Nets.		Seines.			Pound Nets.	
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Yards.	Value.	Number.	Yards.	Value.	Number.	Value.
	Lake Huron Division.			$			$			$			$		$
1	Tenby Bay					1	100	2	1000	50					
2	Marksville	1	8	600	3				2000	200					
3	Thessalon and Bruce Mines	1	12	1500	3	6	600	12	12000	450				3	800
4	Byng Inlet					1	75	2	4000	150					
5	Blind River					1	40	2	2000	100					
6	Spragge					4	325	8	7400	750				8	1600
7	Kagawong	1	10	1800	5	1	100	2	14000	700					
8	Little Current	1	13	1000	6	4	375	10	500	200				15	3500
9	Gore Bay	1	10	1500	6	2	280	3						5	1500
10	Meldrum Bay	2	25	8000	12	1	150	3	48000	5000				5	1000
11	Cockburn Islands	4	75	10800	23	3	225		78600	7700					
12	Ducks Islands	5	77	19200	19	9	882	18	155000	15425				7	775
13	South Bay Mouth	2	24	2000	10	5	622	11	68000	4900				2	250
14	Fitzwilliam Island					18	1650	34	53000	2875					
15	Squaw Island	4	69	8200	20	1	200	2	102000	9000					
16	Killarney	3	60	15000	15	38	3367	75	231000	19800					
17	Bustard Islands	1	15	6000	6	20	2201	53	106000	7005					
	Totals	26	398	85600	128	115	11192	237	884500	74305				45	9375
	Values														
	Georgian Bay Division.														
1	Parry Sound	4	40	6500	21	18	1340	24	140000	15800					
2	Waubashene	1	14	1200	2	8	650	16	15000	1500					
3	Victoria Harbour					4	600	8	24000	1200					
4	Midland					13	1000	26	27000	3000					
5	Penetanguishene					6	400	12	9000	800					
6	Collingwood	3	50	9000	18	21	685	42	142300	8585					
7	Owen Sound	4	80	13400	22	37	2828	74	200000	9986					
8	Colpoys Bay and Tobermory	5	85	12300	28	15	542	30	164760	11632					
	Totals	17	269	42400	91	122	8045	232	722060	52503					
	Values														
	Lake Huron (Proper).														
1	Cape Hurd to Southampton	5	137	17500	35	26	2110	58	211800	7513	1	500	150	2	30
2	Southampton to Goderich	2	15	3800	8	3	210	6	54850	2600					
3	County of Huron, including Grand Bend division	2	56	6000	8	15	1655	48	43000	3320				13	2030
4	Bosanquet Township					7	351	15	4445	499	1	140	20	4	980
5	Plympton "					8	490	11						10	1950
6	Sarnia "	1	20	1400	4	33	1760	47	9400	265				27	5530
	Totals	10	228	28700	55	92	6576	185	823495	14197	2	640	170	56	10790
	Values														

the Quantity and Value of all Fish, &c., in the **Province of Ontario**—*Continued*

KINDS OF FISH.														TOTAL VALUE.	
Herring, salted, brls.	Herring, fresh, lbs.	Whitefish, lbs.	Whitefish, salted, brls.	Trout, salted, brls.	Trout, lbs.	Pickerel or Doré, lbs.	Pike, lbs.	Sturgeon, lbs.	Perch, lbs.	Tullibee, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.	Caviare, lbs.	$ cts.	Number.
.....	.....	800	.....	.....	900	800	6200	.....	.....	.....	.....	2800	.....	498 00	1
20	.....	46100	.....	.....	40650	26400	4600	4700	.....	.....	.....	1000	280	9,779 00	2
.....	.....	15900	.....	.....	18600	300	.....	.....	.....	.....	.....	.....	.....	3,147 00	3
.....	.....	2000	.....	.....	2000	7000	.....	.....	.....	.....	.....	.....	.....	710 00	4
.....	.....	150	.....	.....	850	.....	.....	.....	.....	.....	.....	.....	.....	97 00	5
40	.....	7500	.....	.....	27000	66000	100	4800	.....	.....	900	6000	.....	7,217 00	6
.....	.....	38000	.....	.....	44000	.....	.....	.....	.....	.....	.....	.....	.....	7,440 00	7
120	.....	69000	.....	.....	25100	88000	11800	6300	.....	.....	185	.....	251	13,894 75	8
66	.....	14500	.....	.....	9390	31500	1100	.....	.....	.....	.....	.....	.....	3,982 00	9
.....	.....	30000	30	20	17000	14000	.....	2000	.....	.....	.....	.....	50	5,445 00	10
.....	.....	76000	.....	.....	205000	.....	.....	.....	.....	.....	.....	.....	.....	26,580 00	11
.....	200	142000	20	.....	364000	.....	.....	.....	.....	.....	.....	.....	.....	47,964 00	12
.....	.....	114800	.....	.....	109400	.....	.....	.....	.....	.....	.....	.....	.....	20,124 00	13
100	.....	73000	.....	.....	156000	69000	.....	.....	.....	.....	.....	.....	.....	25,290 00	14
.....	.....	64000	.....	.....	38000	1000	.....	.....	.....	.....	.....	.....	.....	8,970 00	15
.....	.....	341300	.....	.....	100015	143076	13050	380	295	745	534	30	.....	45,084 95	16
183	25000	114100	.....	.....	59300	84500	34800	.....	.....	2000	10500	16600	.....	24,794 00	17
529	25200	1149150	50	20	1217205	569716	71650	18180	295	2745	12119	26430	581	.....	
2116	504	91932	500	200	121720	28489	2866	1091	8	164	606	528	290	251,016 70	
36	4300	199900	.....	.....	279100	2250	400	.....	.....	.....	.....	.....	.....	44,260 50	1
100	2600	3800	.....	.....	5200	49300	16800	1500	.....	.....	2190	12600	.....	4,864 50	2
.....	.....	41140	.....	.....	42500	44300	.....	4290	.....	.....	.....	.....	.....	10,013 60	3
1452	.....	25850	.....	.....	124500	.....	1350	.....	.....	.....	.....	.....	.....	20,380 00	4
38	.....	3700	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	448 00	5
140	109000	61800	20	64	113950	.....	.....	22450	9000	.....	.....	15000	5600	24,636 00	6
36	3100	112600	.....	.....	400200	.....	.....	.....	.....	.....	.....	.....	.....	49,234 00	7
35	2200	7500	10½	189	435020	.....	20	.....	.....	.....	.....	.....	.....	46,281 80	8
1837	121200	456290	30½	253	1400470	95850	18570	28240	9000	.....	2190	27600	5600	.....	
7348	2424	36503	305	2530	1400	4792	743	1694	270	.....	109	552	2800	200,118 40	
770	45000	10	.....	486½	789270	.....	.....	2350	.....	.....	.....	.....	800	88,313 80	1
98	2000	2000	1	153½	84500	.....	.....	.....	.....	.....	.....	.....	.....	10,587 00	2
.....	34398	10137	.....	.....	114070	55187	.....	8810	3128	.....	840	25814	36	16,863 99	3
.....	7320	1500	.....	.....	9517	35691	.....	3710	2150	.....	.....	11812	.....	3,525 99	4
.....	35997	1080	.....	.....	200	55539	.....	3160	950	.....	.....	22295	.....	4,267 29	5
72½	125440	2091	.....	.....	4450	172153	.....	33220	130	.....	30	59263	.....	15,202 59	6
940½	250155	16818	1	640	1002007	318570	.....	51250	6358	.....	870	119184	836	.....	
3762	5003	1345	10	6400	100200	15928	.....	3075	190	.....	43	2383	418	138,760 66	

RETURN showing the Number, Tonnage and Value of Tugs, Vessels and Boats, and the

Number.	Districts.	Fishing Material.													
		Tugs or Vessels.				Boats.			Gill Nets.		Seines.			Pound Nets.	
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Yards.	Value.	Number.	Yards.	Value.	Number.	Value.
	Lake St. Clair.			$			$			$			$		$
1	River St. Clair	..	.....	.....	....	12	280	33	....	.....	12	968	715	...	.....
2	Thames River	..	....	....	.	10	230	20	.....	.....	14	700	540	....	....
3	Lake St. Clair and Detroit River	4	8	1850	9	81	1872	151	.	....	26	2859	1106	8	2075
	Totals	4	8	1850	9	103	2382	204	.	....	52	4527	2361	8	2075
	Values $	..	.....	....	....	....	.. ..	....	.....	...	..	....	..	....	....
	Lake Erie.														
1	Pelee Island	4	83	10900	47	8	576	11	21673	2485	..	.....	....	10	3000
2	County Essex	2	115	12000	11	48	5550	75	4550	446	2	140	45	62	30250
3	" Kent	3	198	12700	12	67	8050	97	....	....	2	500	185	100	41100
4	" Elgin	8	93	17425	22	36	5225	60	.....	....	..	.....	...	88	39900
5	Houghton and Long Point	4	73	14300	28	8	850	16	48600	5800	..	.....	...	20	5900
6	Port Rowan Bay	..	.....	...	..	30	1000	70	4500	250	16	4200	1100	....	.....
7	Normandale	..	..	.....	....	21	1000	54	1200	1100	8	4750	1200	...	....
8	East of Port Dover	4	38	8700	16	13	600	28	50200	1400	..	...	....	17	4700
9	Cayuga to and including Grand River	5	86	12900	28	13	485	20	39000	9500	5	310	210	5	1200
10	Port Maitland to Port Colbourne	3	471	1675	16	13	855	18	4500	1144	..	....	...	14	3000
11	Port Colbourne to Niagara Falls	2	.....	450	4	31	960	34	3109	2365	..	.....	....	4	1600
	Totals	35	1157	75050	184	288	25151	483	177323	24490	33	9900	2640	320	130650
	Values $	..	.....	....	....	....	...	....	....	.....	..	....	....	...	....

Quantity and Value of all Fish, Nets, &c., in the **Province of Ontario**—*Continued.*

Hoop Nets.		Kinds of Fish.													Value.	
Number.	Value.	Herring, fresh, lbs.	Whitefish, lbs.	Trout, lbs.	White Bass, lbs.	Pickerel or Doré, lbs.	Pike, lbs.	Sturgeon, lbs.	Caviare, lbs.	Sturgeon bladders, No.	Perch, lbs.	Tullibee, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.		Number.
	$														$ cts.	
..	..	4800	1000	..	..	104350	..	1090	..	..	5000	..	..	53420	6,677 30	1
..	..	..	..	..	..	29656	886	..	..	..	..	..	541	83962	3,224 53	2
89	4453	850	38000	..	..	52850	21250	40650	1382	..	44250	..	42750	385800	20,860 50	3
89	4153	5650	39000	..	..	186856	22136	41740	1382	..	49250	..	43291	523182	..	
..	..	113	3120	..	..	9343	885	2504	691	..	1477	..	2164	10463	30,762 33	
..	..	233467	11510	..	..	2810	53000	4182	..	..	55453	..	5975	6540	10,194 70	1
..	..	184294	95429	143	2000	174823	256211	19064	1803	..	131036	..	10966	177926	40,568 83	2
..	..	552593	29419	..	1300	289527	394830	10760	355	..	152392	..	1437	87374	50,993 12	3
..	..	710511	60186	..	..	393207	119472	7696	756	..	34514	..	3081	32675	46,147 06	4
..	..	277556	72527	20	..	47859	13168	13115	3450	..	11709	..	242	6677	17,283 76	5
..	..	..	..	..	..	6400	12710	..	..	..	20200	500	5100	74300	3,205 40	6
..	..	12800	200	..	..	63500	10630	..	..	..	83700	..	1120	80900	8,057 20	7
..	..	312750	46750	700	..	291450	400	13100	310	60	26400	..	5300	25100	27,201 50	8
..	..	203300	109100	..	..	117000	6600	5900	167	18	41600	..	700	41795	21,478 80	9
..	..	28989	24612	..	..	64463	138970	35202	2683	..	7392	..	135	131138	17,635 52	10
..	..	915	153	..	..	4200	67531	36354	..	..	1944	..	334	9789	5,393 88	11
..	..	2517175	449886	863	3300	1455239	1073522	145373	9524	78	566390	500	34390	674214	..	
..	..	50343	3599	86	264	72762	42940	8722	4762	62	16991	30	1719	13484	248,159 77	

RETURN showing the Number, Tonnage and Value of Tugs, Vessels and Boats, and the

Number.	Districts.	Fishing Material.												Herring, salted, brls.
		Tugs and Vessels.				Boats.			Gill Nets.		Hoop Nets.			
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Yards.	Value.	Number.	Value.		
	Lake Ontario.			$			$			$		$		
1	Queenston	....	....	....	....	2	50	4	*	600	....	....		....
2	Niagara	1	5	1200	....	12	1500	24	33850	1900	....	....		....
3	Port Dalhousie	....	....	....	....	2	170	4	5000	200	....	....		....
4	Louth	2	....	510	4	1	7	2	6650	443	....	....		....
5	Clinton	....	....	....	....	6	550	12	6500	271	....	....		....
6	Grimsby	3	....	1200	6	....	....	....	15000	900	....	....		....
7	Burlington Beach	....	....	....	....	13	1280	21	46400	2800	....	....		....
8	County of Halton	....	....	....	....	16	2780	41	67500	3765	....	....		....
9	" Peel	....	....	....	....	7	560	12	9900	475	....	....		....
10	" York	1	3	500	2	13	1325	21	39500	3500	....	....		....
11	Electoral District of S. Ontario exclusive of Tp. of Reach	2	....	1750	4	4	95	8	7800	350	....	....		....
12	Counties of Durham and Northumberland	....	....	....	....	21	760	33	37900	1068	10	182		....
13	Rice Lake and Trent River	....	....	....	....	23	306	44	....	....	75	975		....
14	Prince Edward County	3	26	300	10	38	800	68	13000	575	20	200		....
15	Bay of Quinte	3	23	1000	9	18	380	36	6000	275	37	400		....
16	Lennox Co. and Napanee River	....	....	....	....	25	535	31	780	60	37	565		....
17	Amherst Island and vicinity	....	....	....	....	24	615	35	9660	861	3	60		1000
18	Wolf Island and vicinity	....	....	....	....	22	445	31	2400	48	43	675		....
	Totals	15	57	6460	35	247	12158	427	307840	18091	225	3057		1000
	Values $	....	....	....	....	....	....	....	....	....	....	....		4000
	Inland Divisions.													
1	Frontenac County	....	....	....	....	123	1499	192	4750	624	74	1776		15½
2	Leeds and Lanark	....	....	....	....	52	559	91	840	86	61	1545		....
3	Grenville, Dundas, Stormont and Glengarry	....	....	....	....	2	60	4	....	....	....	....		....
4	Prescott, Russell and Carleton Counties	....	....	....	....	19	228	22	785	105	3	68		....
5	Renfrew County	....	....	....	....	23	168	26	1030	321	....	....		....
6	Nipissing District	3	18	4100	11	27	661	37	23800	2725	....	....		....
7	Peterboro' County	....	....	....	....	....	....	....	....	....	....	....		....
8	Lake Scugog and Victoria County	....	....	....	....	....	....	....	....	....	....	....		....
9	Lake Simcoe and tributaries	....	....	....	....	....	....	....	....	....	....	....		....
10	Muskoka District, Grey and Wellington Counties	....	....	....	....	2	40	4	450	45	....	....		....
	Total	3	18	4100	11	248	3215	376	31655	3906	138	3389		15½
	Values $	....	....	....	....	....	....	....	....	....	....	....		62

* 3 machines.

Quantity and Value of all Fish, Nets, &c., in the **Province of Ontario**—*Continued.*

Kinds of Fish.														Value.	
Herring, fresh, lbs.	Whitefish, lbs.	Trout, lbs.	Pickerel or doré, lbs.	Pike, lbs.	Sturgeon, lbs.	Caviare, lbs.	Sturgeon bladder, No.	Eels, lbs.	Perch, lbs.	Tullibee, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.	Whitefish, salted, brls.	$ cts.	Number.
1100	50		2200		3400				8150					584 50	1
492227	5846		25460		7068	448	100	58	8517			365		12579 59	2
200060	350	30	4505	375					12750		250	1050		4688 45	3
56700				1455	150			8	5240		2270	785		1488 08	4
44800	500								8200			1500		1212 00	5
339000		3940												7174 00	6
231800	12625	3000	1000	10700	1000				7900		900	8600		6938 00	7
428990		2500							1000			20000		9259 80	8
20705	255	4000		250				700	700		400	1700		961 50	9
66880	4520	7300							200		200	12500		2695 20	10
33314	2430	332		100					237			650		917 99	11
90158	5195	7703		58313					23027		8440	28124		6996 87	12
				900	40				2150		76320	25600		4430 90	13
18000	27900	32170	1600	76280	500			2640	271500	45200	36840	257745		28368 10	14
4000	1500		10000	150000				25000	110000		61000	105000		16650 00	15
			300	34500	50			6300	23700		49500	400		4970 00	16
7185	13800	3700	2000	10400	1600				32200		2500	12600	10	7672 70	17
	2100		1100	23401				6822	31400		30662	23394		4511 34	18
2032919	77071	64675	48165	366674	13808	448	100	65288	546871	45200	269282	500013	10		
40658	6165	6467	2408	14667	828	224	80	3917	16406	2712	13464	10000	100	122099 02	
9835	75			84744				1600	21947		105570	60725		10901 87	1
3830				14360	220			880	5550	6000	70170	34480		5441 60	2
			1700	1450	9100			800			30	1300		764 50	
250			955	370	1815				40		7600	10810		773 85	4
	1362	228	3240	10413	4199			1510	663		7770	751		1476 23	5
1320	500		1725	1940	128600	13212	62½				200	2645		14665 15	6
		500												50 00	7
2500	1500	30600	500	600				3160	83500		49500	68900		9826 60	8
5000	5000	4500	800									10000		1190 00	9
1100	1100	1200	5200									6600		622 00	10
23835	9537	37028	14120	113877	143934	13214	62½	7950	111700	6000	240840	196211			
476	763	3703	706	4555	8636	6606	50	477	3351	360	12042	3924		45711 80	

RECAPITULATION of the Number of Fishermen, Tonnage and Value of Tugs, Vessels and

Number.	Districts.	Fishing								
		Tugs or Vessels.				Boats.			Gill Nets.	
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Yards.	Value.
				$			$			$
1	Lake of the Woods and Rainy River District	1	8	600	2	31	2,386	67	33,300	4,475
2	Thunder Bay and Lake Superior	13	229	31,550	74	49	5,100	85	258,500	19,792
3	Lake Huron (North Channel)	26	398	85,600	128	115	11,192	237	884,500	74,305
4	Georgian Bay Division	17	269	42,400	91	122	8,045	232	722,060	52,503
5	Lake Huron (proper)	10	228	28,700	55	92	6,576	185	323,495	14,197
6	Lake and River St. Clair and Thames River	4	8	1,850	9	103	2,382	204		
7	Lake Erie and Grand River	35	1,157	75,050	184	288	25,151	483	177,323	24,490
8	Lake Ontario	15	57	6,460	35	247	12,158	427	307,840	18,091
9	Frontenac County					123	1,499	192	4,750	644
10	Leeds and Lanark County					52	559	91	840	86
11	Grenville, Dundas, Stormont and Glengarry counties					2	60	4		
12	Prescott, Russell and Carleton counties					19	228	22	785	105
13	Renfrew county					23	168	26	1,030	321
14	Nipissing District	3	18	4,100	11	27	661	37	23,800	2,725
15	Peterboro' county									
16	Lake Scugog and Victoria county									
17	Lake Simcoe and Tributaries									
18	Muskoka District, Grey and Wellington counties					2	40	4	450	45
	Totals	124	2,372	276,310	589	1,295	76,295	2,296	2,738,673	211,759

Boats, the Quantity and Value of all Fishing Material, &c., in the Year 1902.

Material.									Other Fixtures Used in Fishing.				
Seines.			Pound Nets.		Hoop Nets.		Night Lines.		Freezers and ice-houses.		Piers and Wharfs.		
Number.	Yards.	Value.	Number.	Value.	Number.	Value.	Number of Hooks.	Value.	Number.	Value.	Number.	Value.	Number.
		$		$		$		$		$		$	
			20	2,500	12	600			3	300	3	500	1
			30	6,550						12,435	1	300	2
			45	9,375			100	5	11	3,150	2	1,500	3
									17	7,300	2	1,800	4
2	640	170	56	10,790					22	5,790			5
52	4,527	2,361	8	2,089	89	4,453	8,000	363	14	1,920	16	1,590	6
33	9,900	2,640	320	130,650	15	985	10,000	100	121	22,600	3	5,130	7
5	1,335	385			225	3,057	1,055	19	42	3,395	9	965	8
					74	1,776			1	20			9
6		75			61	1,545	400	10	1	150	1	150	10
							400	6					11
					3	68	1,500	16	3	52			12
													13
							3,000	40	4	1,650			14
													15
													16
													17
													18
98	16,402	5,631	479	161,954	479	12,484	24,455	559	239	58,762	37	11,935	

RECAPITULATION of the kinds of

Number.	DISTRICTS.	KINDS						
		Herring, salted, brls.	Herring, fresh, lbs.	Whitefish, lbs.	Whitefish, salted, brls.	Trout, salted, brls.	Trout, lbs.	White bass, lbs.
1	Lake of the Woods and Rainy River District			263,975			61,504	
2	Thunder Bay and Lake Superior		105,220	398,943	151	226½	1,333,816	
3	Lake Huron (North Channel)	529	25,200	1,149,150	50	20	1,217,205	
4	Georgian Bay Division	1,837	121,200	456,290	30½	253	1,400,470	
5	Lake Huron (proper)	940½	250,155	16,818	1	640	1,002,007	
6	Lake and River St. Clair and Thames River		5,650	39,000				
7	Lake Erie and Grand River		2,517,175	449,886			863	3,300
8	Lake Ontario	1,000	2,032,919	77,071	10		64,675	
9	Frontenac County	15½	9,835	75				
10	Leeds and Lanark County		3,830					
11	Grenville, Dundas, Stormont and Glengarry counties							
12	Prescott, Russell and Carleton counties		250					
13	Renfrew counties			1,362			228	
14	Nipissing District		1,320	500				
15	Peterboro' county						500	
16	Lake Scugog and Victoria county		2,500	1,500			30,600	
17	Lake Simcoe and tributaries		5,000	5,000			4,500	
18	Muskoka District, Grey and Wellington counties		1,100	1,100			1,200	
	Totals	4,322	5,081,354	2,860,670	242½	1,139½	5,117,568	3,300
	Values	$ 17,288	101,627	288,853	2,425	11,395	511,757	264

Fish, &c., for 1902—*Concluded.*

OF FISH.												
Pickerel or Doré, lbs.	Pike, lbs.	Eels, lbs.	Perch, lbs.	Tullibee, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.	Sturgeon, lbs.	Caviare, lbs.	Sturgeon bladders, number.	Value. $ cts.	Number.
207,074	51,341	.....	.....	4,323	240,739	.....	44,099	1,853	128	55,646 91	1
35,205	3,060	....	.....	.....	.....	980	5,860	.....	...	173,430 29	2
569,776	71,650	.....	295	2,745	12,119	26,430	18,180	581	....	251,016 70	3
95,850	18,570	....	9,000	.....	2,190	27,600	28,240	5,600	....	200,118 40	4
318,570	.....	.. .	6,358	.....	870	119,184	51,250	836	....	138,760 66	5
186,856	22,136	.....	49,250	.....	43,291	523,182	41,740	1,382	....	30,762 33	6
1,455,239	1,073,522	. . .	566,390	500	34,390	674,214	145,373	9,524	78	248,159 77	7
48,165	366,674	65,288	546,871	45,200	269,282	500,013	13,808	448	100	122,099 02	8
.....	84,744	1,600	21,947	.....	105,570	60,725	... ...	.....	....	10,901 87	9
.....	14,360	880	5,550	6,000	70,170	34,480	220	.....	....	5,441 60	10
1,700	1,450	800	.....	.....	30	1,300	9,100	....	....	764 50	11
955	370	.....	40	.....	7,600	10,810	1,815	....	....	773 85	12
3,240	10,413	1,510	663	.....	7,770	751	4,199	....	....	1,476 23	13
1,725	1,940	.....	... ...	.....	200	2,645	128,600	13,212	62½	14,665 15	14
.....	.....	.....	.....	.....	.....	.....	.....	...	...	50 00	15
500	600	3,160	83,500	.....	49,500	68,900	.....	... .	....	9,826 60	16
800	.....	....	.....	.. ....	.....	10,000	.....	....	....	1,190 00	17
5,200	....	.....	....	.....	.....	6,600	.....	.....	....	622 00	18
2,930,855	1,720,830	73,238	1,289,864	58,768	843,721	2,067,814	492,484	33,436	368½	.....	
146,542	68,833	4,394	38,696	3,526	42,186	41,356	29,549	16,718	294	1,265,705 88	

STATEMENT

Of the Yield and Value of the Fisheries of the Province for the Year 1902.

Kinds of Fish.	Quantity.	Price.	Value.
		$ cts.	
Whitefish ..... brls.	242½	10 00	2,425 00
" ..... lbs.	2,860,670	0 08	228,853 60
Herring ..... "	5,081,354	0 02	101,627 08
" ..... brls.	4,322	4 00	17,288 00
Trout ..... "	1,139½	10 00	11,395 00
" ..... lbs.	5,117,568	10	511,756 80
Bass ..... lbs.	3,300	08	264 00
Pickerel ..... "	2,930,355	05	146,542 75
Pike ..... "	1,720,830	04	68,833 20
Sturgeon ..... "	492,484	06	29,594 04
Caviare ..... "	33,436	50	16,718 00
Bladders ..... "	368½	80	294 80
Eels ..... "	73,238	06	4,394 28
Perch ..... "	1,289,864	03	38,695 92
Catfish ..... "	843,721	05	42,186 05
Coarse fish ..... "	2,067,814	02	41,356 28
Tullibee ..... "	58,768	06	3,526 08
Total	.....	.....	1,265,705 88

RECAPITULATION

Of all fishing tugs, boats, nets, etc., employed in the Province for the year 1902.

Articles.	Value.
	$
124 tugs, 2,372 tonnage (589 men)	276,310
1,295 boats, (2,296 men)	76,202
2,738,673 yards gill nets	211,759
98 seines, 16,402 yards	5,631
479 pound nets	161,954
479 hoop-nets	12,484
22 dip nets	76
24,455 hooks and set lines	559
239 freezers and ice houses	58,762
37 piers and wharfs	11,935
3 machines	600
120 spears	120
Total	816,392

APPENDIX No. 8.

MANITOBA.

ANNUAL REPORT ON THE FISHERIES OF MANITOBA, FOR THE SEASON OF 1902, BY INSPECTOR WM. S. YOUNG.

SELKIRK, MAN., April 1, 1903.

To the Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I have the honour to submit my annual report of the fisheries under my inspectorate also statistics showing the number of men employed therein, the number of boats, nets, &c., the quantity and value of fish caught. The table herewith appended will show a general classification of districts, fishing material and other fixtures. The subdivisions under the head of districts are as follows: *Lake Winnipeg* and tributaries, which includes Nelson river, Pluggreen lake, Red river and also Winnipeg river from the east. The waterway between Lake of the Woods and Lake Winnipeg, Lac du Bonnet and several smaller lakes tributaries or expansions of rivers flowing into Lake Winnipeg.

Lake Winnipegosis district includes Lake Dauphin and Waterhen. The third district is that of *Lake Manitoba*, Shoal Lake and Lake St. Martin to the east on the Fairford river.

I have also given in one class Lakes Rock, Pelican, Swan and Louise. These are rather expansions of the Pembina river. *The fifth district* includes small inland lakes to the south and west of the province, Oak lake, Clearwater lake, near Riding Mountain and Whitewater lake near Delorme. A comparison with last year's statements will show a most gratifying increase. There is an increase in every kind of fish, with one or two minor exceptions. The catch of whitefish increased last year in the Lake Winnipeg district by 1,000,000 lbs., pickerel by 500,000 lbs., perch by 11,500 lbs., tullibee 100,000 lbs., catfish 50,000 lbs., gold eyes 100,000 lbs., caviare 10,000 lbs. coarse fish 1,598,900 lbs., and fish used for home consumption by 150,000 lbs., or a total increase in this district of 3,520,400 lbs. over that of last year.

In the *Lake Winnipegosis* district there was a decrease in the number of pounds of whitefish caught, being 537,000 lbs. less than the previous year. The reason given for this by the overseer, of the district is depletion, and he suggests restocking by planting fry from the hatchery.

It may be advisable in the near future to place a whitefish hatchery in that district and thus keep up the supply, the other varieties caught in the lakes in this district however show an increase. The catch of pickerel increased by 470,900 lbs., pike by 104,500 lbs., tullibee by 9,500 lbs., mixed and coarse fish by 105,300 lbs. and fish for home consumption by 38,000 lbs., and a total increase of 191,200 lbs.

The Lake Manitoba district shows an excess in the catch of whitefish of 250,000 lbs.; pickerel of 375,000 lbs.; mixed and coarse fish of 295,000 lbs., and home consumption of 50,000 lbs.

There is, however, a decrease of 200,000 lbs. in the weight of pike and tullibee caught, but there is a net increase in the district of nearly three quarters of a million pounds.

It is in these three districts that fishing is carried on as an industry. In the other two it is only incidentally carried on and the fish are used for home consumption.

These surpluses brought with them an improvement in the values of the season's productions, and are as follows :—

Lake Winnipeg district	$157,119
Lake Winnipegosis district	5,906
Lake Manitoba district	35,188

This increase in value of the product of the fisheries is largely but not altogether due to the larger catch. There was a slight increase in the export price of nearly all classes of fish with perhaps the exception of whitefish.

The weather this season has, generally been favourable. There were some stormy days in June, during which nearly $6,000 worth of supplies which were being taken out to the fisheries, were lost. In July the weather was exceptionally fair, and good fishing was made.

During the season I made several inspection trips, visiting the fish stations belonging to the Dominion Fish Co., at Warren's Landing, at the mouth of the Nelson river, also their station at Selkirk island, not far from Grand Rapids. I visited the fishing station of Ewing & Fryer, on the Nelson river, and those of the Northern Fish Co. and Imperial Fish Co., at Black river. Everything in and around the different stations is well kept, clean, and the regulations regarding the disposal of offal well observed, the latter being carried inland, where there is no danger of it getting into the lake. I visited the fisheries in Traverse bay, at the mouth of the Winnipeg river, where there is considerable sturgeon fishing. I was surprised to see sturgeon caught by hook and line by the Indians, who made very successful catches.

I had some difficulty during the early part of the season with some who were not disposed to rigidly observe the regulations. I made several seizures, and after warning the parties let them go. I have had no difficulty since.

In August, I visited a small lake near Brandon, Lake Clements, to learn if it would be advisable to plant some black bass. I found the water shallow and the bottom of a muddy character and would not deem it advisable to recommend it for such an experiment.

The plan adopted of dividing Lake Winnipeg and reserving the north for summer fishing will, I think, have a beneficial effect. The fishing operations during the winter season have grown extremely and the quantity marketed equals that of the summer, but, of course, there is a vast difference in the varieties caught. In the summer, the whitefish, sturgeon and catfish are most diligently sought after; and in winter, the coarser varieties, such as pickerel, pike, perch, tullibees and a few sturgeon and whitefish. The whitefish grounds are in the north end of the lake, and this restriction by the department of closing the north end, gives the whitefish, periodically a rest.

If I have any recommendations to make it would be that it is advisable to give as much stability as possible to the present regulations and then allay the feeling of uncertainty which seems sometimes to exist among those engaged in fishing.

SYNOPSIS OF FISHERY OFFICERS' REPORTS.

Officer J. E. Hughes reports in the district extending from Boundary creek to Fort Alexander in the south end of Lake Winnipeg, all kinds of fish have been plentiful throughout the year and the pickerel catch is a large one. The regulations were well observed throughout the year. There have been more whitefish caught this year than for some years in the vicinity of the Red river. They are a small run of fish about the size of a tullibee weighing from two to three pounds.

Officer J. Magnuson reports on the Quinté district the regulations in regard to close season, etc., have been well observed.

Officer Jos. Polson reports on that part of the Red river flowing in the vicinity of Winnipeg during the year that there was a slight increase in the catch over that of the

previous year, especially of goldeyes and catfish. I may safely say that all the fish caught were consumed in the city of Winnipeg and the surrounding district. The close seasons have been strictly observed, and no case of illegal fishing has been brought to his notice.

Officer A. J. McPherson reports on the waters of Lakes Winnipegosis, Waterhen and Dauphin. The catch this year has been much lighter there than last year although the number of men employed has been much larger, particularly so in Lake Winnipegosis, this shows that this lake is being fast depleted especially of whitefish which shows a large falling off. This lake cannot hold out many seasons longer without restocking, it was injudicious to open the southern end of this lake for summer fishing, as there was not any ice put up in the south and only what was at the Masey river and a large quantity of the fish caught in the latter part of the season was wasted and it alse did great damage to the winter fishing. This also had a tendency to make the fishermen look to smaller lakes for winter fishing. The regulations were well observed among the regular fishermen. There were some attempts to overfish the smaller lakes, but as this was stopped at the outset there has not been any trouble since.

Officer H. Chartrand reports that on the southern portion of Lake Manitoba all kinds of fish have been very plentiful throughout the year. The regulations to his knowledge and the close seasons were well observed.

Officer Jas. Matheson reports on the northern part of Lake Manitoba, including the Fairford district and Lake St. Martin, the fishing is mostly done in the winter season, the fish of all kinds have been more plentiful than they have been for years. The close seasons have been well observed.

Officer Jas. Gray reports on Rock, Pelican, Swan and Louise lakes. The year has been a very successful one, there has been no lack of fish, the close seasons have been well observed. During the year I took possession of four gill nets and also removed two traps from the rivers and one weir net for illegal fishing.

In conclusion, you will notice that this has been by far the most successful year, in the history of our fisheries. In closing I should like to express my thanks to those engaged in the business for the frank and open manner in which they allowed me access to such information as they had on hand, and in all our dealings together.

I have the honour to be sir,
Your obedient servant,

WM. S. YOUNG,
Inspector of Fisheries.

MANITOBA.

RETURN showing the Number, Tonnage and Value of Vessels and Boats, Nets, &c., in the Province of **Manitoba**, 1902.

Number.	DISTRICTS.	FISHING MATERIAL.																		OTHER FIXTURES USED IN FISHING.				Number.
		Tugs or Vessels.				Boats.			Gill Nets.			Seines.			Pound-nets.		Night lines.				Freezers and Ice Houses		Piers and Wharves.		
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Fathoms.	Value.	Number.	Value.	Hooks.	Value.			Number.	Value.	Number.	Value.	
				$			$				$			$		$		$				$		$	
1	Lake Winnipeg and its tributaries	19	1400	260000	150	750	18250	1500	6000	300000	30000	10	330	250	2	300	1000	1000			129	125000	38	10000	1
2	Lakes Winnipegosis, Waterhen and Dauphin	4	111	16760	25	125	11845	235	3340	168650	16865	...	....	.	....	...	....	....			15	7000	10	4385	2
3	Lakes Manitoba Shoal and St. Martin	2	24	1950	5	90	3300	200	1500	75000	7500	5	165	125	....	....	....	...			8	5800	2	150	3
4	Lakes Rock, Louise, Swan and Pelican	....	...	.....	..	6	90	6	20	1000	100	....	....	....	....	....	...	...			....	.....	....	..	4
5	Lakes Oak and Clear Water	....	....	...	..	6	90	6	16	750	75	....	..	...	...	....	. .	....			..	... ..	....	.....	5
	Totals	25	1535	218710	180	977	33575	1947	10875	545400	54540	15	495	375	2	300	1000	1000			152	137800	50	14535	

RETURN showing the Quantity and Value of Fish, &c., Province of **Manitoba**, 1902.

Number.	DISTRICTS.	KINDS OF FISH.										TOTAL VALUE.	Number.
		Whitefish, lbs.	Pickerel, lbs.	Pike, lbs.	Sturgeon, lbs.	Perch, lbs.	Tullibee, lbs.	Catfish, lbs.	Mixed and coarse fish, lbs.	Gold-eyes, lbs.	Caviare, lbs.	Home consumption, lbs.	$ cts.	
1	Lake Winnipeg and its tributaries	6000000	3000000	1000000	600000	40000	600000	600000	5000000	300000	30000	500000	641,200 00	1
2	Lakes Winnipegosis, Waterhen and Dauphin	1464500	1879600	1064800			11500		1200000			236800	182,712 00	2
3	Lakes Manitoba, Shoal and St. Martin	450000	1000000	900000			200000		800000			200000	98,000 00	3
4	Lakes Rock, Pelican, Swan and Louise			130000					20000			40000	4,250 00	4
5	Lakes Oak and Clear Wate			90000					30000			35000	3,250 00	5
	Totals	7914500	5879600	3184800	600000	40000	811500	600000	7050000	300000	30000	1011800		
	Values $	395725	205786	79620	60000	1200	24345	36000	70500	6000	30000	20236	929,412 00	

APPENDIX No. 9.

NORTH-WEST TERRITORIES.

ANNUAL REPORT ON THE NORTH-WEST TERRITORIES FOR 1902, BY INSPECTOR E. W. MILLER.

QU'APPELLE, N.W.T., February 2, 1903.

To the Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I have the honor to submit the following report on North-west fisheries together with statistical returns of their yield, value, &c.

The year was a very favourable one for fish, the lakes and rivers maintaining a high level and their waters being correspondingly fresh and cool. Fluctuations in the catch depend largely on other reasons than the plentifulness of fish; success in farming operations in the south or abundance of fur animals in the north for instance. While in the settled districts there is no increase in the number of those who make fishing their special business, every year now sees more and more people resorting to the various lakes for short periods and their catch in the aggregate is very large. In Assiniboia even the coarse fish are sold very readily at from three to five cents per pound, as with the rapidly increasing population the supply is not equal to the demand.

Nearly all whitefish waters are now under guardianship during the spawning season, and those more generally fished are carefully regulated as regards the amount of netting permitted, &c. Under these conditions, this fishery will continue a most valuable resource and as transportation facilities improve will yield a good return to the fishermen. Only in the more outlying districts is there now any demur to the enforcement of the regulations made for their protection.

The sturgeon fishery is now attaining much importance and will require very careful treatment. The great demand for this fish has caused the fish companies to push their operations into waters where until lately, the local consumption of a small resident population was the only factor. Being the only fish, which under existing conditions of transportation, could be profitably marketed from the lower Saskatchewan and Nelson river districts, the Indians and halfbreeds there resident are naturally very anxious to avail themselves to the fullest degree of the opportunity for a profitable industry so offered. It should be the duty of this department to prevent the future being sacrificed to the present, as with the competition of fish buyers to procure sturgeon, the fishermen are tempted to regard immediate profits without recognizing the necessity of preserving the fishery unimpaired. Reports as to the supply of fish are very conflicting; the catch has increased but this can be accounted for by greater energy on the part of the fishermen, to whom the fishery has certainly been of good service. The duration of a sturgeon fishery where not strictly regulated, has been proved in other places to be very short, and with the first signs of over fishing in these North-west waters, a further limitation of the season will be recommended.

QU'APPELLE DISTRICT.

The Qu'Appelle lakes reached their highest level for a great many years owing to the exceptionally heavy rainfall, but unfortunately the Katepwe dam at their foot proved unequal to the strain and gave way during the spring freshet. No injury to the fishery

has as yet followed, but in view of the return of drier seasons it is desirable that the dam should be made good; all varieties of coarse fish have been very abundant and there has been a slight increase in the catch of whitefish though the amount now caught is small compared to the immense catches recorded in early days. Perch are very numerous in these lakes but as small mesh nets are not authorized very few are taken. Two maskinonge were caught here this season; their presence in these waters had not been previously noted. More net licenses were taken out than in any previous year and a very large amount of angling was also done; the latter principally in the winter when pike and pickerel take a bait very readily. The German and Galician settlers as well as the Indians make large catches in this way. The Jumping Deer creek ran all the summer enabling fish to again pass up to the small lakes in the Touchwood Hills. Guardian Leader seized one net in Pasqua lake, set in the close season, for which no owner could be found. There were four convictions for the use of illegal seines in Katepwe lake during the close season, but the licensed fishermen in general adhere very fairly to the regulations. The catch is totally absorbed by the local demand and even coarse fish sell freely at from four to five cents per pound.

In the Crooked and Round lakes the same conditions of very high water obtained, the level in July being higher than at any time since 1882. I regret to say that the whitefish do not even yet appear to have returned to these lakes where once they were plentiful. Other varieties were very abundant and good catches were made by the large number of visitors who come to these beautiful lakes in the summer. The Indians residing on the reserves adjoining the lakes also do a fair amount of fishing in the winter season and are gradually giving up the objectionable spearing to which they were addicted. Many of the pike caught exceeded 20 lbs. in weight and all the fish were in excellent condition.

At the Moose Mountain lakes, the local guardian reports an apparent falling off in the supply of fish. As most of the fishing is by angling the decreased catch may however be due to growing alertness on the part of the fish. Over two hundred persons resorted here during the summer and nearly all fished. Three net licenses were taken and good catches of mullet made by the fishermen. These lakes gained considerably in volume and their waters are in excellent condition.

In Long lake the fishing was about the same as in former years. Overseer Silverthorne reports that large catches of whitefish were made just before the commencement of the close season, the fish seeming to come into the shallow waters rather early. It may become necessary to close this portion of the lake to prevent the destruction of spawning fish. This lake too has gained during the year though still much below its one time level.

In the Qu'Appelle river and the smaller streams the long continued high water afforded small opportunity for the illegal trapping of fish during the spring close season and though some fish weirs were discovered and destroyed by guardians, as a rule they are now only met with in the vicinity of new foreign settlers unacquainted with the law.

MCLEOD DISTRICT.

Very little net fishing was done in the Waterton lakes this year and the catch of whitefish was small. Floods prevailed for a long time and the amount of trout fishing was probably less on that account; good catches of trout were made by rod in the fall and grayling also were very plentiful; some of the latter reached 5 lbs. in weight. No netting of the streams was reported. A shipment of black bass was placed in Devil's lake, where if they thrive, they will form a very great attraction to the numerous rod fishermen who visit our National Park.

EDMONTON DISTRICT.

Overseer Harrison Young reports very favourably on the condition of the numerous lakes within his district Increased care has been given to the protection of spring

spawning fish by the destruction of fish traps in the streams and the close season has been well enforced in the whitefish lakes. Several of the larger but more remote of the latter are in a position to admit of a profitable fishery as soon as they are brought within reasonable distance of a market. On account of its position Pigeon lake still remains the principal lake in which fishing is done for outside markets, and the careful guardianship of this lake enables it to bear the strain of persistent fishing in the open season without any sign of a decreased supply. White Whale lake also gives an enormous yield of fish which are however small and inferior to the whitefish in most other lakes. Buffalo lake is now resorted to by a very large number of hook and line fishermen and the catch of coarse fish in the months of November and December was extremely large. A trial shipment of black bass was placed in this lake in October including a male and female to spawn in spring and a number of 6 months old fry. Tanglefoot lake, a smaller lake adjoining also received a number, Gull lake though stocked only with coarse fish is now much resorted to by the settlers of the district. Guardian Mobley has done good work here in stopping the shooting and spearing of fish. The absence of whitefish from this lake is rather peculiar as the water is sweet and of a good depth.

Overseer Young, reports that all guardians in his district have done satisfactory work, from which beneficial results will follow. On account of the great number of foreign settlers in his district, many of whom are accustomed to see all government officials bearing outward signs of their authority, he recommends that guardians should be provided with a badge of office, which would materially assist them in discharging their duties.

PRINCE ALBERT DISTRICT.

Overseer Nelson reports that fish in his district have never been more plentiful nor in primer condition, which is accounted for by the extraordinary rainfall during the year. The catch would have been much greater had it not been for the plentifulness of fur and its high price, very little fishing was done therefore for purposes of sale; no fish were exported from the district and the home market was but scantily supplied. The Saskatchewan river was extremely high and very little fishing could be done in it. In those portions of the district under direct supervision, the close seasons were properly observed and no prosecutions were necessary. In the Meadow lake district, where excessive destruction of whitefish in the spawning season had been reported in previous years, Guardian Garnot reports that he succeeded in preventing its recurrence.

GRAND RAPIDS DISTRICT.

Overseer McKay reports a large increase in the catch of sturgeon which fish is pratically the only species caught for market purposes in this district. The fishery was opened for the summer season for the first time, but owing to the extraordinary high waters in the Saskatchewan river and its lakes, the catch was very disappointing and most of the men returned to the lake Winnipeg whitefish fishery. With the return of the water to normal conditions in the fall and winter, the catch was good and the lakes showed no sign of diminution in the supply of fish. The Cedar lake sturgeon average about 20 lbs. weight (dressed), and the fishermen receive on the lake from 5 to 6 cents per lb. The overseer is of opinion that the opening of the market for sturgeon has been of great benefit to the district, the wet season having made the residents more dependent than ever on their fish catch.

The quantity of whitefish and coarse fish caught for food purposes is very large, but there is no export of them and only a very limited traffic in them by sale or barter. No whitefish are now allowed to be taken in the close season except for immediate food supply. The fishermen observe the regulations very fairly and no seizures were made during the year.

There was a very great development of the sturgeon fishery on the Nelson river during the year; 5,200 fish of an average of 26 lbs. being marketed in the summer season. The fishermen here are paid $1 per fish and 180 held licenses during the year, all with the exception of four being resident Indians and half-breeds. The men are satisfied with the present regulations and claim that the fish are as numerous as ever. The overseer is, however, of opinion that the fishing is being pushed too far up the smaller rivers. Very little caviare is made from the Cedar lake fish but Nelson river produced 5,500 lbs. As at Grand Rapids, fish other than sturgeon are caught for food purposes only and the consumption though large does not make any great tax on these numerous lakes.

I have the honour to be, sir,
Your obedient servant,

ERNEST W. MILLER,
Inspector of Fisheries

RETURN of the Number of Fishermen, Boats, Nets, &c., and the Quantity and Value of Fish caught in the **North-west Territories** for the Year 1902.

Number.	Districts.	Fishing Materials.										Other Fixtures used in Fishing.				Kinds of Fish.								Total Value.	Number.
		Tugs.				Boats.			Gill Nets.			Freezers and Ice Houses.		Piers and Wharfs.											
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Fathoms.	Value.	Number.	Value.	Number.	Value.	Whitefish, lbs.	Trout, lbs.	Pickerel, lbs.	Pike, lbs.	Sturgeon, lbs.	Perch, lbs.	Tullibee, lbs.	Coarse and Mixed Fish, lbs.		
				$			$				$		$		$									$ cts.	
1	Qu'Appelle	..	..	....	..	50	750	80	250	7500	1200	..	.....	..	.....	56000	..	50000	75000	.....	500	60000	50000	7,510 00	1
2	McLeod	..	..	....	..	20	500	12	20	600	120	..	.....	..	.....	1500	15000	4000	8000	.....	.....	.....	5000	1,155 00	2
3	Edmonton	..	..	....	..	205	1570	300	1100	33000	3300	..	.....	..	.....	802000	....	27000	153000	..	1500	37000	246000	47,200 00	3
4	Battleford	..	..	....	..	20	200	40	120	4000	400	..	....	..	.....	70000	..	10000	16000	2000	....	...	30000	4,520 00	4
5	Prince Albert	..	..	....	..	260	2600	500	1000	30000	1600	..	.....	..	.....	860000	45000	400000	500000	10000	..	.....	250000	70,250 00	5
6	Grand Rapids	1	11	600	3	350	3500	450	1350	86000	10800	8	1850	4	100	225000	4000	15000	78000	250000	4000	20000	95000	27,390 00	6
7	Northern Districts	..	..	....	..	....	....	....	....	.....	..	..	....	..	...	1500000	50000	500000	600000	50000	...	50000	300000	111,000 00	7
	Totals	1	11	600	3	905	9120	1382	3840	161100	17420	8	1850	4	100	3514500	114000	1006000	1430000	312000	6000	167000	976000	.....	
	Values $	..	..	....	..	....	....	....	....		.....	..	.....	..	.....	175725	5700	30180	28600	15600	120	3340	9760	269,025 00	

RECAPITULATION

Of the Yield and Value of Manitoba and the North-west Territories for the Year 1902

Kinds of Fish.	Quantity.	Rate.	Value.
		$ cts.	$
Whitefish ..... Lbs.	11,429,000	0 05	571,450
Trout ..... "	114,000	0 05	5,700
Pickerel ..... "	6,885,600	0 03	235,966
Pike ..... "	4,614,800	0 02	108,220
Perch ..... "	46,000	... .	1,320
Sturgeon ..... "	912,000	.....	75,600
" caviare ..... "	30,000	1 00	30,000
Tullibee ..... "	978,500	.....	27,685
Catfish ..... "	600,000	0 06	36,000
Goldeyes ..... "	300,000	0 02	6,000
Mixed and coarse fish ..... "	8,026,000	0 01	80,260
Fish as home consumption not included above ..... "	1,011,800	0 02	20,236
Total for 1902			1,198,437
" " 1901			958,410
Increase			240,027

Of the Fishing Boats, Nets, &c., used in Manitoba and North-west Territories in the Year 1902.

Articles.	Value.
	$
26 Fishing tugs (1,546 tons) (183 men)	219,310
1,882 " boats (3,329 fishermen)	42,695
14,715 Gill nets (706,500 fathoms)	71,960
15 Seines (495 fathoms)	375
2 Pound nets	300
1,000 Night lines	1,000
160 Freezers and ice houses	139,650
54 Wharfs and piers for fishing purposes	14,635
Total	489,925

APPENDIX No. 10.

BRITISH COLUMBIA.

ANNUAL REPORT ON THE FISHERIES OF BRITISH COLUMBIA FOR THE YEAR 1902, BY INSPECTOR C. B. SWORD.

NEW WESTMINSTER, B.C., March 25, 1903.

To the Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I have the honour to inclose statistics of the fisheries of British Columbia for the year ending December 31, 1902, including statements of the salmon packs of the different canneries, and the take of sealskins. For the latter figures, I am indebted to the courtesy of Collector Milne of Victoria.

These returns show a great falling off in the aggregate, $5,280,824 as against $7,942,771 in 1901. This is more than accounted for by the shorter pack of the sockeye salmon on Fraser river in 1902, the deficiency in this one item greatly exceeding the total decrease. The northern salmon pack and the increase in other fisheries go some way to reduce the deficiency in the total. This difference in the salmon pack is dealt with more fully under its special head. I have reduced the amount under the heading of 'Entries, etc., of fish not included in the above' from $370,000 to $300,000. This is not done from any idea that the former amount in last year's (1901) return was too large, but from the fact that, having been able to get more exact information, some of the items which went to make up this sum, can now be credited to their proper headings. When our large Indian population is taken into account, whose consumption of fish can only be a matter of estimate, there can be little doubt that the figures given are well within the actual quantities.

In some cases, as in that of the salmon pack, we get exact returns from the dealers; in other cases, where we have officers stationed in the respective localities, we have their reports to guide us; but still in others we have not this resource and have to be guided by such information as we can gather from outsiders.

SALMON.

The total pack of the province of canned salmon this year (1902) is little more than one half of the pack of 1901; 627,162 cases against 1,247,212.

In analyzing the returns it will be seen that the sockeye pack on the Fraser river, 295,670 cases in 1902 against 974,911 cases in 1901, more than accounts for the difference. While this shows such an unsatisfactory return as compared with the previous year, yet taking into account the quadrennial rotation runs, and comparing the Fraser river pack of 1902 with that of 1898 the result is more encouraging. In 1898 the Fraser river pack, mainly no doubt composed of sockeyes amounted to 264,222 cases while in 1902 the sockeye pack amounted to 295,670 cases and the total pack of all varieties to 327,198 cases.

As will be seen from the following comparative tables the falling off this year was confined to the sockeye pack of the Fraser river. The pack in the rest of the province showing an increase of 58,685 cases of sockeyes, and only about 7,000 cases less of other varieties. With regard to the pack of salmon other than sockeyes, this is affected more by the chance of finding a profitable market than by the supply available and the surplus of the large pack of 1901 still on hand had more to do with the small pack of these fish this year than any deficiency in the supply.

		1901.	1902.
Sockeye	Cases.	1,154,717	534,161
Cohoe	"	28,476	47,234
Spring	"	29,221	19,042
Humpbacks	"	31,392	26,097
Qualo (Dog salmon)	"	3,406	628
		1,247,212	627,162

The Fraser River pack was:

		1901.	1902.
Sockeye	Cases.	974,911	295,670
Cohoes	"	17,043	29,685
Spring	"	885	1,574
Humpbacks	"	3,992	269
Qualo (Dog salmon)	"	2,082	
		998,913	327,198

In the official report the Puget sound pack of sockeyes is given as 372,301 cases in 1902 against 1,105,096 cases in 1901 This shows a pack on the sound of 76,631 cases of these Fraser river fish more than was secured by our packers. The decrease in the quantity of barrelled salt salmon is to be accounted for by there being no surplus sockeye in the canneries this year to put down in salt. This decrease is in spite of the fact that a new company on the Naas river returned 1,000 brls. as put up by them this year. The dry salted salmon shows an increase of 4,000,000 lbs. This item amounting to 10,457,000 lbs is wholly made up of the Qualo or dog salmon (O. Keta) put up for the Japanese market. The figures given are taken from the Customs returns verified by comparison with the record taken by the Consul of H.I.M. of Japan. Smoked and fresh salmon both show a moderate increase.

Halibut

The returns for this fishery show an increase of 2¾ million lbs. over 1901. The largest portion of this must be credited to the New England Fish Co., but there are also credited in the returns 90 tons to a new company in Nanaimo, and 50 tons handled by the Cold Storage Co. in Victoria. There is no reason why this fishery should not increase to a still greater extent as soon as a sufficient market is opened up.

Herring.

While the increase shown in the take of herring is mainly to be accounted for by the demand for an increased supply of bait for the halibut fishery, there is also a good deal of attention being given by different parties to the possibility of developing an export trade in these fish. Last year (1902), about 1,000 barrels were shipped to New

York and Australia from Nanaimo, and the shippers consider, that, from the reports they have received of the favour with which these sample shipments were regarded, they are justified in expecting a large development of this trade in future.

The quantity of smoked herring put up is also steadily increasing, and as the possible development of this fishery will, at least for many years, be only limited by the lack of a sufficient market, it is not taking too sanguine a view to expect a large and steady growth in the returns from this fishery.

Oolachons.

The returns of the salted and smoked quantities of this fish indicate an increasing demand, the supply of which, however, is liable to be affected by the fluctuations in the annual runs.

Miscellaneous.

The remaining headings in the report may be dismissed with a very cursory mention.

A large increase is shown under the head of "Smelts,"—this represents the increased local consumption only; with the opening up of outside markets considerable development may be anticipated as the supply at present greatly exceeds the local demand.

"Cod" and "Skill" both show increases, though the development in markets for these varieties is very slow.

"Shad" is less this year than last. This is not owing to any falling off in the numbers of these fish which seem to be steadily increasing, but to the smaller number of sockeye nets in the river this year. The only way in which these fish are taken as yet being in the sockeye nets along with the salmon.

The return of the number of hair seal-skins taken is exact, having been made up from the books of the two Victoria firms, who purchased the whole catch. The localities credited with the different catches are, however, only approximately correct, exact returns not being available.

The same number of sea otter skins (10) were obtained as last year and the value placed on them in the return ($6,250) is the exact price paid.

"Fish oil" shows only a small increase. Partly on account of the smaller catch of salmon the oilery on the Fraser river had a smaller output. The increased amount credited to the Nanaimo district is made up from the actual consumption of this article supplied locally and used in the coal mines. The Fraser river oilery is the only factory making a return for Guano and the reasons for its lessened output of oil hold good as to this item.

The business of canning clams shows practically no increase, there seeming to be great difficulty in getting these introduced, though the parties interested claim that their product is much superior to that put up on the Atlantic coast.

The item of 45,600 lbs. of salmon roe represents the utilization by the Japanese for the their market of what was formerly wasted. A similar item appeared in the returns for 1900. The increased quantity this year may indicate that the market is being found in Japan for this.

Although the number of fur seal skins taken this year was not much more than two-thirds of the catch of 1901, the increased price at which they were sold nearly makes up for this. The price in the London market was $22.60 and the estimate placed on them in the returns is $20.

With the exception of the sturgeon fishery all branches of the fisheries seem to be in a very healthy condition and of late years greater attention is being paid to the possible development of branches hitherto altogether neglected or only taken up in a very small way.

The regulations at present in force for the British Columbia fisheries, are practically limited to those for salmon and sturgeon, and while with regard even to these experience

has shown that some modifications might be profitably introduced, the greater interest now being taken in the utilization of the other fisheries of the province renders it very desirable that the question of the regulations under which these are to be prosecuted should receive the early consideration of the department.

I have the honour to remain, Sir,
Your obedient servant,

C. B. SWORD,
Inspector of Fisheries.

A.—BRITISH COLUMBIA SALMON PACK, 1902.

Name of Cannery.	Location.	Sockeye, 48-lb. cases.	Cohoes, 48-lb. cases.	Springs, 48-lb. cases.	Humpbacks, 48-lb. cases.	Qualo, 48-lb. cases.	Cannery Totals.	District Totals.
Packers Association Canneries—								
Albion	Fraser Riv. Dist.	9,389					9,389	
Atlas	"	5,028					5,028	
Anglo-American	"	6,088	1,658				7,746	
Alliance	"	3,636					3,636	
Acme	"	4,006					4,006	
Brunswick I	"	12,271	10,442	1,337			24,050	
" II	"	7,830					7,830	
Canadian Pacific	"	8,117	9				8,126	
Currie's	"	9,428	1,286				10,714	
Colonial	"	4,281					4,281	
Celtic	"	3,947					3,947	
Cleeve	"	8,208	232				8,440	
Delta	"	7,863					7,863	
Dinsmore	"	5,446		17			5,463	
Ewen's	"	14,301					14,301	
Greenwood	"	4,527					4,527	
Hume	"	4,496					4,496	
Imperial	"	4,756					4,756	
Pacific Coast	"	6,815	2				6,817	
Provincial	"	3,407					3,407	
Terra Nova	"	8,405	1,257				9,662	
Westminster	"	8,382					8,382	
Anglo-B.C. Packing Co—								
Britannia	"	6,030					6,030	
British-American	"	5,515	2,871				8,386	
Birrell's	"	2,680					2,680	
Canoe Pass	"	3,420					3,420	
Phœnix	"	6,658					6,658	
Wadham's	"	5,408					5,408	
United Canneries Co—								
English Bay	"	7,500					7,500	
Gulf of Georgia	"	15,537					15,537	
Scottish Canadian	"	14,520					14,520	
Canadian Canning Co—								
Fraser River	"	7,228	1,398				8,626	
Star	"	11,421					11,421	
Vancouver	"	6,266					6,266	
Todd & Sons—								
Beaver	"	7,269	1,428				8,697	
Richmond	"	5,990					5,990	
Dea's Island, B.C.C.Co	"	7,236	208	117			7,561	
Eagle Harbour	"	4,801	2,525				7,326	
Great Northern	"	7,194	417				7,611	
Lighthouse	"	4,229	3,315	103	269		7,916	
St. Mungo	"	11,127	2,347				13,474	
Industrial	"	5,023	290				5,313	
Totals		295,670	29,685	1,574	269			327,19
B.C. Packers Association—								
Balmoral	Skeena River	5,885		1,604			7,489	
Cunningham	"	12,399	395	2,517	2,515		17,826	
Standard	"	8,286	202	1,148	2,341		11,977	
N. Pacific, A.B.C.Co	"	33,385	1,845	2,750	1,188		39,168	
Inverness, Todd & Sons	"	13,283	350	890	2,569		17,082	
Aberdeen, B.C.C.Co	"	11,990	471	2,273	2,836		17,570	
Carlyle	"	10,380		1,200			11,580	
Claxton, Wallace Bros	"	12,158	66	620	4,722		17,566	
Herman's	"	8,000	500	1,600	1,100		11,200	
Turnbull's	"	2,467	200	760	490		3,917	
Pearce's	"	365	186		10		561	
Totals		118,598	4,205	15,362	17,771			155,936

A.—BRITISH COLUMBIA SALMON PACK, 1902—*Continued.*

Name of Cannery.	Location.	Sockeye, 48-lb. cases.	Cohoes, 48-lb. cases.	Springs, 48-lb. cases.	Humpbacks, 48-lb. cases.	Qualo, 48-lb. cases.	Cannery Totals.	District Totals.
B.C. Packers Association—								
Brunswick III.	Rivers Inlet	14,223	61	111	7	....	14,402	
Wadham's	"	18,595	.....	127	.....	....	18,722	
Wannuck	"	9,062	515	82	21	.....	9,680	
Good Hope, A.B.C.Co.	"	12,000	382	.....	.....	....	12,382	
R.I.'s Victoria, B.C.C.C.	"	14,939	....	173	....	.....	15,112	
Totals		68,819	958	493	28	....	.....	70,298
B.C. Packers Association—								
Bella Coola	Northern Coast	2,685	2,054	128	....	....	4,867	
China Hat	"	2,642	966	....	.....	....	3,608	
Lowe Inlet	"	5,701	1,062	.....	775	.....	7,538	
Hickey's	"	5,200	.....	.....	....	....	5,200	
Namu, R. Draney	"	2,019	2,947	.....	.....	.....	4,966	
Kimsquit	"	6,491	1,416	.....	....	....	7,907	
Totals		24,738	8,445	128	775	....	....	34,086
Mill Bay	Nass River	11,036	819	483	....	.....	12,338	
Naas Harbour	"	9,446	496	932	.	.....	10,874	
Totals		20,482	1,315	1,415	....	.....	.....	23,212
Alert Bay	E. Van Island	1,772	1,780	.....	7,254	....	10,806	10,806
Skidegate	Queen Char. Isld	22	....	....	....	.....	22	22
Clayoquot	W. Coast, V.I.	4,060	846	70	....	628	5,604	5,604

SUMMARY.

Fraser River District	295,670	29,685	1,574	269	.....	327,198	
Skeena "	118,598	4,205	15,362	17,771	....	155,936	
River Inlet "	68,819	958	493	28	....	70,298	
Northern Coast "	24,738	8,445	128	775	....	34,086	
Naas River "	20,482	1,315	1,415	.....	.....	23,212	
Vancouver Island District	5,832	2,626	70	7,254	628	16,410	
Queen Charlote Island District	22	....	.....	.....	....	22	
Totals of each variety	534,161	47,234	19,042	26,097	628	.....	
Grand total	.....	....	....	....	.....	.....	627,162

Number.	Vessels.	License Number.	Masters.	Tons.	Crews.	
					Whites.	Indians.
1	Ainoko	24	A. McDougall	75	6	18
2	Allie J. Alger	22	W. C. Baker	75	8	26
3	Annie E. Paint	33	R. E. McKeil	82	8	19
4	Arietis	11	W. Heater	86	7	18
5	Aurora	38	V. Gullin	41	5	16
6	Beatrice	23	A. H. Olesen	66	5	21
7	Borealis	29	D. Martin	47	18	
8	Carlotta G. Cox	36	R. O. Lavender	76	21	
9	Carrie C. W	28	D. MacAulay	92	8	29
10	Casco	7	W. Munro	63	21	
11	C. D. Rand	13	J. G. Searle	51	6	20
12	City of San Diego	1	A. C. Folger	46	20	
13	Diana	18	A. St. Clair	50	6	19
14	Director	2	J. Anderson	87	24	
15	Dora Siewerd	9	W. O'Leary	93	25	
16	Enterprise	25	H. V. Hughes	69	8	26
17	Favourite	31	L. McLean	80	6	20
18	Florence M. Smith	4	C. LeBlanc	99	24	
19	Geneva	6	C. O. Burns	92	24	
20	Libbie	35	W. Delouchreg	93	8	21
21	Mary Taylor	26	H. V. Brown	43	18	
22	Ocean Belle	32	D. McPhee	87	7	27
23	Ocean Rover	34	E. F. Robbins	55	6	16
24	Oscar and Hattie	3	H. Blackstadt	81	24	
25	Otto	14	J. F. Gosse	86	7	22
26	Penelope	12	G. Heater	70	6	24
27	Sadie Turpel	37	J. Mohrhouse	56	7	12
28	Saucy Lass	16	W. H. Gillen	38	18	
29	South Bend	19	F. Cole	Missing		
30	Teresa	30	W. D. Byers	63	8	21
31	Triumph	5	M. Ryan	98	24	
32	Umbrina	10	J. Haan	99	7	24
33	Vera	8	J. Copeland	60	19	
34	Victoria	27	S. H. Balcam	63	6	17
35	Zilla May	21	H. Balcam	66	6	21
	Indian Catch					
	Totals			2,428	421	437

SUMMARY.

British Columbia coast catch	4,936
Japan coast catch	3,331
Copper Islands coast catch	1,340
Behring Sea catch	5,193
	14,800

SESSIONAL PAPER No. 22

Sealing Report—1902.

Boats.	Canoes.	British Columbia Coast Catch.		Japan Coast Catch.		Vicinity of Copper Islands.		Behring Sea.		Totals.	Branded Skins.	
		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.		Number.	
2	9	116	88	.....	.....	.....	.....	202	211	617	1	1
2	12	117	207	.....	.....	.....	.....	.....	.....	324	....	2
2	9	10	71	.....	.....	.....	.....	179	257	517	....	3
2	9	99	68	.....	.....	.....	.....	202	253	622	....	4
2	8	23	20	.....	.....	.....	.....	.....	.....	43	....	5
2	10	51	86	.....	.....	.....	.....	.....	.....	137	....	6
5	....	57	35	.....	.....	.....	.....	.....	.....	92	....	7
6	....	147	77	60	34	.....	.....	.....	.....	318	....	8
2	14	53	32	.....	.....	.....	.....	370	324	779	....	9
7	....	207	213	279	139	.....	.....	.....	.....	838	2	10
2	10	126	115	.....	.....	.....	.....	270	244	755	1	11
6	....	328	117	.....	.....	179	63	.....	.....	687	3	12
2	9	78	107	.....	.....	.....	.....	81	195	461	....	13
7	....	21	60	293	244	37	80	.....	.....	735	....	14
8	....	.....	.....	91	149	1	18	.....	.....	259	....	15
2	8	106	95	.....	.....	.....	.....	141	218	560	....	16
2	10	43	30	.....	.....	.....	.....	100	115	288	2	17
8	....	.....	.....	272	406	28	55	.....	.....	761	....	18
8	....	27	31	316	460	27	30	.....	.....	891	....	19
2	10	57	91	.....	.....	.....	.....	.....	.....	148	....	20
5	....	149	192	75	35	.....	.....	.....	.....	451	....	21
3	11	30	23	.....	.....	.....	.....	.....	.....	53	....	22
2	8	61	45	.....	.....	.....	.....	.....	.....	106	....	23
6	....	101	52	.....	.....	527	233	99	73	1,085	2	24
2	11	59	61	.....	.....	.....	.....	.....	.....	120	....	25
2	12	47	53	.....	.....	.....	.....	199	338	637	1	26
2	6	61	32	.....	.....	.....	.....	.....	.....	93	....	27
6	....	21	20	9	4	13	12	.....	.....	79	....	28
....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	29
2	10	50	77	.....	.....	.....	.....	.....	.....	127	....	30
8	....	.....	.....	135	330	5	32	.....	.....	502	....	31
2	12	182	140	.....	.....	.....	.....	415	331	1,068	7	32
6	....	47	6	.....	.....	.....	.....	.....	.....	53	....	33
2	8	89	54	.....	.....	.....	.....	130	95	368	....	34
2	10	49	26	.....	.....	.....	.....	82	69	226	....	35
....	....	.....	.....	.....	.....	.....	.....	.....	.....	1,343	....	
129	206	2,612	2,324	1,530	1,801	817	523	2,470	2,723	16,143	19	

SUMMARY.

Total Pelagic Sealing Vessels	14,800
Indian catch	1,343
Total	16,143
Total Canadian catch	16,143
Landed from Schooner *Scifu*	582
Total	16,725

RETURN showing the Number, Tonnage and Value of Vessels and Boats and the Quantity and Value of Fishing Materials and the Kinds of Fish in the Province of **British Columbia**, for the year 1902.

Number.	Districts.	Vessels and Boats.							Fishing Materials.					Kinds of Fish.							Number.
		Vessels.				Boats.			Gill Nets.		Seines.		Trawls and Lines.	Salmon, canned (48-lbs. cases).	Salmon, salted, brls.	Salmon, dry-salted, lbs.	Salmon, smoked, lbs.	Salmon, fresh, lbs.	Sturgeon, lbs.		
		Number.	Gross tons.	Value.	Men.	Number.	Value.	Men.	Fathoms.	Value.	Fathoms.	Value.	Value.								
				$			$			$		$	$								
1	Fraser River	60	2400	240000	280	2686	161160	10622	450500	337875	1600	2400	9200	327198	2250	8632148	95550	1470540	35500		1
2	Rivers Inlet	8	320	30000	24	508	30480	1616	101600	76200	...	....	50	70298	100	.....	1200	25000	...		2
3	Northern Coast	6	240	18500	18	150	800	1200	30000	22500	2200	3300	150	34086	140	75000	30000	27000	...		3
4	Skeena River	12	480	44000	36	644	38640	2525	128800	96600	300	450	125	155936	1550	.....	80000	300000	.....		4
5	Naas River	1	30	2500	3	90	5400	380	18000	13500	...	.....	50	23212	1140	.....	70000	28000	....		5
6	Queen Charlotte Island	...	...	.....	...	40	4000	200	4000	3000	300	450	178	22	150	25000	6000	15000	.....		6
7	Cape Scott to Comox	8	120	4000	24	35	3850	170	2400	1800	900	1350	325	10806	100	.....	6500	30000	.....		7
8	Nanaimo (Comox to Saanich)	55	825	12000	165	75	4500	150	5500	4125	3700	5550	2200	.....	225	1575000	80000	260000	.....		8
9	Victoria (Saanich to Cape Beale)	10	150	2250	30	25	2000	75	3000	2250	1000	1500	1500	.....	275	.....	8000	25000	....		9
10	West Coast, V.I.	9	135	1800	27	30	2700	160	3100	2325	800	1200	200	5604	750	150000	11500	15000	.....		10
	Totals	169	4700	355050	607	4283	253530	*170[illegible]8	746900	560175	10800	16200	13978	627162	6680	10457148	388750	2195540	33500		
	Values $	...	....	..	.....	...	.....	...	...	...	....	....	.....	3010377	66800	418285	38875	219554	3350		

*Including cannery employees.

RETURN showing the Quantity and Value of Fish, &c, in **British Columbia**—*Concluded.*

Number.	Districts.	Kinds of Fish.																Total Value of all Fish.	Number.
		Halibut, lbs.	Herring, salted and fresh, lbs.	Herring, smoked, lbs.	Oolachons, fresh, lbs.	Oolachons, salted, brls.	Oolachons, smoked, lbs.	Smelts, lbs.	Trout, lbs.	Cod, lbs.	Skill, lbs.	Shad, lbs.	Mixed fish, lbs.	Hair-seals, skins.	Sea otter, skins.	Fish oil, galls.	Guano, tons.	Canned clams, cases.		
1	Fraser River	7312000	481200	303490	200000	305	11500	158000	175000	180000	.....	9500	172000	450	...	50500	150	200	2,599,451 82	1
2	River's Inlet	5000	10000	...	...	...	....	....	300	...	.....	....	2500	400	..	5500	....	....	344,180 40	2
3	Northern Coast	25000	70000	...	140000	200	3500	.....	550	....	.....	....	15000	500	....	10700	...	320	194,273 80	3
4	Skeena River	65000	5000	1500	50000	500	1000	....	4500	.....	...	....	20000	325	....	600	....	1900	824,266 55	4
5	Naas River	55000	5000	2000	500000	2500	25000	..	1000	.....	.....	....	15000	700	....	1150	....	.....	190,095 10	5
6	Queen Charlotte Island	140000	30000	4000	.....	...	.....	.	.....	4500	15000	....	30000	270	2	35000	....	200	31,493 10	6
7	Cape Scott to Comox	25000	75000	3500	...	...	....	6500	10000	13500	...	...	25000	855	....	7000	....	40	68,402 05	7
8	Nanaimo (Comox to Saanich)	630000	832400	125000	...	.....	..	125000	150000	325000	.....	....	200000	550	..	31500	....	...	243,807 50	8
9	Victoria (Saanich to Cape Beale)	125000	75000	2250	..	.....	....	100000	5000	11500	.....	....	80000	650	1	5000	....	...	29,212 50	9
10	West Coast, V.I.	35000	70000	4750	. .	.....	.....	.....	5000	5500	.....	...	10000	900	7	15000	....	640	63,421 20	10
	Totals	8417000	1653600	446490	890000	3505	41000	389500	351350	540000	15000	9500	569500	5600	10	161950	150	3300		
	Values $	420850	82680	44649	44500	35050	4100	19475	35135	27000	1500	475	28475	4200	6250	56682	4500	15840	4,588,604 02	

Salmon roe (45,600 lbs.)	$	4,561
Oysters (5,000 sacks, 125 lb. each)		16,000
Clams and mussels		12,000
Crabs and abelonies		20,000
Shrimps and prawns		6,000
		58,560 00
Estimate of fish, etc., not included in above		300,000 00
Fur seals (16,883)		337,660 00
Grand total		5,284,824 02

RECAPITULATION

Of the Yield and Value of the Fisheries of British Columbia for the Year 1902.

Kinds of Fish.	Quantity.	Price.	Value.
		$ cts.	$ cts.
Salmon, canned ..... 48-lb. cases.	627,162	4 80	3,010,377 60
" salted ..... Brls.	6,680	10 00	66,800 00
" dry salted ..... Lbs.	10,457,148	0 04	418,285 92
" smoked ..... "	388,750	0 10	38,875 00
" fresh ..... "	2,195,540	0 10	219,554 00
Sturgeon ..... "	33,500	0 10	3,350 00
Halibut ..... "	8,417,000	0 05	420,850 00
Herring, fresh and salted ..... "	1,653,600	0 05	82,680 00
" smoked ..... "	446,490	0 10	44,649 00
Oolachons, fresh ..... "	890,000	0 05	44,500 00
" salted ..... Brls.	3,505	10 00	35,050 00
" smoked ..... Lbs.	41,000	0 10	4,100 00
Smelts ..... "	389,500	0 05	19,475 00
Trout ..... "	351,350	0 10	35,135 00
Cod ..... "	540,000	0 05	27,000 00
Skill ..... "	15,000	0 10	1,500 00
Shad ..... "	9,500	0 05	475 00
Mixed ..... "	569,500	0 05	28,475 00
Hair seals ..... Skins.	5,600	0 75	4,200 00
Sea Otter ..... "	10	625 00	6,250 00
Fish oil ..... Galls.	161,950	0 35	56,682 50
Guano ..... Tons.	150	30 00	4,500 00
Canned clams ..... Cases.	3,300	4 80	15,840 00
Salmon Roe ..... Lbs.	45,600	0 10	4,560 00
Oysters ..... Sacks.	5,000	3 20	16,000 00
Clams and mussels	.....	.....	12,000 00
Crabs and abelonies	.....	.....	20,000 00
Shrimps and prawns	.....	.....	6,000 00
Estimate of fish not included in above	.....	.....	300,000 00
Fur seals ..... Number	16,883	.....	337,660 00
Grand total			5,284,821 02

Capital invested in **British Columbia** Fisheries, 1902.

Description of Property.	Number.	Value.	Total Value.
		$ cts.	$ cts.
Fisheries—			
Canneries, wharfs, &c	75	1,312,500	
Vessels	169	355,050	
Boats	4,283	253,530	
Gill and seine nets (fathoms)	757,700	576,375	
Trawls and lines		13,978	
Scows	150	30,000	
Cold storage plants	7	87,500	
Oil factories	3	45,000	
Salteries	4	7,500	
			2,681,433
Fur Sealing—			
Vessels	40	452,250	
Boats and canoes		6,500	
Guns and equipment		20,500	
			479,250
Total capital			3,160,683

Employees in Fisheries—		
Fishermen and cannery workers	17,098	
Employed on vessels	607	
		17,705
Sailors and hunters in fur sealing—		
Hunters, white men	421	
" Indians	437	
		858
Total		18,563

APPENDIX No. II.

FISH CULTURE

1903.

REPORT OF PROFESSOR EDWARD E. PRINCE, COMMISSIONER AND GENERAL INSPECTOR OF FISHERIES FOR THE DOMINION OF CANADA.

OTTAWA, December 31, 1903.

To the Honourable
RAYMOND PRÉFONTAINE,
Minister of Marine and Fisheries,
Ottawa.

SIR,—I have the honour to submit my annual report upon that important branch of the Department's work relating to fish culture in the Dominion of Canada. It is gratifying to be able to state that the results achieved during the past year are far in excess of those ever recorded in the department's annual reports. The total output of fry shows a most remarkable advance over any previous year, as the quantity of fry of various species of valuable fishes amounts to no less than 314,511,500. The magnificent output which I announced in my report last year has thus been exceeded this year by the surprising quantity of over forty millions of fry. This quantity, it may be added is exclusive of the black bass fry produced at the Belleville pond, and is independent of the excessively large results of the Cape Breton lobster planting experiment, of which I give a detailed account on a subsequent page of my report.

At the close of the first season during which the superintendence of the Dominion hatcheries was placed in my charge, viz., in 1895, it was my privilege to report the largest results achieved up to that time in the fish culture work of Canada, the grand total being no less than 294,040,000, or nearly twenty millions below the present year's total output. This extremely gratifying result has been accomplished, it may be noted, under circumstances, in at least three of the hatcheries, which hampered the full success of the season's operations. These specially disadvantageous circumstances are referred to in their proper place in the detailed reports of the officers in charge of the respective hatcheries, which are appended to my present report.

In the period of eight years during which I have performed the duties of responsible head of the fish-breeding operations under the Dominion Government, I have in successive annual reports had the pleasing duty of recording the unretarded growth, success and extension of the work of Canadian fish-culture. Twenty years ago the output (53,143,000) was just about one-sixth of the present year's results. Four years later it rose to over 88,000,000, and in 1890 exceeded 90,000,000, but in 1894, under the late superintendent of fish culture it had risen to 254,000,000, while in 1895, the first year of my superintendence of the work, I succeeded in surpassing that very satisfactory and imposing grand total by about fifty millions of fry. In my report of that year (Twenty-Eighth Annual Rep. of Dep. Mar. and Fish., Fisheries, p. 201) I expressed my extreme satisfaction that the transference of the duties of superintendent into my

hands had been marked by no interruption of the work, and, instead of a falling off in the results accomplished, the output of fry during the season of 1895 had been greater than in any previous season.

There has of course been an increase in the number of hatcheries, as well as an increased effort to accomplish a larger output in some of the older hatcheries; but success in fish-hatching depends upon certain essential conditions, the principal condition being the care and the efficiency of the officers in charge of the operations. Last year there were fifteen hatcheries in operation, this year there are nineteen including the new salmon hatchery on the Skeena river at the outlet of Lake Lakelse, the new salmon hatchery built by Mr. S. A. Spencer, with the permission of the Dominion Government, and located on the Nimpkish river, Vancouver Island, and the Shemogue lobster hatchery, Westmorland County, N. B. All these new hatcheries have reported their results for the first time. The new Gaspé and Margaree, N.S. Salmon hatcheries have completed their second season's work satisfactiorly. The Mount Tremblant (Lac Tremblant) hatchery, which is admirably constructed and fitted up, and in a perfect situation for completely successful operations, did not commence work until this fall, when officer William Armstrong, under my instructions, shipped a quota of salmon trout (Namaycush) eggs from the Wiarton spawning station, Georgian Bay. The shipment was met at Toronto by Mr. Alexander Finlayson, and transhipped in his efficient care to Mount Tremblant. Officer Finlayson reported on November 18 their safe arrival in good condition, and in his report speaks of the favourable character of the hatchery, especially its ample supply of water of the best quality. A splendid reserve and rearing pond is also provided close to this latest institution under the department's fish-culture system. The two new lobster hatcheries one on Shippegan island, near Shippegan Gully, N.B., and the other on Prince Edward Island, near Charlottetown, are nearing completion, the pump, boiler, and other necessary fittings, reaching the former institution during the present month (December), while at Charlottetown, the contract for all the machinery, pump, boiler, tank, &c., has been completed and there remains only the erection of a smoke stack, and the final connection of the inspirator fittings. Officer Alfred Ogden, who has most ably supervised the construction of these new buildings, has just reported to me that the boiler has been set, and the pump and tank placed in position ready for next season's work. I may add that the Shippegan hatchery has been provided with a 25 h. p. boiler instend of the 20 h. p. boiler originally decided upon. Both these new hatching establishments will be in full running order for the coming lobster season next spring. With these new institutions in operation there will be four lobster hatcheries turning out vast quantities of young fry by which the lobster industry will receive immense benefits.

The recuperation of the lobster fishing grounds by artificial aids is however, a great task, and the incubation of lobster eggs in the hatching jars of fish breeding establishments is only one of many methods worthy of adoption. By that means lobster spawn is utilized which would otherwise be wholly lost, and the parent lobsters themselves are afterwards boiled and canned: but other schemes for cultivating these valuable crustaceans have been devised. The Lobster Commission in 1898 referred in their report to the suggestion that temporary lobster reserves night be defined, and alternate areas fished in successive seasons. The Commissioners said (p. 38 of their report):

'While laying stress upon the preservation of the seed lobsters and upon limiting the open season for fishing, and also adhering to the size limit and recommending artificial propagation as a means of keeping up the supply, the Commissioners also carefully considered some other suggestions with this object in view; thus, the setting apart of reserves of a specified number of miles in every one hundred miles of coast, such reserves to be for one, two or more years regarded as breeding grounds, has engaged the Commissioners serious attention. A fatal objection to such reserves, even though they be changed from year to year or at longer or shorter intervals, is that their effect would be wholly disturbed by the setting of baited traps all around their borders, and thus drawing the lobsters off and rendering non-effective any system of setting apart such areas.'

It is estimated that no less than nine thousand millions of lobster eggs are destroyed every year by the canneries in the Maritime Provinces, the basis of the calcula-

tion being the experience of the officers at the government lobster hatcheries, who find that the canneries are able to furnish on an average four and a half millions of ova for every one hundred cases packed by them. It is the rule for the Dominion lobster hatcheries to depend for their supplies of eggs upon the lobster packing establishments in the vicinity, the packers in return being permitted to use the female lobsters after the Department's officers have removed the spawn. The spawn is then conveyed to the hatchery and incubated under the supervision of experienced government officers trained to the work. I have in a previous report fully described the method adopted; but I may quote in this connection, the following details respecting the process at the Bay View hatchery, near Pictou, N.S.

After the eggs are received from the lobster canneries, usually at the rate of 1½ millions per day, they are placed in glass hatching jars through which pure sea-water constantly passes, and this circulation keeps them in motion. The hatching jars are upright cylindrical vases, with a central glass tube supplying water which passes up through the jar and escapes by a conical tip at the top of the jar.

About the middle of June the earliest lobster fry hatch out, and are carried by the circulating stream into a capacious reception trough, which receives the waste water.

When the hatching-out begins the assistants are kept busy night and day attending to the eggs and fry to see that they do not collect and clog together, as they soon die under such circumstances.

When the time for distribution comes, the fry are placed in barrels of sea-water, open at the top, and conveyed out to sea on a small steam tug.

They are not simply thrown overboard; but from a low steamer are scattered by means of small tin dippers, or passed through a hose, one inch in diameter and about eight feet long, provided with a funnel-shaped box at the top; they are scattered about one million to the mile over a distance of 60 miles. The bottom is rock and kelp, and the fry are distributed not less than three miles from shore.

The number of eggs placed in the hatching jars is about 65 millions each season, and the eggs are so healthy that at no time have more than a hundred dead eggs been found in the jars at any one time.

No doubt can be entertained that this method of handling lobster eggs is reliable and successful, and at every step the results can be checked until the fry are finally planted in the sea: but a system of hatching by means of floating incubators has attracted much attention. This system of floating hatching crates or cages was really commenced in Newfoundland, and has been carried on for fourteen or fifteen years. The accomplished and zealous superintendent of fisheries for the colony, Mr. Adolph Neilson invented a simple hatching apparatus 3 ft. by 1¼ ft. wide, and 12 inches deep in the centre: but shallower (9 in.) at each end. It is designed to be moored in suitable places after being filled with lobster eggs. A large number of lobster packers volunteered to work the incubators near their canneries, and in addition to those so operated the Fisheries Department tried a number of them in charge of paid officers at other stations, and the young fry were thus liberated at quite a number of important points along the Newfoundland coast. In 1890 a proper trial was made at fourteen stations and in successive years twenty or thirty localities have, as a rule, been planted with some hundreds of millions of young lobsters hatched out by means of these floating incubators. The Canadian Lobster Commissioners refer in their report in 1898 to some weak points in the system and say that 'a cheaper method of lobster hatching has been considered by the Commission, namely, floating incubators, such as those adopted by Mr. Nielson in Newfoundland, and whatever may be said in favour of this ready and inexpensive method it appeared to the Commissioners that the main difficulty in the way of the successful adoption of the Newfoundland scheme is the lack of experience and expert knowledge of the business in the canners' employees who would have charge of them. Floating incubators require to be kept clean and demand almost daily attention or they become foul and the eggs are all lost. If at every cannery a man of experience and an enthusiast in lobster culture could be secured, the system might work favourably, but the risks of failure are too patent to encourage the Commissioners to place implicit reliance in hatching lobsters by floating incubators at canneries.'

In 1894, Mr. R. Hockin, Inspector of Fisheries for District No. 2, Nova Scotia, brought out a self-acting lobster incubator, and experiments on a small and inadequate scale were made: but in 1895, a special lobster inspector (Mr. C. A. Stayner) laid a scheme before the department for saving the lobster eggs and hatching them at the canneries. He suggested that wherever possible each cannery should have a floating car or small scow 12 ft. long, 8 ft. wide and 2 ft. deep, narrowing at each end, and provided with a tight keel: but along a portion of the sides open to the wash and circulation of sea water. Narrow laths of wood one inch or less apart were to be fixed to admit the water so that the eggs placed on bunches of brush (dry spruce) fastened at an angle, would be bathed all day long by moving streams of sea water. Some canners expressed willingness to give these hatching cars a trial in 1895: but no proper experiment was carried out until the following year, and the results of the experiment, for various reasons, were not uniformly successful. The special officer in his authorized circular addressed to the canners said:—

'The immense advantage of hatching young lobsters and distributing them in the waters near the canneries needs no argument, and I would therefore advise you to save all the eggs brought to your factory during the present season and place them in a floating car. The Department has sanctioned my bringing to your notice a cheap and ready way of hatching lobster eggs. All that is necessary is to provide a car or cars suitable for holding lobster eggs brought to the factory during the season. The car should be covered and provided with a door at the top like an ordinary lobster car, but with narrow openings between the boards to allow the water circulation. The brushy tops of old dead spruce boughs should be fastened to the bottom and sides (inside) of the car by nailing laths to hold the boughs. The car should be moored where clean tidal water will reach it. Scatter the eggs brought each day over the brush in order to keep the eggs from massing together. Scrape the eggs with great care by means of a spoon or knife from the live "berried" lobster. When placed in the car see that they are all under water. The eggs will hatch out about the time that the packing season is over, say in the middle or end of June or later, according to the locality and heat of the summer. If a creek or small salt-water inlet is near, erect a brush fence across it, place the car there and the newly hatched lobsters on coming out may thus be retained and protected for a time. It is to the interest of every packer to aid in the scheme.'

In the meantime Inspector Hockin continued his experiments, with a view to making his floating incubator more complete, and in reporting upon the improvements he had made in his invention he said: 'If the fishermen will leave, or can be made to leave the berried female in the water until her eggs were hatched there would be no necessity for incubators; but they will not willingly do so—the fisherman will grasp the ten cents today rather than take the chance of him or some other person making a dollar or two in two or three years. As to compulsion, it can of course be done, but at a very great expense, for unless we can have a stricter class of men inspecting the factories nearly every hour of the day, the spawn fish will be taken. The present scheme is offered as a compromise. Under this system, after a few years when the fishermen will have fully learned the *modus operandi* of treating lobster ova, the cost of incubation should not much exceed one dollar per million..... I am satisfied that incubating lobster eggs will only be satisfactorily done under the immediate direction of the department, as only a very few of the packers could be relied upon to give the necessary attention to this branch of work.' During the present year a further trial of an improved form of the Hockin incubator was officially sanctioned, and an experiment tried at Bay View, Cariboo harbour; Saddle island, Cumberland county; Canso, Guysborough county; and at the Government Biological Station Richmond bay. The reports received are incomplete but they show that the ova remained in perfect condition at most of the stations named, proving that the water freely circulated through the compartments and that the sea-water was sufficiently pure to favour normal development. The period of incubation seems to have been unduly prolonged, especially at Canso, owing no doubt to the cold spring weather; but very fine examples, have reached me of the newly hatched fry from the Saddle island incubator, dated June 23 and July 1, and next season it is desirable that a more extended trial should be made of this very cheap and convenient incubating apparatus.

The members of the Lobster Commission, 1898, in their very full and exhaustive review of the lobster industry, in all its various aspects, after considering the various protective suggestions made, proceeded to say (p. 33 of their report) 'two additional courses appear worthy of the attention of the government, namely, the reservation of natural inshore lagoons, harbours and coves, which it is generally admitted are natural breeding grounds for the lobster, and it appeared to the Commissioners desirable, if at all feasible, that at times when seed lobsters are especially plentiful, as late on in the season, the government might at a nominal sum purchase from the fishermen seed lobsters to be planted in these reserves. A few thousand dollars spent in this way would yield results far outreaching the small expense in its benefits to the whole adjacent shore. The second course, namely, the erection of hatcheries, is one which strongly recommends itself to the Commissioners, especially in portions of the coast where the inshore lagoons or natural breeding grounds do not admit of carrying out the scheme just detailed.'

Accordingly, during the present year, the system of lobster pounds or inclosures for propagation purposes has been tried. It was a most important departure when on May 20 the plan was approved of impounding female lobsters bearing eggs in an inclosure at Fourchu, Cape Breton. The pound is on the south side, outside the inner harbour of Fourchu and is partly a natural resort for lobsters, and partly an artificial walled structure. The total area of the inclosure is 62,700 square feet (380 feet by 167 feet), but it is divided into various smaller ponds or pounds, one of which, 20,000 square feet in superficial area, is reserved as a seed lobster reserve. The bottom consists of sand, gravel and rock, and it is walled in with stone-filled cribwork, having a close-faced sheathing on the inner side and about 4 feet in height which is the limit of ordinary low tide. Some small apertures, 1 or 2 inches in diameter, permit an inflow and outflow of water. Above the cribwork wall is a fence of woven wire netting, 5 feet high, *i. e.* about the height of the limit of high water, and of course there is a free ingress and outflow of water at flood tide. The total height of the inclosure is thus 9 feet, and there is always abundant sea-water in it, without admixture of fresh water. Early in the season, seed lobsters caught by the fishermen were purchased and placed in the pound, and Officer H. C. V. Levatte, who was authorized to supervise the operations carried on by Mr. H. E. Baker, of Gabarus, the owner of the pounds, reported that 24,600 seed lobsters had been placed in the pond and afterwards liberated on July 4, and that 12,600 lobsters were actually in the pond, which number was afterwards increased by the impounding of 13,000 or 14,000 more seed lobsters after the date mentioned. Thus a total quantity of nearly 50,000 seed lobsters was secured by Mr. Baker and placed in the pond under the care of five employees. Of those impounded it was found that 2 per cent had spawned and carried no eggs, 10 per cent bore newly laid ova, 20 per cent showed eggs in a more advanced condition, in 30 per cent the embryo lobster had developed eyes within the egg, while close upon 40 per cent were in a very advanced stage and nearly ready to hatch out. The lobsters were fed every third day on chopped salt herring; but as kelp and rockweed grows in the pound, and additional supplies were placed there, the diet was appropriate. Every few days the pounds were cleaned so that no putrified matter was allowed to accumulate. Batches of the seed lobsters were removed from the pound to be returned to the sea and were placed in crates, anchored in Fourchu bay, whence they were taken on board a small tug to be carried out a distance of 1½ or 2 miles from shore. Each crate was then lowered into the sea, and upset, thus dumping the lobsters into the water and they rapidly disappeared from view, taking refuge on the bottom. Some of the lobsters when purchased from the fishermen, carried very advanced eggs and these hatched out in the pounds towards the end of July. A good many did so and great quantities of free swimming young lobsters were observed in the inclosure as Mr. Andrew Halkett noticed when he visited the pond under official instructions early in August. Only a small percentage of the berried female lobsters died, not more, it is stated, than 2¼ per cent in May, 3⅛ per cent in June and 4 per cent in July, the cause being probably rough handling by the fishermen, when removing them from the traps. The work of collecting the lobsters was no light task, and two steam tugs along with eight or nine

sailing smacks, were occupied in procuring from the fishermen and packers on the Victoria, Cape Breton, and Richmond counties shores the seed lobster for which $5 to $9 per 100 was paid. The average size ran fairly large, Mr. Halkett reporting on an average specimen which measured 12½ inches and weighed 2 lbs. 3 oz. The larger proportion ranged between 8 inches and 10½ inches in length. Only 2 per cent of the berried females measured 7½ inches, while 73 per cent measured from 8 to 10½ inches, and 25 per cent were over 10½ inches long. The first year's trial of this system of impounding seed lobsters which would otherwise be destroyed in the canneries, in spite of the prohibitory regulations, gives ample basis for a continuation of the work. Indeed, it must be followed by the formation of other lobster pounds in various parts of the coast if the full benefits to the lobster industry in general are to be realized. There are risks in the system and dangers which require to be safeguarded, and it is doubtful if the schools of fry hatched out in the pounds will survive under the abnormal conditions surrounding them; but the lobster fishery is of such vast importance and value to the country that a thorough test of the scheme in different localities would be well advised.

An extension of the present fish culture operations is urgently called for in western Canada, and especially upon the Pacific coast. Two years ago I specified certain localities on the shores of British Columbia, where new salmon hatcheries were suggested in order to benefit the great salmon industry. I referred to Lowe Inlet, Rivers Inlet, the northern part of Vancouver Island and Naas river, as inviting efforts to increase the salmon supply. The Nimpkish hatchery is the only one of the four locations named which has been built, and that institution, as already pointed out, is owned by Mr. Spencer, the salmon canner there, though operated under the Department's supervision. The building, it may be noted, is 30 feet by 40 feet, built of cedar, with split cedar floor, and is provided in the roof with eight windows 6 feet by 4½ feet in dimensions. The tanks receive their supply of water from a mountain stream by means of a long iron pipe of 6 inches diameter, reduced to 5 inches over the last sixty feet of its length. The water is very pure and free from sediment and is not subject to the dangers of freshets. The troughs, 24 in number, are 15 feet long, and the trays were arranged to hold a million and a half of eggs; but during the past season, its initial season, that quantity was exceeded and 196,000 eggs more than the estimated capacity had to be accommodated. Inspector Sword, in his report, which is appended, states that the output of fry amounted to 1,636,000 sockeye salmon, which were all placed in Nimpkish lake, a famous salmon spawning ground. The eggs, owing to a low temperature, were a long time in hatching, viz., 150 days, but slowly incubated fry are found, as a rule, to be strong and exceptionally robust. Much of the success of the first season's work is due to Mr. Wm. Roxburgh, a most able and zealous officer, who was long in the Department's service and who had charge of the Nimpkish hatchery. I trust that two or possibly three new hatcheries, in addition to the five recently completed establishments referred to, may be added next year, and the total number of Dominion fish hatcheries will then be brought up to twenty-one or twenty-two.

While this continued increase in the extent of the work of fish-breeding is an important and satisfactory feature, it is no less interesting and important to note that the number of kinds or species of fish included in the operations also continues to increase. A larger number of different kinds are included in the department hatching operations than at any previous time.

Until a few years ago, the following species embraced all the kinds dealt with:— Atlantic salmon, British Columbia salmon, lake or salmon trout, lake whitefish and lobsters, whereas at the present time, instead of five or six kinds of fish planted under the auspices of the Dominion Government, no less than thirteen kinds are now hatched and distributed.

Reference to the black bass hatching and rearing work for the year is made in the report of Mr. F. H. Cunningham, inspector of hatcheries, which I add to my present report. Of the other twelve species of fish distributed during the past year, the details

appear in the usual table, showing the kinds and quantities of fry sent out from the various establishments in the different provinces given below :—

No.	Number of Hatchery.	Number of Fry distributed.	Number of Eggs received from other Hatcheries.	Species.
1	Bedford, N.S	710,000		Atlantic salmon.
2	Bay View, N.S	164,000,000		Lobsters.
3	Margeree, N.S	600,000		Atlantic salmon.
4	St. John River, N.B	648,000		" "
5	Miramichi, N.B	1,000,000		" "
6	Restigouche, N.B	1,935,000		" "
	" "	117,000	130,000	Salmon trout.
7	Shemogue, N.B	17,000,000		Lobsters.
8	Gaspé, P.Q	830,000		Atlantic salmon.
9	Tadoussac, P.Q	1,625,000		" "
10	Newcastle, Ont	2,500,000		Great lake trout.
11	Sandwich, Ont	69,000,000		Lake whitefish.
	"	21,000,000		Pickerel or Doré.
12	Ottawa, Ont	1,181,000	1,250,000	Great lake trout.
	"	20,000	20,000	Rainbow trout.
13	Selkirk, Man	12,000,000	35,000,000	Lake whitefish.
14	Bon Accord Fraser Riv. B.C	9,271,000		Sockeye salmon.
	" " "	230,000		Coho salmon.
	" " "	22,000		Spring salmon.
	" " "	50,000		Rain.&Dolly Varden tr.
15	Granite Creek, B.C	3,250,000		Sockeye salmon.
	" "	1,520.000		Coho "
	" "	75,000		Quâlo "
	" "	20,000		Rainbow trout.
	" "	1,500		Dolly Varden trout.
16	Lake Lakelse, Skeena R. B.C	3,450,000		Sockeye salmon.
17	Nimkish River, B.C	1,636.000		" "
18	Magog, P.Q	820,000		Salmon trout.
	" "	65,000		Speckled trout.
19	Mount Tremblant			Com. operat. this fall.
20	Moisie, P.Q	725,000		Atlantic salmon.
	Totals	314,511,500	36,400,000	

The gross output of fry of all kinds from all the hatcheries operated under the Dominion Government during 1903 was 314,375,000, as follows :—

Atlantic salmon *(Salmo salar)*	9,283,000
B.C. Sockeye salmon *(Oncorhynchus nerka)*	17,607,000
B.C. Spring " (" *quin'nat)*	22,000
B.C. Coho " (" *kisutch)*	1,750,000
B.C. Quâlo " (" *keta)*	75,000
Rainbow Trout *(Salmo irideus)*	90,000
Dolly Varden salmon *(Salvelinus malma)*	1,500
Speckled " *(Salvelinus fontinalis)*	65,000
Salmon Trout *(Salvelinus namaycush)*	4,618,000
Pickerel or Doré *(Stizostedion vitreum)*	21,000,000
Lake whitefish *(Coregonus clupeiformis)*	81,000,000
Lobster *(Homarus americanus)*	179,000,000
Total	314,511,500

FISH CULTURE.

STATEMENT showing the Places where and the Years in which the several Fish Hatcheries have been erected; also the number of fry distributed from each Establishment annually since they were built, including the year 1903.

Number.	Year.	Ontario.			Quebec.			New Brunswick.			Lobster Hatchery, Shemogue.	Number.
		Newcastle.	Sandwich.	Ottawa.	Magog.	Tadoussac.	Gaspé.	Restigouche.	Miramichi.	St. John River.		
		Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.		
1	1868–73	1,070,000										1
2	1874	350,000						100,000	60,000			2
3	1875	650,000				60,000	110,000	600,000	150,000			3
4	1876	700,000	8,000,000			150,000	50,000	300,000	60,000			4
5	1877	1,300,000	8,000,000			1,180,000	1,051,000	600,000	320,000			5
6	1878	2,605,000	20,000,000			707,000	650,000	1,015,000	665,000			6
7	1879	2,602,700	12,000,000			1,250,000	1,597,000	1,470,000	1,025,000			7
8	1880	1,923,000	13,500,000			1,155,000	730,000	1,500,000	805,000	170,600		8
9	1881	3,300,000	16,000,000		200,000	334,000	500,000	740,000	770,000	50,000		9
10	1882	4,841,000	44,000,000		975,000	660,000	530,000	1,400,000	640,000	588,000		10
11	1883	6,053,000	72,000,000		250,000	995,000	520,000	300,000	925,000	72,600		11
12	1884	8,800,000	37,000,000		100,000	985,000	859,000	940,000	795,000	811,000		12
13	1885	5,700,000	68,000,000		300,000	720,000	290,000	660,000	900,000	155,000		13
14	1886	6,451,000	57,000,000		1,400,000	1,627,000	576,000	1,380,000	945,000	2,181,000		14
15	1887	5,130,000	56,500,000		675,000	900,000	630,000	1,500,000	900,000	2,479,000		15
16	1888	8,076,000	56,000,000		3,475,000	850,000	800,000	1,720,000	1,290,000	4,142,000		16
17	1889	5,846,500	21,000,000		2,800,000	1,600,000	450,000	1,280,000	850,000	3,570,000		17
18	1890	7,736,000	52,000,000	5,732,000	2,875,000	1,700,000	806,000	2,396,000	1,022,000	3,492,000		18
19	1891	7,807,500	75,000,000	7,043,000	3,050,000	1,300,000	1,000,000	1,750,000	1,503,000	3,165,000		19
20	1892	4,823,000	44,500,000	4,909,000	2,400,000	624,000	965,000	1,240,000	1,310,000	2,378,000		20
21	1893	9,835,000	68,000,000	6,208,000	3,600,000	2,060,000	910,000	883,000	975,000	3,299,000		21
22	1894	6,000,000	47,000,000	4,480,000	2,035,000	1,975,000	850,000	1,080,000	1,010,000	4,096,000		22
23	1895	6,000,000	73,000,000	3,210,000	3,350,000	2,060,000	675,000	2,885,000	1,200,000	4,060,000		23
24	1896	5,200,000	61,000,000	3,950,000	3,400,000	2,500,000	300,000	1,250,000	1,430,000	4,068,000		24
25	1897	4,200,000	72,000,000	4,100,000	4,500,000	3,272,000	1,100,000	2,100,000	1,558,000	4,155,000		25
26	1898	4,325,000	71,000,000	3,020,000	3,100,000	2,200,000		1,135,000	1,557,000	3,290,000		26
27	1899	4,050,000	73,000,000	3,700,000	3,098,000	2,125,000		2,025,000	1,605,000	3,980,000		27
28	1900	5,175,000	90,000,000	3,450,000	3,099,000	1,400,000		1,125,000	1,620,000	3,957,000		28
29	1901	5,900,000	67,000,000	3,410,000	3,135,000	2,960,000		1,750,000	1,800,000	3,605,000		29
30	1902	650,000	100,000,000	1,245,000	935,000	2,700,000	734,000	2,310,000	1,700,000	998,000		30
31	1903	2,500,000	90,000,000	1,201,000	885,000	1,625,000	830,000	2,052,000	1,000,000	648,000	17,000,000	31
	Totals	139,600,200	257,000,000	55,659,000	49,997,000	41,674,000	17,513,000	39,486,000	30,390,000	59,410,200	17,000,000	

FISH CULTURE.

STATEMENT showing the Places where and the Years in which the several Fish Hatcheries have been erected, &c.—*Continued.*

Number.	Year.	Nova Scotia.				P. E. Island.	British Columbia.				Manitoba.	Totals.	Number.
		Bedford.	Sydney.	Margaree.	Lobster Hatchery, Bay View.	Dunk River.	Fraser River.	Granite Creek, Sicamous.	Nimpkish River.	L. Lakelse Skeena R.	Selkirk.		
		Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	Fry.	
1	1868-73	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,070,000	1
2	1874	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	510,000	2
3	1875	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,570,000	3
4	1876	395,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,655,000	4
5	1877	1,996,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	13,451,000	5
6	1878	1,400,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	27,042,000	6
7	1879	1,740,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	21,684,700	7
8	1880	730,000	.....	.....	.....	500,000	.....	.....	.....	.....	.....	21,013,000	8
9	1881	680,000	.....	.....	.....	375,000	.....	.....	.....	.....	.....	22,949,000	9
10	1882	850,000	315,000	.....	.....	1,000,000	.....	.....	.....	.....	.....	55,859,000	10
11	1883	800,000	659,000	.....	.....	1,210,000	.....	.....	.....	.....	.....	83,784,600	11
12	1884	1,000,000	853,000	.....	.....	1,000,000	.....	.....	.....	.....	.....	53,143,000	12
13	1885	670,000	772,000	.....	.....	1,100,000	1,800,000	.....	1,800,000	.....	.....	81,067,000	13
14	1886	950,000	1,179,000	.....	.....	400,000	2,625,000	.....	2,625,000	.....	.....	76,724,000	14
15	1887	4,230,000	1,415,000	.....	.....	500,000	4,414,000	.....	4,414,000	.....	.....	79,273,000	15
16	1888	4,390,000	1,559,000	.....	.....	.....	5,807,000	.....	5,807,000	.....	.....	88,109,000	16
17	1889	3,850,000	2,034,000	.....	.....	.....	4,419,000	.....	4,419,000	.....	.....	47,700,000	17
18	1890	3,860,000	1,953,000	.....	.....	.....	6,640,000	.....	6,640,000	.....	.....	90,213,000	18
19	1891	2,550,000	1,000,000	.....	7,000,000	.....	3,603,800	.....	3,603,800	.....	.....	115,772,300	19
20	1892	2,620,000	690,000	.....	63,500,000	.....	6,000,000	.....	6,000,000	.....	.....	135,959,500	20
21	1893	3,180,000	.....	.....	153,600,000	.....	5,764,000	.....	5,764,000	.....	.....	258,314,000	21
22	1894	3,805,000	288,000	.....	160,000,000	.....	7,800,000	.....	7,800,000	14,500,000	14,500,000	254,919,000	22
23	1895	3,815,000	195,000	.....	168,200,000	.....	6,390,000	.....	6,390,000	19,000,000	19,000,000	294,040,000	23
24	1896	4,225,000	243,500	.....	100,000,000	.....	10,393,000	.....	10,393,000	4,500,000	4,500,000	202,459,500	24
25	1897	5,450,000	496,000	.....	90,000,000	.....	5,928,000	.....	5,928,000	.....	.....	198,859,000	25
26	1898	3,000,000	.....	.....	85,000,000	.....	5,850,000	.....	5,850,000	9,000,000	9,000,000	192,477,000	26
27	1899	4,025,000	.....	.....	100,000,000	.....	4,742,000	.....	4,742,000	20,000,000	20,000,000	222,350,000	27
28	1900	3,970,000	.....	.....	120,000,000	.....	6,200,000	.....	6,200,000	32,000,000	32,000,000	265,996,000	28
29	1901	3,980,000	.....	.....	110,000,000	.....	.....	.....	.....	.....	.....	203,540,000	29
30	1902	960,000	.....	95,000	120,000,000	.....	9,214,000	6,760,000	.....	.....	23,000,000	271,401,000	30
31	1903	710,000	.....	600,000	164,000,000	.....	9,573,000	4,866,500	1,636,000	3,450,000	12,000,000	314,511,500	31
	Totals	68,845,000	13,652,500	695,000	1,439,300,000	6,145,000	107,662,800	11,626,500	90,011,800	102,450,000	134,000,000	3,705,616,700	

The black bass pond, which the department took in hand in 1900, has proved wholly inadequate to meet all the requests for the fry of that important game and food fish, which have been sent in during the year. So large is the number of requests from all parts of the Dominion for black bass fry or adult fish that it is imperative to consider some extension of the scheme of hatching ponds, which has made such a successful commencement at Point Ann, near Belleville, Ont. This pond which is held under a five year's lease at a reasonable rental, was about 2½ acres in extent, but having been deepened and cleaned out, its area is now about 1,100 square yards and proper inflow and outflow conduits built, it is admirably adopted for its purpose. It gradually deepens from 4 or 5 inches in its shallow parts to 5 feet or more in its deeper portions. According to the report of a special officer, sent down to make a careful examination of the possibilities of the pond, it is well supplied with food, plant and animal, both of microscopic and of larger kinds. The original shape of the pond roughly speaking was pentagonal, and, as stated, is at Point Ann, in front of lot 24 in 1st concession, Thurlow, Hastings Co., Ontario. The base and two sides of the pentagonal form are strengthened by a stone retaining wall, laid in Portland cement, the remaining two sides, on the east, are bounded by a rocky ledge. The west side or base is 95 feet long, one side adjacent is 79 ft. 6 in., and the opposite or south side is 64 ft. 3 in. long. This last side is pierced by an outlet or gate 2 ft. 9 in. wide by which the water finds exit, passing downwards towards the shore of the Bay of Quinte by a ditch cut in the rock and extending over a length of 500 feet. The water supply is cold and pure and being derived from two springs to the west of the pond, it is constant. Each spring is boxed over and both pour their outflow along a covered tile conduit into the pond.

During the present season over a hundred parent bass spawned in the inclosure, the first batch of fish (twenty-one fine adult specimens) being placed there in April, while early in May, a second batch of over sixty fish of large size were also impounded. Ten or twelve days after the second lot of parent fish had been placed in the pond, they spawned. The first nests were completed, and the eggs laid on May 13, and five or six days later thousands of very small bass were reported by the officers to be scattering themselves all over the pond.

Hitherto the plan has been adopted of seining the young fry, and shipping them off in the usual cans to various suitable waters for which applications had been received. The parent fish have also been netted in the fall and transported to more or less distant waters. Drag seines from 75 feet to 100 feet long and 10 feet deep in the bunt, with a mesh of about ½ in. bar measure, and leaded and corked in the usual way, have been used at the pond. A caretaker, resident in the locality, has been in responsible charge, and as a special guardian also appeared necessary to watch and protect the fish from poachers or disturbance of any kind, an assistant officer was authorized in January. The protection of the pond from mischievous or malicious interference has been complete and effective. Unfortunately as the inspector of hatcheries (Mr. Cunningham) points out in his report, the full result of this year's operations was not realized owing to the blasting operations proceeding during the season; but there is every reason to anticipate that the coming year will witness ample results from the bass breeding pond not handicapped or interfered with by the unfavourable circumstances referred to.

One other matter must not be omitted in concluding my report, viz., the continued experiment at the Restigouche hatchery with a view to rearing salmon fry to a comparatively late stage in their larval life. Nearly twenty years ago this plan was commenced by the late Mr. John Mowat; but it is only during the last five years that the retention of some thousands of salmon fry until they were six months old has been again carried out. In 1899, 10,000 fry were fed in open air tanks until they were six months old at the Deeside hatchery, and when hatching operations were transferred to the new Restigouche establishment at Flatlands, arrangements were authorized for the rearing of 'yearling' fry there. Officer Alexander Mowat strongly urged it in his report for 1901 and in 1902 an excellent rearing pond was completed capable of holding about 100,000 young salmon, and during the present year that quantity of fry was retained and fed on raw fish-pulp, etc., until they were nearly five months old and measured 1½ to 2 inches in length. Mr. Mowat strongly urges that this kind of fish culture should be extended,

and it is my intention to consider the further prosecution of this 'yearling' culture at a number of hatcheries, where rearing ponds could with little expense be built.

My own view always has been that with salmon and trout and certain other species, the feeding and rearing of the young fry can be made a substantial success ; but with other fish this plan is not so feasible, and reliance must be placed on the planting of the larval fish during the first few weeks after the hatching. In a special report upon this subject (see Department's Report 1900, p. xli) I treated fully upon the success of planting young fry in large quantities, and I laid stress on the difficulty of rearing in any adequate quantities lake whitefish and similar species, and the impossibility of rearing cod, haddock and marine fishes generally on a scale sufficient to benefit the fisheries. In my report I said respecting the system of relying on the planting of yearlings or fingerlings as compared with the system of planting newly hatched fry in vast quantities :—'the latter method of stocking waters is that mainly carried out in the system of artificial fish-culture conducted by the Department of Marine and Fisheries. The controversy, respecting the merits of the two systems, has been actively carried on for more than a quarter of a century, and fish-culturists are still divided into two schools, the partisans of one school being as emphatic and zealous in their own special advocacy, as the partisans of the other. The adoption of one system does not imply the total disparagement of the other, and there is certainly much to be said for the rearing of the fry of fishes, in our hatcheries, until they are robust and independent ; until, in other words, they are able to look after themselves.'

In the immediate future there is urgent necessity for adopting this latter method on an extensive scale. The importance of largely increasing the operations of the government fish-breeding operations is, indeed, apparent, so that all parts of our vast territory may partake in the benefits of this effective aid to one of nature's most bounteous resources. Public interest has been growing in the work, and the country generally seems to favour the building of new hatcheries, and the more extended planting of fry in our lakes, rivers, and coastal waters.

In the annexed pages will be found the report of the inspector of hatcheries and the reports of the several officers in charge of the hatcheries of the Dominion.

I have the honour to be,
Your obedient servant,

EDWARD E. PRINCE,
Commissioner of Fisheries and General Inspector of Fisheries for Canada.

ANNEX A.

OTTAWA, December 31, 1904.

Professor E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I have the honour to submit the following report on the various fish hatching establishments for the year ended December 30, 1903.

Newcastle Hatchery.

The operations at this establishment were very satisfactory, the collection of eggs and subsequent distribution of fry having been quite successful. Perhaps the efforts put forth by the officials at this institution have not been fully appreciated and it might

be mentioned that all the salmon trout eggs handled by four hatcheries devoted exclusively to this species are procured by the officer in charge and his assistants. The building is in good repair and no great expenses will be incurred on this account.

Sandwich Hatchery.

This hatchery has been kept up to the usual high standard of efficiency and the distribution of the whitefish and pickerel eggs was completed with every satisfaction.

The capturing of the parent fish for the current season's operations was attended with greater difficulty than usual, as it became necessary for the department to abandon for this season, one of its fishing stations; this coupled with the fact that only a few fish entered the river, as compared with other years, made the result doubtful but a good supply of eggs was eventually procured, and another successful season's work is now assured. The new pump is working well and the building is in good repair.

Ottawa Hatchery.

This establishment is again filled with salmon-trout eggs procured from Wiarton on Georgian bay, and in addition a small quantity of sea salmon eggs have been placed in the hatchery as an experiment.

New aquaria have been placed in position for live specimens. Last season some 20,000 rainbow trout eggs were also hatched and distributed in waters adjacent to Ottawa. As usual many persons have visited this establishment during the past year.

Magog Hatchery.

In addition to the usual supply of salmon trout a quantity of speckled trout eggs were successfully hatched and safely distributed in suitable waters. This season's operations will not commence as early as usual owing to the scarcity of water in the Magog river, but in March the quota of eggs will be transferred from the Newcastle hatchery. The building is in good state of repair.

Tadousac Hatchery.

This institution has again had a successful season and is now filled with salmon eggs which are in good condition. During the summer a number of tourists visited the hatchery and great interest was taken in the pond in which the parent salmon are retained. The building is in good repair.

Gaspé Basin Hatchery.

The eggs for this hatchery were procured from the retaining pond at Carleton, N.B., and the operations resulted in a successful distribution of young fish. No lobster hatching was done at this hatchery during the season. The building is in good state of repair.

Restigouche Hatchery.

Reference was made last year to a retaining pond that had been constructed in connection with this establishment for the retention of young salmon and I am pleased to report that the same has been very successful and the young salmon were released in the fall in splendid condition. The hatchery is again filled with eggs and the prospects for a successful season are good. The hatchery is in good repair.

Miramichi and Grand Falls Hatcheries.

The operations here were successful and the buildings are again filled with eggs. These establishments although in use for many years are in fairly good repair.

Bedford and Bay View Hatcheries.

The operations at Bedford have been successful and the building is again filled with salmon eggs procured from the retaining pond at Carleton, N.B.

The lobster hatching as conducted at Bay View has been very successful. The building is in good repair

Selkirk Hatchery.

For the past two seasons whitefish eggs for this establishment have been transferred from the Sandwich hatchery and the results have been satisfactory, but this season the supply of eggs were obtained from fish captured, in Lake Winnipeg. These eggs are reported to be doing well and a successful season's work may be expected. The grounds surrounding the hatchery have been improved which adds much to the appearance of this institution. The building is in good repair.

Bay of Quinte Bass Pond.

The operations at this point were handicapped this season owing to the blasting done in the vicinity, but numbers of bass were successfully planted in western and eastern waters of Ontario.

Lac Tremblant Hatchery.

During the past summer a small but complete hatchery has been erected on this lake and is now filled with salmon trout eggs, which are doing well.

The instalment of this hatchery fills a long felt want east of Montreal, and as the site is an ideal one splendid results should ensue from the operations conducted here.

During the past season a new lobster hatchery was successfully operated at Shemogue, Westmoreland County, N.B., and two others are now in course of construction and will be ready for next season's work.

I am pleased to report that the officers in charge of the various establishments, together with their assistants have been zealous in the performance of their duties and thus enabled me to submit this report of a successful season's work.

Respectfully submitted,

F. H. CUNNINGHAM,
Dominion Inspector of Fish Hatcheries.

ANNEX B.

1.—BEDFORD HATCHERY, NOVA SCOTIA.

BEDFORD, N.S., December 14, 1903.

Prof. E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I beg to submit my annual report of operations at the Bedford salmon hatchery for the season of 1903.

In November of last year, about 800,000 salmon ova were received from the Carleton retaining pond and laid down in the troughs. After they were once picked over and all sterile eggs removed the percentage of loss was very small.

Distribution commenced on May 20. The weather being cool, the young fry were planted in excellent condition in the following named streams:

Salmon.

Rivers Herbert and Meander,		Hants Co., N.S.	60,000
Petite Rivière,		Lunenburg Co., N.S	60,000
LaHave River	"	"	60,000
Salter "	"	"	60,000
Hoosiers "		Halifax Co., N.S	60,000
Sackville "		"	60,000
Pennant "		"	60,000
Nine Mile "		"	60,000
Gaspereaux "		King's Co., N.S	60,000
Cornwallis "		"	60,000
Annapolis "		Annapolis Co., N.S	60,000
Cole Harbour River,		Guysboro Co., N.S	50,000
		Total	710,000

On the 1st ultimo, about 1,500,000 salmon eggs were received from the Carleton pond. After the first culling they proved to be a fine lot and are doing splendidly.

Distribution of fry commenced on May 20, and ended on June 3, after which several applications were received which could not be filled, resulting in disappointment to the applicants.

Bedford basin and Sackville river are each year showing a large increase in salmon, some have been caught, with fly, in the river, and quite a number taken in nets in the basin. Reports from other streams are encouraging.

The customary cleaning, painting, whitewashing and repairing was done during the summer. The hatchery and grounds present a very respectable appearance and are admired by all who see them.

The old coal shed attached to the residential part was torn down and a larger and more convenient building erected.

The hatchery is now in a good state of repair.

I am, sir, your obedient servant,

ALFRED OGDEN.

2.—BAY VIEW LOBSTER HATCHERY, NOVA SCOTIA.

PICTOU, N.S., July 11, 1903.

PROF. E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR.—I beg to submit my report of operations at Bay View hatchery for the season of 1903.

I commenced operations at this hatchery on April 22.

The hatchery closed on July 8 having been in operation 74 days.

164,000,000, of fry were distributed around Pictou bay and island. The eggs were collected from these points.

The spawn collected this season were delivered at the hatchery in very good condition and were hatched with great success.

On my taking charge this season there was no coal on the premises and I had great difficulty in getting some to commence work, consequently I thought it advisable to store seven tons preparatory to next season's opening.

The wharf is in poor condition needing new stringers and planking.

I have send you specifications of repairs necessary to pump and feed pipes.

The early part of the hatching season was very cold consequently the spawn hatched very slowly.

The great drought during the month of June made it necessary to have more water hauled. Our wells gave us a very poor supply.

I am, sir,
Your obedient servant

EDWARD DOHERTY.

3.—MARGAREE HATCHERY, NOVA SCOTIA.

N. E. MARGAREE, N.S., December 22, 1903.

Professor E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—In compliance with the customary departmental rule and the instructions contained in your recent circular, I have the honour to submit my second annual report of the fish cultural operations prosecuted in the Margaree hatchery during the year 1903.

On October 25, 1902, upon receiving orders I proceeded to Carleton retaining pond, St. John, N.B., to observe and participate in the stripping of the parent fish, the fertilization of the ova, efficient packing, and the cautions to be observed in their transportation. I remained there several days. It is contemplated to erect a retaining pond in connection with this hatchery during the coming season, therefore, it is, perhaps, essential that I should be qualified to intelligently pursue the practical work of modern salmon culture from start to finish. There are excellent facilities for the formation of a tidal pond near the mouth of Margaree river. The parent fish can be obtained in sufficient number to stock the hatchery. A large number will be requisite, for the incubation troughs will accommodate from three to four million eggs. Until the salmon are procured here the fullest results cannot be expected. Notwithstanding the exercise of extreme care, the long journey by train and steamer and the subsequent

passage over a very rough mountain road, together with the large number of transfers, in transit, considerably increases the mortality of the eggs.

On my return I brought the quota of salmon eggs for this hatchery—750,000—and on November 7, placed them in the hatchery troughs. The morning temperature of water averaged 38·5° F. On March 10 the first fry appeared and on April 15 the ova were all hatched, the period of incubation ranging from 123 to 159 days.

Distribution of Fry.

The work of distribution was commenced May 9 and concluded June 2. Being unable to make arrangements earlier for a continuous passage, the shipment for North Victoria was delayed for several days after the absorption of the yolk-sac. It was necessary, therefore, that they should be artificially fed. The usual foods—animal blood, liver, etc., could not be easily obtained, so I used pulverized gaspereaux, placed in a perforated pan with water, permitting only the liquid from the same to reach the fry. I had average success with this my first experience. Inspector Bertram assisted me with the North Victoria shipment. The fry were conveyed by teams to Baddeck, C.B., thence to their destination by steam tug *Iona* of North Sydney. The results of the whole distribution were generally gratifying and beyond anticipations. The few mishaps which occurred serve a useful purpose. They suggest desirable changes to prevent a recurrence of them. In all 600,000 fry were liberated into the following streams :—

Big Interval, Margaree river, Inverness Co	25,000
Hatchery Brook " "	50,000
Sugar Loaf " "	25,000
Roseville river " "	50,000
McDonald's Brook " "	25,000
N. E. Margaree " "	25,000
S. W. Margaree " "	50,000
Little River, Cheticamp "	100,000
Middle River, Victoria Co	50,000
Baddeck River "	50,000
North River, St. Ann's, North Victoria	25,000
Clyburn River, Ingonish "	50,000
Cape North "	75,000
Total	600,000

I exercised care in planting, and when possible placed them in the rivulets, tributary to the streams to be stocked. I avoided placing them into the stream in bunches, scattering them along thinly, the object being that the food supply for them would not be quickly exhausted as might ensue if they were massed together.

During the summer I had the building cleaned, the supply tank, troughs and trays varnished with asphaltum and some changes made in the arrangement of troughs and faucets, besides strengthening the supply pipes at a few points that were considered weak to withstand high water. I considered everything was in excellent order for the work of the ensuing year.

On November 5, 750,000 eggs were placed in the troughs, having been brought in my charge from Carleton pond. They arrived in fair condition. On November 17, a violent freshet suddenly occurred and we had the misfortune of having some supply pipes above the stop-house thrown out of position and badly broken in several places. The water left the hatchery altogether. In this dilemma I had the choice of placing the eggs in the nearest spawning grounds or leaving them in the troughs and endeavouring to keep them in condition until the pipes might be mended. I chose the latter and, perhaps, for the eggs the more hazardous course. I changed the water upon them at least three times daily, and once at night, carrying it in buckets from brook. The temperature was kept as low as possible. And considering that the great danger lay in defi-

cient aeration, the real vivifying agent, and with a scanty supply of which the proper development of growing embryos is impossible, I poured the water frequently into troughs from a height and otherwise kept it agitated, all for the purpose of admitting air. This treatment was pursued for 12 days until the pipes were repaired, and I trust that the results next spring will demonstrate that my labours have not altogether been in vain.

I have had the broken pipes repaired as thoroughly as could be done, and covered securely with stone and brush. I would recommend that for some distance above the stop-house the pipe be removed from its present position and placed further from the brook where, indeed, the highest freshet could not affect it. Unless this is done, a mishap like the foregoing may occur at any time.

I notice that the work is being extended at Restigouche hatchery. I refer to the rearing pond in connection therewith. The question of the relative advantage of planting fry or fingerlings in stocking rivers has been a mooted one, concerning which eminent fish culturists have radically disagreed. Forcible arguments have been presented by the advocates of both systems, and as I understand it, the leading fish culturists to-day are adopting in practice a method embodying both systems. This being so, I am pleased that the department under your immediate supervision is keeping abreast of the times, and it is hoped that at an early date a fish pond will be erected at Margaree as well as at other hatcheries.

All of which is respectfully submitted.

I am, sir, your obedient servant,

A. J. CARMICHAEL,
Officer in charge.

4.—ST. JOHN RIVER HATCHERY, NEW BRUNSWICK.

GRAND FALLS, N.B., December 12, 1903.

Professor EDWARD E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I most respectfully request to transmit to you for your information my annual report, giving a synopsis of the work done and the business transacted at this hatchery under my charge and supervision for the present year now about to expire.

Referring to the quantity of eggs received from the Carleton pond, in the month of November, 1902, by approximation I estimate it to have been about seven hundred thousand, a quantity quite inadequate to fill up all the space at our disposal, more especially since the department ceased to send salmon trout or whitefish eggs from Ontario as in former years; the eggs we got from Carleton have done exceedingly well and hatched out a good percentage of young fry, which were successfully distributed and planted in the lakes and rivers in the several counties, as are below described. I give the number of thousands in each locality, viz. :—

Butler Lake, King's Co.	48,000
St. Croix River, the division between Charlotte county and Maine	144,000
Tobique River, Victoria Co.	192,000
Salmon " "	108,000
Summerfield, Carleton Co.	36,000
St. John River, above and below the hatchery	120,000
Total	648,000

During this present fall we got a liberal supply of eggs from Carleton pond. They were brought up in two distinct lots amounting in the whole to about eleven hundred thousand. They were carefully handled and systematically placed in the hatching troughs and are now looking first class; but the time is too short to offer a definite opinion on the future result. Nevertheless, I am pretty sanguine that we will hatch out a good percentage of the ova laid down, as the hatching room is in good order with a plentiful supply of good pure water. We are careful to have all bad eggs removed every day, so as to prevent any fungus from forming that would affect the good eggs, and strict attention is given to them generally.

Repairs.

The repairs in and about the hatchery during the present year were limited; the most serious was the stopping of a leakage in the main dam. The woodhouse had also to be repaired and blocked up; the penstock had also to be repaired and a new slide put in, as it was leaking pretty seriously. It is getting old and may possibly have to be replaced by a new one next summer, as it is the principal part of the hatching room.

It is satisfactory to learn that the number of salmon in this part of the St. John river is kept up to the standard notwithstanding the insufficient protection afforded them, and the illegal fishing and the spearing by the poachers. All this shows what artificial fish culture can do and is doing in this locality, and it is now pretty generally admitted by sportsmen and others that the young fry hatched in this house and planted in our rivers and streams is the means of keeping the said standard of supply up to its present condition.

I am, sir, your obedient servant,

CHAS. McCLUSKEY,
Officer in charge.

5.—MIRAMICHI HATCHERY, N.B.

South Esk, N.B., December 14, 1903.

Prof. Edw. E. Prince,
Commissioner of Fisheries,
Ottawa.

Sir,—I beg to submit the following report upon the operations at this hatchery during the year 1903.

The output of fry was not as large as in former years, owing to the obstacles met with, when procuring the supply of parent fish in 1902. The total number of ova placed in the hatchery in the fall of that year was 1,065,000, of which 815,000 were procured on the Miramichi river, and 250,000 from Carleton pond. Fully one million fry were hatched from these ova, and were distributed in excellent condition in the following rivers and streams:—

North West Miramichi River	400,000
Main South West Miramichi River	100,000
Little South West Miramichi River	300,000
Savogle River	70,000
Renous River	70,000
Millstream Brook	50,000
Stewarts Brook	10,000
Total	1,000,000

Repairs.

After the fry were distributed, it was found upon examination, that part of the dam of the supply pond, would have to be rebuilt. This dam was formerly built of spruce logs which decayed very rapidly. These were all removed and replaced by a substantial structure of cedar. It is necessary to keep the dams at this hatchery in thorough repair, as the stream from which the water supply is obtained is quite large, and some very heavy freshets are experienced. An unlooked for expenditure of about $50.00 was incurred by the supply pipe becoming choked, in some unknown way, while the repairs to the dam were being carried out. Considerable difficulty was experienced before the obstruction was succesfully removed. Besides repairing the supply dam, quite a number of other improvements were made about the hatchery, several drains were made, in order to dry the ground about the buildings, which was formerly very wet. All the outbuildings were painted and the old fences pulled down and replaced with new ones, which adds very much to the appearance of the hatchery and its surroundings. All the appliances and inside fittings of the hatching room were painted and varnished, preparatory to the reception of this year's supply of ova.

Collection of Parent fish.

The preparation of the pond, used for impounding the parent salmon was completed during the first week in September, and then the nets and other apparatus were put in readiness for obtaining this year's supply. The results of this branch of the work were highly successful. The nets were put in operation on September 22 and 43 salmon were taken on that date. On October 21, the nets were taken up, as a sufficient supply had been obtained. The total number of fish netted was 407—thirty-five were liberated before spawning season, leaving a balance of 372, consisting of 230 females and 142 males. The stripping of these fish commenced on October 23, and continued until November 4, and 1,530,000 ova were collected and placed in the hatching troughs in excellent condition. This number was later on supplemented by 250,000 from Carleton pond, transferred here by the assistant officer, making a total of 1,780,000 now in the hatchery.

General Remarks.

While considerable evidence could be given to demonstrate the benefits resulting to the waters of the Miramichi from the operation of this hatchery, I feel that as the work of keeping up the supply of salmon by artificial breeding has been so thoroughly proved successful, it is needless in this report to adduce any other evidence, than that the statements from all reliable sources, show that the salmon fishing and angling during the past year has been well up to the average and shows no signs of decrease. Notwithstanding the enormous strain that is put upon it by reason of the large number of netters operating their traps every year, from the mouth of the bay to the head of the tide on the main river as well as all the branches, and besides, every available portion of the non-tidal waters yields its quota of fish to the sportsman and angler.

The rivers are all abundantly supplied with breeding fish; grilse and parr are also seen in great numbers in all the streams tributary to the Miramichi.

One instance of the successful planting of fry may be cited. About three years ago 25,000 salmon fry were planted in a lake near Sussex,—about midway between Moncton and St. John. The water of the lake is clear and cool and in some parts is very deep, in others there are shoals with about ten feet of water. No mud at all is found, the bottom being clean and stony. At the outlet, which is very small, an arrangement has been made to prevent the fish from escaping. The lake which is about 2 miles long by 1 mile wide, and is beautifully situated is owned by a party of gentlemen resident in Sussex, who made application for the above mentioned number of salmon fry. No report was received concerning this allotment until last June, when in a letter received from one of the gentlemen, it was stated 'that the year previous

(1902) only 14 young salmon were taken, but that this year the water of the lake is just alive with them, all the same size. One rod caught over 50 in one day. They are in all parts of the lake, and are very gamy.' This gentleman forwarded samples of the fish. They are about ten inches in length and are beautifully formed. It will be very interesting to study the future growth and development of these artificially bred inland salmon. While in this case a great success has been met with, I would not deem it advisable to plant salmon fry in all the lakes and ponds that application are made to stock, as it is only in rare cases that the conditions are found so favourable for their growth, as in the lake just spoken of. For this reason, I suggested in my last annual report, the breeding of a number of trout in this hatchery. But as the Provincial Government has erected a hatchery on the Bartebog river, a branch of the Miramichi, for the sole purpose of breeding trout, the suggestion was not carried out. Good results should be obtained by breeding the native speckled trout, and stocking the lakes throughout the province.

In conclusion it may be stated that the operations at this hatchery during the past year have been satisfactory, although the number of fry turned out was not as large as other years, owing to unavoidable causes. Judging by the appearance of the ova now in the hatching troughs, a large output of fry may be anticipated for next season.

No effort will be spared to have them planted in the rivers where the natural conditions are best adapted for their growth and development.

I am, sir, your obedient servant,

ISAAC SHEASGREEN.

FLATLANDS, NEAR CAMPBELLTON, N.B., Dec. 7, 1903.

Professor E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I have the honour to submit my annual report upon the work of fish culture, as conducted at the Restigouche hatchery during the past year.

The supply of eggs gathered in the autumn of 1902, was very successfully hatched, and the fry distributed in the various rivers, lakes and streams, viz :—

Restigouche river between the hatchery and Kedgwick...	1,000,000
Upsalquitch river	535,000
Metapedia	300,000
Held over at hatchery in pond and large outside tanks and fed during summer	100,000
Total	1,935,000

In addition to the above number of salmon fry hatched and distributed, 130,000 salmon trout eggs were received from the Magog hatchery in April last, from which 117,000 fry were hatched and distributed as follows :—

Lake Demoiselle and other lakes in Albert Co., N.B	60,000
Metapedia lake	47,000
Lily lake	4,000
Murray lake	2,000
Total	117,000

Many of these fry were conveyed long distances but in every instance were liberated in a healthy fresh condition.

Capture of parent fish.

The government nets at Tide Head were set and operated in the usual manner, and in order to supplement the catch from these nets, arrangements were made with Mr. W. G. McBeath for his fish, whose net is located immediately below and adjacent to the government nets. The total catch from both of these nets was 255 salmon. Spawning operations began about the usual time, Oct. 20. Mr. W. A. Mowat, caretaker, assumed charge of the manipulation of the fish at the tide head pond, during my absence at St. John, and some 2,500,000 eggs have been laid down in the Restigouche hatchery, the supply from tide head pond having been supplemented by a quota from the Carleton pond. The eggs are in fine condition and I anticipate a very successful output of fry.

Retaining and feeding fry in ponds.

As previously reported a very fine retaining pond was built at the hatchery last year, with the view of holding over and feeding a certain number of fry, for at least a few months as an experiment. In addition to the pond which is 40 ft. square and 6 ft. deep, several large tanks were erected outside in conjunction with the pond, and about 100,000 fry were placed in the pond and tanks on June 20, and fed five times daily, great care being exercised to keep all dead and decayed matter constantly removed. The food consisted of raw fish ground to a pulp, raw and boiled liver, and blood. The fish grew and thrived nicely, and were greatly admired by visitors and were really a beautiful sight to see. These fish were liberated in Sept. and Oct. being nearly five months old, and from 1½ to 2 inches in length, and quite capable of caring for themselves.

This initial work has proved a wonderful success, and ought to be prosecuted on a much larger scale. From my many years of practical experience, I am of the opinion that young salmon should not be planted too young or before the yolk-sac has entirely disappeared. If they could be held over and fed for a few weeks much greater results, there is reason to think, would be produced. With this end in view I would urgently recommend the necessity and importance of constructing a large retaining pond well up towards the head or source of the river, so that large numbers of alevins or fry could be retained and fed for a few months before liberating. As the young fish (salmon) spends the first two years of its life, in fresh water rivers bordering on or emptying into the Atlantic ocean, the fry if retained a short time in ponds well up the rivers, would naturally have the advantage of feeding for eighteen or twenty months, throughout nearly the entire length of the river, while migrating to sea and before reaching the ocean.

I am pleased to report that the Restigouche Salmon Club have become so interested in this branch of the work and salmon culture, that they have decided to construct a large retaining pond for fry on the Metapedia river, with the view of feeding them for a short time before liberating.

Proper Method of Planting Young Fry.

Not more than from two to four thousand fry should be placed in each can containing eight to ten gallons of water. Much depends upon the time and distance to be travelled. The temperature of the water should always be taken at the hatchery and uniformly maintained by adding ice to top of cans during the journey. When river or stream is reached where fry are to be planted, no time should be lost in planting, and the thermometer again comes into use. The water in the cans should be gradually tempered until it reaches the same temperature as the water from the stream in which the fry are to be planted. Fry should always be planted as far up river as possi-

sible and in select places with rough shelvy rock or grassy bottom, affording lodgement, shelter and protection for the fry. Fry should never be dumped out of the large cans in bunches, but poured into a large tin pail perforated half way from the top. This pail with the fry clinging to the bottom should be submerged under the surface of the water and an up and down motion given to the pail, this will very quickly refresh the fry which when allowed to escape will immediately seek the bottom. Large sheets of canvas to serve as covering for the cans while at the station or river bank, should always be provided, because if the cans are exposed, even for a few minutes to the hot rays of the sun, the temperature of the water will be raised which is injurious to the fry. A supply of ice, canvas covering, a hatchet and a perforated tin pail are most indispensable articles to welfare and proper distribution of the fry.

Improvement to Hatchery.

All plant, trays, troughs, etc., were varnished during the summer and prepared for this autumn's crop of eggs. Several large new tanks for retaining and feeding fry were added for the spring. The boat and store house were removed from the old site at Dee Side, and rebuilt at the hatchery. These were very much needed. A new chimney was built and some necessary repairs made to pond and dam. The hatchery with all its appliances is in first class condition, and with the exception of painting will not need any repairs for many years.

The Carleton Pond.

In obedience to official instructions, ordering me to supervise the work at Carleton Pond, St. John, I arrived there on the Nov. 25, and at once began operations. As usual I can only speak in the highest terms of this pond, and the facilities for capturing supplies of stock fish. We caught, examined, and stripped about 200 salmon per day until all the fish were taken out of the pond, between fourteen and fifteen hundred salmon, yielding some 7,000,000 of fine eggs which were assigned to the various hatcheries:—Gaspe, P.Q.; Margaree, C.B.; Bedford, N.S.; Grand Falls, N.B.; Miramichi, N.B.; Restigouche, N.B.; Ottawa and Magog. I found the salmon in good condition and a great number would probably weigh over 25 lbs. There can be no more perfect place for the capture and retention of stock fish, than at the Carleton pond, and if the present pond should be used for a dry dock, which seems likely to be the case, I would advise action to be taken at once with the view of preparing another pond, to be utilized in the spring, as doubtless many of the hatcheries will always be dependent upon the Carleton Pond for a supply of ova. While in the course of operations two female grilse were discovered both yielding eggs, also a number of bright salmon were found among the spawning fish. Notwithstanding their long confinement in the pond they had not lost flesh or deteriorated very perceptibly, but were as bright as when caught in June, and no sign of any maturing of the ovary. Hence I conclude that the fish were barren and would never reproduce their species, which is the cause of their fat and fleshy condition so late in the season.

General remarks.

Unlike last season, the month of June which is always considered the best for angling, was rather off this year. The first school of salmon ascended the river while in flood with snow freshet, and got beyond the anglers. June was very dry and cold and the rivers became low and clear which is unfavourable to both netting and angling. Still some good scores were made. The Mitchell and Ayer club at Dawsonville, a few miles above Metapedia, landed 120 salmon. Camp Harmony club over 100, Brandy Brook club took about 100, Messrs. Rogers, Brooks & Co. at Kedgwick, seventy miles above tide water, scored over 200 salmon. For some reason best known to the lessee, Mr. T. Malcolm, railway contractor, the Upsalquitch river was not fished, except by a few

friends for a few days. Two rods five days in July landed 38 salmon. One rod two days took 15 salmon. I even heard of some salmon landed with the ordinary bamboo pole. All travellers up and down the rivers, with whom I have been talking, say they have never seen the salmon more plentiful than they were this year. The guardians are unanimous in corroborating this.

As I have stated in former reports, with good protection, combined with the good work the hatchery is doing, there need be no fear for the welfare of the salmon fisheries on the Restigouche. All of the above is most respectfully submitted.

I am, sir, your obedient servant,

ALEXANDER MOWAT.

7.—SHEMOGUE LOBSTER HATCHERY.

CAPE BALD, N.B., December 7, 1903.

Prof. E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa, Ont.

SIR,—In submitting to you my first report of operation of the Shemogue hatchery for the season of 1903.

I beg to say that on June 19, I had instructions from the Department of Fisheries, to go and oversee the work at Shemogue hatchery, under Mr. Alfred Ogden special officer. The building was about completed—troughs, boiler and engine were all ready, but we had some difficulty with the salt water piping on account of the tide, which however was also ready in a few days. We fitted the inside and got steam up on the 1st July. We collected the spawn from neighbouring factories by means of sail boats, while waiting for arrival of the tug boat. She arrived on the 6th and collected the eggs for four days to the 11th from Cape Bald, to Cape Bear, from 12 factories, a distance of about 14 miles.

Seventeen millions of fry were hatched in good health, and were distributed from the several points where they were collected.

Lobster packers and fishermen gave me all the help possible, with pleasure.

We are all hoping for an increased supply of eggs for next season and a still greater success in turning out young lobsters.

I am, sir, your obedient servant,

NAP. S. LEBLANC.
Officer in charge of the Shemogue Lobster Hatchery.

8.—GASPÉ HATCHERY.

GASPÉ, December 6, 1903.

To Prof. E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I beg to submit my annual report upon the operations of the Gaspé hatchery under my supervision during the year 1903.

The fry hatched from the 900,000 eggs I received from the Carleton pond on November 9 were distributed as follows :—

The Grand river	50,000
St. John river (Douglastown)	260,000
York river	260,000
Dartmouth river	260,000
Total	830,000

I am sorry to have to state that out of the 50,000 I took to the Grand river, nearly, if not quite one half, died in the transit. I left here on the ss. *Restigouche* at one o'clock in the morning, expecting to reach Grand river at 5 o'clock the same morning, but owing to a dense fog the steamer did not reach there until 5.30 o'clock in the afternoon, and not having sufficient fresh water for so long a time and the very close heat of the day was the cause of the loss.

The fry planted in the St. John, York and Dartmouth rivers were in excellent condition.

Owing to the very low state of the water in the rivers, we had a little difficulty in poling them, especially the Dartmouth, which prevented us from reaching the falls, consequently we had to plant the fry below instead of above the falls, which is usually done.

After the distribution of the fry I had all the troughs, trays, cans, &c., cleaned, varnished, and nicely painted : the doors in the hatchery taken off and refitted as they had all swollen so as they would not open or shut. The double windows properly fitted right side out (they being put on and fitted inside out at first), and everything put in first class condition for another season's work.

In August last we had an exceptional heavy rain storm, consequently a big freshet which tore all the covering of the pipe leading from the dam to the hatchery, which I had properly repaired and put so that it cannot happen again, the work being done in the first days of October.

According to your instructions I proceeded to the Carleton pond on October 28 with my cases to get my quota of eggs as well as to see the real nature of the pond and the stripping of the parent fish, all of which was very interesting me.

On my return home I brought eight cases of ova, 1,080,000, which were most successfully laid down in the troughs the day of my arrival, and the next day had them all cleaned up, only getting 15,000 dead eggs out of the whole lot. Then the next week, on November 12; I received four (4) more cases. Mr. Sheasgreen bringing them as far as Dalhousie, but no officer in charge from there to Gaspé. Consequently there was a much larger quantity of dead eggs in those four cases, which I think had over 600,000 eggs in them, so that with both lots of eggs I have about or near 1,700,000 eggs in apparently first class condition in the hatchery now, and I hope to be able to plant a large quantity of fry in our Gaspé rivers next season.

If the Department of Fisheries contemplates building a retaining pond and getting our own parent fish for this hatchery here, I am pleased to be able to say, after seeing the Carleton pond, with no great cost a pond equally as good, if not better than the Carleton pond, can be built right at the door of the hatchery; but a dredge will be required before it can be built, and I hope the department will have it done at the earliest possible time, so that we will have our own parent fish to stock our rivers. As I have no doubts now whatever after seeing the salmon at Carleton pond, that our salmon on the Gaspé coast is a much larger and in no way inferior run of fish.

I have the honour to be, sir, your obedient servant,

R. LINDSAY,
Officer in charge.

9.—TADOUSSAC HATCHERY, QUEBEC.

TADOUSSAC, November 18, 1903.

Professor PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I beg to submit my annual report upon the operations carried out at the Tadoussac hatchery during the past year. The salmon fry hatched out this spring, 1,625,000 in number, were distributed in the following rivers and lakes:—

Ste. Marguerite river	200,000
Thomas lake	300,000
Baude river	400,000
Chisholm brook	200,000
A Mars river	150,000
St. John river	150,000
Little Saguenay river	100,000
Murray river	100,000
Hatchery lake	25,000
	1,625,000

As usual the distribution of salmon fry in the rivers of the upper Saguenay, has been done with the assistance of the tug boat *Forrest* the property of the Chicoutimi Pulp Factory, and by the Tadoussac carters in the rivers Ste. Marguerite, Baude, Chisholm, and in the Thomas lakes. I have no doubt, that the 600,000 salmon fry deposited in the last two years in the Thomas lakes, will prove a success. The young salmon to reach the St. Lawrence salt water have to pass by Long lake, Gobeil's lake, then by the Little Bergeronnes river to the St. Lawrence. No better lakes could be selected for the excellence of their clear and cool water, and the young salmon have a splendid food, viz., the fresh water smelts in abundance in the lakes Long and Gobeil. The guardian of the lakes, Mr. Malcolm Morneau, has done a good work, in cleaning the streams between the lakes to give a free passage for the young salmon. He has also prepared logs to make a camp at Long lake, to allow the guardian to visit all the lakes the same day. The camp will be built in May next, when the guardian will be at his work. In my last visit this fall to those lakes, I saw many young salmon of one year old in the stream between Thomas and Long lakes.

We set our salmon fishery for the capture of parent salmon in May, we have caught 716 salmon, we kept 531 of the largest size, 321 females and 210 males, 150 of smaller size were delivered at the Fisheries and 35 of the damaged ones given to the employees of the hatchery, and to the hospital Hôtel Dieu St. Valier, of Chicoutimi. At the spawning time, instead of 321 females salmon, we found 330; the mistake having been done during the night in taking the parent salmon to the pond, some 9 females were taken as males. The 330 large females gave us a crop of 3,300,000 eggs, of that number 400,000 eggs were sent to the Roberval hatchery by instructions of the department. The 400,000 eggs have been carefully packed by my son and myself, and I hope, if they are well cared for during the winter at the Roberval hatchery, at least ninety per cent will hatch out next spring. On account of the dry summer and fall during the spawning time, we could only use three tanks, holding at a time 150 salmon. We had not enough water to be able to use all the tanks. The ice is formed on the lake and if the weather continues so dry all winter, I have some fear for our salmon eggs. Just now we have only $2\frac{1}{2}$ feet of water over the head of the iron tube supplying the hatchery. I hope that the department will consider my former communication

in connection with an additional supply of water for the hatchery, from the water works of the village of Tadoussac. We must keep in mind that our hatchery lake, is nothing but an artificial lake made by dams. The Tadoussac hatchery is in good working order, and the breeding room is now filled up with salmon eggs. We want 250 more trays to replace some old wire ones. The next season all the troughs will require a new coat of varnish; about ten gallons will be wanted for the troughs and trays. Since the repairs to the salmon pond, it remains at low tide, four (4) feet of water, making a beautiful pond, with it's dainty kiosk in the middle. It is a great attraction for the many visitors and a grand sight from the kiosk, to look at the parent salmon swimming in all directions. Our pond now could hold 1,000 parent salmon, if wanted. In the beginning of the spawning time, we had the misfortune of losing by burning our little spawning building. I hope it will be put up again early next spring; the walls could be used, being covered inside and outside with new planking. Something must be done also to keep more water in the hatchery lake. The first dam is leaking more and more every year. It is nearly impossible to make a good work in repairing that first dam, even at a high cost. The cheapest way would be to work the second dam, a very good one, by making it about six feet higher, to cover, by the water, the first dam and make our lake one acre longer. The salmon fishing by nets and by lines has been very good this season. The guardian of the St. Marguerite river, the north-west branch, for a New York club, Mr. Simon Dufour, reports that he never saw so many salmon on the spawning grounds for the last twelve years while the guardian of the river. Good reports also come from the guardians of the rivers A Mars, St. John and Murray. It is my intention next season to commence to stock the river du Gouffre, at bay St. Paul. I have received full information about that river, and Chs. Angers, Esq., M.P. for Charlevoix, told me that it would be a very good thing to have the river du Gouffre stocked with salmon fry; he also says that the planting of salmon fry in the river Murray is a success. The river du Gouffre at bay St. Paul and Murray river at Murray bay, are in the county of Charlevoix.

I have the honour to be, sir,
Your obedient servant,

L. N. CATELLIER.

10.—NEWCASTLE HATCHERY, ONTARIO.

NEWCASTLE, December 6, 1903.

To Professor E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I have the honour herewith to submit a report upon the fish culture operations carried on at the hatchery during the past year.

The following schedule will show you the points of distribution, also the number of fry placed in each locality, last spring:—

Salmon Trout.

Lake Ontario,	Cobourg	100,000
"	Toronto	100,000
"	Hamilton	100,000
"	Whitby	100,000
"	Bowmanville	100,000
"	Consecon	100,000

Lake Ontario,	Kingston	100,000
Lake Huron,	Goderich	100,000
"	Southampton	100,000
Lake Erie,	Cedar Spring	100,000
Georgian Bay,	Collingwood	100,000
"	Meaford	75,000
"	Wiarton	150,000
Bay Quinte,	Belleville	75,000
"	Picton	75,000
Lake Couchiching,	Orillia	75,000
Lake Simcoe,	Barrie	75,000
Charleston Lake,		100,000
Lakes at Coe Hill		50,000
"	Westport	50,000
"	Burnt river	50,000
Lake on the Mountain	Glenora	50,000
"	Ontario, Picton sand banks	50,000
Lakes on Bay of Quinte	Ry.	100,000
Mountain Lakes,	Wilberforce	50,000
Six Lakes,	Gooderham	50,000
Deer Lake		50,000
Lakes at Tory Hill		75,000
Lake Ontario,	Newcastle	200,000
	Total distribution	2,500,000

I beg to inform you that the fry were all in first class condition and deposited in the different waters as scheduled.

According to your instructions I proceeded to Wiarton on October 2, with our usual assistants to procure salmon trout ova for this and other hatcheries.

We succeeded in our operations at Wiarton (although suffering to some extent from the unfavourable winds and weather) in securing a sufficient supply of salmon trout eggs. I thought at one stage we would fall short of securing as many as we required as we could not handle our nets from November 18 to 22, a very important stage of our operations in the closed season, and had we not secured the bulk of our eggs before that date, we would assuredly have fallen short in getting our supply. However, we secured 1,000,000 and handed them over to Mr. John Walker, officer in charge of the Ottawa hatchery, and about 800,000 to Mr. Alexander Finlayson, of the Magog hatchery, who laid them down in the troughs of the new hatchery at Mount Tremblant, which leaves a balance of about 2,700,000 in this hatchery in good condition and doing well.

The fishing plant at Wiarton, with the exception of our pile-driver, which, owing to the exposure to the sun and rain during the summer months, requires some caulking in the fall, is in satisfactory state. We have two first class pound nets in Wiarton. Altogether taking into consideration the difficulties we have had to encounter this season, we can congratulate ourselves that we have succeeded well in securing the supply of eggs required for this and the other hatcheries usually supplied with salmon trout ova.

I have the honour to be, sir,
Your obedient servant,

WM. ARMSTRONG,
Officer in charge.

11.—SANDWICH HATCHERY, ONTARIO.

SANDWICH, December 14, 1903.

To Prof. E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I have the honour to submit to you my annual report of the work connected with the fish hatchery here under my supervision.

According to last year's report this hatchery contained 100,000,000 whitefish eggs, from which we turned out 69,000,000 young fry, which were disposed of as follows :—

Young Fry.

Point Edward, Lake Huron	4,000,000
Belle Isle. Detroit River	3,000,000
Fighting Island, Detroit River	5,000,000
In bay below Fighting Island	4,000,000
Stoney Island, Detroit River	3,000,000
Bois Blanc Is., Detroit	7,000,000
In lake below Bois Blanc Is	5,000,000
Pigeon Bay, Lake Erie	5,000,000
Bar Point, Lake Erie	3,000,000
Colchester, Lake Erie	3,000,000
Kingsville, Lake Erie	1,000,000
Leamington, Lake Erie	1,000,000
Rondeau, Lake Erie	1,000,000
Port Stanley, Lake Erie	1,000,000
Hamilton, Lake Ontario	1,000,000
Niagara, Lake Ontario	1,000,000
Toronto, Lake Ontario	1,000,000
In river at hatchery	20,000,000
Grand total	69,000,000

Collecting Pickerel Eggs.

After having cleared the hatchery of the young whitefish, we immediately made preparations for the reception of pickerel (doré) eggs, which were collected from the pound-nets in Lake Huron and Hitchcock's ground, Point Edward. We succeeded in securing 40,000,000.

From these eggs were hatched out 21,000,000 young pickerel which were placed in the following waters :—

Mississippi River, Almonte,	2,000,000
Otonabee, Peterborough	2,000,000
Thames River, London	2,000,000
Detroit River	15,000,000
Total	21,000,000

This fall we have secured and laid in the hatchery 65,000,000 whitefish eggs, which I am pleased to report are in first class condition.

The Catch of Fish.

The catch of fish this fall was not quite up to the average. From information received from the different points in this locality, very few whitefish were caught in the Detroit river and adjacent lakes which is a strange feature and cannot be explained, as they have been so plentiful for the last seven or eight years.

This fall has been a conundrum even to the oldest fishermen around this section of the country.

The number of fish captured by the Government seines at Sandwich was about twenty-two hundred fish, but I am pleased to state that from this number I have succeeded in securing 65,000,000 eggs which are in good condition.

There is no doubt that we might have caught more fish had not the severe winter weather set in so soon, which was about three weeks earlier than usual as we were battling with ice for about two weeks while the spawning operations were in process.

Repairs.

Since my last report a new Worthington pump has been placed in the hatchery which is working very satisfactorily. We drove a number of new piles in the river to protect our screen from ice; but we are still annoyed a great deal from needle ice which settles on the screen and stops the flow of water at times. It would therefore be advisable to sheet-pile around the screen which in my opinion would greatly assist in keeping needle ice from interfering with it.

Next summer it is quite urgent that we should put in new troughs and tanks in the hatchery. We have built a new coal shed convenient to the engine room.

All of which is most respectfully submitted.

I am, sir, your obedient servant,

WM. PARKER,
Officer in charge.

12.—OTTAWA HATCHERY.

OTTAWA, September 19, 1903.

To Prof. E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I have the honour to submit my annual report of the operations carried on at the Ottawa fish hatchery during the year 1902-1903.

On November 17, 1902, were received from Mr. Wm. Armstrong 1,250,000 salmon trout eggs from Wiarton. The eggs were in a good condition when received and very small loss was sustained during the season of operation. The fish hatched out strong and healthy, and were deposited in the undermentioned waters in May and the first part of June.

The work of distributing the fry was done very successfully with but very little loss by Messrs. Halkett, A. W. Ross and Stanford Walker, officials of the Marine and Fisheries department, at Ottawa, and by Mr. Wm. Armstrong, of the Newcastle hatchery.

Were also received in the latter part of May, 1903, about 20,000 rainbow trout eggs which were also very successfully hatched.

Following is the distribution list:

Distribution of Salmon Trout.

Of St. Hyacinthe, P. Q	28,000
Longue and Horseshoe Lake	28,000
Superior Lake	28,000
Carre "	28,000
Blue Sea "	63,000
Rockingham Lake	21,000
Rock Lake	56,000
Villa Mon Repos (Three Rivers)	28,000
Old Forges Stream	28,000
Lac Rond (Ste. Adele)	15,000
Lac Millette	15,000
Lac a Renaud	15,000
Lac Gadner	15 000
Lac de la Fourche	15,000
Lac de Montigny (St. Jérome)	28,000
Lac l'Achigan, P. Q	28,000
Pointe des Chènes	21,000
Grenville	21,000
Canoe and Henry Lake	28.000
Sharbot Lake	63,000
Sudbury, Ont	42,000
Lake Bornet	35,000
Little Whitefish Lake	35,000
Black Lake (Joliette)	56,000
Lac des Isles	35,000
Lac Rivard, P. Q	28,000
Horseshoe Lake	28,000
Christie Lake	42,000
Black Lake, Ont	42,000
Hawleys Lake, P. Q	35,000
Lake No. 7 (Joliette)	42,000
Lake l'Achigan (St. Lin)	42,000
Ursa, Fox and Wolfe Lakes	42,000
Parry Sound Lake	42,000
Rideau Lake	63,000
	1,181,000

Distribution of Rainbow Trout.

To Lac des Isles	3,000
Pickwick (Echo Beach)	1,500
Charleston Lake	6,000
Mountain Lake	8,000
Bonin Lake	1,500
	20,000
Totals	1,201,000

The hatchery having been all cleaned up and repainted, everything is in good condition for the next season's operations.

I have the honour to be, sir,
Your obedient servant,

JOHN WALKER.
Officer in charge.

13.—SELKIRK HATCHERY, MANITOBA.

SELKIRK, MAN., May 5, 1903.

Professor E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa, Ont.

SIR,—Pursuant to your instructions I have the honour to submit my annual report upon the operations of the hatchery at this point for the season just closed.

In conformity with the plan adopted last year our spawn was sent to us from the Detroit river in charge of Samuel Adamson, arriving here on December 15. Owing to the exceptionally cold weather just at that time, the eggs when they arrived were not in first class state, quite a large percentage of the spawn being in an inferior condition. The net result of our seasons work was 12,000,000 of good healthy fry, which we liberated in the Red river at the hatchery.

It will be seen that we have thus restocked our waters here by six times the number of whitefish taken from Lake Winnipeg in any one year.

It is a pleasing fact to report that residents around the southern end of Lake Winnipeg state that large numbers of small whitefish are to be seen, and sometimes caught weighing 2 lbs. to 2½ lbs. and they have no hesitancy in asserting the presence of these to the work of the hatchery. They no doubt work north as they get older to the deeper and colder waters of the lake.

The repairs ordered by the department and made last summer have had a very beneficial effect and been the means of much assistance in carrying on the work during he winter.

The boiler and pump were thoroughly overhauled and we have had no trouble from them this season. The suction pipe was extended 185 feet further out into the river, which puts the 'rose' into 21 feet of water. In former years we have been troubled by mud coming up into the tank and were compelled during the spring to take our supply of water from the well. This year however we used river water right up to the end of the season, and experienced no difficulties such as we had had other years. The forming of scale in the boiler arises from the use of water from the well, but this year after finishing our season's operations, the boiler was as free from such as when we started last fall.

A few minor repairs will be necessary in connection with the machinery before we open again next fall.

The improvements to the grounds are well under way, and we hope that before the summer is over, will present a creditable appearence.

The painting of the outside walls of the hatchery has not been commenced but will be pushed forward as soon as we have the other improvements to the grounds well advanced.

The last fry were liberated on April 25, and the hatchery closed for the season on April 30.

I have the honour to be, sir,
Your obedient servant,

WM. S. YOUNG.

14.—FRASER RIVER HATCHERY, B.C.

NEW WESTMINSTER, B.C., December 1, 1903.

Prof. E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—In accordance with your instructions, I now inclose reports of the work of the Fraser river hatchery, followed by that of the three other hatcheries, in British Columbia, for the season 1902-03, with statements of their condition and prospects for the current season. As allied to fish culture, I also report on the work done on several rivers to enable the salmon and other fish to overcome natural obstacles to their ascent, and thus reach spawning grounds hitherto unattainable.

Fraser River Hatchery.

The total number of salmon eggs received at this hatchery during the season of 1902-03 was 11,166,000, made up as follows :—

Sockeye (O. nerka)	10,892,000
Spring (O. tshawytecha)	24,000
Cohoe (O. kisutch)	250,000

Of these the spring salmon were taken merely to secure specimens of the eggs in different stages of development, and the cohoes were taken in the creek at the hatchery, as there was a little room left in the troughs. Of the sockeyes, 1,918,000 were received from Silver creek, on Harrison lake, and the balance, 8,974,000, from Morris creek.

The first sockeye eggs were received from Silver creek on September 10; the later shipment from that creek, on September 25.

From Morris creek the first shipment was received on September 30, and the latest on October 25.

The loss from bad eggs was 1,640,000 or 14.7 per cent, of which 905,000 or 8.1 per cent, was from eggs which had died before delivery at the hatchery, leaving the net loss from live eggs delivered, 735,000 or 7.1 per cent.

Besides the salmon eggs, we were able to get about 50,000 eggs of the rainbow trout (S. irideus) and a few of the Dolly Varden (S. malma).

During the period of the hatching of the salmon eggs, the average temperature of the water was :—

1902.	September	48·0°
"	October	47·5°
"	November	43·7°
"	December	39·3°
1903.	January	38·0°
"	February	40·3°
"	March	40·2°

Of the shipments (4) from Silver creek, some of the eggs hatched in 52 days, while others of the same shipment took 116 days.

The difference in the time required for development was not on the whole so great in the Morris creek eggs, though even in these there was an interval of from 30 to 40 days from the time when the first fry appeared before all the eggs in the baskets hatched out.

The fry when hatched were distributed as follows :—

Harrison Rapids	9,031,900 sockeyes
Sauchenauch Creek	140,000 "
Nanaimo Lake	40,000 "
Squamish River	60,000 "
Fraser River at hatchery	230,000 cohoes
Fraser River	22,000 spring
Shawnigan Lake	50,000 trout

For the current season we have secured for the hatchery 10,470,000 sockeye ova besides a shipment of 2,467,500 to Granite creek hatchery. (This hatchery having been unable to secure a supply locally to fill it up.) I have it in view if the Granite creek hatchery should be unable to secure a sufficient supply of cohoe ova to fill its troughs, to make a shipment, weather permitting, of eyed sockeye eggs from Bon Accord so as to relieve our troughs there and thus enable us to keep the greater number if not the whole of our fry in the troughs until they are sufficiently advanced to distribute.

Had our fences in Silver creek not been carried away by the freshets occasioned by the wet season, I should have secured sockeye eggs enough for both hatcheries.

I would again respectfully urge on the department the advisability of having this hatchery removed to a site nearer the spawning beds in time for next year's operations. The heavy loss mentioned above 8·1 per cent (more than half of the total) before the eggs are placed in the troughs would I have no doubt be largely reduced if the eggs could be placed in the troughs without the delay and rehandling now unavoidable, and the fry could also be released without the expense and risk now incurred in taking them back to the neighbourhood of the spawning ground.

In a former report (19th March, 1902) I suggested the removal of the present hatchery to the spawning grounds on Morris creek. Should the department however decide to increase the capacity a point more centrally situated, with regard to the different streams from which a supply could be drawn, would be preferable, and I think (though a more specific examination would be necessary before deciding) that a suitable location could be found on the stream from Trout lake about four miles up the lake from the Hot Springs. This stream is now utilised by the sockeye, as a spawning ground so far as its capacity goes. We got 660,000 eggs from it this year and had we got in, our camp in time could probably have trebled that amount.

If this change were made the capacity of the hatchery might safely be increased to 20,000,000. With a small steam launch, we could make all the sockeye streams on the lake tributary to the hatchery and, I have little doubt, could in nearly every year secure eggs enough to fill up.

Another advantage of the change would be that we would be in a better position to carry out the wishes of the department in regard to the securing of trout eggs for distribution.

If there are funds available I would strongly urge that this increase in capacity and change of site should be authorized in time for next season's work.

I have the honour to remain, sir,
Your obedient servant,

C. B. SWORD,
Inspector of Fisheries.

15.—GRANITE CREEK HATCHERY, SHUSWAP LAKE, B.C.

To the Dominion Commissioner of Fisheries,
Ottawa.

SIR,—The total number of salmon eggs placed in this hatchery for the season 1902–1903 was as follows:

Sockeye (*O. nerka*)	3,456,000
Cohoes (*O. kisutch*)	1,537,900
Qualo, dog salmon (*O. keta*)	79,700
	5,073,600

The sources of supply for these were as follows:

Sockeyes.

Seymour River	350,000
Scotch Creek	400,000
Anesty River	46,000
Morris Creek (Harrison Lake)	2,660,000
Total	3,456,000

Cohoes.

Salmon River	1,115,000
Granite Creek	26,300
Eagle River	382,600
Anesty River	14,000
Total	1,537,900

The 79, 700 Qualo (or dog salmon) were sent up from Morris Creek with the sockeye shipments. This variety does not ascend the river so far as Shuswap lake; whether the fry released there will find their way to the seas or remain as a landlocked variety may be a question.

It will be seen that from 70 to 80 per cent of the sockeye ova were supplied from Morris creek. The run of these fish in Shuswap lake this (1902-03) season was very poor, though had it not been for a high freshet letting the fish past our fence in Scotch creek we could have secured a much larger number there.

So far as the Shushwap lake sockeye eggs were concerned the first were secured on September 3 and the latest on October 15. The first fry hatched out on November 8. The shipment from Morris creek received on October 29, began hatching on January. 17.

All the salmon fry were released at the hatchery in good condition.

In addition to the salmon as above stated we secured a few trout eggs and turned out about 20,000 rainbow and 1,500 Dolly Varden trout fry. The Dolly Varden trout eggs we got were in bad condition and we lost nearly all of them.

The Rainbow trout eggs were got from Canoe and Granite creeks, the Dolly Varden from Anesty river.

The rainbow trout were planted in Skimiken lake, which is about ¾ of a mile long by ½ mile wide and about 7 miles from Tappan siding, it is without any outlet and

barren of trout. The planting seems to be doing well as numbers of the fry in healthy condition have since been observed here.

The Dolly Varden were planted in two small lakes, one near the head of Deep creek, a tributary of the Okanagan lake system the other about 5 miles from Notch hill. Neither of these lakes has any outlet nor are there trout in either.

At the present writing we have for the current season a little over 3,000,000 eggs in the hatchery, 3,000,000 sockeye and 110,000 cohoes—some of the sockeye are already hatched.

Of these sockeye eggs only about half a million were obtained from Shuswap Lake; the balance having been sent up from Morris creek. There were very few fish in Shuswap Lake this year and the same scarcity was reported from all the upper spawning beds of the main river. Mr. Babcock the provincial fish commissioner secured only about 2,000,000 sockeye eggs (and these from a late run) for the new provincial hatchery at Lillooet. On Harrison lake and its tributaries, in which are included the spawning beds on the upper waters of the Lillooet river, there has been an ample supply of fish, and from our experience in this and last season it would seem that we must in many seasons be prepared to supplement the local supply from these sources.

The steam launch which the department authorized me to secure for the use of this hatchery has been of great service. Having it at our command we will be able to take advantage of any favourable season for doing the necessary preparatory work in the creeks before the salmon season.

The weather has been so wet and the creeks have kept up so high, that we have not yet been able to do any thing towards getting in the satisfactory foundations to which I referred in my last report, but I am in hopes that when the water falls from cold weather or towards spring I may get this done before another season.

Should the department decide to renew their efforts to introduce the eastern whitefish into the lakes of British Columbia, this hatchery would be very suitably situated, the eggs could be delivered direct from the railway, the fry when hatched could be released direct in Shuswap lake and after a comparatively short railway journey, in Okanagan lake, while for more remote waters this railway would be available to take them to the coast or into the interior to the Kootenay Lakes.

I am, sir, your obedient servant,

C. B. SWORD,
Inspector of Fisheries.

16.—SKEENA RIVER HATCHERY, B.C.

To the Commissioner of Fisheries,
Ottawa.

SIR,—The total number of eggs placed in this hatchery for the season of 1902-03 was 3,932,000. Of these, at 1st February when the water supply failed owing to the dam having broken away and the cold weather lowering the water in the creek, 482,380 or over 12 per cent had been picked out. This is a very large percentage. The record of Mr. Whitwell, officer in charge, does not give me any guide as to the number of these eggs that were dead when taken into the hatchery. There being no lack of spawn Mr. Whitwell, very properly, filled his baskets well up, and this of course while giving a much larger output would occasion a heavier percentage of loss. The mean temperature of the water while the eggs were in the troughs was:—

August	43·3°
September	41·2°

October	39·2°
November	31·2°
December	29·5°
January	28·5°

Making every allowance for possible inaccuracy in the cheap thermometer used it will be seen that the temperature of Cold Water creek, from which the water supply for the hatchery is taken, goes down very low, seriously retarding the development of the eggs. If by changing the present site of the hatchery we can get a supply of water with a higher temperature during the winter, it would be a great advantage and should be borne in mind when this question is being considered.

On January 4 and 5, there were 26 hours heavy rain, Cold Water creek rose 10 feet and swept out the dam from which the water for the hatchery was drawn. Up till February 1, Mr. Whitwell was able to keep the water back enough to supply the hatchery, by felling trees across the creek, but this expedient failed when the creek fell from the weather becoming cold and he had to put out the fry (about 1,000,000) hatched, and the semi-hatched eggs into the Lakelse river and close down operations.

On July 3, I went up with Mr. Whitwell, taking with me four men under Mr. McCaskill from the Fraser river hatchery to replace the dam. The water was very high in the creek when I was there and seems to have remained so, making it hard to get satisfactory work done. The work was completed in the month of August and Mr. McCaskill reported on his return that he thought it would stand.

The weather was much milder than the season before, but with a heavy rainfall, and, on October 12, the dam gave way and the eggs and fry had again to be placed out in the river. The total number of eggs put into the troughs was 4,040,000. All the shipments had reached the eyed stage and the total number of eggs recorded as picked out was 61,500 or 1½ per cent. This does not include the eggs that were dead when taken into the hatchery of which no record has been kept but after making allowance for this and also for the fact that the eggs were put out earlier than in the previous season there is a gratifying decrease in the percentage of loss.

The first shipment was received August 14, and the latest September 10.

Mr. Whitwell's official report for the season 1902-03 was forwarded to you on April 28.

The difficulty of access to this hatchery, the expense of taking in supplies, and the high stage of the water in the creeks when the work would have to be done, make it a hard matter to decide what is best to do. Before going to further expense in getting water from the present source of supply, Cold Water creek, the possibility of getting a better site where the water would not be so cold and the risk lessened of the supply being cut off should be investigated as well as the possibility of moving the present building and the probable cost.

I have the honour to be, sir,
Your obedient servant,

C. B. SWORD.

17.—NIMPKISH HATCHERY, B.C.

To the Commissioner of Fisheries,
Ottawa.

SIR,—I beg to submit the following report upon this B.C. hatchery the property of the Alert Bay Cannery Co.

Mr. Roxburgh (formerly foreman at the Fraser river hatchery), who was in charge of this hatchery during the season 1902-03 reported to me as follows;

'The hatchery is 30 ft x 40 ft, the floor is of split cedar, the sides and roof closed in with cedar shakes: the roof contains 8 windows 6 ft x 4 ft 6 inches.

'It is fed by an iron pipe 6 inches diameter, reduced in the last 60 ft to five inches diameter. The water is supplied by a good sized mountain stream of the purest water which (even when the creek is high) has little, or no sediment. The hatchery has 24 troughs 15 feet long giving it a capacity of 1,500,000.

'In September 1902, 1,696,000 sockeye eggs were placed in the troughs out of which 60,000 were picked. The balance 1,636,000 vigorous fry were released in Nimpkish lake. The temperature of the water averaged 35° or 36°. The eggs were consequently a long time hatching few coming out under 150 days.'

It will be seen that Mr. Roxburgh had got this new hatchery working very satisfactorily, the percentage of loss being only about 3½ per cent.

After he had the fry turned out and had left, the building was unfortunately burned but the company have since rebuilt it with an increased capacity. I have not yet received a report as to the number of eggs secured for the current season.

Work on obstructions in rivers.

Since my last report there has been some additional work done on the Courtenay and Somas rivers supplementary to that referred to there.

The expenditure was kept down to the amount authorized $150 for the Somas river and $200 for the Courtenay.

I could not get over to see the work when the water was low after completion but had visited both places and arranged with the local officers, what should be done, to expend the money to the best advantage. It is a very wet season and all our rivers are keeping high; later when the cold weather lowers the water I will be able to inspect the work. Meantime both Mr. Cox, Alberni, and Mr. Mason, Courtenay, in whose charge respectively the work was, express themselves as well satisfied.

Your obedient servant,

C. B. SWORD,
Inspector of Fisheries.

(Later Report.)

NEW WESTMINSTER, December 9, 1903.

Professor E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—Since forwarding my report of the work of the hatcheries in British Columbia during the season 1902-1903, I have had a further report as to the position of the Nimpkish hatchery from Mr. Groves, manager of the Alert bay cannery. He says:

'We built a small addition to the original building this past season, increasing the capacity to 2,500,000. It is now stocked to its full capacity and Mr. Bucknell says he will turn out fully 2,500,000 fry.'

I remain, sir, your obedient servant,

C. B. SWORD,
Inspector of Fisheries.

18.—MAGOG, P.Q.

MAGOG, December 31, 1903.

To Professor E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I beg to submit my annual report of the operations at Magog hatchery for the season of 1903.

The following schedule will show the points of distribution, also the numbers and kinds of fry planted in each locality last spring.

Salmon Trout.

Lake Memphremagog	150,000
Lake Massawippi	100,000
Brome Lake	50,000
Oxford Pond	75,000
Key Pond	50,000
Little Magog	25,000
Lovering Pond	25,000
Lake Fortin	30,000
Lac Volet	30,000
Baldwins Pond (or Lake Lyster)	150,000
Huntingdon River and District	70,000
Delivered to Mr. Halkett (for New Brunswick)	15,000
Lake Megantic	50,000
Grand total	820,000

Speckled Trout.

Stanstead Trout Pond	15,000
Lac Longue	15,000
Lac Patterson	15,000
North Hatley Trout Pond	10,000
Waterloo Trout Ponds	10,000
Grand total	65,000

I beg to inform you that the fry were all deposited in the different waters mentioned above in the very best condition.

Repairs.

In reference to repairs, I wish to report that the following repairs were finished according to instructions received, the supply tank has been lined with galvanised iron, and a new ice house has also been built, which was very much needed.

I have the honour to be, sir,
Your obedient servant,

ALEX. FINLAYSON,
Officer in charge.

19.—MOISIE HATCHERY, QUEBEC.

QUEBEC, December 30, 1903.

Prof. E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—The expedition to procure ova for the hatchery left our station, at the mouth of Moisie river, on Monday, October 12, for the upper waters.

Arriving at the hatchery they slept there for the night, and the following night camped at the head of the portage, arriving the following morning at the Forks, where they immediately started seining operations to procure parent salmon.

At the first cast of the net, nine male salmon and four good females (full of spawn) were taken; the second cast, four males and one good female; the third cast, four males; the men then returned to camp for the night.

Next morning, at 8 a.m., they again started seining and at the first cast took six males and five good females; the second cast, five males and three good females; the third cast, six males and two good females, and the fourth cast took one male and two good females.

Having now secured all the ova required they left on Friday morning for the hatchery. Arriving at the head of the portage they were detained there two days by bad weather and arrived at the hatchery at 11 a.m. on Monday, where they deposited the ova in the rills, arriving at the post the same night.

Your obedient servants,

HOLLIDAY BROS.

ANNEX C.

REPORT ON OYSTER CULTURE BY THE DEPARTMENT'S EXPERT FOR THE SEASON OF 1903.

CHARLOTTETOWN, P. E. ISLAND, December, 1903.

To Professor E. E. PRINCE,
Dominion Commissioner of Fisheries,
OTTAWA.

SIR,—I have the honour to submit to you my annual report of last season's work in the lower provinces.

After moving out of winter quarters the *Ostrea* being ready for sea, I proceeded to Pictou, N.S., where our compass was adjusted by Mr. Baker, of Boston, who also examined the compasses of other government vessels. Afterwards, Mr. D. Stevens, government inspector of hulls and machinery, inspected the hull, boiler and engines, which he found to be in good order. I then returned to Charlottetown, where I coaled and watered steamer and proceeded to Shediac.

Shediac, N.B.

While here my time was engaged in examining and cleaning the areas under reservation. Upon examination of the largest bed or Wilbur's, as it is named, I found the area in a clean condition. The quantity taken at a haul of the dredge averaged about 21 oysters and 32 brood, or 107 oysters and 160 brood or small ones, to 5 hauls of the dredge; this bed did not require much raking over. I then examined No. 3 bed, which lies next to it, and found this also in a clean condition, as I was working on both these beds last season; out of 100 oysters taken in 4 hauls of the dredge I found 125 small ones, which were too small for market. The bottom was apparently clean with no weed growing on it; but a little dead eelgrass was lying over the beds, which I removed by towing the rakes over the grounds.

I then made an examination of bed No. 2, or the Hannington bed and found this one required more cleaning as I did not go near it last season.

This bed is not in such good condition as the former two. The oysters live but become somewhat stunted in growth and the soil appears to have become softer, there is a good current running over this bed but soft mud surrounds it. Out of three hauls of the dredge I found 75 oysters and 87 small ones, and as the ground was dirty I devoted my attention to this bed until Saturday the 13th June when I finished up the work, took in a hopper of coal, watered the steamer, removed the stakes from the beds, took up my moorings provisioned steamer and made ready to leave for Caraquet but owing to strong winds prevailing was unable to sail before Friday the 19th June arriving in Caraquet the following evening.

Caraquet, N.B., and vicinity.

After an examination of the oyster beds in Caraquet I find they are situated at the head of the bay where two rivers (the North and South) connect and empty themselves into the bay, the area which the beds cover amounts to about one and a half miles square. In some localities I noticed a large amount of small oysters, while on other parts the ground was almost depleted. Four hauls of the dredge were as follows:—12 oysters 5 broods, 2nd haul 9 oysters 43 brood, 3rd haul 9 oysters 49 brood, 4th haul 32 oysters and 69 brood. The ground was dirty all over, the shells being coated with a sediment which settles on the bed, and eelgrass was growing over some parts of the grounds. The depth of water varies on the beds from almost the ebb-dry at low water to about 4 feet, beyond that depth no oysters are to be found but the ground becomes softer on the top and the firm oyster ground can be felt by a pole after penetrating soft mud of from 4 to 18 inches in thickness.

The cause of depletion of these beds is in my opinion the gradual growing up of the whole bay, which is not nearly so deep now as formerly, also the existence of a large sawmill situated about six miles up the South river which used to deposit its sawdust into the stream and now thousands of tons of dust are piled along its banks on both sides which are washed by the tides, although the dust is now being hauled further from the river, but the damage has already been done. Old residents in the locality noticed the gradual decline of the oyster catch from the time the mill was erected abont 20 years ago. The southern side of the bed is the worst, and most brood were found on the north side of the bed which shows the North river to be the cleaner of the two.

I also examined the river St. Simon in company with Mr. Chapman, and from what I saw have very little to report on that area, some of the beds are small and shallow with scarcely an oyster to be found on them, the area where most fishing is carried on, is on the sides of the channel well up to the head of the river where it is very narrow and intricate, and is at present of very little commercial value, only a few men fish there on a very small scale.

Lameque was also examined where I found a small area in a narrow stream lying both above and below a bridge situated about two miles from the wharf, the oysters were scattered for nearly a quarter of a mile in length and about 25 yards wide, this channel is formed by the current running through the openings of the bridge and

consists of a clean sandy bottom with shells and stones, the water was clear and clean and the current strong, oysters and mussels were found to be growing over this area in fair quantities with a depth of water varying from one to four feet at low water. Extensive flats dry right across the river both above and below the bridge where oysters are also reported to be picked up. There is about a sufficient quantity of oysters growing here for local use only and no further action can be taken beyond the strict observance of the oyster regulations.

I also examined an area of ground where oysters were reported to exist on the eastern side of Caraquet island but no signs of them were to be found, the bottom was composed of rough stones, beltweed and sand and I believe this area is too much exposed for the growth of oysters but is a good lobster fishing ground.

Afterwards acting under instructions from the department I commenced cleaning the northern part of the beds at Caraquet, removing the eelgrass and dirt from the beds which I continued to do until the 29th July leaving there on the 30th arriving in Malpeque on the 2nd August. When I left the grounds were not all clean, but there was a decided improvement in the appearance of them, and I was informed late this season by some of the Caraquet fishermen whom I met in Alberton, that where I had been working a large number of small oysters were noticed by the oyster fishermen who were working there this fall.

Malpeque, P.E.I.

On my arrival here I reported for duty to Professor Ramsay Wright who was in charge of the Biological Station ; each day the steamer was engaged in securing specimens from the bottom under the direction of some of the staff, this work was carried on until the 15th September when the station was closed for the season.

During the time many specimens were obtained by the dredge, beam trawl, hook and line and fine silk tow nets. The *Ostrea*, I believe, proved herself a very efficient boat for this purpose, but the results will be given in the report of the staff of the biological station.

While in Richmond Bay I examined an area in Bideford river in company with Mr. Dan Forbes, Fishery Officer, situated between Bird Island Point and Low Point and gave permission for this area to be used by mud-diggers, the area having previously been in dispute by both fishermen and farmers.

Lot 10 River.

Afterwards I proceeded to Lot 10 river where I made a careful examination of the area from above Goff's bridge down to the old wharf and find that mud has been taken from above the bridge for several years past, the beds extend nearly half a mile in length, they are about seven in number of good size, and have been cut up to a considerable extent, although there is plenty of mud if judiciously worked, mud is also found higher up the river and dug upon, but the oysters growing there are of poor quality. Some good oysters grow in the bed of the river just above the bridge, and this area seldom ever freezes over strong enough for a digger to work on as the current is too swift. Off John Ashton's Point on the south side of river there is a good mud-digging bottom, and on the north side of channel there is a considerable area for mud digging purposes if required.

The area reserved for fishing privileges extends from Goff's bridge down to lot 6 Point and Edward Mitchells shore and is well protected from strong winds, and the fishing is fairly good, as there are several live beds existing in this locality, some of the principal beds are known locally by the following names:—Upper Lot 6 bed, Tom Kelly's bed, Rocky Point bed, Barny's bed on opposite shore, Channel bed, Martin Cove bed, Burnt Point bed, McDonald Point bed (this bed was dug on last year under protest, but it is a large flat bed with good oysters growing over its surface and should not be permitted to be destroyed,) and several smaller areas with no special names attached to them but where oysters are fished each season.

Among the beds examined in this river, there are one or two areas where mud might be obtained, one is a bed situated just above Rocky Point bed and Barry's bed, this bed was dug on last year and might be dug up by mud-diggers, another was found just off the shore below Rocky Point bed in front of Mr. Cole's house just open with the woodland to the westward of his house where there is a good face to commence work and plenty of mud as it has never been worked on to my knowledge, and the Horse back bed lower down the river which is of very large dimensions and steep sides.

The Rocky Point bed which caused so much trouble last winter, is a high bed with sloping sides where the fishermen find good fishing, and nine boats were fishing there at the opening of the oyster season, and for the present I would not like to see this bed destroyed.

The area below Lot 6 Point which was given up for mud digging purposes, gives the farmers unbounded scope for their operations.

There is quite a large bed between Gibb's and McA'Phee's shores, another large bed called Gibb's bed is situated off the creek. Mitchell's Point bed has a large area for mud digging, and another bed above it just below the boundary line, and several smaller ones, some of which have been proviously dug out.

If the above observations were adhered to there would be no trouble whatever between the farmers or fishermen. These beds should be dug in a more systematic way which would yield a much larger quantity of mud, but as a rule the person who digs the mud seldom ever thoroughly examines the mud digging areas in a boat, or makes any previous arrangement until the ice is strong enough to drive over, when he cuts a hole and sounds through it, if there is good mud he commences to dig right away and often spoils a bed completely by digging into it a short distance and then commences again in another direction, whereas if he took strip one season he might take another strip later on and eventually remove the whole area, but as it is now, a bed that has been dug on is nothing but a cluster of pyramids and hummocks being of little or no use to himself or the fisherman. If a dredge like the 'Prince Edward' could be used in some of these rivers during the winter months in cutting down some of the beds, say to a depth of twelve feet at low water, leaving a level bottom, it would be a great advantage to all concerned, as the farmers could obtain all the mud they wanted, and it would increase the oyster growing area, as the price of oysters continues to advance each year, and this would enhance the value of the beds considerably and extend them as well, as they are becoming more contracted each year with little or no expansion. I would like to see a step taken where some of these defunct areas could be levelled down and enlarge the fishing areas.

In *Mill* and *Hills* rivers lot 5 very little can be done, as the beds in the middle of the river have practically all been cut up above the bridge and are of no use as a fishing area, the oysters are now found to be growing along the sides of the river where there is no depth of mud and are not disturbed by mud diggers, no trouble appears to exist between the fishermen and mud diggers. Below the bridge the tide runs very strong and does not freeze sufficiently strong enough over the beds where the best oysters are found so there is no danger of the beds being destroyed.

I also visited the Brae and found the western portion of this area utilized by mud diggers in winter on dead beds but on the eastern end the beds are very shallow with little or no mud on them and the fishing is good where excellent oysters are caught. This area should be divided into two sections, the western part for mud digging and the eastern part for oyster fishing, a line being drawn from Campbell's road on the north side of the Brae running north and south to a small bunch of trees on the sand-hills on the south side of the Brae. Under the above conditions there should be no further trouble existing in this locality.

Lobster protection.

After finishing the above examination I sailed from Alberton on the 6th October arriving at Point du Chene the same night, when I reported to inspector Chapman at Moncton that I was at liberty to assist him in the lobster protection service around Cape Bald and Baie Verte, while patrolling we seized what gear we found, all of which

was being fished to the full extent. One line was taken off Cape Kildare on my way round, and nine lines were seized off Cape Bald and three in Baie Verte. I remained on duty in this locality until the 20th October when I was ordered to return to Shediac on the 21st where my time was devoted to the Shediac oyster beds as they were opened for public fishing on the 22nd October.

Shediac Oyster reserve.

After notice had been given by Inspector Chapman that the above reserve would be opened for public fishing from the 22nd October till the 12th November from 8 oclock in the morning till 3 o'clock in the afternoon of each working day, I was on the grounds during that time and started the work each morning and closed it down at the end of the day, also during the working hours my time was taken up in inspecting the fleet of fishermen seeing as far as possible that no small oysters were taken from the beds and ascertaining as correctly as I could the amount of oysters taken.

There were 152 fishermen fishing on the grounds; three days were lost through bad weather and the catch amounted, as near as could be gathered, to about 1,600 bushels, 880 the first week, 540 the second week and 180 the last week. The largest proportion of men fishing there were fishing for clams, and several of the men averaged 150 bushels each during the three weeks the grounds were thrown open for public fishing. There were a large number of small oysters noticeable on all the fishing grounds, but the large oysters were caught up very clean. The price realized $5, $5.50 and $6 per barrel. After the grounds were closed down I removed what stakes were left on the beds, blew my boiler off and on Saturday November 14 sailed for Charlottetown, arriving there the same evening. One day during the following week I went up the West river accompanied by Inspector Matheson who was informed of a bed of oysters existing in deep water, but after searching for some time failed to locate it. We then returned to Charlottetown and placed the *Ostrea* in her winter quarters after removing all the gear out of her as the weather was too wild and unsettled to do anything more this season.

Size limit.

I again wish to call the department's attention to the minimum size limit of the oysters in the lower provinces; it is at present too small for the requirements of the trade, and as oysters become scarcer so many more small sized ones find their way into the barrel which are of no commercial value, and merchants complain of having to purchase oysters which are of no use to them; but are really of legal size. This subject has been before the department for some time past and I would like to see the standard raised to three inches minimum size before another season opens, as it seriously interferes with the marketable value of the oyster and the appearance of the sample. I would also like a clause inserted on the back of the oyster licenses, stating they are not transferable, as I had quite a number of fishermen trying to fish with another person's license while in Shediac, but I insisted on each man holding his own license.

Oyster areas.

During the past season many persons have asked if it is possible to secure an area of grounds for cultivating oysters privately. I would like to see if some arrangements could not be made with the Provincial Governments, so that areas could be taken up, as this is one of the chief means of maintaining our stock by encouraging private culture, and it also assists in keeping up the supply of the natural beds. This question has also been brought up before the department on previous occasions and it is not necessary to go any further into details.

I have the honour to be, sir, your obedient servant,

ERNEST KEMP,
Oyster expert.

APPENDIX No. 12.

REPORT ON COLD STORAGE WORK IN 1903 BY SPECIAL OFFICER PETER MACFARLANE.

NEW GLASGOW, N.S., December 18, 1903.

To Professor E. E. PRINCE,
Dominion Commissioner of Fisheries,
Ottawa.

SIR,—I beg leave to forward the following detailed report of the bait cold storage work under my charge in the Maritime Provinces :—

Reference has been made in the annual reports of the Deputy Minister for the past four years, of the inception and progress of this work which may be briefly referred to. In the report of 1899, the following occurs :—

'This scheme, (cold storage for bait) devised in the interests of the fishing population, aims to meet a need which has been profoundly felt by the fishermen, viz., the ensuring of supplies of bait which will be available when needed. Season after season the complaint arises that the bait is scarce, precisely when it is the most urgently required ; yet such bait can, as a rule, be obtained earlier in the season in abundance when the men are not in immediate need of it. The Lobster Commission of 1898 made reference in their report to a proposal for providing cold storage for bait, and during the year the matter was prominently brought forward in the Provincial Legislature of Nova Scotia. In no way could our fishing population in the maritime provinces be more effectually assisted, and the furtherance of the fishing industries be aided than by enabling the fishermen to acquire the means of securing and preserving supplies or bait in cold storage. A project for building bait freezers was fully considered and the details rapidly completed early in the year. Before the end of April (1899) practical measures were on foot, a complete scheme for the formation of local bait associations was formulated, and printed circulars were issued giving full information respecting the fishermen's bait associations, the erection of refrigerator buildings and directions for their successful operations. Valuable aid was rendered by Professor J. W. Robertson, Commissioner of Agriculture, in developing the scheme, and in disseminating information among fishermen and parties interested. The parliamentary appropriation of $25,000 enabled the department to carry out this valuable and comprehensive movement at once. A special officer, Dr. Arthur Kendall, was authorized to take the necessary steps, both in regard to the organization of bait associations in various localities and the construction of freezers under the auspices of the Dominion Government and the local associations.'

During 1899, the offer made by the department to the fishermen was explained in the maritime provinces and arrangements completed and freezers built at several points, viz., Ballentyne's Cove, Antigonish Co., N.S., Frog Pond and Alberton, Prince Co., P.E.I.

A freezer was built at Neil's Harbour, C.B. by M. G. MacLeod & Co., from plans furnished by the department.

In 1900 the above named freezers were in operation and the work of organization and construction proceeded at a number of points indicated below.

The following is a list of the freezers which have been completed up to the first of January, 1903, together with a statement of their capacity, cost and the proportion of the cost paid by the department :—

FREEZERS CONSTRUCTED UP TO JANUARY 1, 1903.

Locality.	Province.	Nominal capacity.	Cost.	Proportion Government Grant.
		Tons.	$ cts.	$ cts.
Frog Pond	Prince Edward Island	20	1,160 18	590 09
Alberton	" "	30	1,347 67	673 83
Miminegash	" "	10	*840 46	420 23
Souris	" "	50	2,064 39	1,000 00
Ballentyne's Cove	Nova Scotia	20	1,361 04	861 04
Bayfield	"	40	*1,905 89	952 94
Port Hood Island	"	20	1,313 60	655 80
Cheticamp	"	20	*1,277 42	638 71
Eastern Harbour	"	20	*1,491 02	745 51
Ingonish	"	20	*1,411 03	705 51
Gabarouse	"	40	1,982 82	991 41
Petit de Grat	"	20	*1,515 95	757 97
Whitehead	"	15	*963 41	481 70
Port Beckerton	"	20	*1,043 08	521 54
Sambro	"	50	*2,246 66	1,000 00
Port La Tour	"	30	*1,380 03	690 01
Clark's Harbour	"	25	*1,202 88	601 44
Lower East Pubnico	"	50	*2,016 39	1,000 00
Sandy Cove	"	20	*1,427 34	713 67
Shediac	New Brunswick	25	*1,210 18	605 09

*Includes equipment.

During this present year, 1903, the work has gone on steadily without interruption a little better than the usual way. Freezers were completed as follows :—

North Rustico, P.E.I., Westport, Digby Co., N.S., North Sydney, N.S., and Ketch Harbour, N.S. The first break into the province of Quebec was made at Bonaventure River this year. The reason why we could not introduce the scheme there previously was owing to the local legislature not introducing a bill to incorporate these associations. A bill was introduced early in the year, and a start was made there for the first time.

The small freezer erected at North Sydney was found to be inadequate for the wants of the fishermen, and was also found to be too far from the fishing ground; so this freezer was moved to South Bay, Ingonish, and extended to 40 tons, and a new ice house constructed so that it is now estimated that they will be fully equipped for another season's operations.

A new freezer is now under construction at La Have, Lunenburg county, the home of the Banker fleet of fishermen.

These freezers cost, including equipment, as follows:

Locality.	Province.	Capacity.	Total cost.	Proportion of Government grant.
		Tons.	$ cts.	$ cts.
North Rustico	Prince Edward Island	20	1,235 00	617 50
Westport	Nova Scotia	30	1,600 00	800 05
North Sydney	"	40	*2,038 37	1,000 00
Ketch Harbour	"	20	1,401 89	700 94
Bonaventure River	Quebec	20	1,416 05	916 05

* Include extensions.

Last winter was certainly the best winter to get out a supply of ice that we have yet had, and with the exception of one or two freezers, a good supply was harvested; so that I had great hopes of making the best show for this year of any. I think it was

Robbie Burns who said: 'The best laid plans of baith mice and men gang aft agley.' It seems a very apt illustration of this case, as there has been the greatest scarcity of bait the most of the season; and at the present time, a regular famine. Squid, that are usually plentiful in the fall and early winter, have been very scarce, and only on one or two occasions could they be got at all. I believe that at the present moment there are not two tons of frozen squid in the whole of the maritime provinces, while last year there were certainly over 150 tons at the same date. This means quite a loss in many localities, as the haddock fishing industry has developed in a wonderful degree in the past ten or fifteen years. To fully corroborate my statements with regard to the haddock industry, I beg leave to submit the following item from the *Coast Guard* in a very recent issue:

'For some weeks past the fishing at Digby Neck has been brisk and extremely profitable. Haddock have seldom been so plentiful on the ground, and the competition of the several factories kept the price up to a very paying figure. As an instance of the flush times, it is mentioned that two boats, carrying two men each, made a total stock of $127 in two days.'

Some very good catches of mackerel have been made also. At Ketch Harbour, one of the shareholders of the association seined a lot of mackerel one day which he sold in Halifax at something like $4,700. Each one of the men who assisted him for the day received $491 as his share; a goodly sum for one day's work. The catch has been about the same as last year, while prices have ruled much better than in 1902.

The Halifax *Chronicle*, with regard to the present season's fishing, entitled 'Mackerel Season Over' says:—

'The arrival of the seiners *Grayling*, *Arcadia*, *Lena* and *Maud* and *S. F. Maker*, this morning, says the Gloucester *Times*, brings the mackerel season of 1903 to a close; the only vessel now to arrive being the schooner *John M. Plummer*, at Portland.

'The catch this year is practically the same as last, being 44,200 barrels of salt mackerel against 43,900 barrels in 1902.

'When the high prices are considered, the season in every way has been much better than last year. There has been practically no low price for mackerel since the season opened. The fleet out south did well, landing fine fares at New York, the amount comparing favourably with last year at that port, but showing a falling off at New Bedford and Newport.

'The season in Massachusett's Bay, and especially on George's, was not up to last year's standard. Some good hauls were made off No Man's Land and South Shoal lightship, but the bulk of the catch came from the Bay of Fundy and Maine coast. The late Cape Shore catch was practically nothing.

'The size of the fleet was about the same as last year, at a time numbering over 100 sail.

'On George's, as usual, many fish were seen, but they were even wilder than ever and the seiners could do nothing with them.

'The season ended very suddenly on the Maine coast, the fish disappearing almost like a flash toward the last of September. Since then only the small late Cape Shore fleet has been engaged in the fishery.

'All in all the season has been better than last year, yielding a few more barrels and a much better financial return.'

The season for smelts has now opened and a very profitable start has been made. This industry is carried on principally in New Brunswick and Prince Edward Island; while Nova Scotia catches a few, it does not amount to much. The following from St. John *Sun* sums up the beginning of the smelt fishing industry:—

'The great smelt fishing which has prevailed upon the Miramichi River for some two weeks has put everybody in good humour. So far the catch has been all that could be desired and goes far to recoup the fisherman for the poor successes of the past two years. Prices have ranged high, four cents a pound being paid for the fish on the ice, and while the price is good the quality of the fish is also good. In a short area upon the river from Douglastown down toward the Middle island it is estimated that fish to the value of over twenty-five thousand dollars have been taken in a few days, and as this represents the first hand value to the fishermen, some slight idea of the value can

be formed of this once despised fishery, and the difference between success and failure in the homes of our fishermen can also figured upon.

The cod fishing industry has been a poor one as far as the catch is concerned. There have been some redeeming festures, as the price of dry fish has been higher than usual. Cod livers this season have been quite a source of profit to the fishermen. I wish I could say the same about those who bought them ; but it is from the fisherman's standpoint that I am writing this. One great source of trouble this year has been the abundance of the dogfish. In some localities they have troubled the fishermen for over five months, and only left the fishing grounds last month.

The dogfish nuisance has now arrived at a very critical period. If they go on increasing as they have done the past three or four years, the fishermen will be unable to prosecute their calling along the shores. A new use has been devised for the destruction of this great pest. That is putting them up as an article of food. The United States Government has appointed Mr. Irving Angell Field, Harvard University, to study this question thoroughly, and make his report. I have no doubt it will be made very shortly. He believes that they can be used as an article of food by putting them up in cans like salmon or mackerel, and renamed, that many people would be glad to use them if put on the market at a reasonable figure. He had some cooked and served, and the following is his report :—

'Experimenting with dogfish, the scourge of fishermen and lobster catchers along the coast, he has found that the dogfish, when properly cleaned and cooked, is a very dainty edible with a fine flavour. The dogfish feeds on lobsters and crabs, frequenting clean sandy beaches, and is therefore one of the cleanest of sea fish.

'To a class at the summer institute not long ago Professor Field served a dinner of dogfish without telling what it was until all had eaten. Every one agreed that it was delicious. The fish can be fried or boiled.'

Mr. H. E. Duff, of Petit de Grat, wrote offering to send him some of them canned, and this is his reply :—

'MUSEUM OF COMPARATIVE ZOOLOGY, HARVARD UNIVERSITY,'
'CAMBRIDGE, MASS., Oct. 22, 1903.

'Mr. H. E. DUFF,
'Petit de Grat, C.B.

'DEAR SIR,—Your letter of October 12 at hand. During the past summer I have been in the service of the government investigating the destruction of food and other fishes by the fishes of little or no food value. I found the smooth dogfish or dog shark, scientifically known as *Mustelus canis*, very destructive to lobsters and crabs. I could see that the only way to reduce them was to make them of commercial value, and it was with this end in view that I experimented on making or utilizing the fish as a food and for such products as oil, glue, sand paper and fish flour.

'I found that dogfish freshly cleaned and allowed to soak for about two hours in salt water, made a very savory fish when fried. They taste very much like halibut, but not as strong. The only reason I could not see why they have not been widely used is because of their name and appearance. If they are prepared in such a way as to look nice and are given a new name, I can't see why there should not be a good market for them. At Wood's Hole I had them served under the name of "Japanese halibut." This species of dogfish is eaten in Japan, the Bermudas and in France as you have heard. In Japan and the Bermudas it is considered a great delicacy, but in France it is only eaten by the poorer population.

'I do not think that the smooth dogfish ranges as far north as Cape Breton. Cape Cod is about its southern limit. I think that it is the horned dogfish that you have, known to the scientists as *Squalus acanthias*, although I may be mistaken. However, I cannot see why the horned dogfish should not be almost as good as the smooth dogfish for a food. The smooth dogfish lives almost entirely on crabs and lobsters while the horned dogfish lives mostly on other fishes.

'The horned dogfish, as you no doubt know, are the great curse to the fishermen, destroying their nets and the fish gilled in them. For that reason they ought to be utilized in some way so that they may be a profit to the fishermen. I have made a study of the food, but did not get around to its food value. This I expect to do next summer at the U. S. Fish Commission. If you wish to take up the matter I will be glad to co-operate with you. I am very anxious to see the dogfish utilized, and know they can be if the proper persons will take hold of the matter.

'I am so pressed with college duties now that it will be some time before I can make out a report of my summer's work. As soon as that is done, it will be sent to the government at Washington for publication. The Fish Commission people will then probably try to encourage the use of dogfish as a food.

'It is very generous in you to make me the offer of a dozen cans of dogfish. I will very gladly accept them, and will use them to best advantage both to you and to myself.

'I would like to suggest that you salt some down. I tried it with the smooth dogfish, and found them just as good as codfish similarly prepared. You might be able to prepare a really so called *boneless cod.*

'I have not yet made a chemical analysis of the flesh, and so have not really felt entirely safe in proclaiming it as a food. In preparing any flesh, I would be sure and keep the liver separate.

'I am very glad that you are interested in the matter, and hope you will find it to be one of profit. I will do what I can to make it so. Yours sincerely, I. A. FIELD.'

Since then Mr. Duff sent him one dozen cans, and intends sending him one of the fish as taken out of the water.

Being at Petit de Grat some days ago. had some cooked for my breakfast. To my mind they taste more like eels than anything else that I could compare them to. I also received one can which I asked the proprietor of the hotel here in New Glasgow to serve his guests and he reports as follows:—

'Whether a rose by any other name would smell as sweet or not, I cannot tell, but masquerading under the *nom de plume* of "Japanese halibut" they were adjudged "fine". We "planked" them and consider they are well adapted for this mode of cooking. In case some one would not know to prepare them in that way, allow me to explain that we secured an oak, birch or beech plank about two inches thick and get the fish made into orders or shares, lay them on the smooth plank without greasing, as there is oil enough in the fish, and cook them in the oven, first seasoning them. The smoke and the acid from the wood combine to make a most palatable dish.

If they could be utilized as a food with a very small encouragement as a bonus, perhaps, from the government, I can see where they could be greatly diminished in a short time. The price of dry cod, as I have already mentioned, has been higher for some months than for several years. I herewith submit the following from the Halifax *Chronicle* as touching these matters:—

Owing to the continuance of bad weather since our last report, there have been very few dealings in fish on this market. The dry fish from this coast have been about all marketed for this season, and about the only ones remaining to come forward are a few small lots from the west coast of Newfoundland and those from Gaspé.

The markets abroad remain steady, with the exception, perhaps, of Porto Rico, which is somewhat easier owing to Lunenburg shippers continuing their policy of consigning their fish to that market irrespective of results. So far as can be found out, the greater part of the fish landed by the *Lunenburg* has gone into the hands of the dealers, there being not more than 25,000 quintals remaining for distribution in that county.

Late advices from northern and southern Brazil report strong markets and a good demand. The Opporto markets, which had fallen off to some extent owing to the excessive shipments, have again recovered. The latest advices from that market by way of London report a better tone to the market, the demand being good and stocks not excessive. Prices have for dry fish remained unchanged and as firm as ever.

Herring.—The first arrivals from Bay of Islands by the *Harlaw* a few days ago were sold at an advance on four dollars. There is a good demand for these fish in the west, and it looks as if prices would remain unchanged for the next receipts.

Mackerel.—There have been no sales of mackerel reported here since the last report. The American markets are easier owing to heavier receipts from Ireland and Norway.

The following tables show the amount of bonuses earned and paid to the different bait associations during the past three years.

During the season of 1900 four freezers were in operation, but in one (Port Hood Island) a test charge only was made. The total nominal capacity of the three in operation was 70 tons bait and 47 tons were frozen, or 67 per cent of the capacity was utilized. In 1901, 13 freezers were in operation, having a nominal capacity of 360 tons and 137·8 tons of bait were frozen or 38 per cent of the capacity was utilized. The tables given below show the bait freezers in use in 1900, 1901 and 1902, and the bonus earned by each.

Freezer.	Province.	Nominal capacity.	Number of tons frozen.	Bonus earned.
Season of 1900.		Tons.	Tons.	$ cts.
Ballentyne's Cove	Nova Scotia	20	14	70 00
Frog Pond	Prince Edward Island	20	25	100 00
Alberton	" "	30	10	50 00
Season of 1901.				
Frog Pond	Prince Edward Island	20	20	100 00
Alberton	" "	30	20	100 00
Souris	" "	50	2	10 00
Ballentyne's Cove	Nova Scotia	20	10·1	50 50
Bayfield	"	10	14	70 00
Port Hood Island	"	20	11·8	59 00
Gabarouse	"	40	10·3	51 50
Whitehead	"	15	10	50 00
Port Beckerton	"	20	10	50 00
Sambro	"	30	20	100 00
Port La Tour	"	30	Test charge.	
Clark's Harbour	"	25	" "	
Lower East Pubnico	"	50	9·6	48 00
Season of 1902.				
Frog Pond	Prince Edward Island	20	20·69	100 00
Alberton	" "	30	20·75	100 00
Bayfield	Nova Scotia	40	30·70	100 00
Port Beckerton	"	20	11·95	59 75
Sambro	"	50	20·69	100 00
Clark's Harbour	"	25	20·34	100 00
Lower East Pubnico	"	50	None frozen.	
Cheticamp Chapel	"	20	20·63	100 00
Eastern Harbour	"	20	19·70	98 50
Petit de Grat	"	20	20·28	100 00
North Bay	"	20	3·36	16 80
Miminegash	Prince Edward Island	15	20·38	100 00

The following are the different reports from the Bait Associations with some explanatory notes of my own in regard to each :—

Frog Pond, P. E. I.—This is the fourth year of continuous operation for this association and the secretary sent me the following report as the annual meeting has not yet been held :—

'I had some trouble to get this up last spring. The fishermen agreed to take charge and run it themselves and hand in an account of salt, ice, temperatures, bait received and issued, etc. To say the least about the matter it would have been less trouble to me and more satisfactory to all concerned if I had retained full charge of it myself. Still, I do not regret what has been done as it has taught those people a lesson. You

will observe that the dates are broken. Well, we just give you these figures as we received them at very irregular dates from them. This should not discourage all concerned. Am still encouraging this good work, for without frozen bait our cod fishing will die out. Signed, A. F. LARKIN.

Alberton, P.E.I.—This association like that of Frog Pond has also been in continuous operation for four years. The president reports as follows :—

'Suffering as we are under the disadvantages of the entire loss of our past year's operations, owing to a shortage of ice supply and inexperienced attendant, we have not recovered our lost ground, but trust that an extension of bounty to cover this season will be granted us in consideration of our past season's failures. We believe that the establishment of bait freezers is one of the greatest boons to our fishermen and is really an insurance on the season's catch of fish. One thing should be strongly impressed on their using frozen bait, and that is to provide suitable means of keeping the bait on board their boats. Those men who take care of their bait have done well this season, and ask for a greater supply for next. I would urge the department to extend assistance to all freezers for another season. Signed, T. B. WOODMAN, President.'

Miminegash, P.E.I.—This is the second successful year that this association has had and it has proved a real benefit to the fishermen. The president says 'that our fishermen took more advantage of the frozen bait the past season than the previous one. The bait has proved to be quite a boon to the fishermen who have used it, and I believe that next season it will be more generally used. It never failed to get good catches of codfish.'

North Rustico, P.E.I.—This association was formed about one year ago, and the building was ready for them to put in a good supply of ice. The secretary states that we have had good results from the bait freezer here. 'The ice house was completed in time to store a good supply of ice for the spring. When we completed the freezer about April 20, the herring struck very plentifully and we froze all the cold storage rooms would conveniently hold, which was about 18 tons. We received one and one half tons of mackerel and about two tons of smelts; in all twenty one and one half tons. Our fishermen here claim that frozen herring from the freezer are equal to new fish bait and all admit that it is going to be a great boon to the fishermen here. One fisherman took 62 lbs. of frozen bait and caught $13 worth of fish. Another took 32 lbs. of bait and caught $9 worth of fish. In both cases, had there been no frozen bait they would not have been able to get any fish, as there was not any fresh bait to be had. There have been a good many hundreds of dollars more fish caught here this year than would have been had there been no freezer here. Signed, SIMON PINEAU.'

Souris, P.E.I.—This freezer has been built now for three years; is a large 50 ton one, but it has never had a fair trial. It wants some one to run it. If a good man would take hold of it, I should be pleased to see it get a fair trial. The secretary reports as follows :—

'The refrigerator built at this place was let to Messrs. Sterns Bros. for one year for merely a nominal sum. They used the building for storing ice, no curing of fish being done therein. *Re* fishing here this season; the run of herring in the spring was small, and I doubt if there were enough procured to run the refrigerator successfully. Then after, July, the dogfish interfered greatly with the cod and hake fisheries. Dogfish seem to be the bane of the fishermen.'

Ballentyne's Cove, N.S.—This is the pioneer of the freezers, but it had to be idle the whole of one year on account of no ice forming there of sufficient quantity to get up a supply. The secretary reports as follows :—

'We had quite a quantity of herring frozen this year and they came out of the freezer in fine shape. The fishermen say they are just as good as fresh bait when fish are plentiful. We used every pound frozen and could have used considerable more, in fact, we could have used double the quantity only for the dogfish, which have got so numerous here that the fishermen had to stop fishing three or four months earlier than usual. We think our freezer a good thing, for before we had one, we lost the best of

the fishing season for the want of bait. Unless there is something done to kill off those dogfish, freezer, fishermen and everything else will go down. Hoping to hear a favorable report from the other associations, I remain, sir, yours very truly, Seward MacPhee.'

Bayfield, N.S.—This freezer has been under good management and has had three very successful years; the past one the best of the lot; and the following report from the secretary which speaks for itself:—

'In looking over the past season with regard to our freezer, I have to say that this has been the most satisfactory season we have had since it was built. Herring were very scarce here in the spring but we procured them in Harbor Bouché where they were in abundance and we froze all we could handle. Besides what our boat fishermen used we sold some seventy barrels to bankers who were here looking for bait, and had they not been able to procure the frozen bait, would have lost three or four weeks fishing for want of bait as there was no fresh bait to be had at that time. The fishermen now see that the freezer is a necessity. Yours truly, CHARLES E. GASS.'

Port Hood Island, C.B.—This freezer has been in operation for three years with only a fair measure of success. The president reports as follows:—

'In looking over the past year as regards the fishing and frozen bait, I beg to say that fishing has not been up to the average. There were some herring in April and May, but not enough to supply lobster fishing. There were none to put into the freezer. There was a small catch of spring codfish owing a good deal to the lobster traps being on the same grounds where we fish for codfish. We also had a small catch of hake in June and July. The bait used then was large fresh mackerel which were caught in nets, they being too costly to put in freezer. The hake fishing was not more than a half catch, being mostly of a small size, squid made their appearance in July and August, but not enough to supply the fishermen at the time. We put very few into the freezer; in fact, we could not get them to put in. There were no fish traps at Port Hood this year, and what squid landed on the shore did not amount to anything. The month of September there were some herring caught, but the price by the fishermen was $5 per barrel. It would not pay to put them in the freezer. The dogfish came on with the herring and for two and a half months, September, October, and November nothing was done in fishing of any kind, The latter part of November there were some squid, but not many taken. A few came on s' ore two or three nights but nothing to speak of. We put in all we could get, but we imported squid from Mulgrave. Fishing is very good now, but the weather is very bad. October and November were very blustery months, also the first part of December. Average catch from each boat is from 1,000 lbs. to 2,000 lbs., when they got a chance out. Yours, JOSHUA SMITH.'

Cheticamp Chapel, C.B.—They failed to put in any ice during last winter and consequently did not run their freezer. The following report from Rev. P. Fiset, who is president of the association, speaks for itself:—

'The summer of 1903 has been poor for the fishermen owing to the storms and dogfish troubles. The association did not put any bait in this year. This part of the county wishes for an encouragement to destroy the heavy and ruinous school of dogfish along our coasts.'

Eastern Harbour, C.B.—This association did not put up a supply of ice. The president submits the following report:—

'Following is a brief report of the fishing industry of this locality for the year 1903. The staple fishes, cod, hake and haddock, have been found in great variety at different times throughout the season, the latter part of the season producing the best of each kind. A few herring were caught in the spring in nets around the shore, but the greater part landed here and used for bait purposes was got from around the Magdalen islands. Several crafts secured good cargoes of it in the beginning of May. The quality was very good. The lobster catch was considered a fair one. The trappers were again handicapped this year owing to the usual northeasterly gales which greatly damaged their gear and retarded their progress. Although mackerel has touched the shore in great abundance, the general catch has been small. It was very

much regretted that the fishermen had failed to secure any ice for the freezer, having waited too long. It is quite evident that the lack of frozen bait whenever fresh could not be secured, was one great hindrance to the fishermen. That day was lost, when it could have been made profitable with a liberal supply of bait from the freezer.

'The tempestuous weather together with the ravenous dogfish have stood as a second obstacle to successful fishing. I am your obedient servant, A. C. AUCOIN.'

Ingonish, C.B.—This association got up a good supply of ice, but failed to utilize it. The president submits the following report:—

'In regard to our cold storage I must say that we were greatly disappointed owing to the fishermen not putting in any bait after we had stocked the freezer with ice. They failed to make any use of it.

'At the opening of the fishing season I had a meeting of the directors called and we decided to have a second meeting of shareholders to have the cold storage opened up for the season as there were lots of herring on the coast and a good chance of stocking the freezer with them. I gave notice of a meeting of the association and there was only one of the fishermen put in an appearance at the meeting as they did not want to put in any bait, thinking that their nets would supply them with bait for the season, and the result was that they were days and days ashore from want of bait, and at a loss of hundreds of dollars worth of fish owing to not having put bait in the freezer. I remain yours very sincerely, ANGUS MACDOUGALL.'

North Sydney, C.B.—This association was formed last winter and some ice secured. Being the first year there were some things they had to learn, but I believe it will yet prove a success. During last autumn the freezer was moved to Ingonish Ferry, where it has been enlarged and a new ice house built. The secretary reports as follows:

'As the North Sydney freezer was not finished until May, we were late for the spring herring, and only secured about 30 barrels, which were used up within a few days. There was no bait of any kind to be had until November, then we put in about 10 barrels of squid, and some herring which we imported from Newfoundland. We have been getting herring from Bay of Islands since November 10; about 75 barrels so far. The weather has been so cold they kept without freezing. We simply store them in ice in storage room. From May until August we stored a lot of cod, salmon and mackerel. There was no bait to be got anywhere. The freezer is all right if bait can be got to freeze. Yours truly, GEORGE H. HACKETT.'

Sambro, N.S.—This association has not been able to secure any squid at all, therefore are very much handicapped. The secretary sent the following report:—

'Enclosed please find report from our freezer. We have been unable to do anything this year. Have been very anxious to put in bait to use. We stored ice last winter but could not get any bait to freeze. We find our ice house does not keep the ice well; we have lost considerable by waste. We hope the department will see their way clear to continue the bounty for freezing bait. The fishermen now realize the convenience of having bait, but it is so expensive to get and freeze that the premium offered is quite an assistance. We made fair catches of fish, principally cod and haddock. Bait scarce. Dogfish very plentiful for a long time. They have now taken their departure. Hoping you will use your influence to have a continuance of the bounty. Yours truly, C. W. HART.'

Sandy Cove, N.S.—This association got their difficulties all arranged about twelve months ago and filled up a good supply of ice, having a good measure of success. The secretary sent the following very favourable report:—

'In accordance with the regulations governing fishermen's bait associations, I beg to submit the following report:—Our freezer was completed July 1901, but owing to financial difficulties, caused in a great measure by the reluctance of fishermen to interest themselves in the association, not any bait was frozen during the summer of 1902. About January 10, 1903, the difficulties arising from lack of funds having been satisfactorily arranged, we began storing ice, and put in about 200 tons. Our first attempt at freezing was on April 20, when we froze 11,200 lbs. gaspereaux. Again on April 9

we froze 5,600 lbs. gaspereaux. On May 8, we froze 11,200 lbs. gaspereaux. On August 10 we froze ten tons squid.

'We have our freezer full of herring at the present time.

'All these fish came out of the freezer in splendid condition, and those who used them expressed themselves pleased that they could obtain a supply of frozen bait which was very little inferior to the fresh. I regret to state that owing to the prevalence of dogfish in the Bay of Fundy during a great part of the fishing season, the catch this year was small and consequently the demand for bait much less than usual.

'The fishermen here, many of whom have been doubtful as to the value of frozen bait, are beginning to express their appreciation of the freezer which supplies them with good bait at times when, owing to the scarcity of fish bait, they would have to suffer great loss. Yours very truly, AMASSA N. ELDRIDGE.'

Lower East Pubnico, N.S.—This association has had very bad luck. I herewith quote you a portion of last year's report as it sums up the situation fairly well :—

'There was a defect in the construction of this freezer. Some of the ordinary tarred felt having been used in the freezing chambers and one of the storage rooms, instead of the regular P. and B. insulating paper. The board of directors think the government should put it in good shape, as the tar felt contaminated the first fish stored in the freezer, and also the bait fish, and that the fishermen imagine they cannot use it as the fish don't like it. The matter stands in abeyance at the present time; when an examination will be made and the matter amically settled.'

I am pleased to say that everything has been put into good shape during the past summer, and I trust we will have good results another year. The president sent me the following report :—

'As you are already aware there was nothing done this year at all, as the freezer was only made ready to receive bait this summer. As you also know, we started out well the first year, got our ice in and mackerel were the first fish put in and some taken out to look at and cooked for food, and they could not be eaten on account of tar odour which was put in at the freezing and storage room ; then there was some meat put in which had to be thrown away ; we then put in some herring and squid and sold it to the fishermen. They could or did not get any fish on the bait. We should like to have got a report from the fish themselves to know if the bait tasted tar or not. We reported to Mr. Fraser that the freezer was not in order to save bait. Put up ice the second year, but it was not fixed that year, so we lost the ice. You asked us to put in ice next year and promised that the freezer would be fixed ; but the directors said that probably they would not fix it, and so the company was a lot out. It would not be advisable to put in ice ; the shareholders would not pay for it, so we did not put up ice last year ; consequently no ice this year to put up bait. It has cost me $350 to put up ice, and the shareholders will not pay me, as they say the government was to put the freezer up right. We knew nothing about freezers and had to depend on what the foreman said, who was sent by the government. There are a number of shares subscribed and not taken for the same reason. Had the work been done properly at first, I think everything would have gone on well, and the government officials are to blame for it ; but so far they only bear the blame and I am out the money. All the bills are paid. I have paid them and am out about $500. We have not said much to the shareholders about it. We expect to hold a general meeting of shareholders in January, and I think we should have a substantial bonus from the government before then, so I could tell them the bills are all paid, otherwise I will have to tell them the facts of the case and will have to try to collect from them, which will mean that a number of the people will have a grievance against the government. This is about the only report I can make this year, and you know it is a fact yourself and I am not enlarging any part of it. Hoping soon things may be done to smooth matters over. I would like to see it filled with ice this winter and try to make a success with it. No doubt, whatever is done, I shall have to do it on my own responsibility as the shareholders are discouraged. They went into it with confidence, but the tar blasted their hopes and it is hard to work them up again. Yours respectfully, H. T. D'ENTREMONT, *President.*'

Port La Tour, N.S. :—This association made some costly mistakes in its early stages. After quite a number had taken shares in it to help the fishermen, they turned them all out and would not allow them to remain in it. Many of the fishermen themselves would not take any shares in it, and the consequences are they were heavily in debt to begin with, and some misfortunes since then have obliged the association to go into liquidation, and it was sold to pay the debts in October last. The late secretary writes me as follows :—

'As you already know, the freezer at this place has been sold to H. D. Smith, of Smithville, and I have had nothing to do with it for some months past. I have received a request from you to give a short monthly report and have done so. There have been no fish of any kind received, frozen or delivered by the association this year, 1903. Please remember that I have nothing whatever to do with the association other than a shareholder.'

Clark's Harbor, N.S.—This association has always had a great difficulty in getting up the ice supply. The locality seems to have less winter than any other section of Nova Scotia ; and generally any ice they store must be hauled on wheels, which makes it very expensive. I herewith submit the report from the secretary :—

"The season for storing ice was very unsatisfactory, and we only secured about 50 tons ; a part of which was of very poor quality. As soon as bait could be secured we obtained all that was available. The fishermen used it until they were able to take bait in nets, which was earlier than usual. A small quantity was left over, and as our supply of ice gave out we had to throw the balance away. The directors have not held a meeting to consider or determine on selling building, but from conversations, I have had with them they give it as their opinion that it is the only course to persue."

Westport, Digby Co., N.S.—This is one of our associations which has done well for the first year. Westport is one of the sections where the fishing industry is pushed for all it is worth, and a good supply of fish is a great boon to that vicinity. The fishermen are up to date with their methods, and some are making and saving a little money out of it. The following from that association :—

'When our building was ready this spring, we put in about three tons herring and gasperaux, and when squid came we put in about nine thousand six hundred pounds. At the start we had to contend with a good deal of opposition. So many who did not have any faith in cold storage for bait. However, after a start was made, we have proved it a great success. We might have had a great many more squid if it had not been for this, for the building had been ready some time before we could persuade any one to try it. Had the building been filled with squid it would have meant thousands of dollars to the fishermen, as it is, what are in now are being taken out every fine day, and by the last of the year will be about used up. We are perfectly satisfied as to the value of cold storage for bait and we are in hopes to fill in with herring yet this year. The fishermen say now it would have paid them when squid were plentiful to have stopped fishing long enough to have filled in their shares. Weather has been favorable so far for fishing. Haddock has been the principal fish caught—quite plentiful—dogfish scarce. Frozen squid chiefly used for bait.'

Petit de Grat, C.B.—This association has been hampered somewhat for the want of bait. The supply put up by the association, and it was all they could secure, is about exhausted, and now they are down to frozen herring. Whether they will prove as successful as squid will be put to the test very soon. Dogfish bothered the fishermen very much. They have a direct steamer now to convey the fish and smoked finnan haddies to market. The fishermen make the most of their money in the haddock fishery during the months of November, December and January.

Whitehead, N.S.—This association leased their freezer to Mr. W. S. Harris, who filled it up with ice and has run it very successfully. They have been hampered by want of bait. They have had direct communication between Canso and Halifax by the new steamer *Strathcona.*

Port Beckerton, N.S.—This association also leased their freezer for one year on trial. The operator, Mr. H. S. Kaiser, has run it very successfully, finding a good market for all the fresh fish he could handle. The steamer *Strathcona* calls at this place also and they find it a great benefit as they were badly situated as to proper facilities for shipping previous to its arrival. Everything has gone on smoothly here.

Gabarus, C.B.—This association like some of the others will have to go into liquidation. Financial troubles and other failures have been the lot of this association. One of the very best localities for freezing squid that I know. At Gabarus bay the squid always make their first appearance early in the year, weeks before any one else has reported them. It is to be hoped that an early settlement will be made so that they can go on and do business.

Shediac, N.B.—This freezer was completed last year when making out my annual report. The board of directors gave a contract to fill the ice house with 200 ton of ice for $90. The freezer worked admirably. The following report from the secretary gives you a complete summary of the season's operations :—

'*Re* the completion of our cold storage building last spring. We had some eight to ten tons of spring herring frozen and placed in the storage room. We disposed of a small quantity of the frozen fish to the lobster fishermen during the month of July with I believe with satisfactory results, but owing to the broken season of fishing, the operators had sufficient of salt bait for their requirements, and the demand for frozen bait was not what we anticipated. We have just now sold out all at a good fair figure. The herring seem to have kept very well in the dead rooms. While we have been on the lookout for squid we have been unable to procure any and understand there was no run along our coast this season. We are at present using the cold storage for smelts and have proved that the dead rooms when charged will sufficiently freeze these fish and keep them, in perfect condition, for some time. We expect to handle ten tons of these fish or more through our building, and I can assure you in such weather as we are having at the present time, the cold storage is a great help to the fishermen, as the shipping of unfrozen fish to the American market in soft weather is a losing business. I may say the ice house portion of the building is most satisfactory. We used fresh water ice the past season, but think of putting in salt water ice this winter. Yours sincerely,

E. A. SMITH.'

Bonaventure River, Que.—The first start was made in this province this year. On March 18, a meeting was held and stock subscribed over $300 at the first meeting. The following day they started to store some ice and about 150 tons were put into another building, and when the freezing was completed, the ice was transferred and the freezer utilized the past summer with good success. The secretary reports as follows :—

'We have had bad weather for the most of the time this season. Fish plentiful : mostly cod, but no bait. We have frozen 130 barrels of herring and smelts for the season, and caught about an average of four quintals to a barrel of frozen bait. The fishermen are satisfied for this present season and expect to have greater satisfaction in the future.'

Several meetings were held in this and Gaspé county to explain the scheme to the fishermen, and at several points very good and large meetings were held.

Reviewing the past season's business, I can only say what has been repeatedly said before ; when the fish were good and properly frozen the freezers have done their part of it. The greatest drawbacks seem to be debts and bad management. These are the great incubus to the successful management of these freezers. When one or two have assisted themselves and run them as they should be run everything marches along like marriage bells. The freezers are an actual necessity at times and have given the best of satisfaction when run and managed properly. Perhaps the government could change the regulations somewhat and allow some live man in each locality to take hold of the management, and I feel satisfied that a very much better system would prevail than at present. This view is the same as taken by Mr. Chas. Way of Newfoundland who was sent by his province to look the matter over and report. I understand that an arrange-

ment has taken place whereby a large commercial freezer will be built at Canso by the Messrs. Whitman & Son and operated by them to supply the bankers and any others that may require it. This is certainly a good move and will fill a long felt want, as there has been in the past a great loss of time waiting for bait by many of the fishermen. Should the dogfish problem be solved and a good supply of bait kept on hand our fishermen should then reap a rich harvest. What an immense amount of wealth these people in the maritime provinces have at their very doors ; a veritable Klondike, without many of them being able to grasp the very thought of it.

Out of the 24 freezers completed, five of them did not put up any ice, leaving 19 in operation. Of this number, 12 had first class results, viz., Miminegash, North Rustico, Petit de Grat, North Sydney, Ballentyne's Cove, Bayfield, Whitehead, Port Beckerton, Sandy Cove, Westport, Shediac and Bonaventure River. Of the other seven fair results were obtained in four ; these were Frog Pond, Alberton, Port Hood Island and Clark's Harbor. In three places, viz., Souris, Ingonish and Sambro, the first was leased to a firm ; the last two put up ice. Ingonish failed to utilize it and the latter had no opportunity to do so.

I have the honour to be, sir,
Your obedient servant,

PETER MACFARLANE.

APPENDIX No. 13.

REPORT ON THE FISHERIES PROTECTION SERVICE OF CANADA

FOR THE SEASON OF 1903,

BY COMMANDER O. G. V. SPAIN.

OTTAWA, December 31, 1903.

To the Honourable
The Minister of Marine and Fisheries.

SIR,—I have the honour to report on the work of the Fisheries Protection and Fisheries Intelligence Bureau services, under my charge for the past season, as follows:—

The vessels under my command comprising the protection fleet were:—

La Canadienne, Commander W. Wakeham;
Curlew, Capt. J. H. Pratt;
Osprey, Capt. C. T. Knowlton;
Kingfisher, Capt. W. H. Kent;
Lady Laurier, Capt. Johnson;
Constance, Capt. G. M. May;
Petrel, Capt. E. Dunn;
Kestrel, Capt. H. Newcomb.

In addition to the above vessels, four steam patrol launches were used in the protection of our coastal waters. These patrol boats were manned and directed by the crews of the *Curlew*, *Kingfisher* and *Osprey*. One of them, the *Brant*, was specially engaged around the P. E. Island coast at the disposal of the Marine and Fisheries officers at Charlottetown. The other patrols rendered valuable services to the larger cruisers in the Bay of Fundy and elsewhere, often surprising poachers where bigger vessels would have attracted notice.

La Canadienne works independently of the rest of the fleet, looking after the fisheries interest in the Gulf and on Labrador coast, where she constantly patrolled during the whole season. Dr. Wakeham, of Gaspé Basin is in command of this cruiser and in charge of the Gulf division.

Curlew.—The principal patrol of this cruiser is Bay of Fundy but recently there was so much to attend to that she was ordered to cruise as far east as Cape Breton where she did excellent work remaining in commission until Christmas eve. The fishing season must have been a servere one on the banks as no less than thirty fishermen are reported drowned from Lunenburg county alone.

Osprey and *Kingfisher*.—These sailing cruisers were again patrolling between the Cape Breton coast and Prince Edward Island waters with headquarters at Canso and Souris. Although these cruisers are not so fast as steamers they are still considered good sailors and render useful services to the fisheries interests.

The *Constance*, though managed by this department, is entirely under the control of the Customs Department and their officers, especially Inspector F. Jones.

Petrel.—This steamer was again busily engaged cruising the waters of Lake Erie. Judging from the thousand nets and the three fishing tugs reported seized by her captain, it is evident that all the poachers have not gone out of business in those contiguous waters. Capt. Dunn's report is herewith appended. It is hoped a more rapid cruiser will replace the *Petrel* in this important district.

Kestrel.—This new cruiser was ready in June to attend to the fisheries protection work in the waters of British Columbia to replace the temporary assistance formerly rendered by the *Quadra*. Her commander is Capt. H. Newcomb. He devoted all his time to protection work and has rendered efficient services to this department.

LIST of United States Fishing Vessels to which Licenses were issued, under the Act intituled 'An Act respecting Fishing Vessels of the United States of America,' during the year 1903.

Name of Vessel.	Port of Registry.	Tons.	Port of Issue.	Fee.
				$ cts.
Nereid	Gloucester, Mass	69	Pubnico, N.S.	103 50
Nannie C. Bohlin	"	96	Halifax "	144 00
Horace B. Parker	"	62	Pubnico "	93 00
S. P. Willard	"	87	" "	130 50
Elector	"	84	" "	126 00
Essex	"	84	" "	126 00
Harry A. Nickerson	Boothbay, Me	83	Yarmouth "	124 50
John L. Nicholson	Gloucester, Mass	92	" "	138 00
Blue Jacket	"	86	" "	129 00
E. M. Morrissey	"	83	Pubnico "	124 50
Mable D. Hines	Salem, Mass	92	" "	138 00
Valkyria	Gloucester, Mass	104	" "	156 00
Columbia	"	89	" "	153 50
Parthia	"	77	Tusket Wedge, N.S.	115 50
Lucinda I. Lowell	"	77	Canso, N.S.	115 50
Independence	"	102	Liverpool, N.S	153 00
Hiram Lowell	"	95	Yarmouth "	142 50
Emma E. Wetherell	"	81	" "	121 50
L. A. Munroe	"	84	Pubnico "	126 00
Argo	"	79	Yarmouth "	118 50
Helen F. Whitten	"	92	" "	138 00
Maggie and May	"	88	" "	132 00
Arbutus	"	86	Liverpool "	129 00
Fernwood	"	96	Yarmouth "	144 00
W. H. Moody	"	48	" "	72 00
Norma	"	77	Shelburne "	115 50
J. J. Flaherty	"	124	Tusket Wedge, N.S.	186 00
Georgie Campbell	"	78	" "	117 00
Dora A. Lawson	"	93	Tusket, N.S.	139 50
Shenandoah	"	77	" "	115 50
Scythia	"	100	" "	150 00
Henry M. Stanley	"	83	" "	124 50
Wm. E. Morrissey	"	93	" "	139 50
Alice R. Lawson	"	85	" "	127 50
Margaret	Beverly, Mass	107	" "	160 50
Tattler	Gloucester, Mass	135	Shelburne "	202 50
Maxine Elliott	"	75	" "	112 50
Loring B. Haskell	Boston, Mass	67	Digby "	100 50
Masconomo	Gloucester, Mass	67	Lockeport "	100 50
Carrie W. Babson	"	62	Liverpool "	93 00
Samuel R. Crane	Salem, Mass	52	Thornes Cove, N.S.	78 00
Edith McIntyre	Booth Bay, Me	96	Shelburne, N.S.	144 00
Carried forward				

LIST of United States Fishing Vessels to which Licenses were issued—*Concluded.*

Name of Vessel.	Port of Registry.	Tons.	Port of Issue.	Fee.
				$ cts.
Brought forward.....	.....	.....	.....	.....
Hazel Oneita.....	Gloucester, Mass....	73	North Sydney, N.S	109 50
Olga.....	"	77	Canso, N.S.....	115 50
Madonna	"	79	Tufket Wedge, N.S.....	118 50
Hattie A. Heckman.....	"	72	Canso, N.S.....	108 00
M. B. Stetson.....	Bucksport, Me.....	94	St. Peters, N.S	141 00
Bertha D. Nickerson.....	Booth Bay, "	89	Liverpool "	133 50
Orpheus.....	Gloucester, Mass....	73	Tusket Wedge, N.S.....	109 50
Anna L. Sanborn	Beverly "	17	Yarmouth " ...	25 50
Frank G. Rich.	Booth Bay Har. Me.	72	St. Peters "	108 00
Sceptre.....	Gloucester, Mass....	91	Lockeport "	136 50
Emma and Helen	"	62	Yarmouth "	93 00
Nellie T. Gaskill.....	Cutler, Me.....	14	North Head, N.B.....	21 00
F. W. Homans	Gloucester, Mass...	44	Port Mulgrave, N.S....	66 00
Margaret	"	79	Shelburne "	118 50
Lizzie Maud.....	Vinal Haven, Me...	48	" "	72 00
Fannie W. Freeman	Provincetown, Mass.	64	St. Peters "	96 00
Marjie Turner	Booth Bay Har. Me.	44	Shelburne "	66 00
Agnes.....	Gloucester, Mass....	75	" "	112 50
S. L. Foster.....	Cranberry Isles, Me.	30	Lockeport "	45 00
J. M. Nicholson.....	Bucksport, Me.....	90	Liverpool "	135 00
Bohemia	Gloucester. Mass....	86	Tusket "	129 00
Lizzie M. Stanley.....	Gloucester, Mass ...	92	Canso N.S	138 00
Elizabeth N.	Bucksport, Me	102	St. Peters " ...	153 00
Robin Hood.....	Gloucester, Mass ...	65	Barrington "	97 50
Bertha May	Vinal Haven, Me...	47	Pubnico "	70 50
H. W. Longfellow	Gloucester, Mass....	48	" "	72 00
* Alice M. Jacobs (S.S.).....	"	88	Port Mulgrave "	132 00
Quickstep	Boston, Mass... ...	75	Digby "	112 50
Niagara.....	Gloucester, Mass....	78	Canso "	117 00
Gossip	"	91	Yarmouth "	136 50
Levanter.....	Vinal Haven, Me...	27	" " ...	40 50
Arabia.....	Gloucester, Mass....	86	Tusket "	129 00
Irene and May	Boston, Mass. ...	62	Canso "	93 00
† Eglantine.....	Gloucester, Mass...	67	Amherst, M.I., Que.....	100 90
Squanto	Duxbury "	95	Canso N.S ...	142 50
Preceptor.....	Gloucester "	89	Arichat "	133 50
Freddie W. Alton.....	Provincetown "	67	St. Peters " ...	100 50
Slade Gorton.....	Gloucester "	88	North Sydney " ...	132 00
Marguerite.....	" "	81	Liverpool "	121 50
Vigilant.....	" "	87	" "	130 50
Margaret Leonard	Cranberry Isles, Me.	20	Lockeport "	30 00
New England.....	Gloucester, Mass....	59	Canso " ...	88 50
Vanguard.....	Cranberry Isles, Me.	25	Lockeport " ...	37 50
Caroline Vaught.....	Vinal Haven, Me...	48	Pubnico " ...	72 00
Rena.....	Boston, Mass. ...	37	Port Hawkesbury "	55 50
Maud M. Storey.....	Gloucester, Mass ...	53	Liverpool " ...	79 50
Edward A. Rich.....	"	58	Yarmouth "	87 00
Wm. H. Ryder	"	45	" " ...	67 50
Ralph Russel	"	48	Pubnico " ...	72 00
Mildred V. Nunan.....	Kennebunk.....	43	Shelburne "	64 50
Manhassett	Duxbury, Mass.....	79	Yarmouth "	118 50
		6,910		$ 10,365 40

* Licensed cancelled, fee refunded. † Proceeds of Sight Draft, $101. Fee, $100.50.

93 Vessels. 6,910 Tons.
$10,365.40 Fees collected.

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LIST of French Fishing Boats which entered the Port of Sydney, Nova Scotia, during the Season of 1903.

Date.	Name of Vessel.	Port of Registry.	Master's Name.	Tonnage.	Men.	——
1903.						
April 29..	Anne May	St. Pierre	Lancelot	30	16	Seeking Bait.
" 29..	Augusta Maria	"	Brenen	41	16	"
May 4..	Admiral Garvaux	St. Malo	Descouse	192	34	"
" 4..	Albert Roberts	St. Pierre	Josephus	41	18	"
" 4..	Alsacian	"	Gecollos	36	16	"
" 9..	Adele	"	Covenant	40	14	"
" 18..	Adele & Rose	"	Poirier	12	6	"
July 20..	"	"	"	12	6	"
June 16..	"	"	"	12	6	"
July 25..	"	"	"	12	6	"
Oct. 12..	"	"	"	12	6	"
April 25..	Blanche	"	Gallian	55	21	"
" 25..	Batavia	"	Vemouse	59	22	"
May 11..	Bratigan	"	Billard	148	31	"
" 16..	Blanche	"	Gallian	55	21	"
Aug. 3..	Breeze	"	Jasaman	25	10	"
May 4..	Charmeuse	"	Charley	149	36	"
Oct. 12..	Catherine	"	Dolomin	21	11	"
May 4..	Count Barroton	Nantes	Fallard	192	30	"
" 4..	Dictator	"	Laptist	40	16	"
April 24..	Emeline	St. Pierre	Constantin	57	23	"
" 24 ..	Eshendelam	"	Marchant	45	16	"
" 24..	Emelia	"	Moulton	57	19	"
Aug. 17..	Emily	"	Radman	57	18	"
May 9..	Florida	"	Cluett	34	12	"
April 17..	Granada	"	Maillard	32	17	"
May 7..	Georges	"	Ameaux	54	16	"
" 16..	George & Paul	"	Poirier	39	18	"
July 20..	"	"	Refman	39	18	"
Aug. 4..	"	"	Poirier	39	18	"
" 25..	"	"	Refman	39	18	"
Sept. 2..	"	"	"	39	18	"
May 4..	Galatia	Granville	Major	61	21	"
" 4..	Gerten Prosper	St. Pierre	Oliem	35	16	"
July 28..	Gesendon	"	Maillard	32	17	"
" 31..	Joseph Maria	"	Hosman	26	12	"
April 27..	Java	St. Servan	Bautim	64	21	"
May 4..	J. L. C	St. Pierre	Cavelier	58	16	"
" 4..	Jennett	"	Hanest	33	16	"
" 11..	Joseph Rosalia	Granville	Bersen	82	25	"
" 11..	Java	St. Servan	Boutellier	64	21	"
April 22..	La Seine	St. Pierre	Cauder	45	21	"
" 27..	L. D'Avagnan	St. Malo	Morgnac	104	24	"
" 29..	Lanladian	St. Pierre	Payer	34	15	"
" 29..	Lorraine	"	Moslen	44	19	"
May 4..	La Ban	"	Roberts	38	16	"
" 13..	Latour D'Ajan	Granville	Boudrot	36	21	"
Sept. 19	Leander	St. Pierre	Binsh	50	10	"
April 20..	Maria	"	St. Pierre	53	19	"
" 28..	Maria Antoinette	"	Cost	47	19	"
May 4..	Manalia	St. Malo	Fenecy	54	21	"
" 4..	Margot	St. Pierre	Reffeny	31	16	"
" 16..	Maurice	"	Lefette	39	16	"
" 20..	"	"	"	39	16	"
Aug. 12..	Maria	Bayou	Thuson	53	14	"
July 25..	Maurice	St. Pierre	Lefettc	39	16	"
May 11..	Normand	"	Lafleur	59	21	"
July 25..	Orfounder	"	Refuma	15	10	"
May 4..	Parisian	"	Peckman	45	18	"
" 7..	Progress	"	Luckmau	22	13	"
" 7..	P. F. 22	"	Bausen	31	14	"
" 14..	Parisian	"	Magner	72	19	"
" 20..	Pucson	"	Gaulton	53	21	"
April 21..	Rose L	"	Briand	44	18	"
" 27..	Romeo	"	Poirier	36	21	"
May 9..	"	"	"	36	21	"

LIST of French Fishing Boats which entered the Port of Sydney, Nova Scotia, during the Season of 1903—*Concluded.*

Date.	Name of Vessel.	Port of Registry.	Master's Name.	Tonnage.	Men.	——
1903.						
July 23..	Romeo	St. Pierre	Poirier	36	21	Seeking Bait
Aug. 1..	"	"	"	36	21	"
Sept. 28..	"	"	"	36	21	"
May 4..	St. Ann	"	Grandy	47	18	"
" 4..	Seonene	Bordeaux	Porcelin	119	25	"
" 4..	Gasemete	St. Pierre	Bossell	46	19	"

LIST of United States Fishing Vessels which have entered Canadian Ports for the year ending October 31, 1903; showing net tonnage, crew and the number of times each Vessel entered the several Ports.

Number.	Name of Vessel.	Net Tonnage.	Number of Men.	Arichat.	Barrington.	Canso.	Georgetown, P.E.I.	Halifax.	Liscombe.	Liverpool.	Lockeport.	Louisburg.	Lunenburg.	North Sydney.	Hawkesbury.	Port Hood.	Port Mulgrave.	Shelburne.	Souris, P.E.I.	Whitehead.	Yarmouth.	Total Entries.
1	A. E. Whyland	96	19									1										1
2	A. T. Gifford	58	14															1				1
3	Ada S. Babson	99	18																	1		1
4	Admiral Dewey	78	18			1		3										1				5
5	Agnes	75	18															1				1
6	Alcina	53	18															3				3
7	Alice M. Jacobs	88	24			3		1		1		1		1			1	2		2		12
8	Alice R. Lawson	86	18					1				2		1							4	8
9	Aloha	100	24			1				1												2
10	Anglo-Saxon	72	18							1												1
11	Anna L. Sanborn	33	8																		6	6
12	Annie Greenlow	68	18			1		2		1								4		2		10
13	Annie M. Parker	100	19			1		2		1				2								6
14	Appomatoxy	47	16															3				3
15	Arabia	86	18			1								3							1	5
16	Arbitrator	72	18					1	1						1							3
17	Arbutus	86	18							4		1										5
18	Arcadia	90	20			2						1		2				1				6
19	Argo	80	19			1		1				2		2			1				2	9
20	Arkona	97	21							1		1									1	3
21	Arthur Binney	118	16	1														1				2
22	Arthur D. Story	75	16															1				1
23	Arthur S. Woodbury	155	18									1										1
24	Atlanta	74	18									1										1
25	Belle Franklin	52	13															1			4	5
26	Benjamin F. Phillips	102	20															1				1
27	Bertha D. Nickerson	89	21					2		1												3
28	Bertha May	47	15																		5	5
29	Bertha and Pearl	77	18							1				1						2		4

SESSIONAL PAPER No. 29

LIST of United States Fishing Vessels which have entered Canadian Ports for the year ending October 31, 1903, &c.—*Continued.*

Number.	Name of Vessel.	Net Tonnage.	Number of Men.	Arichat.	Barrington.	Canso.	Georgetown, P.E.I.	Halifax.	Liscombe.	Liverpool.	Lockeport.	Louisburg.	Lunenburg.	North Sydney.	Port Hawkesbury.	Port Hood.	Port Mulgrave.	Shelburne.	Souris, P. E. I.	Whitehead.	Yarmouth.	Total Entries.
30	Bessie M. Devine	91	18			1		1	1			2								1		6
31	Blanche	78	18															3				3
32	Blue Jacket	86	18		1			1				2		2							2	8
33	Bohemia	86	18			1						1		1							2	5
34	Boyd and Leeds	37	16		1																	1
35	Braganza	67	18			1		1			1			1				2		1		7
36	Canopus	73	18							1											1	2
37	Carleton Belle	104	22									5						3				8
38	Caroline Vought	48	19		1					3								1			1	6
39	Carrie C	71	13															1				1
40	Carrie M. Babson	62	19					1		3		1		2								7
41	Cavarie	59	15																	1		1
42	Cecil H. Low	75	16							1								2				3
43	Clandia	79	18			1				1	18	1						2			2	25
44	Clara A. Morton	20	2																		1	1
45	Colonial	79	18							2							1	6				9
46	Columbia	89	18			3		1						1							2	7
47	Conductor	50	15	1																		1
48	Constellation	89	19			1		2						2						1		6
49	Corsair	78	19					1				2		2	1					3		9
50	Cosmos	47	10							2								1				3
51	Dauntless	77	17					1		1		3		1								6
52	David Sherman	67	16																		4	4
53	Dawson City	49	18								18											18
54	Diana	89	18			1		1						2								4
55	Dictator	92	20					1														1
56	Dora A. Lawson	93	18			1		1										1			3	6
57	Dreadnought	74	16									2										2
58	E. C. Hussey	41	18		1																	1
59	Edith McIntyre	96	23					1				1						1				3
60	Edith M. Prior	78	18			1		2		1										1		5
61	Edna Wallace Hooper	97	19									1		3	1							5
62	Edward A. Perkins	58	16															1				1
63	Edward A. Rich	58	17		4																3	7
64	Edward Trevoy	66	18			1				1												2
65	Effie M. Morrissey	83	18			3						1	1	1							3	9
66	Eglantine	67	20			4			4	1								7		1		17
67	Elector	84	18			1		1	1			1		1						2	2	9
68	Electric Flash	80	18																	1		1
69	Ella G. King	52	12							1								1				2
70	Ella M. Goodwin	86	20						2	2								4			1	9
71	Ellen C. Burk	60	18		1																2	3
72	Ellen F. Gleason	43	17			1		1						2				1		1		6
73	Emma E. Withrell	81	18							2		1									2	5
74	Emma W. Brown	73	17															1				1
75	Emma and Helen	62	18	2		2		1						1	1			1			3	11
76	Essex	84	18			1		1			1	1		1							3	8
77	Eva A. Rice	12	6								6							1				7
78	Everett Pierce	67	16		1																1	2
79	F. W. Homans	44	14			1										1	2		7			11
80	Fannie A. Smith	87	22							2												2
81	Fannie Bell Atwood	82	18			1																1
82	Fannie S. Orme	61	13							1								1				2
83	Fannie W. Freeman	64	16	1		1	1					2		4								9
84	Faustina	78	18	1				2												2		5
85	Fernwood	96	18			2						1									2	5
86	Flavilla	38	14															1				1
87	Flirt	82	21			1		1		1					1			1				5
88	Flora	36	13			1																1
89	Flora S. Nickerson	73	20		1																	1
90	Freddie W. Alton	67	15															1				1
91	Gardener W. Tarr	62	15		1																	1
92	George F. Edmunds	110	19	1				2				1		1						2		7

LIST of United States Fishing Vessels which have entered Canadian Ports for the Year ending October 31, 1903, &c.—*Continued.*

Number.	Name of Vessel.	Tonnage.	Number of men.	Arichat.	Barrington.	Canso.	Georgetown, P.E.I.	Halifax.	Liscombe.	Liverpool.	Lockeport.	Louisburg.	Lunenberg.	North Sydney.	Port Hawkesbury.	Port Hood.	Port Mulgrave.	Shelburne.	Souris, P.E.I.	Whitehead.	Yarmouth.	Total entries.
93	Georgie Campbell	78	20									1		1						1	2	5
94	Gertrude	84	18							1								1				2
95	Gladstone	74	15							1												1
96	Gladys and Sabra	50	16							1											1	2
97	Gloriana	76	18							1								2				3
98	Golden Hope	75	19	1				1										1		1		4
99	Golden Rod	98	18			1				1					1							3
100	Gossip	91	19			1		1		1											1	4
101	Grace Choate	39	12							1												1
102	Grace Darling	47	16		1	1												1			5	8
103	Grayling	87	18			1		1		1		1		1						1	1	7
104	Harriet W. Babson	99	19					1														1
105	Harry G. French	67	18																	1		1
106	Harry Nickerson	83	18					1				1		1				1			2	6
107	Harbard	76	18			1		1		1		1								1		5
108	Harvester	76	18															3			1	4
109	Hattie A. Heckman	73	20			2		1	1	5				2				3		1	1	16
110	Hattie L. Trask	48	15															2				2
111	Haltie M. Graham	96	18					1				1								1		3
112	Hazel Oneita	73	17							1				2								3
113	Helen F. Whitten	92	19			4								1							2	7
114	Helen G. Wells	66	18								2				1			1			1	5
115	Henry M. Stanley	83	18			2				1		4		2							3	12
116	HenryW. Longfellow	77	18																		4	4
117	Hiram Lowell	95	18					1				1									1	3
118	Hope	75	18											1								1
119	Horace B. Parker	62	18					1				1			1						2	5
120	Illinois	78	18					2										1				3
121	Independence	102	21			1				2		1		1								5
122	Indiana	88	17					2														2
123	Iolanthe	49	13															1				1
124	Irene and May	62	18	1		1			2	2					1			1				8
125	Isaac Collins	93	22			1														2	1	4
126	J. E. Garland	57	15															1			5	6
127	J. W. Stanley	92	20			1																1
128	James A. Garfield	50	16		8													1			1	10
129	James R. Clarke	66	18		4																1	5
130	James S. Steele	50	18			1				1				2						1		5
131	Jennie B. Hodgdon	85	18							1								3				4
132	Jennie and Agnes	53	18															2				2
133	John J. Flaherty	124	27			1						1									3	5
134	John L. Nicholson	92	18			2		1	1			1		1				1			2	9
135	John M. Keene	61	16		3													2			1	6
136	John M. Plummer	95	16									1					2			1		4
137	John S. Presson	63	16					1						1								2
138	Joseph Warren	49	15		5																2	7
139	Joseph W. Lufkin	80	18		1	1							1					5			1	9
140	Jubilee	87	18						2	1								1		1		5
141	Judique	89	20							4					1			4			2	11
142	Juniata	49	19															1				1
143	Kearsage	93	18									1										1
144	Kentucky	91	20			1		1	2	1								6				11
145	Landseer	71	15															1				1
146	Latonia	71	18			1											1					2
147	Lavanter	27	14		2																5	7
148	Lawrence A. Munroe	84	18			1		2		1		1		1						2	2	10
149	Lawrence Murdoch	42	12															2				2
150	Lena and Maud	78	18			1		3				2		3				1				10
151	Lewis H. Giles	95	18			1		1						2	1							5
152	Lizzie Griffin	72	18			1															1	2
153	Lizzie Maud	48	18							3								2				5
154	Lizzie M. Stanley	92	20			3								1							1	5
155	Lizzie M. Stanwood	76	17									1										1

LIST of United States Fishing Vessels which have entered Canadian Ports for the year ending October 31, 1903, &c.—*Continued*

Number.	Name of Vessel.	Tonnage.	Number of men.	Arichat.	Barrington.	Canso.	Georgetown, P.E.I.	Halifax.	Liscombe.	Liverpool.	Lockeport.	Louisburg.	Lunenburg.	North Sydney.	Port Hawkesbury.	Port Hood.	Port Mulgrave.	Shelburne.	Souris, P.E.I.	Whitehead.	Yarmouth.	Total entries.
156	Loring B. Haskell	67	18																		14	14
157	Lorna Doone	48	13															4				4
158	Lottie Byrnes	68	18							1												1
159	Lottie G. Merchant	79	18	1		2		2				1		4	2			1				13
160	Lucinda I. Lowell	77	18	2		2						2		2								8
161	M. B. Stetson	94	17															1				1
162	M. H. Perkins	50	16		5													1				6
163	M. J. Nelson	78	17					1														1
164	M. S. Ayr	76	17		3																1	4
165	Mabel D. Hines	92	18			2		1						2							2	7
166	Madonna	79	18					2						1	1			1		2	1	8
167	Maggie E. Turner	45	14															4			1	5
168	Maggie & May	88	18									2		4							1	7
169	Maggie Sullivan	123	24							1		1						3				5
170	Manhassett	79	23																		1	1
171	Manomet	43	16															1			1	2
172	Margaret	107	18			2		1				2		1				1			2	9
173	Margaret Leonard	20	13								3							2				5
174	Margarett	79	18						2	2								3			1	8
175	Marguerite	81	20			1				2		7		1						1	1	13
176	Marguerite Haskins	72	18					2												2		4
177	Marion E. Turner	45	14															4				4
178	Marsala	54	15															1				1
179	Martha A. Bradley	72	12																		1	1
180	Mary A. Whalen	127	23															1				1
181	Mary E. Cooney	88	16															1				1
182	Mary E. Harty	77	18					4	1	1										2		8
183	Mary Edith	51	14							1	14											15
184	Masconoma	67	21			1					3	1										5
185	Massachusetts	102	20							1												1
186	Matchless	73	20	1						1			1								1	4
187	Matilda Wilson	78	18					1														1
188	Mattakuset	50	18	1																		1
189	Matthew Kearney	47	13															2				2
190	Mattie Winship	73	14															1				1
191	Maud M. Story	53	13			1		1		3								1				6
192	Maud S	44	14															1				1
193	Maxime Elliott	75	23			1		1			2							2				6
194	Metamora	81	23	2						1								2			4	9
195	Meteor	96	20			1		1						1	1	1			1		1	8
196	Mildred V. Nunan	43	15							1								2				3
197	Mira & Lizzie	34	6																		1	1
198	Miranda	76	18	1		1												1				3
199	Miriam	82	20																		1	1
200	Monarch	97	17			1		1		1				2						2		7
201	Monitor	100	18					1														1
202	N. B. Nickerson	68	16											1								1
203	Nannie C. Bohlin	96	19			2		1						2				1				6
204	Natalie J. Nelson	78	18			1			1			1		2						1		6
205	Navahoe	91	20	1				1	2					1						1		7
206	Nellie Dixon	78	20			1												2		2	5	10
207	Nellie G. Davis	36	6										4									4
208	Nelson Y. McFarland	65	12	1														2				3
209	Nereid	69	18			2				1								1		1	1	6
210	New England	59	16			2				1					1						1	5
211	Niagara	78	18	2		2		1		1		1										7
212	Noon-day	71	15		1																	1
213	Norma	77	21			1						1						2				4
214	Nourmahal	86	18									1										1
215	Ocean	45	14																		3	3
216	Olga	77	20			4		2		4								1			1	12
217	Olympia	50	14															1				1
218	Oregon	79	19							4					1		1					6

LIST of United States Fishing Vessels which have entered at Canadian Ports for the Year ending October 31, 1903, &c.—*Continued.*

Number.	Name of Vessel.	Tonnage.	Number of men.	Arichat.	Barrington.	Canso.	Georgetown.	Halifax.	Liscombe.	Liverpool.	Lockeport.	Louisburg.	Lunenburg.	North Sydney.	Port Hawkesbury.	Port Hood.	Port Mulgrave.	Shelburne.	Souris, P.E.I.	Whitehead.	Yarmouth.	Total entries.
219	Orinoco	88	20					1		3							1	3				8
220	Orpheus	74	18			3				1				1						2	1	8
221	Paragon	80	19											2	1			1				4
222	Parthia	77	18			4						1									4	9
223	Patriot	59	16															1				1
224	Pauline	51	14															1				1
225	Phelomina Manter	66	18												1							1
226	Pinta	68	18							1								2				3
227	Preceptor	89	18	2		1																3
228	Priscilla	73	13															1				1
229	Priscilla Smith	89	18			3		3		1			1	2							1	11
230	Procyon	85	18					1									1					2
231	Puritan	62	16					1		3							1					5
232	Quick Step	77	18							1								1			3	5
233	Ralph E. Eaton	47	14															1				1
234	Ralph H. Hall	90	18			1		1				1		1	1							5
235	Ralph Russell	48	14							1								2			1	4
236	Ramona	58	15																		3	3
237	Rattler	78	15																	1		1
238	Regina	111	22															1				1
239	Rena	37	6												2							2
240	Richard Wainwright	98	18			1														1		2
241	Rigel	87	18						1	2												3
242	Rineo	83	18															2				2
243	Rising Billow	19	5															1			1	2
244	Rival	91	18			1		1				1								1		4
245	Robin Hood	65	18		2	2				1	1	1										7
246	Rob Roy	79	18					1	1	1				1								4
247	S. F. Maker	78	18			2		3		2		1		5					1	2		16
248	S. L. Foster	30	5								6											6
249	S. P. Willard	87	18			4						2								2	2	9
250	S. R. Lane	47	16															1			4	5
251	Saladin	89	18			1		1				1								1		4
252	Samuel R. Crane	52	18							1											11	12
253	Sceptre	91	20								2	1									1	4
254	Scythia	100	18					3							1						1	5
255	Seacornet	40	16			2																2
256	Senator	74	18			1																1
257	Senator Saulsbury	77	18					1														1
258	Sheffeyld	61	16		3																3	6
259	Shenandoah	79	18					1						2							3	6
260	Slade Gorton	89	22			5			2	2				1				1		1	2	14
261	Smuggler	91	18			2		2						3								7
262	Speculator	77	18			2		1	1	2				1				3				10
263	Squanto	95	17			2																2
264	Sylph	57	15																		4	4
265	T. M. Nicholson	91	18							1		1										2
266	Tacoma	71	18					1														1
267	Talisman	98	18							1		2								1		4
268	Tattler	135	26							3				1				3				7
269	Thalia	78	16		6																	6
270	Theodore Roosevelt	90	19			2																2
271	Thomas Brundage	73	15																		3	3
272	Titania	77	18							1												1
273	Two Forty	39	14		1																	1
274	Uncle Joe	60	11								1											1
275	Valkyrie	104	18			1		2				1		3							3	10
276	Vanguard	25	10								3							3				6
277	Veda McKown	83	18			1		1						2						1		5
278	Vera	77	18					1										2				3
279	Vesta	75	16		5													1				6
280	Victor	75	18					3				1		3						2		9
281	Vidia M. Brigham	53	14															1				1

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LIST of United States Fishing Vessels which have entered Canadian Ports for the year ending October 31, 1903, &c.—*Continued.*

Number.	Name of Vessel.	Tonnage.	Number of men.	Arichat.	Barrington.	Canso.	Georgetown, P.E.I.	Halifax.	Liscombe.	Liverpool.	Lockeport.	Louisburg.	Lunenburg.	North Sydney.	Port Hawkesbury.	Port Hood.	Port Mulgrave.	Shelburne.	Souris, P.E.I.	Whitehead.	Yarmouth.	Total entries.
282	Vigilant	87	18	..	..	..	..	..	..	4	..	..	..	..	..	..	..	3	..	..	..	7
283	Volant	96	18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1
284	W. E. Morrisey	93	18	..	..	2	..	1	1	1	..	1	..	4	..	..	..	..	..	..	1	11
285	W. H. Cross	41	17	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	5
286	W. H. Moody	48	16	..	..	..	..	1	..	4	..	..	..	..	..	..	..	..	..	..	6	11
287	William H. Rider	45	17	..	1	..	..	..	..	1	..	..	..	..	..	..	..	2	..	..	6	10
288	Willie L. Swift	96	17	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	2
	Totals	21,140	4,983	18	71	144	1	117	30	136	81	95	8	119	22	3	12	204	10	65	232	1,368

ANNEX A.

OFFICERS' REPORTS.

REPORTS OF CAPTAINS COMMANDING CANADIAN CRUISERS.

CRUISER 'OSPREY.'

SHELBURNE, N.S., December 19, 1903.

To Commander O. G. V. SPAIN, R.N.,
Commanding Fisheries Protection Service of Canada,
Ottawa.

SIR,—I have the honour to submit to you my annual report on the work done by the ship under my command during the season just closed.

Having received instructions from you as in former years, I arrived at Shelburne on April 15, and found the work of fitting and making ship ready progressing. May 1st commissioned ship and signed crew ; 2nd unmoored and proceeded, but was detained for some days at Sandy Point on account of fog. However on the 7th, we proceeded cruising east. Morning of 8th off Sambro fresh N.N.E., with much rain ; p.m., called at Isaacs Harbour, 9th proceeded again calling at Whitehead where we took on board our boatswain and two seamen, 11th cruising toward Magdalen islands calling at Port Hawkesbury where we took in a supply of fresh water and proceeded on our way through the strait, arriving at Amherst, Magdalen islands on the 13, strong S.W. breeze. There were not many fishermen here, first run of bait herring being over, 14th we cruised Pleasant Bay calling at Alright and Grindstone islands, finding several U.S. trawlers all holding Canadian licenses except one who handed me his license fee. I duly paid it over to collector at Amherst, where we droped anchor for the night. Morning of 15th were compelled to get underweigh and take shelter under Alright island, a heavy northern and very cold. On the 16th, went to sea cruising southward, 8 p.m. off East Point, Prince Edward Island. 17th at Port Hawkesbury, unable to get on slip for some days, ship making water. 19th cruising south to meet U.S. seining fleet. 22nd cruising off Liscombe where we met the first of the fleet, and anchored with them at Liscombe noon that day ; strong S.W., with fog close on shore. On 23rd proceeded with fleet N.N.W., gentle breeze running east with a large fleet of seiners. P.M., came too at Whitehead with 25 U.S., seiners, heavy north gale. 24th gale continues. 25th with a fleet of 30 off Cape Canso, we continued to cruise with this fleet in this vicinity until the 9th when ship was docked at Port Hawkesbury. Calked and painted, much time was used in performing this work the weather being foggy and rainy. However we went off slip on the 19th and went to sea. P.M., same day resuming our old station, Canso for headquarters, and continued to cruise until by your orders on the 8th of July we sailed towards Gaspé calling at Port Hawkesbury and Pictou. At the latter place had ship's company measured for uniforms. And on the 12th we continued our cruise through the straits of Northumberland towards Gaspé having very light wind, latter part foggy, arriving at Gaspé on the 15th where we remained until the 21st, then receiving your order we at once proceeded towards Magdalen islands arriving at Grindstone on the 24th and wired you our arrival, on the 26th breeze came in from S.E., we proceeded to Amherst for better shelter. 27th came with south gale, 7 a.m. weighed anchor and stood towards Grindstone, wind N.W., with indication of bad weather. 4·10 p.m., received your orders to proceed to Gaspé. We immediately proceeded 9·45 p m., off west end of Amherst island steering north heavy E.N.E., gale and raining in torrents ship under close reefs, midnight put ship under reaching canvas N.E., very

heavy gale, noon on 28th gale moderating set reef mainsail. P.M., all sail set again moderate north wind, on the 29 arrived at Gaspé where I met yourself. 31st after you gave the ship a short visit, by your order we proceeded to sea cruising towards strait of Canso where you ordered the ship docked again as leak had not been found. Arriving August 1, making an average of 10 miles per hour the entire passage.

Here we put ship on the 'slip,' and found that the worms had destroyed rudder post and rudder stock, which were replaced by new ones, and when ship was put off found the leak as bad as before. A bad fit being made with rudder post. However we succeeded in stopping the leak to some extent after which we proceeded and took up our station and cruised as before. September 9th we had the pleasure to attend the annual regatta at Canso. Also by request of committee assisted by firing starting gun.

Our attention has been directed toward looking after illegal lobster fishing being assisted by Launch No. 2 between Point Michaud and Jeddore. I find very little signs of this illegal and injurious practice which heretofore was carried on to such an extent. The fishermen seem to realize that a great mistake was being made.

November 2nd we arrived off Halifax and found a small fleet of United States seiners. We remained with this fleet until the 20th when the last one went westward. We arrived at Lunenburg same date and reported to you. *Curlew* in port.

I am sorry to state that the fall catch of mackerel, as regards the United States fleet has been quite a failure, only small fares were taken by some of the fleet while others went home empty. I am pleased to state that our net fishermen on this coast took fine fares of mackerel while the spring schools were on the coast.

The cod fishery as regard the bank fishermen was a great failure, scarcity of bait being the cause. Large fleets might be seen all through the summer lying at Canso and other ports waiting for bait, consequently the catch is the smallest for a great many years. Yet the prices are running so high, those who obtained half their usual fares will be able to pull through quite neatly. We continued to cruise along this coast for west Baccaro Point until the 19th when we went into winter quarters at Shelburne. The season has been uneventful, everything going smoothly.

I have the honour to be, sir,
Your obedient servant,

C. T. KNOWLTON,
Com'g. cruiser Osprey.

GOVERNMENT CRUISER 'KINGFISHER,'
SHELBURNE, N.S., December 10, 1903.

Capt. O. G. V. SPAIN, R.N.,
Commanding F. P. Service,
Ottawa.

SIR,—The *Kingfisher* was laid up at Shelburne, N.S., during the winter of 1902–3, and some repairs were made to the stern of the ship and new rails were put on.

In March orders were received to put the ship in commission on the 15th of May. I proceeded to Shelburne on the 1st of May, superintended fitting out and, after completing my crew, sailed eastward on the 21st of that month. On the morning of the 22nd we sighted five American seiners off Cape La Have, running east. I followed and made the fleet of seiners operating off Egg island—thirty miles east of Halifax. They had seen some schools of mackerel and had made some small hauls. The following day we were off Beaver island, continuing on eastward until White Head was reached, we found a fleet of some forty sail working on a large body of fish ten miles southwest of White Head. The schools of fish had apparently turned, working westward. It is claimed by experienced men of the seining fleet that the fish had struck

the cold water of the Arctic current, which had stopped their progress eastward. Some large catches were made in that vicinity, the schooner *Bertha & Pearl*, captain Joseph Smith, securing some 525 brls. in two days—325 brls. were salted, 200 brls. were taken home fresh on ice. The fleet then worked eastward off Canso and Chedabucto bay, where the schools of mackerel seemed to make a stop, large quantities of fish entered the bay going through the Gut of Canso and some 8,000 brls. were taken by local fishermen about Canso, L'Ardoise, Petit de Grat, and West Arichat. Mackerel of enormous size were taken in nets among the small islands about Madame island, where they had not been seen or caught for many years before. Part of the fleet worked east as far as Louisbourg but soon returned, finding nothing farther east then St. Esprit. Some fine hauls were taken off Canso and vicinity. From the 5th to the 15th of June weather was very bad, dense fogs nearly all the time, and during this time the fleet left for home. The total catch of the Cape Shore Spring fleet was 9,269 brls. salt mackerel among forty five sail.

On June, 16 orders were received to take up station off East Point, P.E.I. I at once proceeded to Port Hawkesbury to fit up our steam launch which had been hauled up there for the winter On the 21st I had completed this work and sailed for Souris, arriving there the same afternoon. The launch was ordered to Pictou. On the 26th June by your orders we proceeded there to go on the Marine slip as the ship was leaking more than was comfortable. On the 29th June we hauled over on the slip, made repairs to the rudder port and put on a new shoe. On July 9, repairs being completed, the ship was launched. We then proceeded to Souris, P.E.I., steam launch in company, and took up our patrol on that coast, looking after the mackerel fishery, also illegal lobster fishing. Only three American seiners visited my station this year. The schooner *F. W. Homans*, seining and netting secured a fare of 250 brls. Some mackerel were taken off South lake in August, about 800 brls. The total catch at Magdalen islands would be about 8,000 brls. We kept a vigilant watch over the illegal fishing for lobsters and located and caught some parties operating at Murray harbour. I made one trip to Cape Tormentine with three of my men in the launch *Brant* and succeeded in capturing a so called-desperado in the act of canning lobsters in the close season in the ell of his house. Also seized 8 cases of lobsters on his premises. Another place was visited where a small quantity was found in cans. Both of these parties will be vigorously prosecuted. The steam launch was sent by your orders to assist Inspector Chapman at Cape Tormentine and spent some days there cutting up about 800 lobster traps. We made two trips to Bird Rocks on business connected with the department, where we met rough weather and could not land—had to do everything by signal.

On October 25, by your orders we sailed for Sydney via Port Hawkesbury. The steam launch was ordered to meet me at Hawkesbury, where she was handed over to Messrs. H. W. Embree & Sons to haul up and house over for the winter. We then continued cruising along the coast, arriving at Louisbourg on the 28th of October, when I met the fleet of seiners from Sydney—twelve vessels bound west. One vessel, the *Victor* (gasoline), had secured 200 brls. all No. 1, some $1,500 worth of mackerel. By your orders I kept on to Sydney to make sure all the fleet had left, arriving there on the 31st Oct. and finding the coast was clear. I remained there two days, when I worked my way west calling at Louisbourg and Liscombe on Nov. 5, when I received your orders not to go west of Liscombe until further instructions.

I notice the American fresh fishermen are making the harbours of Louisbourg and Liscombe their resorts for winter fishing. They report fish very scarce. The weather has been very rough since October came in, so much so that it is almost impossible to get west owing to the prevailing westerly gales.

The catch of lobsters has been good on the coast this year, large fish having been taken, more especially at P.E.I. The close season has been very well observed, very little illegal fishing has been reported. With the help of patrol No. 1, which is attached to the *Kingfisher*, it makes it about impossible to carry on any illegal lobster fishing on my station. The only place now where the fishermen seem to be persistent in fishing for lobsters in close season is at Bay Verte and Cape Tormentine, where stringent measures must be carried out in order to cope with the men who are breaking the law.

They are under the impression that fishery officers cannot enter their dwellings to search, and almost in every case the canning is done in their houses in the close season.

I remained at Liscombe on my way west for some days. During that time I was called upon by the captain of the American ship *Fred P. Lilchfield* for protection against the mutinous crew he had on board. I put an armed guard on board for several nights at the captain's request.

On December 1, I proceeded west, weather being very bad and sails poor, could not make much headway. On December 3, I called at Lunenburg, where we had a heavy snow storm, and on the 4th we came in to Shelburne, where I paid the ship out of commission on the 7th inst.

I may add the full catch of the fleet of American seiners off Sydney by eleven and twelve vessels was 499 brls. mackerel, and that the catch of the New England fleet for the year 1903 was 70,600 brls. fresh mackerel and 44,213 brls. salt, this by about 100 vessels.

All respectfully submitted.

I have the honour to be, sir,
Your obedient servant,

W. H. KENT,
Commanding 'Kingfisher'.

Commander O. G. V. SPAIN, R.N.,
Commanding Fisheries Protection Service,
Ottawa.

SIR,—I beg to submit the report of the work done by me and the men under my command during the season of 1903.

May 18, by your orders, I went on board the *D.G.S. Lady Laurier*, Captain Johnson, in the capacity of a fishery officer taking with me a boat's crew of four men.

May 21, ship proceeded cruising in the Fisheries Protection Service and supplying lighthouses, &c. On arriving outside found the spring fleet of U.S. seiners, of about fifty vessels, about five miles off Sambro. Ship continued in the vicinity of Halifax harbour watching seiners and supplying lighthouses till first of June.

June 1, proceeded cruising to the eastward and placing buoys. Sighted U.S. fishing vessels all along coast, the largest number, forty-two, being off Canso.

June 2, arrived in Sydney harbour, left next morning and placed Point Aconi buoy, returning to International Pier in the afternoon and coaling up.

June 4, cruised to Arichat harbour, sighting twenty seiners off St. Esprit. Next morning proceeded, after placing Cape Jack buoy, cruised towards Halifax where we arrived June 6, passing about thirty seiners off Canso and several others to the westward.

June 12, proceeded to cruise to Sable island, on our arrival there found several U.S. fishing vessels anchored and fishing from 4 to 12 miles off shore. After landing the horses at Sable island cruised to Louisbourg, arriving there June 13, leaving the same evening, passing the seining fleet between there and Whitehaven. Ship arrived in Halifax June 14.

June 29, by your orders transferred myself and boat's crew from *D.G.S. Lady Laurier* to the patrol boat No. 2.

During my stay on board the *D.G.S. Lady Laurier* we steamed 1,700 miles sighting a large number of U.S. fishing vessels boarding fifty,

June 30, you and the other members of the court of inquiry into the stranding of the ss. *Halifax* in Halifax harbour come on board patrol boat No. 2, and cruised about the harbour over the course the ss. *Halifax* followed.

July 1, received your orders to proceed to Canso, 3 p.m., proceeded cruising eastward as far as Canso and continued cruising between Canso and Liscombe.

Aug. 11, met cruiser *Osprey* in Canso and from that date until the end of the season cruised from St. Peter's canal to Jeddore working in concurrence with the cruiser *Osprey*.

Sept. 21, proceeded to Queensport, fishery officer Torry came on board. From there we cruised to the Gut of Canso destroyed a few traps and imposed a fine on a hotel-keeper at Port Hawkesbury for having lobsters after season. From there cruised through Dover passage, Whitehaven and about Sugar island, but did not find anything more, Sept. 27 officer Torry left boat.

Oct. 20, at Dover passage destroyed twenty traps and cars containing enough lobsters to make four cases.

Nov. 7, Sober island, officer Torry came on board. we proceeded and destroyed 101 traps fresh baited with lobsters in them.

Dec. 9, at Tangier received your orders to proceed to Halifax and pay off. The weather being so stormy and the sea so high found it impossible to proceed.

Dec. 20, weather clearing proceeded to Halifax.

Dec. 21, made boat fast to Marine and Fisheries wharf, Halifax, paid off crew and put boat out of commission.

With the few exceptions mentioned found the law regarding lobster fishing well observed in this part of the coast.

During the time on board patrol boat No. 2 steamed 3,483 miles, destroying 485 traps and boarding U. S. fishing vessels 116 times.

I have the honour to be, sir,
Your obedient servant,

W. J. MILNE,
Officer in command

CRUISER 'CURLEW,'
ST. JOHN, N.B., Dec. 31, 1903.

Commander O. G. V. SPAIN, R.N.,
Commanding Fisheries Protection Service,
Ottawa.

SIR,—I have the honour to again submit to you my annual report on the operations of this ship for the past year, during which we have taken part in the various duties required of us, from the shores of the State of Maine, to the beautiful harbour of Sydney, Cape Breton. Those duties have indeed been various, from pursuing poachers in the still hours of the night, to others more pleasant though none the less arduous. Indeed, were it not for the sudden and unexpected changes incidental to the life of those who go down to the sea in ships 'and do business in great waters,' a sea life would lose much of its attractive influences for those who are making up their minds to choose it for a calling.

Our cruising on such a vast expanse of coast affords us every opportunity to narrowly examine nearly all the various fishing grounds, and there is no doubt that a decrease will be found in the catch of fish in the Maritime Provinces during the past season. The presence of dog fish, that terrible scourge of our fishing grounds, is one of the principal causes of this decrease. These pests are annually increasing in numbers, they are coming earlier each season and remaining with us to a much later date than heretofore. Fishermen at many places along the coast were compelled to remove their gear from the water owing to the unwelcome presence of this voracious fish, and seek other employment for which they were poorly fitted.

The results of the Commission appointed by your department to inquire into this dog-fish nuisance and make effective recommendations, are looked forward to with great interest, and it is earnestly hoped that they will procure information that will enable them to recommend some action that will exterminate these pests.

During the winter the ship was in winter quarters, near the Union Railway depot in St. John, and every attention was paid to the necessary repairs required by the engines and boilers. Various small repairs were made to the hull of ship, and also to our steam launch, which had been hauled out of the water near the ship.

On January 18, I received orders from you to take charge of a detachment of officers and men of this service whom you had ordered to proceed to Quebec to take a course of instruction at the Citadel there. Meeting the detachment at Moncton, N.B., on Saturday evening, January 31, we boarded an I.C.R. train for Quebec, and on Monday, February 2, at 9 a.m., we had the pleasure of falling in on the Citadel parade ground with the Royal Canadian Artillery. For six weeks the detachment worked hard at mastering gunnery, ammunition, and other drills, but more especially the handling of the six and twelve pounder quick firing guns, with the option of afterwards remaining another week and taking an extra course, in order to become experts in the handling of the Maxim gun also. After spending the required time during which the detachment assiduously applied themselves to the work in hand, devoting very little time to the numerous attractions that regimental life repeatelly affords, the examinations began, being conducted by Colonel Benson, R. C. G. A. Each man was subjected by him to a very rigid examination, but having been thoroughly trained by Sergeant Instructor Sutherland of the Citadel staff, they acquitted themselves extremely well, in the words of Colonel Wilson, Commanding the Citadel, who reports that he 'cannot speak too highly of the conduct of all ranks while under his command, and that the showing of the certificates obtained reflects great credit on the part of both officers and petty officers of the class.'

The catch of lobsters along the coast will show a falling off from previous seasons, there is certainly no increase, but a slow and constant decrease. The prices received by the lobster fishermen show an increase, which brings those men a corresponding amount of happiness, even though the most of them are well aware that in the near future this source of income will surely disappear, if more stringent measures are not adopted by those in control. I found much interest manifested in Mr. Harry Baker's lobster hatching pond at Fourchu, Cape Breton, which I was unfortunately prevented from examining by urgent patrol work rendered necessary by the large fleet of American seiners on the coast between Louisburg and Sydney. The methods adopted by Mr. Baker seem to be very similiar to those followed by nature in the propagation of this valuable crustacean, and it seems to be the opinion of those who are in a position to have information on this subject, that this new departure at Fourchu will meet with the success it richly merits.

The mackerel catch of our local fishermen will show a somewhat less catch than that of previous seasons although some good hauls were made by the traps and nets in St. Margaret's bay during October and November. Good prices were realized for these fish, which were iced and sent fresh to the United States. During the month of September immense numbers of tinker mackerel were found mixed with the small herring in weirs of the Passamaquoddy district, and it is to be hoped that we will soon have a recurrence of the good mackerel fishing that formerly prevailed in the Bay of Fundy. This is a favourite topic of our older fishermen requiring their energetic descriptive powers, as they hold forth to a group of eager listeners telling of the great fishing when they were 'boys.'

A fleet of twelve United States mackerel seiners participated in the fall mackerel fishing on the Nova Scotia and Cape Breton coast, and the last vessel of this fleet left the waters of Halifax harbour for Gloucester on November 19, having had rather poor success owing almost entirely to bad weather. Several nights when this fleet were off Sydney, they saw immense schools of mackerel passing constantly to the southward, but they only succeeded in securing small hauls. The crew of one of the United States schooners named the *Lena and Maud* ran their seine around a school of mackerel, and

estimated they had fully a thousand barrels inclosed. The wind increased to such an extent that the seine burst and they lost all those fine fish.

The catches of all those United States vessels for their fall trip run from 10 barrels up to 200 each, but few went above 50 barrels, and all were caught off Sydney. They did not take any off Halifax, although we heard the usual untruthful rumors that they had made hauls of mackerel inside the three miles limit, which we found quite easy upon investigation to contradict.

With reference to the statements continually made that the schools of mackerel are slowly but surely disappearing from our coast, I might be pardoned for quoting here a statement made by Captain John McFarland of the Gloucester seining schooner *Victor*, one of the most observing and reliable skippers sailing out of Gloucester, who arrived there on November 17 from a mackerel seining trip on our coast. On his arrival he made the following encouraging statement. I have no hesitation in saying that but for bad weather while the mackerel were passing southward off Sydney, the whole fleet could easily have loaded in one night. Such bodies of fish I never saw before in those waters, great rafts of them, and regular walls of mackerel, which would extend from the Fort to Eastern Point. The above is very encouraging for Canadians to know, and should act as an incentive to our fishermen.

Having received your orders to put the *Curlew* into commission as soon after April 15 as possible, various repairs to ship and machinery were rushed to completion, and we sailed from St. John April 23. We anchored in Flaggs Cove that evening at dusk, where we met numerous fishermen who desired fishery licenses and information on various matters relating to the kind of fisheries that they may be engaged in.

On the 25th we steamed to Campobello, where we met the overseer and transacted a large amount of fisheries business with reference to herring weirs on the islands. On the morning of May 2 we steamed to the ports of the Bay of Fundy, visiting Salmon river, where a dam was erected across the river some years ago by the owner of the saw-mill there, and action has been taken by the department to compel the owner to place a fishway therein.

Returning down the bay on May 9, all the islands were visited, enforcing the various provisions of the fisheries laws, issuing weir licenses, seeking illegal lobster fishing until the 19th instant, when we cruised across the Bay of Fundy bound to Shelburne to meet an American fleet there that were seeking mackerel. A dense fog accompanied by a Scotch mist compelled our anchoring at sunset in Barrington passage where the fog detained us a day. When it cleared we continued our cruise eastward along the coast, but did not discover any United States fishing vessels which were evidently ahead of us off Halifax, or further east, and at sunset we steamed into Liverpool to coal and water up.

On the 23rd we steamed steadily all day to the eastward, not meeting any United States fishermen, anchoring at dark at Liscombe harbour. The schools of mackerel had evidently all passed eastward to Cape Breton, and Arichat was reached on the 27th. Here some men were shipped, and on the 30th we put into Louisburg to clean boiler and bunker ship.

At 8 a.m. on the 30th, off St. Esprit island, we sighted the famous Solomon Jacobs with his fishing steamer, about seven miles off shore and taking a school of mackerel on board. The many rumours I heard afterwards regarding Captain Jacobs exploits on our coasts stated that these fish were caught the night previous in Chedabucto bay, when the fog was most dense and the wind strong, and the moment I sighted this vessel rumour had him off Halifax, bound for Gloucester.

Several United States mackerel schooners were met with in the waters off Louisburg, each vessel with their lookouts at the mast head who were eagerly scanning the ocean for the well known signs of a school of mackerel. Cruising on the coast off Sydney on June 2, we steamed into Glace Bay breakwater at dark, and during our stay there hundreds of hardy coal miners from the mines in the neighbourhood visited our ship, as government cruisers never visit this narrow harbour. Steaming from there on June 8, we rounded Scatteri and cruised on the south coast of Cape Breton, but dense fog interfered with the movements of the fishermen very much. At Louisbourg, on June 9, the fishermen informed us that their mackerel fishing to date had been a

complete failure, quite unlike other years, and only three solitary mackerel had been caught to date off Louisbourg. Fortunately that night the mackerel nets began to take numbers of mackerel and mostly of very large size.

Cruising to the westward during the remainder of June, calling at the several posts on the way, Halifax was reached on the 18th, where we took on board the limber of Gatling gun and other supplies, and continuing westward, Lunenberg was reached on June 20, where repairs were made to our steam capstan, and ship's hull was painted.

On June 30, we left the Nova Scotia coast and resumed cruising in the Bay of Fundy, finding the trawl, weir and other fishermen hard at work in their several branches. Cruising in every part of St. John and Charlotte counties and examining into the management of the numerous fisheries, fully occupied our time till June 29, when we steamed over on the Nova Scotia coast again, and at Shelburne on August 4 and 5, we acted as judge in the annual regatta of the Shelburne yacht club. It was a very successful meeting, and as the weather was fine several very closely contested and highly interesting yacht races took place. A four oared boat race also took place on the second day of the regatta for a silver cup offered by the yacht club, which was won by a crew from this ship and now adorns our mess room.

Returning to the Bay of Fundy on August 15, we visited the Quebec Garrison Artillery encamped at Fort Dufferin, St. John, N. B., and observed the splendid practice made by the different detachments at a moving target from which a very valuable amount of information was gained by us on quick firing guns.

From this time till the end of season the catch of herring suitable for sardine herring was very small in Charlotte County, and accordingly the value of the catch began to increase with their scarcity, until the price per hogshead began to soar above $10.00, and on several occasions reached $20.00. These high prices induced many reckless fishermen in Charlotte Co., to violate the law in taking herring by seines during the nights that herring would be found striking in on the shores. The endeavours we used do render futile those efforts kept us busy for many nights and while it may be considered a light task to stop illegal fishing by day, the difficulty increases enormously when you desire to do the same work by night over any extent of coast. However, we succeeded on a number of nights in arriving at the right place at the right time. The usual fine of $100.00 on each offender was imposed and paid, and the seines used were also confiscated, which in good condition are worth $60 00 each. The seines seized during this past season were all good. Several small boats were also confiscated, which we found very handy for the use of the ships and steam launch. The fines imposed this season, were all paid.

The apprehending of so many poachers, and the prevention of poaching with any degree of success, is rendered very much easier since the steam launch has been added to our equipment. Nearly all the illegal fishing in my district is done during the night, in out of the way places, and now with the launch we can comfortably proceed long distances with the necessary men and boats on board, and night work is therefore robbed of nearly all its unpleasant sides. As she is manned from the *Curlew* the expense of her maintenance is hardly observable. From July 15 to October 15, she was busily employed at patrolling the Grand Manan spawning grounds, and there she has done good work, by keeping the net fishermen from encroaching on those grounds during this annual close time.

During October, several unknown fishermen began lobster fishing in the vicinity of Bliss harbour, and over a hundred traps were destroyed, and at Lord's cove two crates of lobsters and over 150 traps were found and destroyed, although each of those places is provided with local overseers.

The fall fleets of United States mackerel seiners then operating on the Cape Breton and Nova Scotia coasts, your orders were received to proceed there and meet them between Lunenburg and Halifax, as they cruised to the westward. We accordingly proceeded to Lunenburg, anchoring there on the evening of November 3. We found Lunenburg harbour pretty well filled with the fishing schooners belonging to that town in their winter quarters. Nearly all of those schooners had a very poor season, over fifty of them having less than 100 quintals of cod fish for the season's work. It is

estimated that the catch of all the schooners of Lunenburg County will not exceed one quarter of the catch of 1902, but the prices were very much higher.

Using that enterprising town as our head quarters we cruised on the coast between Halifax and Liverpool, watching the United States fleet of seiners that remained cruising off the coast near Halifax. Those vessels were not very successful, which was attributed to bad weather and one by one they began departing for their home ports about November 15, the last of them sailing for Gloucester November 19. We accompanied them along the coast to the westward, meeting strong gales which retarded our progress somewhat, and put into Cape Sable to procure evidence from the Collector of Customs regarding alleged illegal acts of a foreign fishing vessel. On the 28th we went into Yarmouth to bunker ship, and on arriving at Grand Manan next day began the taking of fishermen's bounty claims on that island.

On the 1st of December we arrived over on the mainland and visited all the ports there, collecting bounty claims, destroying lobster pots, instructing fishery officers and other miscellaneous work necessary for such an important fishery district.

Continuing at this work till the 8th of December, when the members of the sardine fishery commission were embarked at St. Andrews and taken to Grand Manan, where they spent two days in taking evidence regarding the herring fishery of the Bay of Fundy, and on the 11th we took them to St. Andrews, where they left the ship, to return and resume their important enquiries in May.

Receiving bounty claims was then renewed and hauling the launch out of the water at St. Andrews on December 22 we steamed to St. John on the 23rd, and the same evening at sunset the ship was put into her winter quarters near Union Depot and placed out of commission, the crew being paid off.

The large number of fishermen who lost their lives on our coasts this season was very lamentable, leaving a large number of widows and orphans in the fishing villages. Over 30 fishermen have been lost who were natives of Lunenburg County alone, and the loss of the U. S. fishing schooner *Gloriana*, near Canso, with her crew, nearly all Nova-Scotians was particularly sad.

Since putting the ships into winter quarters the engineering staff has been working at the necessary repairs to machinery as directed by the government Inspector.

I am, Sir,
your obedient servant,

JOHN H. PRATT,
Commanding 'Curlew.'

QUEBEC, December, 1903

To Commander O. G. V. SPAIN, R.N.,
Fisheries Protection Service,
Ottawa.

SIR,—I have the honour to again submit the following report which is a synopsis of the work performed by the revenue cruiser *Constance* during the past season of navigation.

At the close of last year's work the *Constance* was placed on Messrs. Davie & Sons patent slip, Levis, for the winter.

January 12, 1903.—My engineers and crew began the work of overhauling and doing repairs to engine and boiler to have all in readiness and in good-running order for the opening of navigation.

March 26—Officers and crew joined ship and began work at once cleaning and painting the interior of the different compartments.

April 7—*Constance* was launched from patent slip, Levis, and at once proceeded over to Quebec, took in a full supply of coal, fresh water, provisions &c., and as instructed we left Quebec for sea on April 13 cruising down along the south shore, through the Northumberland straits, along the Nova Scotia coast and on May 2 arrived at Digby, where we were joined by Inspector Jones, of the preventive service.

From the latter date to May 16 we remained in the vicinity of Digby making cruising trips about the Bay of Fundy and St. Mary's bay.

May 17, we left Digby with Inspector Jones on board for the River St. Lawrence calling at various places along the Nova Scotia Coast securing information and affidavits to the effect that the schooner *Acacia* owned by Geo. G. Doggett had smuggled into Canada from St. Pierre, Miquelon, during November 1902, a quantity of spirituous liquors and landed same at a place known as Boisbrulé, in Gaspé bay. After securing the required information we proceeded to Quebec where a warrant was issued for the arrest of the said Geo. G. Doggett and intrusted to the care of Detective Patry for execution. On June 5, with Inspector Jones, and Detective Patry on board, we left Quebec and on June 10 succeeded in locating Doggett at Fox Bay, Anticosti, where he was made prisoner and taken to Quebec for trial. Also seized his schooner *Acacia* (which was sent to Gaspé) pending further instructions from the Honourable the Minister of Customs. Doggett pleaded guilty in the Quebec court and was sentenced by Hon. Judge Chauveau to one month imprisonment, and $200 fine.

From June 17 to September 11 our cruising varied from the River and Gulf St. Lawrence to the Magdalen islands, south shore of Nova Scotia, Bay of Fundy, St. Mary's Bay, &c., after which time we returned to the Gulf, and for the remainder of the season were cruising along the Gaspé coast, the north shore, Anticosti and the Bay des Chaleurs.

On September 16 I received instructions to look out for a suspected vessel which had been reported off east end of Anticosti, and Fox bay. After several days search, during which time we encountered some very boisterous weather we succeeded in intercepting this vessel to the westward of Seven islands. Again on October 15, I received another report stating that a schooner had left St. Pierre, Miquelon, for the St. Lawrence river with a quantity of contraband liquors on board. This vessel we also intercepted a short distance from Point des Monts, and after a thorough search, nothing could be found on board of a contreband nature.

We arrived at Quebec November 22 from our season's work and on the 30 placed the *Constance* in the Louise basin for the winter, and paid off officers and crew from further active service leaving the *Constance* in charge of watchman Michel Dickey, and retaining the services of 2nd officer McGough until such time as the vessel was well secured in the ice. During the past season we, as usual, boarded and searched all strange vessels, and vessels of a suspicious kind, and covered in distance 12,512 miles.

In conclusion I may here mention that during the time the *Constance* was on the patent slip last winter we had the planking on ship's bottom caulked and copper painted, the inside lining of bunker space removed scraped and painted. Iron bunks replaced the wooden ones in petty officers quarters and forecastle. Bilge keels were also put on which greatly reduced the heavy rolling of the vessel in heavy seas. The electric light was also another great addition throughout the ship, the dynamo and search light gave good satisfaction and proved of great service at all times during the season.

It was thought that by the addition of the bilge keels, and more especially by the use of extra steam taken from the engine boiler to run the electric plant the speed of the vessel would be greatly lessened, but on the contrary, no perceptible change in the speed could be observed.

I have the honour to be, sir,

Your obedient servant,

GEO. M. MAY.

AMHERSTBURG, Ont., December 3, 1903.

Captain O. G. V. SPAIN,
Commanding Fisheries Protection Service of Canada,
Ottawa.

SIR,—In obedience to your circular letter of the 28th ult., I beg to submit my report of the work performed by the *Petrel* during the past season. It will not be as complete as I could wish, for the reason that the ship's log is in the hands of the Court. I will do the best that I can with the notes I have.

On April 25, a departure was made from Owen Sound, at 10 a.m., and after testing the compass on the ranges I proceeded direct to Amherstburg, where arrived the following day at 4 p.m. On Monday the 27th, off Pelee Island I seized 16 American gill nets. May 1, placed gas buoy near Detroit River light. On the 5th, I seized a small gasoline fishing tug and 28 nets off Windmill Point, and placed them in charge of the Collector of Customs at Port Colborne. On the 6th, I seized two whitefish nets off Port Maitland. On the 11th, I placed a gas buoy on Grubb Reef. 12th, placed spar buoys on Grecian Shoal and North Harbor Reef, and to the east of Pelee Island I seized 28 gill nets same day. On the 23rd, self and crew were ordered to St. Thomas to assist in celebrating the centennial of Col. Talbot's landing there. 24th, dressed ship and fired a salute of 21 guns. July 1, Dominion Day, dressed ship and fired a salute of 15 guns. 3rd, I seized the tug *Kitty D*, off Lapp Point, case now before the court. On the 9th, accompanied by yourself and others went over the course as on the 3rd, to verify the place of seizure of the *Kitty D*. 16th, I seized 133 gill nets off Long Point. August 10, 41 gill nets were seized also off Long Point. September 14, I seized 181 gill nets. 15th, 62 nets, also off Long Point. On the 17th, at Welland at trial of *Kitty D*. 22nd, I seized 94 gill nets; 23rd, 90 gill nets; 25th, 62 nets, and on the 29th, 92 gill nets, all off Long Point. October 9, 16 gill nets were seized; 13th, I seized the tug *Star*, and 28 gill nets. Tug and nets were placed in charge of the customs officer at Port Stanley. 19th, Judge Horne of Windsor, and John Auld, M.P.P., and party were taken to Pelee Island to hold Court of Revision, and on the following day were landed at Amherstburg and Windsor. On the 30th, I seized 90 gill nets about 23 miles to the eastward of Pelee Island. November 9, fired a royal salute of 21 guns. 18th, Mr. Fraser of the department came on board at Kingsville, and was conveyed to Middle Ground lighthouse, and returned on the 20th to Kingsville. 21st, took up the anchor of the gas buoy and towed buoy to Amhestburg from Grubb Reef. 24th, took up spar buoys from Grecian Shoal and North Harbor Reef. 25th, placed a winter spar buoy to mark the place of the south-east lighship, and in the afternoon seized 45 gill nets about 7 or 8 miles east of Pelee Island. 26th, took in spar buoy from wreck of *Mont Blanc*. 30th, took in the gas buoy and anchor from near Detroit River light.

Besides placing the winter buoy near the lightship—south-east shoal—I have at sundry times delivered supplies and taken members of the crew to and from the ship. This I have done because she is in our waters and of great benefit to Canadian shipping. I have not been instructed to do this work, but I trust it will meet with the approval of the Minister.

The fishing in Lake Erie, this season has been generally light, which in part accounts for the extensive and determined poaching by American fishermen, which has been far in excess of former seasons. And about the only truthful statement given to the press by the captain of the steamer *Silver Spray* was that the American fishermen had more nets in Canadian waters than the *Petrel* could take out in two weeks. I received permission from the department to employ one or more tug. I did procure one for a day but the owner would not go again because he was threatened by American fishermen with the destruction of his tug. I could not prevail upon any other parties having fishing tugs to assist me, they saying if they did so the American fishermen would come over and steal their nets, or burn their tugs.

I am delighted at the Minister's express determination to put a stop to wholesale poaching by American fishermen, and that he is going the right way about it. The

Petrel was never speedy enough, and of late years fast fishing tugs have been built, which has rendered her very inefficient for the service.

You will see by the above that 1,007 nets were seized, and three tugs. Some of the nets were returned—those on the gasoline tug—and those belonging to the *Star* are still with her. The rest have been sold and—with the exception of a small balance yet to collect—the money placed to the credit of the receiver general of Canada.

I have the honour to be, sir,
Your obedient servant,

E. DUNN,
Commanding D. G. S. Petrel.

EXTRACT OF WORK DONE BY THE D. G. F. C. "KESTREL" FOR THE SEASON OF 1903.

VANCOUVER, Dec. 26, 1903.

June 29, started on patrol duty as far north as Lowe Inlet.

On this cruise I notified several cannerymen and cautioned them that they would have to find other means of disposing of their offal besides dumping it on the fishing grounds. This they did at once.

I also notified the proprietor of the saw mill at the head of Rivers Inlet, that he must stop throwing slabs, rubbish and saw dust in the river, under penalty of one hundred dollars fine. They at once closed down and set about to make arrangements for burning the refuse. We also visited other fishing stations but found the law complied with.

July 5, coaled at Nanaimo and proceeded north to Port Simpson, Nass River, Hecate Straits, Queen Charlotte Islands, etc.

On this cruise we located several halibut banks in Hecate Straits and north end of Queen Charlotte Islands, also took a line of soundings around Rose Spit, and located a reef off Redfern Island, now known as Cecil Rock, also rounded up several fishermen for not carrying their licenses with them when fishing, also fined the Oceanic Cannery $10.00, for same offence remitting fine to Mr. Sword, Fishery Inspector. Our presence in these waters also had the effect of the stopping illegal Sunday fishing in Chatham Sound.

From August 3 to 26, on patrol duty between Fraser River and Carmanagh Point. Our presence in these waters at once had the effect of stopping poaching with seining nets along our coast, although we were unable to catch any of the poachers in the act of taking fish. Returning we cruised as far north as Seaforth Channel, locating halibut bank at the north end of Vancouver Island, this bank extends from Quatseno Sound to 51°5′N and eastward to Browning passage, we named this King Fisher Bank after the American steamer of that name operating out of Vancouver which took over 900 tons of fish off this bank alone in four months time.

We also warned several fishermen that if they where caught within the 3 miles limit that they would be seized, and that cleaning their fish and throwing the offal overboard in our harbours must cease at once under penalty of confiscation.

On September 11, took out Chamber of Commerce delegates excursion.

From 13 to 19 cruising in Howe Sound, Malaspina Straits. On this cruise made small survey of coast from Powell River around Grief Point to the small harbour of Froke, also located rock of north end of Texada Island giving correct position of same, also visited all the streams of note where fishing is carried on.

On 21st, started on cruise to Queen Charlotte Sound, taking many soundings on King Fisher bank, and visiting all streams on the route, also destroying several obstructions that Indians and others had placed in the streams to obstruct salmon from entering them.

On October 5, left for cruise north as far as Nass River, Hecate Straits, &c., on this cruise, we chased one steamer out of Chatham Sound, but were unable to catch him having no gun to round him to. I also located three uncharted rocks, but as the weather was bad I had no chance to survey them and give correct bearings. Also visited all fishing stations in route where we found everything in order.

On November 28, left again for the north as far as Whales Island and Virago Sound, Queen Charlotte Islands. We cruised the whole coast thoroughly but found no poaching going on at present, as the Alaskan halibut fleet have shifted their cruising grounds since the *Kestrel* has put in her appearance in the northern waters. This fleet is now operating in S. Eastern Alaskan waters around Kitchikan.

We also located another halibut bank laying about S. E. by S. from Goose Island, this bank, I have named 'Kestrel' bank, as the weather was bad I could not survey it properly, but from soundings taken and information gained, I learned that this bank is about 28 miles long by 18 miles wide in a N.W. and SE. direction. On our return trip we visited all way stations but found everything quiet.

H. NEWCOMB,
Commanding D. G. F. C. "Kestrel."

ANNEX B.

DETAILED REPORT OF THE FISHERIES INTELLIGENCE BUREAU.

HALIFAX, N.S., December 30, 1903.

Commander O. G. V. SPAIN, R.N.,
Commanding Canadian Marine Service,
Ottawa.

SIR,—I have the honour to submit the annual report of the Fisheries Intelligence Bureau, whose operations begin on May 1, and close the 15th, of October. The reports of the various agents at the fifty-five reporting stations included in the bureau, have been compiled with statistics, tabulated statements, etc., and are submitted herewith. These will be perused with interest. In addition to these stations there are also five towns to which daily telegrams were sent by me of the movements of the fish; and bulletins have been regularly posted for information of the fishermen. These places are:—Shelburne and North Sydney, N S., Charlottetown, Souris and Tignish, P.E.I.

The daily bulletins have been regularly published in the 'Morning Chronicle,' 'Halifax Herald' and 'Acadian Recorder,' and sometimes in the 'Daily Echo' and 'Evening Mail' in Halifax; also in the St. John newspapers.

Papers also throughout Nova Scotia and Prince Edward Island have frequently published the 'Fisheries Intelligence' contained in our bulletins. The reporting station located at Escuminac Point, Northumberland Co., N.B., which had been inoperative since 1900, was re-established last spring and placed under the efficient control of Mr. John Walls. Messrs. Hume Hopgood and John A. Leslie were appointed reporters at the stations of Malpeque, P.E.I. and Spry Bay (Leslie Bay) N.S, respectively, *vice* Jas. M. McNutt and Wm. S. Quigley resigned. Mrs. M. J. Bond, assumed the position of reporter at Point St. Peter, Que., in place of Mrs. E. Bond (deceased). I regret to report that there has been a considerable decrease all around in the catch

and value of the fisheries. This is attributed to unfavourable weather, scarcity of bait, and the prevalence of dogfish. The latter evil, I am glad to learn is now engaging the attention and consideration of our Government. The following summary will show the results of the fishing operations for the season of 1903.

LIST of Fisheries Bureau Reporters outside the Civil Service.

Residence.	Name.	Allowance.
		$
Alberton, P.E.I.	David Montgomery	15 00
Arichat, C.B.	J. T. Jean	15 00
Blomfield, P.E.I.	Edmund D. Kelly.	15 00
Canso, N.S.	John E. Cohoon	15 00
Caraquet, N.B.	Mrs. E. Blanchard	15 00
D'Escousse, C.B.	John P. Gruchy.	15 00
Gabarus, C.B.	James Nichol	15 00
Douglastown, P.Q.	Charles Viets	15 00
Grand River, P.Q.	Mrs. J. Carbery	15 00
Ingonish, C.B.	J. M. Burke	15 00
Isaac's Harbour, N.S.	Simon M. Giffin	15 00
L'Ardoise, C.B.	J. M. McIsaac	15 00
Long Point (Mingan), Que.	A. Maloney	15 00
Lunenburg, N.S.	W. A. Zwicker	15 00
Magdalen Islands, Que.	J. A. Le Bourdais	15 00
Meat Cove, C.B.	A. B. MacDonald	15 00
Newport Point, Que.	Mrs. M. Meunier	15 00
Paspebiac, Que.	Miss. Ada Beck	15 00
Percé, Que.	E. G. Tuzo	15 00
Point St. Peter, Que.	Mrs. M. J. Bond	15 00
Port Mulgrave, N.S.	David Murray	15 00
Salmon River, N.S.	Arthur Balcom	15 00
Sand Point, N.S.	John A. R. Morrison	15 00
Seven Islands, Que.	P. E. Vignault	15 00
Shippigan, N.B.	Mrs. M. J. Robichaud	15 00
So. West Point Anticosti, P.Q.	Miss. Z. Lemieux	15 00
Spry Bay (Leslie's Bay), N.S.	John A. Leslie	15 00
St. Ann's, C.B.	Thomas D. Morrison	15 00
St. Peter's, C.B.	Angus J. McCuish	15 00
Whitehead, N.S.	J. E. Dillon	15 00
Yarmouth, N.S.	F. L. Hatfield	15 00
Clark's Harbour, N.S.	J. Lewis Nickerson	15 00
Queensport, N.S.	W. P. Scott	
Port Malcom, N.S.	R. G. Proctor	15 00
Gascons, L'Anse, Que.	Mrs. A. E. Brotherton	15 00
St. Adelaide de Pabos, Que.	Miss. Christina Mauger	15 00
Escuminac Point, N.B.	John Walls	15 00
Malpeque, P.E.I.	Hume Hopgood	15 00

LIST of Fisheries Bureau Reporters who are Government Officials.

Arichat West, C.B.	C. P. LeLacheur	15 00
Cheticamp, C.B.	Chas. E. AuCoin	15 00
Digby, N.S.	J. M. Viets	15 00
Georgetown, P.E.I.	Chas. Owen	15 00
Grand Manan, N.B.	Charles Dixon	15 00
Hawkesbury, C.B.	J. C. Bourinot	15 00
Liverpool, N.S.	J. H. Dunlop	15 00
Lockeport, N.S.	J. R. Ruggles	15 00
Louisbourg, C.B.	H. C. V. LeVatte	15 00
Mabou, C.B.	Lewis McKeen	15 00
Margaree, C.B.	M. A. Dunn	15 00
Musquodoboit Harbour, N.S.	George Rowlings	15 00
Petit-de-Grat, C.B.	P. T. Fougere	15 00
Port Hood, C.B.	E. D. Tremaine	15 00
Port La Tour, N.S.	J. W. Taylor	15 00
Lo. East Pubnico, N.S.	J. A. D'Entremont.	15 00

NOVA SCOTIA.

Report of A. N. Whitman & Son :—

The season of 1903 has been one of the most unprofitable to our fishermen of any for a number of years. The weather as a rule has been unsuitable for fishing operations of any sort, and other causes have contributed.

Codfish.—Our inshore cod fishery has become unimportant to our fishermen. We have had to make the same report before, but have to give it now with added emphasis. Bad weather, a scarcity of bait, and the dogfish pest have been contributory causes of the failure. This year the bank fishery has been a failure owing to the scarcity of bait and fish, and the unfavourable weather which has prevailed. The total catch of codfish on our off banks cannot have been more than fifty per cent of an average catch. There is nothing to indicate a permanent reduction in the value of this fishery.

Haddock.—Owing to the increasing demand for haddock for the fresh fish trade and for smoking and the consequent increasing value, these fish are more sought after, and are a source of much revenue to our fishermen. The outfit for the haddock fishery is increasing each year and the value of the catch is proportionately increasing. There is no apparent diminution in the supply and we have one of the finest haddock fisheries in the world. Some of our fishermen are using nets for the capture of these fish, especially in the earlier part of the season and with good results. One firm here has canned a considerable quantity of finnan haddies and found a market for the quantity packed but at only a small margin of profit, it is understood.

Pollock.—There seems to be no diminution but rather an increase in the supply of these fish and considerable quantities of them have been caught this year. Notwithstanding the low price at which they have to be marketed they help out the income of our people very materially, and are really a very useful food fish. Great quantities of small pollock have swarmed in our waters this year and have served for food for some of the larger species.

Herring.—We have had no catch of herring worth speaking of for some years and this year has not been an exception. Perhaps it is as well as the demand for these fish is not nearly so great as it was thirty or forty years ago. Time was when every Canadian farmer laid in his barrel or more of herrings, but they have learned to eat other things, and herrings are neglected. Large catches of them now would fail to find a market in the country. The European demand seems to be maintained but is fully supplied from the other side of the Atlantic especially Great Britain and Norway.

Mackerel.—The spring catch of mackerel in this bay and the southern Cape Breton shore was the largest for many years. Many thousands of dollars were paid out for them during the short time they were passing along our coast for their Northern haunts and those who were successful were provided for financially for the lean and hungry months to follow, as they have earned but little since. The summer catch was but indifferent and at this time of writing the prospect for a fall catch is not encouraging.

Lobsters.—Fair catches of lobsters were made on some parts of our coast during the open season. In this particular locality the catch was small. Bad weather was the principal cause of this. It seems to have been pretty satisfactorily demonstrated that the hatcheries established by the government have been of material benefit to the part of the coast on which they are located and it is hoped that the government will see its way clear to enlarge its operations. Extremely high prices helped in part to make good the loss due to a diminished catch.

Halibut.—Our supply of halibut here is limited largely to the months of April, May and June and is obtained principally from the vessels fishing in the vicinity of Sable Island. The catch this year was smaller than the previous year. Prices ruled about the same. One of our firms put up a very nice quantity of "Kippered" halibut in pound cans and it has met with a favorable reception. The Gloucester halibut fleet is

constantly diminishing and it has been predicted that the business will soon be abandoned and the supply obtained almost entirely from the Pacific Coast where these fish are more abundant. We noted the arrival in Boston recently of one lot of ten cars of halibut from the coast. The fish caught there are medium size and of fair quality but they are considered inferior to our Atlantic halibut. There will always be a certain amount of halibut caught in Atlantic waters by vessels in pursuit of other fish, as is the case at present, but they will not long pay to fit out for exclusively unless they become more abundant. The supply has been diminishing for some years.

Sword fish.—A new industry sprang up here this year in the catching of sword fish and quite a number were caught. The catching of these excellent fish has been an industry for a number of years on the coast of the United States, but it has never been followed here. It was discovered here this year that these fish were unusually abundant in our waters and as the price is usually a good one, our fishermen fitted out with harpoons and other appliances to capture them with the result that quite a number were taken and another year will probably see an important business done if the sword fish are as numerous as they were this season. They are among the best of the edible fishes, as all who have tasted can testify. Our fishermen proved adepts in the art of catching them, after a very little practice. We predict a good future for the sword fish business.

Squid.—The catch of squid has so far this year been disappointing. Not only do our fishermen find them almost indispensable for their own business for the catching of cod and haddock, but they also earn thousands of dollars in the supplying of them for bait to the banking vessels which make Canso their port of rendez-vous. This year very little has been earned by them in this way, and the absence of squid has helped to intensify the wants of a lean year. Nothing like an adequate supply has been put into cold storage up to the time of writing, for the winter haddock fishery, but it is hoped that before the season closes such a supply will have been obtained. All the surplus from last season was taken readily this spring by the early bankers but not nearly enough could be obtained.

The Dominion Government has undertaken to liberally bonus an up to date cold storage plant capable of storing an adequate supply of squid for our bankers for the spring, and it is confidently expected that before the end of another year there will be established at Canso or some other central point on our coast a well equipped plant. The need of such a plant has been demonstrated this year as never before and both political parties seem agreed that no mistake will be made in liberally bonusing the undertaking. We predict that it will supply 'a long felt want'. In this connection we would like to say that as soon as depots of ample capacity for the storage of frozen bait are established on our coast we hope to see a new departure made in the character and equipment of our salt fish fleet. Once an ample supply is assured there will be no reason why vessels should leave the fishing grounds to come in for bait and when taken on board carry it out in a perishing condition. Given snug, strong three masted schooners of from two hundred and fifty to three hundred tons capacity, low sparred and with stump topmasts to avoid rope-hamper as much as possible so that they may ride easily, fitted with an up-to-date ammonia freezing plants and sufficient cold storage room to hold enough frozen bait for the voyage, using oil in tanks or hard coal for fuel, and with a supply of water, provisions and other supplies for the voyage and as many men and boats as they can carry conveniently, there will be no reason why these vessels should come to land until they are loaded to the gunwale. If they find bait on the ground as they frequently do, all the better, their supply of bait will then not be used, and will be good for another trip, it being safely kept in cold storage, but should there be no bait on the ground or an insufficient supply, the bait on board will be available and instead of running away from fish, as they often have to do, they can remain on the ground steadily fishing, wind and weather permitting, until a full fare has been secured. Such vessels could carry a dynamo for electric lighting and a search light as well, and steam whistles or sirens for signalling in thick weather and a steam windlass. All this would cost money, but it would be money well spent and the present hand to mouth system of carrying on the business, involving a heart breaking loss of time, demoralizing and unprofitable, would be forever done away with. It would mean a

revolution in the business, but one very much needed, and we believed that the time is near at hand for the carrying of it out. The money lost this year to our Nova Scotia fleet for want of just such an equipment would put up a first class cold storage plant on shore and equip many such vessels.

Dogfish.—The dogfish nuisance seems to be increasing rather than diminishing. For many years these rapacious fish had almost abandoned our shores but they have come back in steadily increasing numbers, and are now robbing our fishermen each year of a very considerable portion of their revenue. A number of numerously signed petitions were presented to the Dominion Government this year asking for aid in the destruction of the dogfish in the form of a bonus, and we believed that the matter is under advisement. There is no doubt that the dogfish would be utilized for the manufacture of fertilizer and become a valuable asset, as we suggested in our report last year, and we hope that either private or government enterprise, or better still the two combined will succeed in establishing a chain of plants along our coast for the utilization of dogfish and other non-edible fishes and fish offal for this purpose and the manufacture of oil and glue. There is money in the business if properly conducted, especially with a reasonable amount of government aid; such as might be reasonably given in view of the aid granted to other enterprises not more important, perhaps, than this.

Fresh Fish.—There was a time when salt fish were to a very considerable extent the only fish eaten in this country, and they were no doubt a wholesome and useful food. With the means of transportation then available fish were of necessity salted before using, but with the net work of railroads now covering a large portion of Canada and increasing every year and the numerous steamboats feeding the lines of railway and there is no reason why the people cannot have their fish fresh and obtain them in a more wholesome and palatable form. It is pleasing to observe that our legislators are paying more attention to this matter and that the question of furnishing the fishing industry with adequate transportation facilities is receiving increasing attention. The county of Guysboro and port of Canso are so situated in relation to the best fishing grounds as to be in a position as to become the banner county, and port of all Canada for the conduct of the business, and yet but few counties are so poorly off for railway facilities as this same county of Guysboro. With the exception of the Intercolonial Railway cutting across one small corner of the county to Mulgrave Station it has no railway within its borders, and Canso, with the splendid fleet of fishing craft of all sizes that make it a rendezvous during the fishing season, as only one small steamboat connecting it with the railroad and that by a circuitous route, a service which might be vastly improved upon. Notwithstanding the fact that those engaged in the business are so seriously handicapped in this way they have a growing business upon their hands, and it is to be hoped that before many years a railroad will find its way to the waters of this important fishing port, and that in the meantime the very best steamboat service possible will be given in place of the present unsatisfactory service.

Marine Biology.

We believe that the time has come when a new departure should be taken in the study of marine life. For some years an amount has been appropriated yearly by the Government of Canada for the promotion of this important branch of scientific research, and a floating structure built for the purpose was located at St. Andrew's, New Brunswick, then at Canso and now at Prince Edward Island, whereby some of our best college men have been enabled to carry on original investigation in Marine Biology, but the facilities furnished have been quite in adequate, though not to be despised. The results accomplished have been far beyond what might have been expected in view of the inadequate facilities available. We believe that a larger sum of money should now be provided for this purpose and that at some central point in close touch with the fisheries of our Atlantic coast a permanent establishment should be erected and equipped, and placed under the management and control of one of the best men available for the purpose. In connection with it there should be a museum into which should be gathered specimens of every form of marine life indigenous to our North Atlantic

waters, and a suitable steamboat should be attached to the establishment, equipped with all useful appliances for dredging the ocean floor and searching its waters. A summer school should be established in connection with this institution in which students from our colleges in Canada could carry on original investigation on their own account during the vacation months and acquire at first hand an intimate knowledge of marine life such as could not possibly be obtainable in college lecture rooms or laboratories. This too, would cost money, but we are convinced that it would be money well spent, as well spent as any that is spent on experimental farms, agricultural colleges and dairy schools, or colleges of mining and metallurgy.

We commend the suggestion to the attention of our Government.

Reporter, Mr. John E. Cohoon:

Codfishing commenced at this station this season as early as March 3, from which date to the 6th of April, 130,000 pounds of cod were landed by one schooner which had been operating on the Western Banks. The inshore fishery began March 26, and good catches were taken until the 29th. During the month of April the catch varied from good to fair and it was reported on the 9th of May that all branches of the fisheries were very dull since the month came in due to very bad weather and a continuous east wind had been prevailing since April 10. Boats averaged the following week about 1½ quintal per man and one banker arrived with a fare of 55,000 pounds of fresh codfish caught at Cape North in a four days' trip. The captain reported fish plentiful on the banks. During the remainder of the month and in June the catch was on an average fair and in July on the 18th, the largest catch taken by one craft with a crew of six men for one week's fishing was 9,000 pounds. Towards the end of the season the fishing varied from fair to poor. Bank fishing out of this port in early spring is a very profitable business and with properly equipped schooners the off shore fishery could be made a paying investment during winter months. The inshore codfishing has ceased to be profitable during the summer season.

Haddock were first reported on the 4th of May, from which date to the closing of the season haddock were taken in catches varying from good to poor. The haddock fishery the past winter has been a very successful one but the catch during the summer months was not as good as that of corresponding months of previous years.

Halibut.—During the months of April and May quite a large quantity of halibut was landed by the bankers and the inshore fishermen discharged a considerable quantity of fish during the latter part of June and July. Halibut were in larger numbers on the inshore fishing grounds this season than they were the previous season.

Herring.—The herring fishery was reported a complete failure this season.

Lobsters.—The first report from this station the past season reported fishing of all kinds very poor attributed to the very bad weather on the coast, which had caused great destruction to the lobster fishermen, the majority of whom lost about one half of their gear. The fish appeared in light quantities in May from the 1st to the 9th, and fair fishing was reported each day to the 19th. Between these two dates the lobster men were reported doing fairly well with one half of their original lobster outfit, and boats averaged about 300 pounds. The latter part of May, the fishermen reported a fair week averaging about 350 pounds per boat, when the fishery became scarce after to the close of the season. The lobster catch this season was reported disappointing due largely to rough weather in which a great many of the fishermen lost their traps and were compelled to go out of the business early in the season. The catch is considered about the same as last year's.

Mackerel.—The first mackerel news received from this station was on May 23, when American mackerelers arrived in the bay, and it was reported that one of the number had made a stop of 80 barrels, on the 22nd, east of Halifax. Mackerel were now being captured by both nets and traps with good results. 500 fish were taken on the 26th, with 1,000 in nets the following day. One trap reported on the 28th, 10,000 mackerel

and the next day 9,000. The weekly report of the 30th, read,—' that the few mackerel fishermen that engaged in the business did very well the past week landing between forty and forty-five thousand mackerel, making the total amount paid to mackerel fishermen about four thousand dollars.' On June 1, mackerel increased in quantity and very good catches were made daily to the 9th. From this date to the middle of July, small quantities of mackerel were taken which was due to the strong east winds off shore. The fishing was fair from July 16th to 25th and the net fishermen were reported on the 18th averaging about 300 mackerel for the past three days of the week. The fishermen were doing well by report of the 25th, with an average of 150 fish per boat and traps about 1,000 per day. There was a scarcity in this branch afterwards until August 21, when one seine reported 6,000 mackerel. Small lots had been stopped all the week to the 25th, on which date one seine landed 16,000 fish and two days later on the 27th, a large school of mackerel was rounded up by the same seine but unfortunately when closing the arms of the seine a strong tide swept the net from the bottom and the fish once again were permitted to enjoy their freedom. The spring catch was the largest we have had for a number of years. The fall fishery is still being prosecuted with every prospect of a good catch.

Pollock have been and are still very plentiful on the coast. Large quantities are being taken and the catch would have been largely augmented had bait been obtainable.

Squid struck inshore about August 8, and were in fair supply until the 11th and 12th of the same month. On these dates three bankers obtained full baiting and a number of other crafts secured part baiting and sailed for the banks. The catch varied from fair to poor to the end of the month and in September and the greater part of October squid was a failure on the coast. At present writing (Nov. 2) fair quantities of this bait fish were being taken and the bait supply for the remainder of the fall and winter fishing is practically assured. Our reporter says :—' It is a great pity we have not an up-to-date cold storage plant with a sufficient capacity to supply the banking fleet, as well as our inshore fishermen in the summer months with bait. Thousands of dollars were lost to the fishing industry during the past season through the inadequate supply of bait, for with a first class cold storage at Canso the fishing fleet of Nova Scotia would not have to spend so much of their valuable time in a vain search for bait. Squid could be obtained in the fall of each year, thereby making the present year supply the demands of the future. Squid in unlimitable quantity has always been obtainable in past years during October and November.'

Dogfish.—Codfishing the latter part of the season was reported on a poor condition, bait being the cause. Although squid had been and are at the present plentiful off Canso, it is impossible for the fishermen to catch any owing to the swarms of dogfish which infests the waters of our coast. Mr. Cohoon reports,—' I notice by the papers that several persons have suggested ways and means to exterminate or make the invading swarms of dogfish scarcer along our shores. One plan is to utilize the government cruisers in making war upon the fish with bait and dynamite. Now, I am under the impression that a great number of other fish would be killed, such as mackerel, herring and pollock, &c., all which can be found near the surface of the water, during the best part of the fishing season, attracted by bait thrown overboard by the cruisers. My suggestion would be to build a large fertilizing plant and pay the fishermen a fair price for catching dogfish, which could be used in making fertilizer as well as being utilized in the manufacture of oil and glue, which I think would have a tendency towards lessening the swarms of dogfish more than all the dynamite that could be used by the cruisers. I feel sure any private enterprise establishing a fertilizing plant at Canso would have no difficulty in obtaining all the material they could handle for with the thousands of tons of fish offal of various kinds thrown away yearly by our fishermen there should be no question in regard to material. The necessity of doing some thing in the way of offering bounties for the extermination of dogfish, should also be strongly impressed upon the government.

Sword fish.—Something new in the fishing industry was reported during the season when swordfish appeared on the coast in good quantities. Swordfish were reported plentiful in September 21, and about 20 fish were landed the week of the 28th.

STATEMENT of Catch of Fish for Season of 1903.

CANSO, N. S.

Fish.	Quintals, dry.	Pickled Green, lbs.	Fresh, lbs.	Smoked, lbs.	Canned, lbs.	Oil, gals.
Cod	4,500	450,000	400,000			
Haddock	1,000	40,000	2,675,000	550,000	45,000	
Pollock	5,500	150,000	50,000			
Mackerel		700,000	500,000			
Herring		125,000	200,000	20,000		
Halibut		130,000	255,000	30,000	15,000	
Lobsters			155,000		250,000	
Swordfish			15,000			
Squid			1,500,000			
Fish oil						35,000
Totals	11,000	1,595,000	5,750,000	600,000	310,000	35,000

CLARK'S HARBOUR.

Reporter, Mr. J. Lewis Nickerson :

Alewives.—This station is never frequented by alewives in any great numbers, and last spring alewives were scarcer than ever.

Cod.—Shore codfishing began towards the last of May, by a few boats and by the middle of June the whole fleet of small crafts was engaged in the fishery doing very well for a number of weeks in succession. There was no bait in the local freezer last summer and for a time some inconvenience was experienced on that account until the herring trap got in operation and then the supply of bait was quite constant for the remainder of the season fishing continued fairly good till late in the fall, and for some reason which is not easily explained, comparatively few boats followed up the fishery to any extent. Those who did made paying wages at it, selling for the most part, fresh from the knife, to the local buyers who have several stands here at present and who appear to be doing a good business. The ready cash payment is one advantage to the fisherman. Boneless fish were put up at this station by three factories.

Haddock and Pollock.—The catching of either kind of these fish at this station does not form as in some places a separate pursuit from that of cod. They are found during the summer more or less numerous on the same grounds and the boats which go for codfish usually take mixed fares by hand-lines. Last season both haddock and pollock were reported plentiful, especially the latter in the early fall. The catch all round was fully up to the average. It is worthy of note that cod livers received additional value last year from an industry started here by New York parties for refining the oil extracted therefrom. The great shortage in the supply of cod liver oil for medicinal purposes from Norway the past few years has led to the enterprise mentioned above, and plants for extracting are now operated at several parts in Western Nova Scotia with a degree of success that promises great expansion in the near future. The price paid for cod livers is many times more than could be obtained for them otherwise, which materially increases the earnings of the fishermen.

Halibut.—Trawling halibut was regularly followed by a limited number of boats, beginning in June. In this branch success depends on striking the light grounds as these fish seldom occupy a wide range of bottom, consequently the fares have been very unequal, though in some cases the stock was a handsome one. The local cannery, the

only one of the kind in Canada took most of the catches at remunerative prices. Altogether this branch of the fisheries is assuming a greater relative importance than formerly.

Herring.—The general scarcity of herring all along the North Atlantic sea-board was felt here, but not to such an alarming extent as elsewhere. The ordinary summer run did not appear inshore. The nets did literally nothing. The trap was set the latter part of June and proved a veritable boon in the way of supplying timely bait not only to the local line fisheries, but to schooners from neighbouring ports, besides enabling a lot to be stored for use in lobstering. The total catch of the trap was 800 barrels. The benefit from this contrivance should not be underestimated. At a time when no bait could be procured from the freezer and the nets were practically useless the supply from the trap enabled the boat fishing to keep on, sometimes landing $800 worth of fish in a single day. It is to be regretted says our reporter, that the government puts a tax on that enterprise by charging a license fee of fifty cents per fathom of leader. In most cases this would take $50 out of the trap owners and sometimes $100. It seems certainly like a mistaken policy to give aid to freezers for preserving bait, and fine the traps which alone can furnish the supply. In no way could our shore fisheries be more encouraged than by abolishing the license fee on herring traps at least, since no good purpose can be served by retaining it.

Mackerel.—Trapping has been totally abandoned at this station owing to previous failures. Netting was continued as usual, but only a few mackerel were taken by this method and no schools appeared in these waters last spring.

Lobsters.—The season's work in lobstering which is now far and away the leading branch of the fisheries with us shows a gratifying advance over that of the previous year. The number of boats engaged in that pursuit was if anything larger than ever before, but at no time during the whole five and a half months was there any marked decline in the general catch such as would result from over fishing. From the middle of December till January, the weather was favourable on the whole and active crews made an exceedingly good stock. After that there were frequent storms which interrupted the fishing till the first of March; but loss of gear was not so extensive as formerly. The spring months closed very fair. There was an average catch in the aggregate, but the high prices for live exports was the chief factor in the season's success. The market price ruled right through at least $5 more per crate than last year. The canner also got about $1.50 more per case on their orders. The output of the canneries at this station were:—

James McGray	750	cases.
A. S. Swim	500	"
Cape Sable Packing Company	1,400	"
James C. Penny	500	"
M. G. Nickerson & Co	1,000	"
F. T. Nickerson	700	"

Making a total of 4,850 cases; over 1,000 cases more from the same factories than last year.

DIGBY, N.S.

Reporter, Mr J. M. Viets:

The early part of the season was very boisterous, interfering materially with the spring catch. The summer months were mild and seasonable. Later on in the fall, November made a good showing although the month was at times very stormy. The season fishing in the whole district exceeded that of 1902 considerably. Prices kept up well, especially in the fall. A quick market was found at this station for all kinds of fish, particularly haddock. The dealers in the 'finnan haddie' business gave liberal prices for fresh haddock for smoking purposes and often received by rail from Yarmouth quantities sufficient to meet the requirements of the trade. Lobsters were

more plentiful in the middle and western part of the district than in the eastern section and the catch was larger than that of last season. Herring, as usual, were scarce. Fair takes in weirs at Sea Wall, in the middle of the district, were reported the latter part of the summer. At this station there is a considerable shrinkage all round. This is attributed to the vessels of the Digby fleet, in the spring months, running into Yarmouth, unloading and disposing of their cargoes. The fishermen in this district this season were also obliged to spend much of their time seeking bait. They reported that bait is falling off alarmingly on the north shore (New Brunswick and Grand Manan) where they were compelled to seek for the 'one thing needful' in the fishing industry.

Codfish made its appearance on the coast in May, on the 2nd and to the 23rd of the month the catch was on an average fair, with the June and July catches varying from fair to poor. Small fares were reported for the balance of the season, which ended with a yield of 400,000 lbs.

Caplin were reported in good fishing on May 22.

Haddock.—Catches were light early in the season on account of reasons stated above. Towards the end of the fishing season, fair catches were reported regularly. Total yield is estimated at 540,000 pounds.

Hake.—This fish was reported in May, from the 5th to the 23rd, in fares varying from fair to poor, with a light June catch. In the month of July the fishery improved and fair fishing was reported to the 14th. From this date continuing through the month of August to September 15, good reports of hake were received daily and regularly. The October catch averaged fair. and hake fishing ceased for the season with a catch of 1,342,000 pounds.

Squid.—Fair quantities of squid were reported in September on the 13th and 25th.

TOTAL catch of Fish taken in Digby district for season of 1903.

DISTRICT.	Cod. — Lbs.	Haddock. — Lbs.	Hake. — Brls.	Lobsters. — Cwt.	Herring. — Brls.	Halibut. — Lbs.	Pollock. — Lbs.
Digby	400,000	540,000	1,342,000	500	1,018	6,000	4,000
Sandy Cove	85,000	1,130,000	1,590,000	1,250	.....	.....	40,000
Tiverton	2,132,000	1,130,000	3,790,000	1,120	2,350	40,000	.....
Freeport	1,932,000	720,000	573,000	1,120	.....	.....	932,000
Westport	739,000	450,000	350,000	720	450	65,000	2,302,000
Total	5,288,000	3,970,000	7,645,000	4,710	3,818	111,000	3,278,000

HALIFAX, N. S.

Mackerel made a fine showing on this part of the coast line during the past season' and some very large hauls were made. The fish remained on shore quite late in the fall as the following clipping will show. During the mackerel voyage, large numbers of United States seiners flittered around the coast, but they were kept under strict surveillance by the vigilance of the fisheries protection cruisers.

HALIFAX DAILY ECHO, November 2.

STATEMENT showing the quantity and value of fish exported from Halifax, for 11 months.

HALIFAX FISH EXPORTS FOUR MILLION DOLLARS.

Nova Scotia's Fishermen add to the Country's General Prosperity.

Statement showing the quantity and value of 'Fish' (by articles) exported from the Port of Halifax from January 1st, 1903 to November 30th 1903, inclusive, 11 months.

Articles.	Unit of Quantity.	Quantity.	Value.
			$
Codfish, including haddock, ling and pollock—Fresh	lbs.	76,825	3,214
" dry salted	cwt.	439,033	1,839,258
" wet salted	cwt.	331	1,290
" tongues and sounds	brls.	97	897
Mackerel, fresh	lbs.	242,337	13,268
" canned	lbs.	10,272	2,986
" pickled	brls.	14,257	150,463
Halibut, fresh	lbs.	3,500	130
Herring, fresh or frozen	lbs.	297,620	5,356
" pickled	brls.	50,410	186,886
" canned	lbs.	4,710	266
" smoked	lbs.	301,173	7,559
Sea fish, other, pickled	brls.	157	532
" " " preserved	lbs.	22,554	1,254
Oysters, fresh	brls.	11	58
" preserved in cans	lbs.	24	3
Lobsters, fresh	brls.	5,847	57,849
" canned	lbs.	6,457,396	1,680,354
Bait: Clams or other	brls.	19	88
Salmon, fresh	lbs.	70,065	7,013
" canned	lbs.	2,895	357
" pickled	brls.	1,412	17,961
Fish, all other, fresh	$	.....	1,300
" " " pickled	brls.	317	2,736
Total	.....	.....	3,981,078

LOCKEPORT, N.S.

Reporter, Mr. J. R. Ruggles :

Alewives were not reported when in the rivers, but 20 barrels were taken during the season.

Cod.—Fishing poor owing to rough weather was the first report received from this station on May 1, and light quantities of codfish were on the coast from the 7th to 15th. 27 quintals was the highest fare by the off shore crafts on the 16th, with cod plenty being reported on the 26th. Good numbers of cod were off shore on the 27th, 28th and 29th, and best boat reported on the 26th 125 quintals in 2 weeks' operations. 43 quintals were landed in June on the 1st, by one craft from the off shore fishing grounds, where cod had appeared plentiful, but the appearance of dogfish on the coast caused a scarcity all around, until codfish were again in large bodies in our waters on the 20th. Three arrivals on the 23rd, the *T. C. Lockwood*, *Julian H. Archer* and *Ida M. Clarke* reported 750, 600, and 600 quintals respectively. The weather was rough after to the 29th, when the offshore fishing which was good reported 65 quintals, by best boat. The offshore fishery in the month of July was on an average good, but was seriously

hindered by dogfish and lack of bait. Best boat on the 7th, reported 103 quintals, in a fortnight's fishing. The codfishery opened up poor in August on the 1st, but increased to good the following day, which continued the same to the middle of the month, afterwards becoming light in catch to the 5th of September on which date 800 quintals was reported the catch of the *Ida M. Clarke*. Good fishing was reported from the 11th and 19th of September, and poor after to the 8th of October, when best boat reported a catch of 40 tubs. Severe weather prevailed to the close of the season during which 1,811,709 lbs. of codfish were taken, a decrease of 639,005 against last year's catch. 12 brls, or 432 gallons of cod oil were extracted this season, which is also 9 brls, or 324 gallons less than the quantity taken in 1902.

Haddock.—No reports of haddock were received during the season. The catch, however, is totalled at 9,182 pounds.

Hake and cusk.—These fish were not reported on the coast, but their catches will aggregate about 13,773 pounds.

Halibut were reported when on the coast on the 26th of May in light quantities. The fish were scarce after until they re-appeared in July on the 7th, and halibut fishing was reported light, the last of the month from the 27th to 31st, and again on the 1st of August. Halibut struck in fair quantities in September, from the 11th to 20th, and many fair hauls were taken. The total catch is in excess of that of 1902, by 2,000 lbs, as it is estimated that 10,000 lbs. were obtained during the season, which makes this year's halibut fishing the most successful since the season of 1895 when 14,000 lbs. was the catch.

Herring bait by fishermen's nets was reported on the grounds in May on the 26th, but herring were very scarce to the month of August, during which light quantities struck inshore from the 6th to 15th and again from the 18th to 26th. Those taken between the latter dates were reported in nets. Herring nets were reported at Westhead on the 27th of August and a few fish were netted in September from the 2nd to the 20th, and in October on the 7th. Herring plentiful was reported the following day. About 1,000 barrels or 1,100 brls. below 1902 catch was the herring fishery's yield for this season. The fishermen were reported replacing their nets on the 14th of October, after recent storms.

Mackerel fishing at this station was a little better than in previous seasons and about 80 barrels were taken this season, which will make this season's catch larger by 45 barrels than last year's.

Lobsters were in good supply in May on the 2nd and 4th, and fair quantities were taken from the 7th to the 11th. The lobster fishery improved after and good catches were reported to the 24th, with light fares being taken to the end of the month, which closed the season for lobster fishing.

No. of live lobsters (large) taken for export.....	140,000	
" " lobsters canned (small).....	1,252	cases.
or.....	60,096	lbs.

5,000 lobsters more were exported this season than last, and the canneries output was 6,336 lbs. larger.

Striped Bass.—This fish also was not reported, but when on the coast this season, increased the total catch at this station by 800 pounds.

Pollock.—1,836 pounds of pollock were taken during the fishing season.

Squid and clam bait.—Squid were reported plentiful on the off-shore grounds in August from the 2nd, to 6th. 705 barrels of clams, a decrease of 104 brls. from last season's catch, were taken during the season, and will be utilized for bait purposes.

DETAILED STATEMENT of Catch of Fish at Lockeport Station for 1903.

Name of Vessel.	Number of Pounds taken.	Barrels of Oil.
T. C. Lockwood	237,500	
Helen, C. Mace	65,000	
Ida M. Clarke	316,000	9
Julian H. Archer	204,000	3
Gertrude L.	275,000	
Fleetwing	17,000	
Charlie Richardson	75,000	
Altona	60,000	
Shamrock	80,000	
Muriel	44,000	
Louise T. Churchill	96,000	
Maple Leaf	125,000	
Katie	24,000	
Britannia	18,000	
Total of Vessels	1,636,500	12
Boats from Port L'Herbert to Blue Island	200,000	or gals 432
	1,836,500	gals. 432

	Lbs.
Proportion of cod	1,811,709
" haddock	9,182
" hake and cusk	13,773
" pollock	1,836
Total	1,836,500

LUNENBURG, N.S.

Reporter, Mr. W. A. Zwicker:

Cod.—Plentiful on the shore soundings on May 1 and 2, were the first reports received on this fishery. The weather was poor after to the 7th, and no catches were taken. Fair catches inshore were made on the 11th and 12th, and to the 27th good fishing was reported quite regularly. Dogfish put in an appearance on the 30th, and were reported very troublesome on June 1 and 2, from June 1 to 5, fair hauls of cod were taken and to the 12th, good fishing was reported. To the end of the month the cod catch was very poor on account of rough weather and dogfish which were on the shores and greatly affected the catches in general. From July 1 to 31, fair catches were made each day by inshore boats, and to August 25, the codfishing was very dull owing to the onslaughts of dogfish. On August 26, 27, 28 and 29 fair reports were received. The fishery was fair to the close of the season, although dogfish were reported a great hindrance to the fishermen. The shore codfishing this season is below the average. The principal causes assigned are the scarcity of bait, the prevalence of dogfish and the rough weather. It has been reported that the vessel owners of Lunenburg are discouraged over the season's results and are curtailing the construction of new vessels. The Lunenburg banking fleet, the past season, consisted of 69 vessels, and their catch totalled 11,784,000 pounds, a falling off of 9,921,000 pounds as compared with last season. The LaHave banking fleet had 68 vessels employed with a total catch of 11,368,000 pounds, a decrease of 7,432,000 pounds, 24 vessels comprised the Mahone Bay banking fleet, whose total catch was 3,480,000 pounds, being 3,130,000 pounds less than last year. From the figures given, it will be thus seen that the total catch for the whole county was 26,632,000 pounds, whereas in 1902, it was 47,115,000 pounds, a total decrease of about 20,483,000 pounds, or almost fifty per cent. The average catch per vessel was the smallest since Lunenburg started the bank fishing industry in 1871.

Haddock were taken in fair catches from June 1 to 12. For the remainder of the season, the catches were identically the same as cod.

Herring appeared about May 12, when a few were taken in nets. A light quantity of bank herring was reported on the 13th and 14th. From the latter date to the 26th, herring were on an average fair with some boats reporting one barrel. The fishery was reported very poor and irregular in the month of June, and very light catches were taken for the balance of the season. 100 barrels was the total catch and our oldest fishermen cannot remember a season in which there was such a scarcity of herring on the coast as the present one. This scarcity has been attributed however, to the numerous shoals of dogfish in the offing during the fishing season.

Lobsters.—Fair lobster fishing was reported from the opening of the season, Dec. 15, to January 20, after which the fishing was poor to the end of March. Fair catches of lobsters were taken from April 1, to May 9, but on May 11 lobsters appeared plentiful and good catches were taken to the 26th. To the close of the season, the fishing was on an average fair. The catch for the season was reported below the average, but prices were reported higher than in 1902. A market was found in the United States for all live lobsters of a large size caught previous to April 30. After this date, both the large and small lobsters were disposed of to the canners.

Mackerel fishing began for the first on May 14, when one boat made a catch of 7 large mackerel. 20 and 12 large ones were averaged by the boats on the 15th and 16th respectively, and on the latter date, mackerel were reported schooling off Big Duck island. Boats were averaging on the 18th, 125 fish and to the 26th from 30 to 70. In the month of June from the 1st to the 12th, a few medium and large sized mackerel were caught. Dogfish were now very troublesome and all branches were dull until July 9, when it was reported that the boats at Kingsbury averaged 100 mackerel. Between the 15th and 21st inclusive boats had from 40 to 60 fish. On the 22nd, one trap had 100, and mackerel boats 50, with the former reporting 3 barrels on the following day and boats another catch of 50 mackerel. 135 fish were taken by the boatmen on the 25th and 26th, and at Roseway on the 29th, 200 brls. were trapped. Mackerel fair were reported Roseway on the 30th and on the 31st boats averaged 75 mackerel in nets. The August catch opened on the 1st, with 12 brls. by one trap and an average of 150 mackerel in nets by boats. 185 brls. by traps and boats averaging 130 fish were reported on the 3rd, 4th and 5th. From this date to the 10th, boats averaged 50 mackerel. There was a suspension of fishing operations after until it was reported that 10 barrels were taken in one trap on the 25th and to the 31st, 125 barrels was the catch by traps with boats averaging 200 mackerel. In September, 18 barrels were taken on the 1st and 40 brls. on the 2nd. The October catch as far as reported was 50 brls. in traps on the 26th. Very few mackerel were netted to November 15, on account of dogfish which were very troublesome and destructive to the fishermen and nets. The total catch is about 900 barrels. During the months of September and October, the bays and inlets in this district teemed with small mackerel about 5 inches long.

Squid were reported a total failure on our shores as well as the banks this season.

Dogfish have been reported more numerous and destructive on our coast and the banks during the past fishing months, than in any previous season.

The results of the vessels engaged in the bank fisheries for the past season are set forth in the appended statement:—

LUNENBURG BANKING FLEET.

	Lbs.		Lbs.
Willis C	70,000	Maggie E. Z	200,000
Tribune	24,000	Demering	205,000
Lillian	220,000	Blanch A. Colp	140,000
Ellen E. Maxner	200,000	Alcæ	140,000
J. M. Young	80,000	Hilda C	40,000
Clarence	170,000	Campania	100,000
Minnie M. Cook	130,000	Harry Lewis	310,000
Acadia	240,000	Dove	80,000

LUNENBERG BANKING FLEET—*Concluded*

	Lbs.		Lbs.
Torato	10,000	Kandahar	140,000
Kuvera	280,000	Shamrock	170,000
Maggie M. Wm.	40,000	Tasmania	80,000
Vendetta	270,000	Alexandra	290,000
Excelda	120,000	Maravilla	180,000
Transvaal	160,000	Palatia	180,000
Britannia	80,000	Alameda	130,000
Strathcona	140,000	Alexan	240,000
Luettea	270,000	Viking	190,000
Mizpah	130,000	Aquadilla	300,000
Huron	190,000	St. Helena	130,000
Lena F. Oxner	240,000	Hispanolia	130,000
Columbia	195,000	Arcana	40,000
Baden Powell	110,000	Ahava	180,000
Frances Willard	90,000	Colonia	260,000
Gladys B. Smith	110,000	Hazel L. K.	170,000
Azalea	245,000	Earle V. S	250,000
Defender	220,000	Juanita	120,000
Albertha	80,000	Alhambra	220,000
Atalaya	170,000	Athlon	200,000
Mauna Loa	160,000	Palmetta	270,000
Muriel	280,000	Coronation	240,000
Olympia	190,000	Lilla B. Hirtle	260,000
Asabia	140,000	Jennie May	100,000
Lilla D. Young	260,000	Scintilla	140,000
Peerless	120,000		
Roma	85,000	Total	11,784,000
Perfect	160,000		

LAHAVE BANKING FLEET.

Marion	300,000	Elena	180,000
Iona	120,000	Yosemite	240,000
Cardenia	160,000	Glenwood	170,000
Minnie J. Hookman	100,000	Blake	310,000
Ariadne	130,000	Corean	200,000
Concord	200,000	Lina A	180,000
Champion	190,000	May Myra	120,000
Ophir	88,000	Melba	80,000
Ivanhoe	70,000	Mariner	120,000
Mindora	40,000	Electro	160,000
Flora W. Sperry	120,000	Ungara	170,000
Campania	100,000	Pilgrim	130,000
Majestic	240,000	Carlraine	220,000
Millie Mace	50,000	Karmoe	160,000
New Era	250,000	Alice Gerhardt	230,000
Speculator	120,000	Ethel	170,000
Moran	140,000	May Myree	140,000
Elva	80,000	Collector	180,000
Cyril	120,000	Victoria	170,000
Calavera	77,000	Pacific	148,000
Alma Nelson	120,000	Glyndon	100,000
Emulator	200,000	Barcelona	140,000
Earl E. Richard	150,000	Reliance	130,000
Vestra Pearl	50,000	Meteor	320,000
Lucania	220,000	Ambition	300,000
Stanley	120,000	Yukon	290,000
H. H. Kitchener	80,000	Manhattan	360,000
Annie, N. W	200,000	Premier	240,000
Mary E. Smith	240,000	L. Morton	20,000
Oregon	320,000	Avis	190,000
Havana	120,000	Latooka	180,000
G. S. Troop	240,000	Aldina	110,000
Maderia	220,000	Lottie	210,000
Parana	280,000		
Oracle	25,000	Total	11,368,000

MAHONE BAY BANKING FLEET.

Daeta M	160,000	J. W. Mills	160,000
W. S. Wynot	160,000	Mildred	220,000
Vernie May	220,000	Unique	110,000
Saratoga	170,000	Australia	70,000
Clarence, E	170,000	Roanoke	170,000
Iona W	155,000	Flo. F. Mader	150,000
Yamaska	150,000	Oressa Belle	110,000

MAHONE BAY BANKING FLEET—*Concluded.*

	Lbs.		Lbs.
Fredonia	110,000	Crofton McLeod	180,000
Clara	200,000	Loyal	120,000
Hazel B. Mosher	160,000	Minnie Bell	240,000
Kimberly	110,000		
Palanda	80,000	Total catch	3,480,000
Markland	105,000		

The following clipping from the 'Fishing Gazette' of October 3, may be read with interest :—

'The Morning Chronicle of the 26th instant comments at length on the failure of the Lunenburg fishery. Provision to ensure a continuous bait supply is suggested as a prime consideration; also that trips should be curtailed in order to land and cure fish for the South American market, inasmuch as the bankers are so long out of port at present that it exhausts their salt supply to even ho'd the fish for the West Indian trade.

Lunenburg has suffered severely from the loss of the Porto Rican market, and although new fields are opening up in Europe there is a heavy deficit again this season both in money and vessels, which comes at a most inopportune moment.'

MUSQUODOBOIT HARBOUR, N.S.

Reporter, Mr. George Rowlings :

Alewives were very scarce this season. Some of the rivers in which this fish could always be found were not visited at all. Places formerly frequented by alewives in large numbers reported only a very small quantity.

Codfish were first reported on the coast in May 13, when good quantities were going and fair fishing was reported after almost daily to the 25, 26, 27 and 28 on which dates the codfishery slightly improved with good results. From May 29 and continuing throughout the months of June and July, the fishery varied from good to fair when the weather permitted the crafts to venture on the grounds. The August and September catch was from fair to poor. Codfish were reported later in the season on October 3, as being in fair numbers but a good distance off shore. It has been reported by our official reporter 'That codfishing has not been quite as good along this part of the coast this season as last. Fishermen say that cod were fairly plentiful nearly all the season but owing to stormy weather and scarcity of bait, they found it impossible to operate, and as was stated last season when fish are well off shore, the fishermen do not obtain many fares as only about one in every ten of the cod fishermen has boats of any size suitable for this fishery. Seven-eighths of the fishermen at this station are also reported engaged in the lobster industry all the spring, and later utilize their lobster-crafts for cod-fishing. It was further reported that had any bait, such as herring and mackerel, been in good supply and the weather more favourable the catch would have exceeded that of last year. From West Chezzetcook sailed five vessels (two of them over 60 tons) this season. Every one of these crafts returned with a full load the result of a little over two months fishing in the North bay fisheries. A few herring came along the latter part of June and codfish were reported plentiful but the unwelcome dogfish were now in the harbour and destroyed the nets to such an extent that the herring gear was all removed, as herring do not remain on the grounds where dogfish are, consequently no bait.

Halibut were reported very good this season along the coast, particularly from Jeddore East to Owl's Head. During July and August some of the fishermen did well in this fishery. Some boats manned by two men caught two and three large halibut per day, which netted them 5 cents per pound ex-vessel.

Hake.—The catch of hake in this district this season was so small that it is not worth mentioning.

Haddock were first reported on May 14, in fair quantities. Throughout the entire season, the catches were identical with that of the codfishery. The haddock fishery the past season was reported fairly good.

Herring were reported very scarce in this district all the spring and summer. A few barrels were taken in June for about two weeks and several fishermen salted a small number of barrels after to October 12. These were reported only scattering herring. From October 12 to the last of the month, herring struck in fairly plentiful in some localities and from 20 to 40 barrels were taken per boat.

Lobsters.—Operations in this branch of the fishing industry commenced about the first week in April and from that period to the middle of May lobsters were fairly good. After a suspension of work for nearly two weeks due to the severity of the weather, lobster fishing was again fairly good, Mr. Rowlings states:—'that any year from the 15th of June onward to the close of the season, lobsters are not worth catching and the factories always lose money, as not a sufficient quantity of lobsters is procurable to keep the factories running more than one-quarter of the time.' The pack of canned lobsters will be about the same as last year—perhaps a shade better, and the number of lobsters shipped alive to the Boston market will be in excess of that of last season.

Mackerel.—No mackerel to speak of were on this coast this season and consequently no bait for fishing excepting clams, which were used on many occasions.

Salmon were more plentiful in this district this season than last, but other places such as Jeddore and Clam harbour did not do as well. The reason for this was not on account of a scarcity of salmon, but at the latter places nets are set well out in the sea and as it has been already explained rough weather prevented all kinds of fishing. At Musquodoboit harbour the nets are set in the harbour. Salmon were plentiful at this station during the month of June.

Pollock were in the harbour some weeks in very large quantities. In May on the 11th and 12th, pollock were reported plentiful and fair on May 13. On the shoals between Jeddore and Petpeswick harbour some days a seine could have been used quite successfully. A good quantity of pollock were taken in July.

Trout.—Fair fishing of trout was reported daily in May from the 25th to 29th and also in June to the 9th. Small fares were taken after until the 29th, when fair catches weremade. Fair trout fishing was again on in July on the 1st and 6th.

Dogfish.—It was reported to the Bureau by a coasting captain that dogfish came on the coast about May 16, in very large quantities, and as a result all the traps and gear set were completely destroyed by this ravenous fish on the 5th of June. To the 31st of October, dogfish were still on the coast, between this station and Owl's Head in very large numbers.

It is estimated that the quantities of fish taken in this district from Dartmouth, N.S., are as follows:—

Alewives	170	barrels.
Cod	5,737	cwt. dried
" Sounds	4½	barrels.
Haddock	89,400	pounds fresh.
"	615	cwt. dried.
Hake	11	" "
Halibut	28,371	pounds.
Herring	1,153	barrels salted.
"	12,150	" fresh.
Lobsters	163,566	cwt. fresh in shell.
"	61,536	pounds canned.
Mackerel	14,460	" fresh.
"	139	barrels salted.

Salmon	2,970	pounds fresh.
"	115	" salted or smoked.
Pollock	422	cwt.
Trout	3,850	pounds.
Fish as bait	462	barrels.
" oil	2,171	gallons.

This district embraces the fisheries of Eastern passage and Devil's island, Cow bay and Lawrencetown, Seaford and Three Fathom harbour, West Chezzetcook, East Chezzetcook, Petpeswick harbour, Musquodoboit harbour, Jeddore, Clam harbour, Owl's Head, and West Ship harbour.

Twelve vessels, with 89 men and 544 boats, giving employment to 346 men, engaged in these fisheries during the past season. Four lobster factories, with 18,150 traps attached, valued at $7,260, and 294 smoke and fish houses with a valuation of $6,775, are established in this district.

PORT MULGRAVE, N.S.

Reporter, Mr. David Murray:

Cod.—The first report of codfish was received on May 2, when good fares were reported by the fishermen operating in the vicinity of western banks and cod were said to be striking inshore on the 9th. A scarcity of fish was reported on the 15th by arrivals from Sable island grounds, Quero and Middle ground 'hand-liners', and to date schooners with 11 dories have only averaged from 20 to 50 quintals of fish. About 25 Lunenburg bankers sailed in port on the 18th and secured a sufficient quantity of bait, but reported poor takes on western bank and neighbouring grounds; the highest catch being only 325 quintals on three baitings. Cod were also very scarce the latter part of the month, and vessels arriving from banks reported handliners doing practically nothing. The report of June 13 was to the effect that the week was a failure as regards fishing. Fog and southeast winds prevailing since Sunday the 7th and continuing still foggy. The schooner *Ben Bolt*, from Cape North fishing grounds, 250,000 pounds, homeward bound, Yarmouth being her destination. On June 29, it was reported that fish of all kinds had left the shores except a few lobsters, and vessels in from North bay hand-lining had catches from 550 to 950 quintals. The latter figures represented the catch of the schooner *Gertrude L*, captain Timothy Downey, who operated off St. Peter's, P.E.I, and is looked upon as 'high line' in dory fishing in two trips. Fish was very scarce in July and the reports of the 21st had it that the schooner *Etta Vaughan*, captain Thorburn, of Shelburne, was all over western bank and finding all branches of the fisheries very dull, sailed for the North bay, but met with no better suceess. A return to the banks was made again to await developments. As herring bait was also very scarce about this time, clams were being used instead but gave poor satisfaction. The *Nellie J. King*, of Shelburne, was reported in port on August 8, for the past ten days, seeking bait but was compelled to send to LaHave for clams. The *Julian H. Archer* which was reported on August 15, reports both bait and fish a failure off shore, and her catch will not average 100 quintals. Fish were also reported scarce on the eastern fishing grounds off Labrador, but earlier in the season those operating at Natashquan did well, as well as at Kegashka later in the season. The codfishery was also poor in September and October, as was reported by vessels arriving from the various fishing grounds.

Herring have apparently left our shores, as very few herring were caught on any of the fishing grounds. The first report was received on May 9 when a few were being netted at Harbour Bouché. Bait was very scarce throughout the season. A few light catches were netted at Harbour Bouché in September on the 16th and 22nd.

Lobsters were reported fairly plentiful on May 9, when the two factories located here secured about two tons during the week. The fish were small but of regulation

size. Good catches were taken during the month and to the end of June, when it was stated that all kinds of fish had left the coast except a few lobsters, which became scarce afterwards. A large quantity was packed there this season and good prices were realized.

Mackerel were the first fish of any account taken at this station this season. The fish were caught in nets after dark by drifting in boats, and some good catches were reported from Sand Point light to Port Hastings. Mackerel were reported fair on May 25 and plentiful the next day, when captain Hunson. of the schooner *Nova Zembla*, reported sailing through large schools of mackerel between Whitehead and Canso. Very large quantities were in Chedabucto bay on June 3, and boat did well dragging, with extra catches being reported at every fishing grounds. It was reported on October 19 that the fall run of mackerel had not as yet struck in Chedabucto bay.

Pollock were only mentioned in the report of June 13 as being on the coast.

Bait was reported at times very scarce at this station during the season. Herring were reported used for bait on May 9 and 25, June 13 and September 16. Squid were not reported on the coast this season.

PORT LA TOUR, N.S.

Reporter, Mr. J. W. Taylor:

Alewives were in light quantities throughout the season. They were first reported in May on the 27th, and a few were in nets the first of June.

Codfish were reported in May on the 2nd and 4th, but strong easterly winds were quite prevalent, which prevented the cod boats from operating on the grounds. It was reported on the 18th of May that prospects for codfish were very fair, though very few were engaged in this fishery at the present as most of the boats were attending the fishermen lobster fishery. There were very good signs of cod the following week but not many were employed at it until the close of the lobster season. The last week in May was reported not very profitable to the fisheries. Some cod were taken but were small in size. Very poor fishing was reported at the beginning of June and both fish and bait were very scarce. The whole of the population was engaged entirely in a new line of business, that of fighting forest fires and for the past three days and nights were combatting the fire elements with such good results that the safety of the village was assured. Thick fog, east winds and rough weather prevailed until the 27th of June, when arrivals reported good appearances of cod and herring bait on the grounds. Although the wind and tide were both unfavourable for fishing the same day the average of cod per man was one quintal or better. Codfish the first of July were fairly plentiful with squid bait, but on the 13th, shallops operating 9 or 10 miles off shore found fish moderately plenty, with herring bait and secured good fares. The fisheries were so dull the end of July that many of the fishermen began 'haying.' The outlook was much better in August as fish and bait appeared to be working inshore, but the voracious dogfish were reported on the coast which cause a dulness all around. Cod fish were on shore later in the season in September in very good quantities and 3 quintals per man were taken on the 4th. The boats in October did not average more than one-half quintal per man, the most of which was haddock and the prospects for the fall were now very discouraging. The catch of cod on the whole this season was very light, almost a failure. No bait excepting clams was obtainable for the greater part of the season. The 4th and 5th of September were reported the only two days good fishing the boatmen had. The falling off in the catch of cod must be 50 per cent below the usual average.

Haddock.—Small numbers of haddock were caught in June from the 19th to 27th with fair hauls being reported on the 29th. Light quantities were taken during the remainder of the season, which will not run over one-half of that of last year.

Herring were first reported by boats that arrived on the 27th of June, which reported good appearances of cod and herring bait on the fishing grounds. Herring bait was again on the offshore grounds on the 6th of July but too far out for any crafts other than shallops. No bait was reported at this date in the nets in the harbour. Shallops operating offshore, nine or ten miles, reported good fares and herring going. Some very small herring appeared in the harbour on the 10th of August, but scarcely enough was taken for bait. Herring were reported on the 15th of August, in large shoals on the grounds, and boats reported mixed herring quite plentiful offshore the following week. In September, on the 4th, it was reported that the large shoals of herring had gone. The fishermen were at a loss to know whether they had passed over the grounds or were lying on the bottom in too deep water to reach them by sinking nets. In the meantime, comparatively little was done. The season was now so far advanced, and with easterly winds and rain storms prevailing it is not likely there will be many more herring taken. The herring fishery this season, for which quite an outlay was made, was an entire failure.

Lobsters.—Fair lobster fishing was reported in May on the 2nd, with average of trap 2½ fish, one-third large, which continued to the 26th, when lobsters slackened off and did not average more than one per trap, one-third small. The fish were scarce after for the balance of the season. Good prices ruled during the season, which repaid fishermen for their labours. The catch of lobsters at this station was not two-thirds of last season's. Many of our fishermen removed to Tusket Wedge during the lobster season. Those who operated in that locality were very successful, both in the quantity caught and the prices obtained.

Mackerel.—No mackerel were reported having been caught at this station the past season. There will probably be a few barrels taken this fall in nets, which have been set wide out offshore.

Pollock have been reported much short during the season; there being not nearly enough taken to supply the local market.

Squid were reported on the coast in the month of July on the 6th, when the fish were fairly plentiful. They seemed to have nearly all passed over the fishing grounds, from all accounts a few days later in the month. A few squid were on the offshore grounds on the 25th of July.

Dogfish were in abundance on the coast in July on the 13th, and were reported very troublesome in August on the 10th.

Mr. Taylor reports that the catch on the whole has been much below the average; and is of the opinion that the present season will be a very hard one for the fishermen of this district.

PUBNICO EAST, N.S.

Reporter, Mr. J. A. D'Entremont:

Codfish first appeared about May 17, in small quantities, after which fair fishing was reported from May 23 to June 10. Very good reports of fishing were received from this station on June 15, 17, 20 and 22. The fishing in July varied from good to fair, and the August catch was on an average good. During the months of September and October, the fares were very light, and the catch for the season is considered only a medium one. It was reported that though the catch of codfish has not been as good as in former years still the good prices that prevailed for the fish will about make up for the shortage in the catch.

The total catch of the vessels engaged in codfishing for the season is as follows:—

Names.	Lbs.
Marguerite	150,000
Senora	260,000
Geneva May	200,000
Estelle	15,000
Aurore	160,000
Greenwood	100,000
Dawn	120,000
Annie B	44,000
Eddie James	188,000
Regine	40,000
Laura J	200,000
Nelson A	140,000
Sea Foam	25,000
Henry L	30,000
Souvenir	170,000
Total	1,842,000

The only vessel which prosecuted the lobster fishery during the past season was the Annie B..... 200 crates.

Alewives.—Fair catches of alewives were reported in May from the 12th to 28th, and also in the early part of June; afterwards becoming very scarce for the remainder of the season.

Halibut was said to be a medium catch this season, but were only reported in light quantities in July 15, 18, 20 and on August 1, 5 and 7.

Herring.—There were no reports of herring received from the inshore fishery throughout the whole season, but good catches were made on September 17, at Mud island, with fair stops reported during the remainder of the month. The herring fishery this season was considered a poor one.

Lobster season opened very satisfactorily, and some good catches were made in May and good fishing reported, which remained the same throughout the season. The lobster fishing was in advance of that of last season, as the six factories operating here packed on an average 1,200 cases each, against 1,000 cases last year.

Mackerel has been reported a total failure at this station during the past season.

Haddock were reported in fair catches only from the 15th to 22th of June.

Ice was in good supply during the months of May, June, July and August.

Bait.—Herring bait was reported obtainable at Mud island from September 17 to the close of the season.

The results of the fisheries at this station in all branches are considered below the average, excepting that of lobsters, which was a little better than that of last year.

SALMON RIVER, N.S.

Reporter, Mr. Arthur Balcom:

Alewives first appeared in this river on May the 4th, with fair catches throughout the month, and poor after to June 6th, when the fish disappeared for the season.

Codfish were reported on the coast on May 18, two days earlier than last year, and fair catches were made daily for the balance of the month. The June catch was very small, as bad weather prevented fishing operations. In the months of July, August and September the catch was on an average good, excepting a few stormy days when all branches of fishing were dull. From October 1 to 7, codfishing was fair and poor from the 7th to close of the season, owing to the very stormy condition of the weather.

Haddock first appeared on this coast about August 1, but were reported very scarce all throughout the season.

Halibut were also reported very scarce during the past season.

Herring.—Fair fishing in this branch of the fisheries was reported from May 31, to July 8, after which very few fish were taken or reported during the remainder of the season.

Lobster fishing was reported fair all through the month of May, but owing to bad weather in June the catches were very light. It is reported that there were only five days, out of two weeks in that month, in which the weather was favourable for the fishermen to haul their traps ashore.

Mackerel.—Fair quantities of mackerel were taken from the 2nd to 13th of June, after which and to the close of the season mackerel were reported scarce.

Salmon.—The catches of salmon from June 26 to August 8 were fair. After this date, no catches were reported.

Squid appeared on this coast about a week earlier than last season and were first reported on July 9 in good quantities, which remained so to the 25th of the same month. Disagreeable weather now set in and squid left the shores for the balance of the season.

Smelts.—Fair catches of this 'species' of fish were made in May and June, the only months of the year in which they are in the river.

Trout were first reported May 1, with catches poor during the remainder of the month and in June. From the 1st to 15th of July, good fares were made when trout became scarce to the close of the season.

It is estimated that the quantities of fish taken in the Salmon river district, this season are as follows:—

Alewives	20	barrels.
Herring	80	" salted.
Cod and haddock	60,000	pounds dried.
Halibut	8,000	" fresh.
Lobsters	600,000	" " in shell (shipped).
"	650,000	" canned.
Mackerel	2,000	" fresh.
Salmon	800	" "
Trout	2,000	" "

This district comprises Sober island, Quoddy, Harrigan cove and Port Dufferin. Two vessels, one steamer and about 30 boats prosecute the fisheries in this district, giving employment on shore to 18 men. Four lobster canneries located in this district, average about 25 hands to operate 15,000 traps.

SAND POINT, N.S.

Reporter, J. A. R. Morrisson.

Alewives were not reported as early as in last season nor in as large quantities. The total catch for the season is below last year's and is reported at 70 barrels.

Codfish were reported plentiful off-shore in May from the 16th to the end of the month, and though cod were reported fair in shore on June 5, the 30th was the first day in which the shore boats made a catch of one quintal per man. Very little was done in this fishery early in July as bait was scarce and for a few days some of the boats averaged 2 quintals with the off shore fleet for the want of bait practically doing nothing. The fisheries were very dull about now, and on the 31st it was reported that a boat manned by three men caught one quintal of fish. The boat-fishermen in Aug. 15, reported codfish on the grounds but found it very hard to obtain either squid or herring to operate with. Prospects for boat fishing were said to be very poor the latter part of August. The sch. *Etta Vaughan*, from western bank, reported on Sept. 16 for 500 qtls. and reports poor prospects for bankers this year. Bait was reported so scarce in Sept. 30 that the boat-fishermen were compelled to dig clams to carry on what little fishing was going. The schr. *Agatha* 700 qtls. arrived on the 5th, also the *Nellie J. King* with 600 qtls. It was reported that the small boat fishermen of the harbour caught on an average this season 7 quintal per man of cod, haddock and pollock. Boats of 20 tons register reported 150 qtls. per boat or a catch of 450 quintals in all. The large bankers, *Agatha*, *Nellie J. King*, *Kestrel*, *Etta Vaughan* and *Maltie*, with 100 men employed, landed for the season 6,000 quintals of cod, haddock and pollock.

Herring were reported at this station, this season on Aug. 8, but only a very few were taken and it is reported that the catch of herring will not exceed one barrel, so very scarce was this fish on the coast.

Lobster season opened on January 1, as usual with fair prospects and to the close of the season fair catches were made when the weather permitted. Our reporter informs us as far as can be learned lobsters were not as plentiful on the coast as last year, but prices ruled higher, which brought the season's work on a par with that of 1902.

Mackerel, practically nothing done in this branch of the fisheries this season. To date no signs of mackerel have been reported.

Salmon.—It was reported on May 16 that only a few salmon were taken to that date, and on the 23rd of the same month, salmon were reported very scarce.

Squid first struck in this season on June 29, quite plentiful, and fair catches were reported on the 2nd and 3rd of July. Bait of all description excepting clams was scarce after until the 6th, 7th and 8th of August when squid again struck in-shore and fair stops were made.

Dogfish came on the coast about June 8 in large quantities and remained so throughout the season.

LESLIE'S BAY (SPRY BAY), N.S.

Reporter, Mr. John A. Leslie:

Codfish were first reported in May on the 8th, when a few were taken and from the 13th to the end of the month the fishing varied from very good to fair. The fishermen reported the cod taken very large in size and several small boats averaged about 4 quintals per day for several days. When the weather was favourable in June fair hauls were made. Codfish were on the grounds in July in fairly large quantities but the boats could do nothing in this line owing to the blowing and blustery weather. Codfishing was dull after until it was reported on August 29, that the fish were fairly good and those taken were larger than any caught for a long time. Fair reports were received in September from the 5th when boats had three quintals to the 26th. It has been reported that the fishing in this vicinity has been considered a failure this year. Both the deep sea and shore fishermen have had a very poor season. In fact the catches have been poorer than any season during the past fifteen years.

Halibut.—Very good signs of halibut were reported on May 16, with light quantities from the 19th to 27th, excepting the 22nd, on which date fair fishing was

reported. Halibut fishing was not reported after until August 29, when some fine fish were caught. The next report in this line was received in September, from the 5th to 17th during, which the fishing varied from good to fair, but the chances for shipping this fish fresh were so poor that the fishermen did not operate the fishery to any extent. Halibut were reported returning inshore again on September 28.

Hake were reported in fair quantities in September on the 8th and 10th.

Herring.—Small herring were reported being used for lobster bait on May 9, with fair quantities reported on the 14th, 16th and 29th of May, though in so very small shoals that netters did not do so well. Very few stops of herring were made during June and July and on August 15, herring struck in shore again but the fishermen were very timid about setting out many nets as the destructive dogfish were 'on'. A week later, on the 22nd, the same condition of things existed and the fishermen were compelled to condemn several new nets that were 'set' only one night, on account of these monsters tearing them all to pieces. A few herring were reported on August 29, and the fish taken were said to be beautiful. To the 5th of September the herring fishery was reported almost a total failure, the largest catch being 20 barrels. The 1st of October herring struck in on shore again and some boats reported from one to three barrels. Herring were still on shore a few days later but dogfish drove them eventually from the grounds, and as a heavy sea was in the running the boats did not leave their moorings. A large number of boats that had been trying for herring missed both herring and cod as it was next to impossible for them to attend to their nets and fish cod at the same time, and dogfish being so very numerous, herring could not possibly get in on the regular net grounds.

Lobsters.—The month of April was reported the roughest for a number of years, which brought the lobster business almost to a standstill. On May 9, the weather was a little more pleasant but the spring tides kept the sea up and lobsters would not move about hence the catch to the present was small. The catch to the end of May was on the whole an average one and the packers were of the opinion that the fish were better meated than usual. Light fares of lobsters were taken the first week in June, when blowy, foggy and blustery set in which continued to the close of the season. The lobsters season has not been an average one which tends to make it still harder especially for those fishermen who do no other kind of fishing. Lobster fishing is getting to be quite a science both in the construction of traps and the method of rigging them, says our reporter. Mr. Leslie further states that he knows of several good fishermen who this time last year had $150 and $200 in their pockets are now getting supplies on one year's credit.

Mackerel were first reported on the coast when schooling off Popes harbour on May 20, and two later schools were off this bay. Four hundred mackerel were stopped by boats on the 27th of May. The fish were of a very superior quality and the largest taken at this station for years. It is stated that the ordinary size nets used in this fishery were of very little use as nothing less than a four-inch mesh would hold the mackerel going. A few light fares were taken during the remainder of the season when the weather permitted.

Squid were reported in good quantities in July on the 9th, and fair on the 17th. Fair catches were also reported in August on the 14th. Squid struck in plentiful in September on the 12th, 10 miles east of this station and it was hoped that should they spread over the grounds, there would be a good run of codfish.

Trout fishing was reported varying from very good to fair in the month of May from the 8th to 30th. On the 23rd, it was stated that trout were taken in large numbers and were very beautiful fish, some weighing over three pounds. The lake trout caught on the 30th, were reported exceedingly fine fish and were more plentiful this season than for a number of years.

Bait.—The bait supply has been another great drawback this year. The government has offered liberal inducements to fishermen to establish freezers, but the people don't seem to take hold of the idea.

Dogfish.—What is needed now is some remedy for the dogfish evil, i.e. a small government bounty that would pay fishermen to catch them and perhaps sell their catch to some enterprising company who could manufacture the fish as a fertilizer. It is very discouraging for men to go to the grounds day after day and find their nets torn to ribbons by those 'devil-fish' as some call them.

WHITEHEAD, N.S.

Reporter, Mr. J. E. Dillon.

Alewives were reported at this station in catches from poor to fair, from the beginning of the season to June 8. After this date, very few alewives were taken. The catch for the season is estimated at 150 barrels.

Codfish appeared on the coast the latter part of April and during the month of May, from fair to good catches were reported. On June 3, 8, 9 and 13, fair quantities of codfish were on shore but bait was very hard to obtain. Very few cod were taken from June 12 to July 7, on account of scarcity of bait and rough weather. Boats averaged from 200 to 400 lbs, on the 8th and fair fishing was reported on the 13th. From the 15th to 18th, cod were plentiful on the coast and boats reported from 800 to 1,000 pounds. Dogfish struck on the shores about the 19th, and all line fishing was dull. Large numbers of dogfish were still reported from the 21st to 25th and with a scarcity of bait, boats only reported for from one-half to two quintals. About 200 lbs. of cod were caught on the 29th and from this date to August 18, very few codfish were taken on account of scarcity of bait, rough weather and dogfish. One quintal, was the fare on the 19th, after which the fishing became dull up to September 3 and 4, when the boat's average was one quintal taken on squid bait, that struck inshore. For the balance of the month to October 7, poor catches were reported and from October 7 to 10, boats yielded from one-half to two quintals per day. The total catch is estimated at 2,500 quintals, which is 1,200 better than the catch of 1902.

Haddock were taken throughout the season in catches varying from fair to poor. The catch is estimated at about 600 quintals, or 100 quintals over that of last season.

Halibut were not regularly reported this season. About 75 cases of halibut was the catch for the season.

Herring were first reported in May towards the latter part when a few small lots were taken in nets at Port Felix. Herring were scarce after July 13, when boats averaged 100 and 200. The fishing was again dull until the week of August 17, during which 70 barrels were taken. The herring fishery was very much better the past season than that of last, and about 200 barrels have been reported as the total catch.

Lobsters were on the coast in fair quantities on May 4, which continued the same to the end of the month. Owing to easterly winds and rough weather the catches were said to have been small. From June 1, to the close of the season, when the weather permitted, lobsters were taken in catches from fair to poor. About 2,000, cases or 400 cases less than the previous season were packed this year. Several crates of live lobsters were exported to the Boston market this season.

Mackerel.—The first mackerel for the season at this station was taken on May 15, when one mackerel was caught and on the 23rd, one boat reported sixty fish. Captain Sol Jacobs was also reported as having stopped 200 barrels offshore. About 25 American mackerel crafts, and the F.P.S. Cruiser *Osprey*, Capt. Knowlton, were in the harbour on the 24th. Good fishing of mackerel was reported on the 27th, 29th and 30th, and seiners reported good hauls offshore. The report of June 6, from this station stated that

the American seiner, *Nellie M. Dickson*, arrived yesterday with a fare of 340 barrels from the offshore fishing grounds. Mackerel were fairly plentiful the last of June, and on the 30th. one Lunenburg craft baited and iced here. Hardly anything was done in the mackerel line to the middle of July, when boats averaged one barrel, and to the close of the season mackerel fishing was rather uncertain as dogfish struck the coast in such large quantities that it had practically cleared the shore of bait and fish. The estimated catch for the season is 175 barrels.

Pollock.—The first catch of any importance was reported on June 13, when 200 pollock were taken in traps. Several light stops of this fish were made during the month, and nothing was reported after until the month of September, when pollock were again on the coast. 200 quintals were reported taken for the season.

Squid were very scarce at this station this season. Clams and alewives were used the first of the season when herring were unobtainable. Squid were first reported on the morning of September 3, in light quantities and was utilized for bait purposes for the balance of the season.

Dogfish first came on the coast about June 19, in very large numbers and on the 27th, drove all bait fish offshore. These fish were reported very troublesome during the remainder of the season and greatly retarded the progress of the fisheries.

YARMOUTH, N.S.

Reporter, Mr. Fred. L. Hatfield.

Alewives fishing commenced and continued in very good quantities from about the first week in April till the latter part of May. The catch is probably as good or a little better than last year.

Cod.—Good codfishing was reported on the coast in May on the 2nd, with fair reports on the 12th. A few days later, on the 14th and 16th, codfish appeared in very large numbers and fair quantities were again on the coast the latter part of the month on the 23rd and 27th, Codfishing was not reported after until the months of August and September when fair catches were made.

Haddock although on the coast early in the season, the first report received of the fishing was in August and for the remainder of the season the catch was the same as that of the codfishery. Our reporter states that 'I imagine cod and haddock would have been quite plentiful all the time, had local or nearby boats gone after them. Excursionists seemed to get plenty.'

Halibut.—The first halibut caught by local vessel or boat was on the 22nd of April at a time that all foreign and outside vessels had nearly finished the season's work from our harbour. Halibut fishing was fair in May on the 12th when a decided improvement in the fishery was noticed, and on the 14th and 16th, very large quantities of halibut were in and off the harbour and good hauls were taken. Fair fishing was reported on the 23rd and 27th of May and light fares in September on the 12th.

Herring first appeared at the mouth of the Tusket river on the 29th of June. The fish at first were quite small in size but improved later on in the season, both in size and quality. On the 21st of July the floating trap at Yarmouth Bar reported about 50 barrels small herring which were partly used for lobster bait. A few small herring were again taken at the bar on the 28th. Large quantities of small and medium size fish were plenty in August on the 5th and on the 12th herring bait in traps and herring bait by fishermen's nets were procurable at this station. Small and medium size herring continued plentiful at Yarmouth Bar on the 17th, with bait also in good supply at same locality. The last report of herring was in September on the 15th, when the fish were reported very plentiful, in size and quality.

Lobsters were reported in a fair condition on the 2nd of May, and Mr. Hatfield reports that he thinks the industry must be getting better every year. There seem to be more people engaging in it every year. Also there appear to be more factories and parties paying fines. If there is nothing in it, why do they keep at it. The following statement (from the Customs Dept.,) is the quantity shipped from our port between December 15th, 1902 and June 4th, 1903.

Crates live lobsters	19,585
Cases canned lobsters	21,473

The above shipments brought very remunerative prices.

Mackerel.—Cranberry Head trap was the only one in readines for the mackerel voyage early in the season and on the evening of the 8th of May pursed two mackerel for the first. On the 11th, the same trap had 150 fish and the following day 27 fish were the contents of Burns trap. The latter trap reported 3 mackerel on the 14th and mackerel were schooling 4 miles off the harbour on the 16th. Iron Mine and Cranberry Head traps respectively reported 160 and 30 fish on the 18th, with the former stopping 50 mackerel on the 19th. 5 ice barrels were taken from Iron Mine trap on the 25th and 200 from the same trap and 50 each from the other three traps was the report on the 27th. Iron Mine continued doing good work and on the 28th 1,000 mackered were stopped, with others only reporting a few. It was reported on the 1st and 3rd of June that the four traps reported for 4,000 mackerel. Afterwards there seemed to be only a few scattering ones taken by the traps, and very few in nets. 'Evidently for some cause the mackerel did not come in close to our shore' consequently the total catch is considered a failure.

Salmon were very scarce this season. Only a few were reported during the month of June.

Trout.—From all reports trout must have been exceedingly plentiful. Probably the shipments to Boston were large.

Shad reports were very good, but few found their way to Yarmouth town where good prices were always obtainable.

Pollock.—Large quantities of pollock were reported in County Line and Burns Point trap on the 19th of May. During the remainder of the season quite a quantity of pollock was taken in the traps, and the hand line pollock fishing was reported very good.

Smelts and eels are always more or less plentiful and are obtained in proportion to the observance of the law.

WEST ARICHAT, C.B.

Reporter, Mr. C. P. Lelacheur.

Cod.—There was only a light catch of cod at this station this season, which was chiefly due to the same old cry 'No bait' during the early part of the season, and the class of boats in general use by our fishermen is also a barrier to successful fishing. Until our people provide themselves with boats capable of standing a bit of rough sea it is hopeless to expect that codfishing can be carried on in a successful manner. Early in September, the greater number of fishermen hauled their boats on the beach and gave up the work.

Haddock.—A few haddock were taken all through the season, but the total catch will not be large. One or two of our residents are making preparations for fall haddock-fishing, and it is to be hoped they may meet with success.

Herring first appeared on the coast about the 7th and 8th of July, and to the 13th, several netters did fairly well with the catches made, which sold readily to baiters at

$1 per hundred. These fish were of a medium size, but quite fat. Large schools were reported close inshore on the 11th, and it is said the water was fairly boiling with them, but the fish were mostly of a small size—somewhat larger than smelts. Light catches were then made up to the 23rd, when herring struck in on Bradley bank, about mid-bay, and from good to fair stops were made for two or three days by a number of large boats and small crafts which were operating on the outer grounds. Good fishing was reported on the 30th, but during the month of August the fishery was generally poor, with fair reports on the 4th and 5th, and good on the 22nd and 27th, when some netters had 400 fish. Many times during this month the fishermen were unable to obtain a sufficient quantity of herring for bait. The early part of September, the fish left the bay and did not return any more. There can be no doubt that the large schools of herring that visited this bay in July, August and September, the past few years, have —as is not unusual to this fish—migrated to other grounds. Herring entered the bay, this season, in small bodies, moving away again nearly as soon as they came. This, however, was not surprising, as the fish were harassed by dogfish most of the time.

Lobsters.—This season's catch of lobsters shows a marked improvement over last year. The fish proved to be more plentiful all along this coast, but more especially in the Strait of Canso and Janvrin's island grounds, where the catch was exceptionally good. The fares, this season, consisted of a greater proportion of large fish than during the past three or four seasons, and as a consequence the exportations of live lobsters showed a marked increase. The lobster fishing began about April 15, very satisfactorily, although the weather was occasionally rough, but the fishermen did not lose much time in consequence, and no ice was reported on the coast to interfere with the fishing this spring. During the first part of May, when the fishery was in a fair condition, our reporter informed us he saw two samples of the crustacean family that weighed respectively 11 and 9 pounds. The factory located here received on May 23, from Canso strait, as report stated, as many shipments as it could conveniently handle, and the catch along the shores of the strait did not appear to be diminishing as all the lobster smacks were bringing in good fares. Good lobster fishing was also reported on the 16th, in Lennox passage, near Rabbit island, where men engaged in this industry had averaged $5 per day for the last ten or twelve days. On the whole, this branch of the fisheries was a fairly profitable one this season, and those who had made extensive preparations were well repaid for their outlay.

Mackerel made its appearance on the coast on May 29, and a few fair hauls were made. The following day good fishing was reported all along the shore and one fisherman at Thomas' Head, Jauvrin's island, is reported to have netted 22 barrels of mackerel, or an average of one barrel per net. Most of the fishermen were not fully prepared to capture such large fish, as the nets used were all small meshed and suitable for the herring fishery only. It is now about 15 years since mackerel visited these shores in such large quantities and, consequently, the fishermen had got out of the way of making preparations for them. Their visit was quite unexpected, but nevertheless welcome. On June 6, it was stated that during the past week, all other branches of the fisheries had been considerably neglected in the wild rush for mackerel, which had struck in on different parts of our shores. Large quantities of these fish were caught in the Lennox passage and at Thomas' Head, about 4 or 5 miles from here, and some of the fishermen had salted quite a number of barrels, with the catch continuing good to date. A few mackerel fishers of the immediate locality who had not fared so well as others removed their gear nets, &c., to the passage and were well repaid for their trouble. The fish moved off the coast on June 8, and were not reported again until September 19, when large schools of very small mackerel, about four or five inches long, were reported in the harbour.

Pollock.—Small fares of pollock were taken during the season, and good fishing in this branch has been made by fishermen at Arichat, the last two weeks (Oct. 17). One boat recently landed 2,000 lbs., the result of a few hours fishing.

Dogfish put in an appearance on August 31, and the fishermen were all of one opinion : that their visit on the grounds was the cause of the scarcity of herring. Their presence was also felt during the month of September, destroying all the contents of nets and gear set.

ARICHAT, C.B.

Reporter, Mr. J. T. Jean.

Codfish were first reported on May 14, and about the 22nd and 23rd of same month several good hauls were made. The same complaint prevailed among the fishermen this season as in former years, that of the scarcity of bait throughout the fishing season. In the months of June, July and August when bait was obtainable some boats were very successful and reported good catches. Squid bait was being used in September but for a few days only, as this little bait-fish became very scarce and the fishermen were then dependent on what few herring were being taken in and off the harbour. The total catch of cod was about the same as that of last year's.

Haddock were first taken on May 1, with boats reporting catches from 60 to 270 fish. On the 2nd and 4th good fares were made, which continued fair to the 14th, when haddock left the harbour. The catch was reported larger than last year and the run a little earlier.

Herring appeared on the coast a little earlier than last year and were first reported about June 4th in small quantities continuing scarce after until August 28, when three fishermen stopped 50 barrels in one seine. The fish were said to be smaller than the general run of summer herring and were sold fresh for bait. The herring fishery at this station for the past season was similar to that of 1902, a total failure.

Lobster fishing began about the same time as last year and the catch throughout the season was very light. A few boats engaged in the lobster fishing did very well at the beginning of the season, but as lobsters slackened off the fishermen took ashore their gear and made preparations for hand-lining. Season's catch about same of that of last year's.

Mackerel first appearance was noted on May 28 and 29 when one boat secured 20 and 250 mackerel respectively. The same craft was still successful in this industry and made a haul of 10 barrels on the 30th. From this date to June 14, the waters in and around the harbour fairly teemed with mackerel and large quantities were taken by some fishermen, while others who had given up all hopes of mackerel returning to our shores were wholly unprepared for the fishery as the gear had become rather obsolete. A large fleet of American seiners were off the harbour during the mackerel voyage and when the winds blew very strong from the south, the fleet sought shelter in the bay. Contrary to other years, the mackerel did not go as far east as Sydney but followed the Cape shore down and from reports passed through the Strait of Canso into the North Bay. Our reporter states that he was informed by one of the American fishermen that large quantities of pollock, which were schooling outside of the mackerel were responsible for the latter's close wanderings inshore. The catch this season was the largest for many years. The last large catch was taken about fifteen years ago.

Squid struck in on the shore about August 13, but this fish has been reported very scarce to the present. It is to be hoped that as in former years the fishermen will succeed in obtaining a sufficient supply of this splendid little bait-fish, which will meet the requirements of the fishing season.

Dogfish.—As to this destructive creature, it is becoming more and more a source of great nuisance, and if nothing is done, and that very quickly, to destroy these pests in our waters, the fishermen will be unable to earn a livelihood.

The following approximate quantities of fish were taken at this station during the past season :—

Cod	56,300 pounds.
Haddock	21,600 "
Herring	46,000 "
Mackerel	38,600 "
Lobsters	22,000 "

In addition to the above, 200 crates of live lobsters were shipped to the Boston market. Of the cod catch, many of the fishermen, at the present, send away their own fares; others club together in threes and fours, and ship their catches by vessel to Prince Edward Island, and other points outside the province.

In Mr. LeLacheur's report to the Bureau, he says :—'One remarkable feature of the fisheries at this station this season, was the return of spring mackerel to our shores. These fish were practically unknown to these parts for nearly a quarter of a century and their sudden appearance in large bodies about the latter part of May took our fishermen by surprise, and found the most of them but poorly prepared to catch this valuable fish. For many years past no preparations were made by the fishermen of this locality for mackerel fishing. They looked upon the coming of this fish to our waters as a thing of the past; their nets becoming too old for further use, and were carried away or lost. The fishermen also neglected to replace them by new ones, considering they would only represent so much dead stock on hand, so this spring when the mackerel came schooling within a gun-shot of their shores, until so to speak the water fairly boiled with them; the majority of our men found themselves with not a suitable net to catch the fish. Their herring nets were brought into use, but of course being too small in the mesh, they could not hold one tenth of the fish that went into them and the result was that hundreds of barrels dropped to the bottom to rot there. That there was a large body of these fish on the coast is proved by the fact that some of the fishermen with a couple of old mackerel nets caught from twenty-five to thirty barrels. The fishing was especially good along the Lennox passage, where every cove and creek seem to have been visited by them during the eight or ten days they remained in these waters. They were a splendid run of mackerel, being large and fat, averaging about one hundred and fifty to a barrel. Owing to the lack of proper facilities for shipping them fresh the most of the mackerel caught here were salted.

The following figures are considered a fair estimate of the fish caught at this station the past season.

Codfish	250 quintals.
Haddock	50 "
Pollock	25 "
Herring	500 barrels.
Mackerel	1,000 "
Lobsters	500 cases packed.
" live exported	125 crates.

Quite a quantity of mackerel was also taken in the bay by small crafts, of which it was impossible to obtain an estimate.

CHETICAMP, C.B.

Reporter, Mr. Chas. E. Aucoin.

I herewith beg to submit my general and detailed annual report on the operation of the fisheries which have taken place at the usual localities, viz :—Cheticamp proper, Cheticamp Island, Grand Etang, Cape Rouge and Pleasant bay. I have issued twenty-six fishing bounty licenses this spring, being four more than the previous year. Herewith are the new comers with owners and tonnage listed.

Schooners.	Owners.	Tonnage.
Wyvern	P. LeFort	25 Tons.
Gertie Belle	Chas. Robin Collas & Co	14 "
St. Aubin	" "	14 "
Walla Walla	S. Belfontaine	11 "

The *Wyvern* hails from Barrington, N.S., and the *Gertie Belle* from Canso, N.S. The two other have been built in Cheticamp. Touching upon the operations of the fleet, I will commence by stating that the gulf of St. Lawrence was clear of ice on the tenth of April, although it had moved to and fro in detached portions long before. On the eleventh came a blinding snow storm.

Strong and cold breezes from the north-east blew almost constantly, a biting and poisonous blast parching the land and engendering disease. It blew formidable gales on the thirteenth, fourteenth and fifteenth. After the completion of the general gearing and repair in which oakum and copper paint played a considerable part the first boats to set sail were the *Mayflower* and *Lucy* which cleared for the Magdalen islands on April sixteenth to secure their cargoes of herring. On the twenty-fifth, the *Mayflower* had performed her trip with two hundred and seventy barrels of herring in bulk. On the twenty-ninth, four days later, the *Lucy* arrived with one hundred barrels.

The quality of the Magdalen herring was fine enough, but more of an assorted nature than last year. Of a mess of fourteen taken from *Mayflower* six were found to be spawn ones. I at once reckoned that proportionately, out of that vessel's cargo which contained about three hundred barrels, millions of that fish were being destroyed. The wholesale destruction, at that rate, when thousands of barrels are annually captured is hardly to be conceived. For a number of years, the spring variety around these shores has apparently diverged from its usually natural course, and the quantity entering the bay here has diminished yearly to an enormous extent. I may say that this year has seen but a few 'stragglers.' It is commonly supposed that considerable dredging in harbour may have been the cause of checking its entrance, probably on account of a derangement in the natural bottom, but this has no foundation. There has been an ususual strike of the June and July herring this year. This variety, as given in my report of last year, has remarkable qualities being substantially built and very savoury, its fatness forming quite an oily surface in the dish when cleaned. Again, it appears that this sort is, in a marked degree not so fecund as are other spring varieties, that is to say, it has not been endowed by Nature with a very strong functional element in the way of propagating its own kind; as I have carefully remarked that the quantity of spawn in the female ovum is very small. From what I can judge, I venture to say that fecundity is ten times greater in some species that in others.

On July 6, one net secured six hundred and forty of this herring. The greater part of the general catch was used to bait cod trawls. A word about spawning. I believe that I am fully entitled to approach this subject because nature herself has amply satisfied me to a goodly extent whenever I have thrown an eye at her silent but wonderful accomplishments. Spawning is done upon a slimy moss covered stone bottom and wherever sea-weed or other grass has a tendency to accumulate, I have carefully examined the bottom of rivers and brooks, and where ever I have found a deposit of spawn, it was always upon a slimy, moss-covered bed, together with an accumulation of decayed vegetable matter apparently arranged by the kind hand of nature as the most suitable place for the maturing of fish-eggs. This is true especially of smelts and salmon. I have never found spawn upon a clear, sandy or gravelly bed. Were it otherwise, schools of fishes would never seek the shore or inner waters to make a deposit of their spawn; but could easily and without inconvenience respond to their instinctive calls anywhere in mid-ocean or open water. But nature has kindly provided them with innumerable safety-vaults in the way of estuaries, inlets, etc., wherein the fragile eggs are cosily sheltered and out of the reach of the enemies of the deep which might well prey upon them if at all in their range. I must mention here that for a few consecutive springs, gaspereaux have been wending their way up Friar's Head brook for the purpose of spawning. It had been reported that on several occasions persons did maliciously attempt to bar the brook by placing obstacles in the way, thereby preventing the ascent of that

fish. I found no evidence whatever in the report. As usual, there has been a great wreckage of lobster traps this spring, I believe the worst on record. The twenty second and twenty-third of May were especially remarkable for their heavy north-west gales The trappers have again suffered considerably. I may say that these boisterous spring gales invariably happening in the best part of the fishing season are the only potent factor which hampers the progress of the lobster industry. Trawling was carried on to some extent this year and the best cod was captured in this way. The schooner *Walla Walla*, captain Poirier, on one occasion weighed in a single haul twenty-one hundred pounds with a hundred codfish. In connection with trawling, herring bait was used exclusively. Owing to a perceptible deterioration of clam bait about the beginning of July caused by the intense heat, cod did not appear so greedy on it as in the spring, knowing well that its freshness had gone.

Clams at this season were soft and depreciated and would hardly hold on fish hooks. But squid appearing on the scene about the twentieth of July soon relieved the situation. There was a great abundance of launce and other small fishes moving upon the shores this season which probably accounts for a better inshore cod-fishery than last year. The best quality of cod however is always found in deep water, such as is captured in 'Trou-à-Couillard' and 'Banc Vert', where fishing crafts moor in seventy-five and thirty-five fathoms of water respectively. Of course good sized fish are sometimes captured in shallower water. The following are the principal codfishing grounds, (Fond de remorques) which lie from two to five miles off shore;—Fond des sauvages, 'Fond à Rambeault', 'Fond de la Mitaine','Fond à Mice' and 'Fond à Gracien'. These grounds lie in the direction between the points north and north-west and are considered rocky grounds (fonds de roches) the habitual resort of the cod. Boats often times direct themselves westerly, and on more than one occasion arrive in sight of East Point, Prince Edward Island, making a return sailing voyage of about seventy miles. In this connection it is quite worthy to note that not a misfortune has ever happened to any of those tiny crafts which are constantly at the mercy of the mad waves ready to engulf them at any moment. Indeed the men who are engaged in this seemingly perilous vocation evince a knowledge of real prognostication, for they are rarely deceived by the visible signs of nature in presaging the condition of the weather. Often a forecast made with wisdom has prevented much annoyance and trouble. Nearing the conclusion of this report I shall touch upon the dogfish, which as usual were quite abundant upon the shore and the probable cause of 'spoiling' the mackerel fishery and causing that fish to abandon our shore so early in the fall. The dogfish struck here in full force in the beginning of July and remained till the end of the season. Schooners reported having ploughed through schools of them on their way to Banc Vert. I am sorry to report that no bait of any sort was stored in the refrigerator at Eastern Harbour this season, as the fishermen interested in it failed to secure a supply of ice at the proper time, and were debarred from the immediate advantages resulting from an ever present store of frozen bait. The protection service rendered to salmon in Little River has been well accounted for; and the guardians have acquitted themselves in a most satisfactory manner and the overseer has not reported a single contravention of the law. Smelts have enjoyed more freedom and liberty than for many years past. The quantity of spawn destroyed has been comparatively small. Fewer urchins to wage war against this tiny fish and a better look out by the protection staff will greatly tend to a large reproduction.

Below is an estimate of the different kinds of fish captured at each of the aforesaid stations:—

CHETICAMP PROPER.

Codfish	3,052 qtls.	Herring	375 bbls.
Hake	90 "	Lobsters	199½ cases.
Haddock	100 "	Salmon	2,500 lbs.
Pollock	30 "	Mackerel	58 bbls.
		Cod oil	930 galls.

CHETICAMP ISLAND.

Codfish	300 qtls.	Lobsters	147 cases.
Hake	20 "	Mackerel	4 bbls.
Haddock	50 "	Dogfish oil	160 galls.

GRAND ETANG.

Codfish	913 qtls.	Mackerel	83 bbls.
Hake	19 "	Lobsters	425 cases.
Haddock	130 "	Cod oil	300 galls.
Pollock	61 "	Dogfish oil	1,000 "

CAPE ROUGE.

Codfish	75 qtls.	Mackerel	100 bbls.
Haddock	5 "	Lobsters	911 cases.

PLEASANT BAY.

Cod, hake and haddock.	60 qtls.	Salmon	10,000 lbs.
Mackerel	75 bls.	Cod oil	20 galls.

From the above figures, it will be seen that there has been a decrease in some of the fisheries as compared with those of last year.

Not included in the above estimate are 600 quintals, shipped by the fishermen of the various localities, and about 100 quintals consumed at home.

DESCOUSSE, C.B.

Reporter, Mr. John P. Gruchy.

Alewives.—The run of alewives this season lasted about four days and only a few barrels were reported. The first fish taken were on May 26, when the fishing was fair.

Codfish commenced about July 24 when a few fish were reported for the first. During the remainder of the month and to August 4, the fishermen could not reach the grounds at all owing to rough weather and as a consequence the fishing was abandoned. The fishermen were reported on August 8, engaged in securing their hay crop. The cod fishery was again attempted in September on the 23rd, and as squid were now on the coast fair fishing was the result, which continued to October 10. Squid left the shores about the latter date and the fishermen ceased operations in codfishing with a total of 50 quintals for the season's catch. All kinds of fish this season have been reported very poor in this district and if the fishermen had not something else to depend on many would go short.

Herring.—First report of herring having been taken atthis station was on June 30, from which date to July 19 a few fish were taken daily. For the next seven days to the 26th, when the fishermen landed their gear herring were very scarce. Total catch estimated about at 25 barrels, which is 10 barrels more than the catch of last year.

Lobsters.—The lobster factory in this district opened up on May 2, and lobsters were scarce to the 18th, when there was a slight improvement in the catch to the last of the month. Fair fishing was reported the first week in June with poor catches for the remainder of the month. On the 26th, a heavy storm occurred which caused great loss of traps and gear, practically winding up the lobster fishing for the season. The pack of the factory here this season was 175 cases, against the output of 150 cases of

the former season. It has been stated that the lobster fishery has been very poor owing to so much easterly wind and stormy weather during the whole season.

Mackerel.—The first mackerel taken at this station was on May 30 when mackerel were on the coast in fair quantities but only a few of the fishermen had their nets out. The fish were of a fine quality and large in size and were all caught inshore. Fair fishing continued to June 6 and mackerel became scarce afterwards to June 13 when all nets were brought ashore. A run of summer mackerel were on the coast from July 17 to August 1. Fishermen began haymaking about this time and all operations were suspended until the hay crop was secured. Mackerel in small numbers were schooling and hooking freely about September 1 with the fishing continuing fair by hooks to October 7, and those of the fishermen who had nets out between October 7 and 11, were reported doing fairly well until the arrival of dogfish on the shores, which became plentiful and destructive to nets and whatever fish was found therein. The fishermen kept their nets out however with the expectation of large hauls, as reports from the western shores of Nova Scotia were very encouraging; but nothing in the mackerel line was reported and consequently on Saturday, November 14, all traps, gears &c., were landed for the season. About 75 barrels were taken with the hook; and 150 barrels were reported by the nets for the whole season.

Squid.—Fair fishing of squid were reported in September on the 26th, with light quantities being taken the first two weeks of October.

Flounders were used as lobster bait during the season. Fresh herring for cod the early part of the season and squid the latter part. Poggies was the bait used for mackerel in September.

The three vessels from this station prosecuting the deep sea fisheries did very well during the season. Two of the crafts marketed one thousand quintals and the other about eight hundred.

GABARUS, C.B.

Reporter, Mr. James Nicoll.

Codfish appeared about May 14, but the catches were reported light until the first week in June when fair quantities of cod were in the bay. Codfish were reported plentiful on June 8, 18, 20, 22 and 29, with the fishery varying from good to poor in July from the 4th to 16th. Good hauls of cod were reported in the same month from the 18th to 25th inclusive. To September 24 when rough weather set in cod were in a fair supply. The catch this season was on an average fair.

Herring.—Bait was very scarce early in the season and herring did not appear until July 7 when they struck in on the coast in light numbers. The herring fishery became fair from the 18th to 25th, and poor after to August 6, when the last report, which was a fair one, was received. The total catch was considered a small one this season.

Lobsters were first reported in fair quantities on May 9, but during the following nine or ten days, lobsters appeared quite plentiful and good fares were taken. Fair catches of lobsters were reported regularly each day from May 26 to 31. In the month of June, to the 22nd, the catches varied from good to fair. The lobster catch taking all things into consideration has been considered a fairly good one for our fishermen who appeared to be perfectly satisfied with their results in this fishery, this season.

Mackerel.—The first mackerel taken at this station was caught on May 25. Fair mackerel fishing was reported in June on the 4th and 6th, with mackerel plentiful being reported from the 8th to 13th. Small quantities were taken about the middle of June on the 18th and 20th, and the season's catch has been estimated a fair one.

Squid.—Bait scarce was the report the first of the season, and squid's first appearance on the coast was reported in September on the 11th and 23rd, when this bait fish struck in shore in good quantities. Bait was also reported plentiful on September 15.

INGONISH, C.B.

Reporter, Mr. J. M. Burke.

Codfishing began about May 8, and for a week cod were reported fairly plentiful and scarce after June 22 and 23. In the months of July, August and September, very few codfish were taken and the month of October was so rough and squid so scarce and uncertain, that the fishermen reported a very unsuccessful season as regards the catch which was behind that of last year but good prices obtained made up in some manner for the shortage of catch.

Haddock appeared at this station early in the season, but were not taken in catches of any consequence till about May 10. The catch to the closing of the season of this branch of the fisheries about June 12, was reported light, and not as good as the previous year

Herring were reported along our shores the first week in May, but not in any large quantities. All the herring caught were used fresh for lobster and cod bait. There was no summer run of herring reported during the season.

Mackerel.—Light catches of mackerel were reported in June from the 2nd to the 8th, with best boat reporting on the 5th, 150 fish. From the 8th to 15th, some very good hauls were made; some of the mackerel fishermen netting as many as twenty barrels. The first run of mackerel were very large in size. No summer fish were taken this season, neither was any fall mackerel reported caught on our coast.

Lobster factories commenced operations about the first of May, and lobsters were taken in small quantities, on the 4th, 5th and 6th. When all the lobster gear was set, the balance of the month of May proved very profitable as did also the months of June and July. Lobsters did not appear to diminish in catch during the remainder of the season as was the case in former years, but continued fairly plentiful to the time granted for the closing of all factories. Notwithstanding bait was difficult to procure in the month of July, the fishing is considered a 'Banner Year' in the lobster business for all parties concerned.

Salmon were first reported on May 29, and not again until June 8, in light catches. The salmon were small in size and continued very scarce till end of run, and might be considered almost a failure.

Squid were very late in arriving on our coast this season. Signs were reported the latter part of July, but the fishermen were unable to obtain enough squid for bait during the month of August and up to the present time (November 10,) squid are very uncertain and scarce.

Dogfish were more plentiful than ever on our shore this season and are a source of annoyance to net fishermen as well as cod fishermen by destroying gear, &c.

Hake.—None were reported taken on this part of the coast this season.

L'ARDOISE, C.B.

Reporter: Mr. John M. McIsaac.

Codfishery.—This branch of the fisheries inshore was not reported until very late in the season although light quantities of codfish were on the shore at different periods during the month of June. The line fishing in fact was almost neglected owing to the mackerel voyage and to the large number of young men who left in American vessels to operate on the banks. About the middle of June the weather was reported very cold for the season and on the 19th, dogfish had taken possession of the fishing grounds to such an extent that the fishermen would not risk the gear, nets, &c., being out. Appearances of cod and haddock were now on but no catches were reported owing to the

swarms of the voracious fish that were hovering around the shores. The crafts were reported as having arrived in port on July 3, from eastern bank with full fares. These vessels were launched this spring and reported the eastern ground fisheries, *i. e.*, Scattarie and off Sydney, as being very encouraging. All branches appeared to be in a poor condition as reported on July 17, although the line fishing to date is in advance of last season. Poor reports were received from the grand banks, by letter the same week stating that another evil had presented itself. Instead of dogfish, which had now vanished, icebergs were on the grounds and were reported very troublesome. Cod were reported on the coast in fair quantities in July 17 and 22, and haymaking will more than likely be the next pursuit followed though a few of the fishermen are still attending line fishing. The August catch was very light. In September 17 two fishing crafts arrived with a fair share of cod and good signs of cod were noticed off-shore in deep water, but bait was so scarce nothing could be done. All the eastern fleet of sails arrived in by report of August 24, with fair hauls and a return to the banks may be in order, should the wheather prove favourable. When the boats left the grounds fish were reported plentiful, but the weather was very blowy and much against successful fishing. Two American crafts arrived at St. Peter's on October 2, with about one-eighth of a trip and reported an unprecedented scarcity of cod on grand banks this season. During the season some vessels went to grand bank; some to the Halifax market, and others to the railroads with their fares. All the crafts attending the eastern banks have done well. Six new crafts were engaged in the fisheries this season and it is reported that a few more new ones will be added to the fleet this winter. The following is an estimated catch of the various vessels engaged in the codfishery at this station during the past season:

Name.	Tonnage.	No. of Quintals.
Mary S	18	300
Florence M	24	350
Annie M	18	250
Two Brothers	18	200
S. Luvenia	11	150
J. B. Saint	18	200
St. Thomas	11	100
Mary Alice	11	100
		1,650
Boat catch		800
		2,450

Haddock were taken for the first time this season on May 5, when 50 fish were caught. Nothing of any importance was reported after until fair signs of haddock were reported about May 22. As haddock fishing had proved a failure for many years past only a few boats attended the fishery merely for their own purpose. Other crafts did not care to risk fitting up for fishing fearing a disastrous venture as previously stated. Several American vessels shipped crews at St. Peter's and a good many fishermen accepted the offer of $200 for the round trip to the banks. Haddock were on the coasts in the month of June when dogfish were going, but no catches were made. Very light quantities of these fish were reported after to the end of the season. The catch is estimated at 300 quintals.

Herring.—It was reported on June 19 that there was some likelihood of herring being on the shores only for the presence of dogfish which were in the bay in large numbers. No herring had been taken to July 10, excepting a few scattered ones, and our reporter was about fearing a failure again this season, which would mean a serious drawback to the farmers as well as to the fishermen. A few herring were caught according to the report of July 17, but no quantity worth speaking of and not enough for local consumption, though the fares stopped were a shade better than the corres-

ponding season of 1902. The season for fat herring was all over by the last of the month of July, and a few catches were made later on in the season during which 500 barrels were reported as the total catch.

Lobster factories were reported as preparing for fishing on May 1, and light quantities were taken during the month. Fair lobster fishing was being operated until the arrival of mackerel in the bay when those of the fishermen who had only a few lobster traps forsook this branch of the fisheries for that of mackerel. The lobster industry being the first operated here is as far as stated by our reporter on an average with previous seasons. There are not as many men engaged in the lobster fishery of late years as formerly, as it is thought to be a rather risky business to depend on. The two lobster factories at this station packed this season 1,600 cases.

Mackerel.—The first report of mackerel was first noticed early in May when some fair catches were taken by the fishermen who had large quantities of gear out, and it is thought the average all around will be better than last year. The fish were of good quality, large and fatter than the mackerel of the previous season. Our reporter writes us that he used some of the mackerel and found them better to eat than those caught in the fall and also larger in size than those of last year. He was also of the opinion from all appearances that the voyage at this station would be safe for the season. The report of the 29th conveyed word that a boat came in port with two barrels of mackerel and reported good signs off shore. Mackerel were reported good on the 30th and the fishery varied from good to fair from the 1st to the 10th of June. During this period the fishermen made good hauls. The mackerel voyage ended with the week of June 20 and all hands appeared perfectly satisfied with the quantity and quality of the fish taken. The season was pronounced the best as far as mackerel were concerned for many years past, and L'Ardoise as reported was the principal rendezvous of mackerel. Should good prices be obtained, as was the case last year, some of the fishermen will be well repaid for the services rendered the voyage. The stock on hand of salt at this station was reported very low during the season and only for the supply of River Bourgeois and Descousse, it would have been a very difficult task to keep the fish caught in good condition. Fall mackerel were taken one time in our waters but no one tries for them now. The mackerel taken this season was all forwarded to the Halifax market with extra prices as the result. All the fishermen have already made a good run on mackerel this spring and with good prices obtained for the labour will enable them to provide handsomely for the winter. Mr. McIsaac reports that the mackerel voyage exceeded every other season for the past twenty years, both in the quantity caught and quality of the fish taken as well as the prices obtained.

LOUISBOURG, C.B.

Reporter, Mr. H. C. V. Levatte.

Cod were first reported at this station when taken on trawls the first day of May. The catch of cod was fair after to June 20, when dogfish struck the coast and all fish were scarce during the remainder of the month. Codfishing was fair the first week of July and light hauls were reported to August 27, when squid appeared on the shores, and good schools of codfish consequently followed. The catch during the month of September was fair when the weather permitted with the same conditions prevailing to the first of October on which date the last report was received. The total catch is considered below the average.

Haddock.—Fair fishing of haddock was reported in May with very light fares in June. For the balance of the season, haddock were reported in catches somewhat similar to that of the codfishery. This fishery is also considered below the average, which is attributed largely to the numerous shoals of dogfish on the coast.

Herring.—Bait was very scarce at this station the early part of the season and the first summer herring was reported about July 6. On the 12th, 14th and 15th, fair

catches were made; then rough weather set in and all fishing operations were suspended. A few small bodies of herring were in the harbour the first of August. The herring fishery this season at this station will fall below the average.

Lobsters were first taken on the coast on May 7 with fair catches to the 13th. From the middle of the month to the latter part, lobsters were plentiful. Fair lobster fishing was reported to June 20 and scarce after to the early part of July, when fair catches were reported which coutinued to the close of the season. The total catch of lobsters this season is reported an average one.

Mackerel. The first mackerel for the season was reported on May 30 and on June 5, boats averaged from 100 to 300 mackerel. Good mackerel fishing was reported on the 8th and 9th with a fair report on the 10th. Dogfish were now in possession of the grounds and all branches of fishing were dull. This branch of the fisheries was also reported below the average.

Squid were first reported on the coast, when caught by hooks on August 27 and on the 31st fair fishing was reported. The September fishing from the 12th to 30th varied from very good to fair, with very large quantities of squid being reported on October 1.

MABOU, C.B.

Reporter, Mr. Lewis McKeen.

There has been a decrease in the catch of cod, hake and haddock at this station, the past season. This shrinkage in the catch is due largely to the scarcity of bait throughout the season.

Codfish were fairly plentiful during the months of May, June and portion of July, but a small catch was reported as bait was very difficult to obtain. A great scarcity of line fish was noticed on the coast from the middle of July until late in September, which was accounted for by the presence of large numbers of dogfish on the shores. The fall fishing was almost entirely abandoned by the fishermen on account of these voracious creatures which frightened and drove away from the coast the various kinds of fish as well as being very destructive to the nets.

Herring.—A few spring herring were taken which were used chiefly for bait. During the season the catches of herring were far from being sufficient to meet the requirements for bait. As there were very few squid on the coast, bait remained scarce during the whole season.

Mackerel.—These fish only made their appearance on the coast for a short time during the season. As they would not take the hook freely, the catch was comparatively insignificant.

Lobster fishing during the month of May was reported very good and fair catches were taken to the close of the season. The lobsters caught were of a large size and as a rule were well filled. The pack at this station was 525 cases, or 50 per cent above last year's yield.

Salmon did not make an appearance until about June 23. There was a slight decrease in the catch from that of 1902. In fact there has been a gradual falling off in the salmon fishery for several years. This decrease is attributable to the presence of lobster traps on the coast. It is believed by the fishermen that the salmon are driven from the shores by the odour emitted from decayed and decomposed bait, which is used in the traps.

MARGAREE, C.B.

Reporter, Mr. M. A. Dunn.

Alewives.—Appeared early in May. There were only small quantities going to the 18th of the same month, when a few days of fair fishing were reported. During the

remainder of the season small catches were now and then taken. The total catch was very small.

Cod.—Early in May codfish made its appearance and along to the 20th fair catches on trawls were reported, with a few days of good fishing by hand lines. For the greater portion of June and July the codfishing varied from good to fair. On the 27th of June, the boats averaged 250 cod, and from the 4th of August to the end of the season only a few good hauls were reported. The chief causes given for this falling off in the catch of cod was the presence of large quantities of dogfish on the coast; a general scarcity of bait and unfavourable weather. The whole catch was about 70 per cent of an average year's catch.

Haddock and Hake ran along with the catch of cod, but in much smaller quantities. The former appeared in the month of May, the latter about the 1st of August. The diminished catch of these fish is about the same proportion as cod.

Herring struck in-shore early in May, but nothing worth while was taken until about the 22nd of June when a couple of good days' fishing were reported. From July 1 to 8, fair stops of herring were made. For the remainder of the season nothing was reported.

Lobsters appeared about May 1, and were reported from good to fair for the greater part of May and June. After 1st, the catch began to decrease to the close of the season. The whole catch was reported good. The lobster gear was reported in May on the 26th, out of order by the storm which had taken place on that day.

Mackerel have been almost 'nil' on this part of the coast this season. A few large ones were netted about the 14th of July and again towards the last of August, when from 50 to 100 were taken per net. In September, on the 4th, mackerel were reported on the coast but not hooking.

Salmon appeared about June 9, when good salmon fishing was reported for a few days. During the balance of the season salmon were reported in catches from fair to poor. The total catch was about 60 per cent of an average year's catch.

Squid were very late in putting in an appearance, and as to quantity were reported to be similar to other years.

Dogfish were reported to be around the harbour in large numbers early in August, and for the greater part of the remainder of the season, were the greatest obstacle the fishermen had to contend with. The fishermen claim that cod and haddock were plentiful on the fishing grounds for the most part of the season, but owing to the above mentioned causes the fish could not be caught.

MEAT COVE, C.B.

Reporter, Mr. A. B. MacDonald.

Codfishing was first reported in May on the 11th and to the 30th of the month the catch varied from good to fair. Codfish in the month of June were in catches from good to poor, with a varying catch in July from good to fair. The only reports of cod after were on the 5th and 22nd of August, when the fishery was in a fair condition. A heavy sea was on during the month of September and no fishing was reported. The total catch is considered a fair average.

Herring.—Fair stops of herring were reported in May on the 11th, 15th, 18th, 21st and 30th, which catch was used solely for lobster bait. The summer run of herring was a complete failure owing to dogfish. There was evidence enough that herring were on the coast in large quantities during the season but those who risked their nets out had them ruined by dogfish as well as losing the herring they contained.

Lobster traps were being set in May on the 8th, when very good signs of lobsters were reported. The fish appeared in good quantities on the 11th, after which very large numbers were reported on the 13th, 15th, 18th, and 21st, with good fishing on the 22nd. A heavy northerly gale on the following day destroyed all fishing gear. Lobsters were fair on the 30th of May. In June the fishing increased from fair on the 1st, to good on the 30th. To the close of the season the fishing was reported good and about 700 cases were packed in this district, which is a good average pack.

Mackerel were first reported when netted in fair quantities in July on the 11th. Fair stops of mackerel were taken after from the 14th to 23rd of July and again in August on the 22nd and 27th. It was reported that dog-fish interfered very much with the mackerel fishing. Only about 100 barrels were taken altogether this season.

Salmon.—Light fares of salmon were taken in June on the 6th, 8th and 9th with fair catches from the 17th to 30th. The salmon fishing in July varied from fair to poor from the beginning of the month to the 14th, when strong easterly and S. E. breezes, heavy sea and N. E. gales, were prevailing occasionally.

Dog-fish.—The catch of codfish this season was greatly 'spoiled' by the 'arch enemy' of the fishermen. But the latter retaliated by killing quite a number of these fish. About 20,000 were killed in one or two day's labour in this particular industry. The oil was extracted from their livers and the bodies of the dog-fish were fed to the cattle and horses. Strange to say, when the latter animals became accustomed to it they enjoyed this meal as well as hay or oats. The fish were first boiled, then made into a mash with boiled potatoes or with meal and fed in this manner.

ST. PAUL'S ISLAND.

Cod.—Good codfishing was reported around the island on May 30, and again in the month of June on the 3rd and 8th, with fair catches on the 5th of the same month.

Lobsters appeared in good quantities on May 30, with good daily reports the first week in June. On June 8, fair lobster fishing was reported.

Herring were in fair quantities on May 30, and in June 3 and 5.

PETIT-DE-GRAT, C.B.

Reporter, Mr. Peter T. Fougere:

Alewives.—These fish seem to have left our shores entirely, as none were captured in these waters the past season.

Codfish made their appearance very early this season and were reported on March 30, when the schooner *Lady Laurier* of 12 tons burthen made a trial trip in the codfishery and yielded a catch of about $10. Another schooner of the same size the *Lillian Louise* and several others made similar trips and did fairly well when bait was obtainable. Little later bait squid in the freezer became unfit for further service which was a great loss to all concerned, especially the fishermen, who were now dependent on herring which at the present were very scarce. This state of things existed to the last of April. The schooner *Lena Jane* arrived in June 6, and reported fair codfishing on the grounds. Fair fishing was also reported on Canso Bank on the 20th, by the schooners *Lady Laurier* and *Lillian Louise*. Some fisherman did well by report of July 18, and the schooners *Lady Laurier*, *Lena Jane*, *Pearl*, *Lizzie May* and *Minnie L.*, had done well off-shore by their reports. A few small vessels operating on the outer grounds in July 11, were making good hauls until driven off by dog-fish which destroyed some of their trawling gear. By report of August 1, codfish had been plentiful one day, on which the schooner *Pearl* caught 5,000 lbs. This was the largest catch reported for the season. Cod would have been in fair quantities in September, if dog-fish were not present and

the schooners *Lady Laurier*, *May* and *Lena Jane* were compelled to leave the grounds and return to port on October 17, on account of dog-fish which destroyed their trawls. About this time the fishermen could not see their nets under any circumstances. The codfishery, in comparison with other season was considered almost a failure.

Haddock came on the coast about May 20, and fair catches were made at times by the fishermen who utilized nets. About 300 qtls. were dried and about 600 qtls. were sold fresh at 3 cents per fish. It paid the fishermen better to sell the fish fresh than to dispose of them after once dried. On the whole the catch is about 1,000 qtls. below that of 1902.

Lobster operations commenced April 1, as required by the regulations, and the catches were about the same as last year. The prices obtained for lobsters were not as favourable as in former years, and as a result, not as many fish were exported to the United States market. All the canneries close down on June 30.

Herring were reported as being used for bait on May 9, and light quantities were taken to July 8, when fair fishing was reported. By report of the 11th, herring had been fair for the past two mornings, and on the 18th, two Lunenburg bankers baited here and sailed for the offshore fishing grounds. The fishermen did well in the herring fishery by report of the 25th, and good hauls of herring were reported on the coast the first week of September, and the herring fishers would have been more successful but dog-fish prevented them from operating. A few, however, made several attempts to set their nets, and the gear was no sooner placed then destroyed by these ravenous creatures, which rendered all branches of the fisheries about this time extremely dull. All the small crafts that were off shore took shelter at Port Hood to escape this destructive fish. The herring fishery was reported operated with poor results throughout the whole season, and our reporter is of the opinion that the catch will not exceed 300 brls., while in other years the catch varied from 1,000 to 1,500 brls., which is considered about an average catch at this station.

Mackerel.—These fine fish came in abundance on the coast about the same time as haddock, and the fishermen were wholly unprepared for them, on account of the great scarcity of mackerel in these waters in former years. Those who had mackerel gear of any kind and brought it into use during the mackerel voyage did well, as the fish realized 5 cents a piece. 300 mackerel were brought ashore the last week in May by the fishermen, and the first week in June mackerel were fair, and some boats stopped as many as 12 brls. Destructive dog-fish, winds, and heavy seas retarded fishing to the week of the 27th, of June, when the schooner *J. B. M. & Maud* from the Magdalens reported each for 40 brls. of mackerel. Schools of mackerel were reported in St. Peter's Bay, on July 18, and a few fish were netted September 12. Dog-fish now wrought destruction on all nets, gear, &c., and caused a suspension of operations before the season had finally terminated.

Squid were very late appearing on the coast and were reported for the first on the morning of September 12. Light quantities were taken towards the latter part of the month, and on the 26th a few shore boats secured several buckets of this bait fish. Squid was taken and used for bait during the balance of the season. About 10 tons of squid, and between 8 and 9 tons of herring were placed in the bait freezer for future use.

Seventeen vessels procure their baiting from this freezer to prosecute the winter fishing and several of them did very well last season. There are two dealers at this station, Messrs. Duff & Gruchy, and J. & W. Jean, engaged in the 'finnan haddie' business. These merchants find a ready market for their goods in the western provinces. The firm of A. & E. Loggie, of Port Mulgrave, have engaged a 'tern' vessel to purchase fresh haddock in this district, which averages about one cent and a quarter per lb.

Fish of all kinds have been scarce at this station this season. During the months of August, September and October, nothing was done of any importance owing to the large quantities of dog-fish on the grounds. These fish have been responsible for the loss of thousands of dollars to the fishing industry and our reporter thinks the govern-

ment should offer a bounty to the fishermen to have this pest exterminated. Should some firm engage in the 'fertilizing enterprise,' it would pay the concern to locate here, as they could obtain in addition to dog-fish, offal from the various kinds of fish.

PORT HAWKESBURY, C.B.

Reporter, Mr. John C. Bourinot.

Cod were first reported in good quantities at Creignish on May 14, and on the 25th in the same locality, both the cod and herring fishery were reported in a fair condition. Light quantities of cod were reported at this station on the 29th, and from good to fair on June 8 to 17. The only reports received of codfish after were on July 10 and 11, on which dates cod were on the coast in good and fair numbers respectively. The cod-fishery this season has been considered poor.

Herring.—Although herring were reported around the coast in good numbers on June 20, on July 15, and an occasional run in August and September, the herring fishery was reported very poor. Herring were very plenty at Harbour-au-Bouche, on May 6 and plentiful at Creignish on the 12th. Fair fishing was also reported at the latter locality on May 25.

Haddock were reported plentiful on June 16, and fair on July 7, with good quantities going on the 10th. The catch of haddock this season has also been considered a poor one.

Lobsters.—Fair reports of lobsters were received on May 1 to 15, and the next two weeks, good fishing was reported. Very large quantities of lobsters were on the shores on June 1 and 2, and to the close of the season the catches varied from good to fair. Lobsters were on the whole quite plentiful throughout the season and the fishermen were reported as having done handsomely.

Mackerel struck in plentiful on May 29 to 30; June 10, very large numbers of mackerel were on the coast and some good hauls were made. The mackerel taken between these two dates were mostly No. 3's, and a few No. 2's, making the fishing quite profitable to the fishermen.

Pollock were reported plentiful along the coast on June 13 and 20.

Dog-fish.—Complaints are quite general from the fishermen of the ravages and destruction of the dog-fish, which have become very numerous of late years all along our coast line. This fish should become valuable for their livers as the oil extracted is excellent and it is hoped a good price per gallon will yet be realized as was the case in the *Fifties*, also that their bodies be made use of for compost, &c. Dog-fish as a matter of foodstuff, is now attracting the attention of learned and scholarly men as can be seen by the following extract from the 'Fishing Gazette' (October 3,) of New York :—

DOG-FISH FOR FOOD.

'Professor Irving Angell Field, of Harvard University, has been investigating fishes that have no food value and their destruction of other fish. He claims dog-fish, when properly cooked, is the equal in flavor to many other fish. It feeds on lobsters, crabs and fish of different kinds, and frequents sandy beaches.

'The Professor served a dinner of dog-fish at Wood's Hole recently, without in forming his guests the nature of the fish. It was pronounced delicious. The commercial use of the fish is now being studied, aside from its use for food.'

PORT HOOD, C.B.

Reporter, Mr. Edw. D. Tremaine.

Codfish were first taken this season early in May, and as formerly were caught in quantities from fair to poor until dog-fish appeared early in August. Shortly afterwards this fishery was abandoned to the close of the reporting season. The dog-fish usually remain until cold weather sets in. Codfish were first reported fair on May 11.

Haddock came on the grounds this season shortly after cod and were caught in fair quantities up to the arrival on the coast of the dog-fish.

Hake appeared early in July, about 10th, in good fishing which continued to the 16th. From this date to the end of August fair numbers were taken. This fishery like the cod and haddock fisheries was also abandoned during the time dog-fish were in possession of the grounds.

Herring were taken in small quantities in April and early in May, and were again in light catches in July. The stops of herring were very small during the fall and it is reported that the herring fishery on the whole this season was a failure.

Mackerel were taken in small numbers from time to time during the season, but those caught were all of a large size and excellent quality. The total catch was less than last season.

Squid.—Only very few squid were caught this season, not nearly sufficient to supply the boat shore fishing with bait.

Lobster.—This fishery opened April 21, and closed on July 10, has been one of the most profitable in the history of the lobster fishery in this section of the county of Inverness. The catch has been larger than in any season during the past fifteen years, and the quantity and size above the average. There were four canneries in operation in the western division of Inverness County this year, (1). The cannery at Port Hood Island owned by Burnham & Morrill Co., of Portland, Maine, under the efficient management of Mr. Alex. Gunn, of Cross Roads, Country Harbour, Guysboro County, who has been in charge continuously for 25 years. Eighteen males and eighteen females were employed at the cannery this year. Thirty-four boats with a crew of two men for each fished for this firm here; three smacks were used in gathering up lobsters from the smaller boats; 7,000 traps were used by fishermen; 2,089 half cases, 396 five-eighth cases and 49 whole cases were put up at this cannery, aggregating the equivalent of 1,341 cases of 48 one pound tall cans and representing $16,092 in value. Alex. W. Morrison, of Port Hood Island, was 'high line' fisherman, having netted 614 dollars, a good result for two months and a half.

PORT HOOD, C.B.

Reporter, Mr. Edw. D. Tremaine:

Lobsters.—The cannery at Sea-side, operated by McDonald and Gillis, and at which six males and eight females were employed, put up 390 cases of lobsters. Fifteen boats, averaging two men in each, fished for the cannery, besides two smacks engaged in gathering up lobsters, and 2,300 traps were used by the fishermen.

At Judique cannery, operated by J. G. Rood, Esq., the well-known successful lobster packer, of Halifax, 602 whole cases, 100 half cases and 75 three-fourth cases, were put up for market; eleven males and sixteen females found steady employment here for the season; 18 boats and 36 men fished here, using 3,600 traps. Hugh and Alex. Gillis, of Judique, headed the list of successful fishermen, having caught in one day 2,200 lbs. of lobsters valued at $66.

The fourth cannery was the one at Long Point, operated also by J. G. Rood, where 312 whole cases and 37 three-fourth cases were put up; nine males and eleven females

were employed—all natives—under the capable supervision of Mr. McMaster, foreman. Thirteen boats, using 3,000 traps, were engaged in this branch of the fisheries here during the season.

The grand total of the four canned numbered the equivalent of 2,780 cases of lobsters containing 48 one-pound cans each, an increase of 643 whole cases over that of last year. The value of the total yield, 133,440 one-pound cans, can safely be estimated at $33,360. This is another link in the chain of evidence that the coast of Inverness is one of the best fishing grounds in North America.

PORT MALCOLM, C.B.

Reporter, Mr. R. G. Proctor:

Cod appeared about May 20, from which date until the end of the season the catch was light, excepting a few days in the first part of July when codfishing was reported good. The codfishery was reported poor this season, and only about 50 quintals were taken. The bankers out of this port are also reported as having done poorly this season, owing to the scarcity of bait.

Hake were not reported, but 5 quintals were taken this season.

Halibut were not reported this season.

Haddock.—Very small catches of haddock were taken in May and June, and 10 quintals were reported for the season's catch.

Herring struck in very small number in May to the 29th and 30th, when fishing was reported fair. Herring were scarce after to the latter part of June, and fair quantities were said to be on shore the two last days of the month. On July 9, it was reported that herring were very good the first part of the week and fair on the 6th and 7th. The report of the 16th, stated that herring had been fair all the week with all other branches of the fisheries very dull. Very good fishing of herring was on the coast on August 6 and 27, with fair catches being reported in September to the 12th. Total catch estimated at 100 barrels. Several bankers were in port seeking bait during June and July. Those in the bay, last month, reported fish scarce on banks, but dog-fish very plentiful.

Lobster fishing commenced May 1, with fair catches to the 7th. From this date to the 17th, lobster fishing varied from fair to poor. Lobsters appeared plentiful for the next six days with fair reports on the 25th and 26th. There was a very good improvement in the catches from May 28 to June 2, and from fair to poor after to the close of the season. The lobster catch this season was considered good and about 40,000 lobsters were taken.

Mackerel were reported in May, on the 24th and 30th, very plentiful, and also on June 1. It was reported, on June 4, that mackerel fishing was very good for the past three nights. Seiners in the harbour reported the fishermen doing very well with mackerel off Canso and Whitehead, where the fish had struck in very abundantly. Good quantities of mackerel were on shore on the 6th, 9th and 22nd of June. Very few mackerel were reported after. About 1,000 barrels were stopped during the season.

Alewives.—Light quantities of alewives were on the coast in May, from the 21st to 28th, inclusive. Fair fishing was reported on the 29th and 30th, and small again on June 22. Ten barrels was the total catch.

ST. ANN'S (ENGLISHTOWN), C.B.

Reporter, Mr. Thomas D. Morrisson:

Cod made their appearance May 1, but were not very plentiful until about the 15th, the catch after was reported fair to the end of June, as the majority of the fisher-

men had turned their attention to the lobsters fishery. Bankers reported good catches in May and the first part of June, but a little later in June those who called in for bait were considerably handicapped as there was a great scarcity of bait-fish in the market.

Haddock were reported fair in May on the 12th and again in June on the 19th and 29th, but the catch was reported light throughout the season.

Herring struck in on our coast about the middle of April and continued plentiful to the middle of May. A few fair stops of herring were taken after to the 17th of June. Traps at this station did not stop many herring this season as the fishermen were rather too late in setting the gear. The quantity taken however was sufficient to supply a number of bankers, that called in when the fish were going, and several French vessels were included in the number.

Lobster were taken about May 1, from which date to the 15th, with the exception of the 6th, on which date a large quantity of lobster gear was destroyed, in fair catches. The fishery improved considerably after, and some good fares were made. The fish were reported large throughout the whole season and the quantity packed was 40 per cent above that of last year.

Mackerel were very scarce inshore this season.

Salmon were also very scarce, and the catch was said to be very light during the entire season.

Squid were reported as being a complete failure this year.

Pollock appeared plentiful on the coast this season, but the catch was light.

The total catch of fish in this district for past season is as follows :—

Cod	400	quintals.
Hake	50	"
Haddock	100	"
Pollock	250	"
Herring	500	Barrels.
Mackerel	75	"

Lobsters, about 800 cases packed, say 225,000 lobsters.
Salmon, about 6,000, pounds.

PRINCE EDWARD ISLAND.

ALBERTON, P.E.I.

Reporter, Mr. David Montgomery :

Codfish were taken earlier this season than almost any previous year, and were first reported on the coast in the month of April. Some very large codfish were taken on trawls during the latter part of May and the first of June. About the middle of June the fish moved off-shore, but the months of July and August were very productive and very large quantities of codfish were taken. The codfishery for the season was a very remunerative one for those who followed up this branch of the fisheries, all along the coast and at the different points, viz :—Kildare, Tignish, North Cape and Waterford.

Hake and Haddock were very scarce comparatively over the whole district during the past season.

Herring appeared on the shores early in April and as soon as the coast line was clear of ice good catches were made. During the first and second week in May and again early in the month of June immense shoals of herring swarmed along the coats

of which large quantities of fish were taken from nets in our bay, sufficient to supply local demands. The traps at Tignish were reported 'over-flowed' with herring on several occasions and could not be cleared of these fish.

Lobster fishing was reported good throughout the whole season and large quantities and larger sized fish were taken this season than during that of 1902. Although a portion of the lobster gear was reported broken up, by the storm which occurred on the 25th of May, it was reported that it was the absence of the very stormy weather and severe gales that prevailed the previous season, which contributed largely to this year's successful operations in this important branch of the fishing industry.

Mackerel.—The mackerel season has been a very successful one over this entire district. They were taken in nets for the first on the 4th of June and continued good and fair during the whole season, first by netting, and later by hooking. Mackerel appeared more plentiful in August than any other month of the year, and were reported in large numbers schooling and netting over the whole district from the 11th to the 29th. The mackerel taken were also of a superior quality; it being rare to find any number threes (3's) among the catch. There appeared to be mackerel over the whole fishing grounds this season, and the fishermen say there is yet hope of this valuable fish returning to our shores again in similar quantities, as when mackerel visited these localities in the early fifties and sixties.

Trout were plentiful at this station the early part of the season and scarce towards the close.

The past season's fishing was reported very good, and has been considered the most remunerative one all over this district for the last decade.

BLOOMFIELD OR MIMINEGASH, P.E.I.

Reporter, Mr. Edmund D. Kelly:

Cod fishing began about May 6, under favourable conditions and reports received from this station dated May 15, indicated fair fishing with some boats averaging 400 lbs. The cod taken were reported to be large ones, and fair fishing prevailed during the remainder of the month of May to the 27th of June, which increased to good to July 6, and fair again to the 13th, with boats reporting from 300 to 600 pounds. After this date a stormy period set in and cod fishing was poor all through August excepting the 25th, 26th and 28th, on which dates fair fishing was reported. From September 1 to 15 the catch was on an average fair and poor after to the end of the season.

Hake struck in on July 16th fair, and remained so until the 24th, with daily catches reported from 20 to 40 pounds. The fishing was poor after until the 22nd of August. Fair hauls were made to the 1st of September and good from now to the 8th of the same month. None were reported afterwards as the weather became occasionally stormy.

Herring.—Fair stop of herring were made at this station from May 1st to the 16th. The fishing was poor to the 29th and on the 25th it was reported that no fish of any account was taken at Roseville excepting a few herring. Fall herring struck the coast about the 8th of September, but in small quantities, and the fish were reported scarce during the remainder of the season. A little over 2,000 barrels were landed.

Lobster fishing opened up about the 1st of May with good prospects at this station to the 8th, and fair after until the 23rd, on which day it was reported a severe storm which had occurred on that day wrecked the gear considerably. Lobster fishing was poor during the month of June excepting at a few intervals, and the last fair reports were received from July 1 to 6, when boats were averaging from 200 to 300 lobsters. About 1,000 cases were canned at this station this season.

Mackerel were reported about June 10, with the fishing poor to the 15th and 17th, when fair catches were taken. Then the fishery became poor after to the 1st of July,

when for about a week fair stops were again made, but the mackerel caught were of a smaller size than those taken at the first of the season. Mackerel hooking commenced about the 6th of July but with poor success and the catch was light to the close of the fishing season.

GEORGETOWN, P.E.I.

Reporter, Mr. Charles Owen :

Codfish appeared first inshore in good numbers on May 5, when it was reported that very few fishermen were exclusively engaged in this industry. Cod were again plentiful on the 18th. Hand liners did fairly well after to the 15th of June when the fish moved into deep water and to the end of July good fishing was reported on the banks, were cod had made its appearance in large numbers. Off Souris and the north side of the island from East Point to St. Peter's Bay, cod struck in abundantly the first week in August and fishermen made good catches. At Fisherman's Bank about the 17th, catches varying from good to fair were reported. Codfish were plentiful the last of August on the north-side of the island and off Cape North, but dog-fish became so numerous along the coast and on the banks that all fishing was discontinued. Codfishing in the fall appeared to be good but few were engaged in it. The estimated catch for the season is about 250 quintals.

Hake fishing was reported good off Murray Harbour on the 8th of August and fair catches were taken to the end of the month. On September 12th hake were reported plentiful, but owing to the ravages of dog-fish the catch was poor. A considerable quantity of nets and gear was destroyed during the visit of dog-fish on our shores.

Haddock were first reported on the coast when a fair mixture of cod and haddock was taken on the 27th and 30th of May. The catches during June, July and August varied from fair to poor.

Herring fishing commenced about the 14th of April and to the end of the month fair catches were made. Herring were very scarce early in May and nets did not average much over one barrel of fish. It was reported on the 18th that there has not been an abundance of herring on the coast as in previous years. Occasionally some nets would average good, while others do not mesh over a quarter of a barrel. Four cargoes of herring were in port on the 23rd of May, from the Magdalen islands and an improvement in the herring fishery was expected daily. A sufficient quantity of herring was taken in June to assist in supplying the lobster fishermen with bait. The July fishing was poor, and on August 8th herring struck in off Pictou island with fair results. Small crafts were employed in this fishery and their fares were intended for smoking purposes. Catches averaging from fair to good were stopped the last week in August off Panmure, Brighton and Pictou islands. To the 20th of September, between Panmure and Murray Harbour good stop of herring were made, with nets averaging 3 barrels. The fishing off Wood's islands was also fair the middle of September. Two Canadian bankers are reported as having been supplied with bait off Murray Harbour about this date. With the exception of a few herring being caught off Panmure island on September 30, there have been no reports of any other fishing in this vicinity for many days past. Herring bait by fishermen's nets was reported at Cardigan bay on October 8. The estimated catch is about the same as last season—5,000 barrels.

Lobster fishing began about April 21. The catch early in May was considered from fair to good, with some boats landing 500 pounds. One factory with 17 boats operating the lobster fishery averaged 5,000 pounds daily. It was reported the week of May 18 that lobster fishing was good and the daily catch per boat, fishing 250 traps, was said to have been 700 pounds. Fair hauls were taken the last of May, and 200 pounds were obtained from 200 to 300 traps by single boat. The fishermen were making good wages the first week in June but a considerable decline was noticeable in the catch. Three thousand pounds yield from 15 boats was reported on the 18th, and towards the end of June the lobstermen moved their gear into shoal water. The

weather was unfavourable on July 1, and on several occasions the boatmen were obliged to return to the shore for shelter after only a portion of their traps had been examined. Quite a number of traps were removed before the expiration of the season due to the poor condition of the fishery. The catch of lobsters in this district is considered a fair average, and is thought to be the equal if not a little over that of last year.

Caplin were reported on June 15th schooling on the banks in this district.

Mackerel made its appearance the last week of May, and five were netted off Brighton island. From June 3 to 6 a fair catch of mackerel was taken in nets off Panmure island. Nothing of any consequence in this line was noted after until on Saturday, June 27, a school struck inshore again and a few makerel were netted. Mackerel schooling off East Point was reported on August 3, and several large schools were observed towards Cape George and also southeast of Brighton island, the middle of the month. On the 19th mackerel were hooking quite freely and boats were averaging from 400 to 500 fish each by hook and line between East point and Souris. A few schools of small sized mackerel were off Entry island the last of August. Very little was done in mackerel fishing later on in the season. Mackerel fishery as far as the catch was concerned is reported a failure on this coast the past season.

Dog-fish made their appearance earlier than usual this year and were much more destructive than ever before in the gulf waters. It is claimed by the fishermen that these fish are so ravenous that a dory can be filled in a few hours by holding a piece of bait over the side of the boat, and 'gaff' the fish as they come to devour the bait. If the government gave a bounty to induce fishermen to catch these fish and means were provided for manufacturing the catch into 'fertilizer,' etc., it is the opinion of many that the waters in the course of a few years would be so depleted of this pest that successful operations in all branches of the fishing industry would be the result.

MALPEQUE, P.E.I.

Reporter, Mr. Hume Hopgood :

Codfish were first taken about May 3 in good catches, which continued the same during the month of May and a portion of June to the 24th. After that date, owing to bad weather, very few hauls of any note were taken, consequently the total catch was not nearly as large as in former years.

Herring first struck inshore about April 20 in good numbers. Although only reported after in light quantities in May from the 11th to 16th, the catch was said to be very good the past season. It was reported on November 9 that about 480 barrels of green herring were stopped to the present, and a good many more would be obtained if required.

Lobsters.—Good catches of lobsters were taken for the first from April 29 to May 20, but owing to a very severe storm occurring about the latter date and causing considerable damage to the lobster-traps, the catch was only fair after to the close of the season, which, however, is considered a fairly good one. Six hundred and eighty cases of lobsters were packed during the season.

Mackerel were not taken on hook this season. A small quantity were netted during the months of June, July and August. About 65 barrels of salted mackerel were reported.

NEW BRUNSWICK.

ESCUMINAC POINT, N. B.

Reporter, Mr. John W. Walls:

Cod.—The first report received from this fishery indicated fair fishing on July 29, that 1,600 pounds of codfish were landed since, and on August 1 it was report beginning of operations. Good catches of cod were reported daily in August and to the 24th, 2,500 cod with an aggregate weight of 8,000 pounds was the result of the weekly reports received. From September 10 to the 30th the fishery varied from good to poor with catches from 600 to 1,200 pounds. About 1,200 pounds were taken in October from the 1st to the 10th. On the whole the cod fishery this season was said to be fair, and it is considered that the total catch will be considerably in excess of 1902. About 10,600 pounds of cod were landed during the season.

Herring were reported in the month of May in fair catches on the 4th, 5th and 7th, and from this date to the 16th, the fishing varied from good to poor. The run of herring this spring was considered good, as this fish never fail to appear on the coast in large quantities. About 2,000 barrels were stopped, which were used for lobster-bait. Light quantities of herring were reported the first week in September, when about three barrels were caught, and the following week 15 barrels was the catch. The fishermen encountered stormy weather the latter part of the month and only 300 fish were stopped with one-half barrel being taken on October 1. Our reporter states that the fall fishing was a complete failure at this station this season, but was in a good condition the year previous. No catches of any account were noted, although it was reported that one boat stopped between 75 and 80 barrels of herring in one night's fishing in 16 fathoms of water to the north of Escuminac light-house. This would be the only catch of any consequence made in this vicinity during the fall.

Lobster fishing began about the first week in May with fairly good prospects and some excellent catches were made during the month. 35,000 lobsters were reported caught by report of the 4th, and to the week ending May 16th, 56,000 lobsters were taken. 25,000 fish were trapped to the 23rd, and 32,000 lobsters was the catch according to weekly report of the 30th. The fishery was poor the first week in June, but improved to a good condition, which continued throughout the month, during which period 80,000 lobsters were reported taken. Light catches were made daily on July 1, after which to the close of the season some very good fares were made. It is estimated about 300,000, lobsters were landed during the season, throughout which the weather was very favourable for lobster fishing, and as a result the total catch will be the largest for many years past.

Mackerel.—It was reported on July 11, that mackerel fishing was commencing, but the fish were only in small numbers and appeared to be keeping in deep water to the depth of 16 to 18 fathoms. Fair reports of mackerel which were of a fair size were received daily the first week in August, when mackerel were moving closer inshore and 800 fish were reported taken on the 8th. 550, 600 and 200 mackerel were caught respectively on the15th, 22nd and 24th of same month. The last report of this fishery was received on September 7, stating that 100 mackerel were stopped and fishing operations in this branch was reported suspended on the 12th. The mackerel fishery of this season in comparison with that of the previous year is considered a very poor one. Mackerel were reported in good quantites in the month of June to the south of this station.

Salmon were reported in May 18, in light quantites, which continued the same throughout the months of June and July. The salmon fishery was not as good as that of last year's, and the number of salmon landed is estimated at 1,500.

Shad fishing was reported good the first of the season, and the catch on the whole is better than that of last season's.

Mr. Walls says:—'I think mackerel strike this coast about May 15, and remain until June 15, when they make off down towards the Nova Scotia shores. It seems that the fishermen get out too late to make any large catches, and I also think mackerel boats should be on grounds about May 10. In regard to lobsters, they seem to keep in deep water the past two seasons. From 14 to 15 fathoms is always the best fishing grounds, at least, we find it such at this station.'

GRAND MANAN, N.B.

Reporter, Mr. Charles Dixon:

Cod were reported as having showed up well on the Bulk-head the first day of May with the trawlers catching five quintals to one run, and hand liners averaging about the same quantity per day. A weekly report received at the bureau dated May 9, stated that the movements of the fish could not be closely followed at the present owing to an interruption of the telegraph cable between the island and mainland. Reports, however, by letter were forwarded regularly and promptly until the necessary repairs were made. Very good fishing was on the week of the 16th, and several small boats reported catches from five to eight quintals. At Gravelly bottom and Bulk-head the last week in May, cod fishing was fair, and from two to six quintals were averaged daily. The month of June opened with good prospects and vessels operating on the above mentioned grounds made hauls averaging from 25 to 30 quintals. Good fishing did not continue long as the weather set in bad and the fishermen could not reach the grounds, where cod were reported in large quantities. A little later in the month two vessels that were fortunate enough to operate two slacks on the Bulk-head reported good fishing. All that is required now is favourable weather, and the catch of cod would reach the average. Towards the end of the month of June, small crafts caught as much as ten quintals of large codfish per day, which continued the same to the first week in July, and it was reported on the 4th, that quite a large quantity of cod appeared on the north side of the islands. A light catch was reported in August and during the month of September a few good catches of cod were taken. The season's catch is considered a fair one, and was about the same as last year's. 1,000 quintals were reported for the season, and 175 casks of fish oil were obtained, the most of which was manufactured into medicine oil, at a very good price.

Hake first made its appearance on the coast about May 30, when they were reported striking in off the Wolves. One small vessel, *Falcon* by name, caught 18 quintals on that date. Haking was fair the week of June 6th, in North Channel and off Wolves bank where vessels were obtaining catches as high as 20 quintals per day, and boats from two to five quintals. When the weather permitted the vessels to visit the fishing grounds some good catches of hake were made. One small vessel is reported as having been very successful the past week (June 13), in the hake fishery. Her fares amounted to about $70. The best hake fishing that was at this station for years was reported on June 27. Vessels caught in the North channel 20 quintals daily, and small boats from 8 to 12 quintals. One craft set her trawls off Swallow-tail and was rewarded by a catch of seven quintals. Trawlers haking in the North channel and off the Wolves July 4, secured from 20 to 30 quintals by vessel a day and the small boats averaged six and seven quintals. Very few hake were taken the last of the month as dog-fish had possession of the grounds. Fair fishing of hake was reported in August the first week and very good the following week, after which dog-fish became so numerous on the shores, that the fishermen almost abandoned the fishing industry. The total catch of hake is estimated at 2,500 quintals, which is 500 quintals in excess of last season's fare. 3,000 pounds of hake sounds were shipped to the United States. They sold for forty cents per pound on the island.

Haddock.—Light quantities of haddock were reported on the coast early in June and again in July on the 4th. Very good haddock fishing was reported the week of August 15, in North Channel and on October 10, it was reported that haddock trawled the last

two days at Duck island by inshore boats averaged one half ton per boat. The total catch for the season is estimated at 1,000 quintals, which is 300 quintals, better than last year.

Halibut were only reported this season, when a few were taken on trawls the first part of May.

Lobster fishing has been on an average fair. The lobster factory located at Seal cove packed 1,275 cases of lobsters during the season. About 20 tons were also shipped fresh to the United States market.

Herring.—The first herring used for bait at this station were caught at Campobello island early in the season, and were very small in size. The first report of herring around the island reported on June 13, that one fisherman made a catch of twenty hogsheads of small sized herring, one night in his weir at Long island. There was a scarcity of herring after until the week of June 27, when net fishing was reported at Flagg's cove, with nets averaging about two barrels. Ingersoll's weir at Long island also reported a few fish. Some large herring were netted at Flagg's cove, the first of July and a few smaller ones in Long island weirs. Dog-fish drove all fish off-shore until the 25th and 27th, on which days herring struck in plenty and fair at South-head and on the Bulk-head respectively. Herring bait by fishermen's nets was also reported at Whale cove on July 31. Early in August, herring appeared in large numbers at South-head and good net fishing was reported. The weirs also at Long island and Whale cove were getting a good supply. The week of August 8, boats made catches as high as thirteen barrels of herring to one set of nets in one night's fishing at Flagg's cove and Whale cove and Seal cove, and the weirs at Grand harbour and Long island reported on August 15, as having made good hauls. A few net herring were caught the latter part of August, but the ravenous dog-fish devoured and destroyed both the contents and the gear used for capturing this valuable bait fish. The same story was reported on September 5, and the schools of dog-fish were so very large and numerous on the coast that all operations were suspended. The fishermen were about now entertaining the idea that should this state of things exist much longer a very hard season is in store for those who follow up the fishing industry.

Dog-fish moved off-shore later in the month and some good net fishing was reported at the various localities around the islands. On the 19th of September, it was reported that no large bodies of herring were on the coast this summer and that the fall catch is likely to become small. A later report on the 26th, was to the effect that the weirs at Seal cove did well during the week and stopped as high as 100 hogsheads. The herring and line fishing were reported a failure at the north part of the island this year. Many of the fishermen that had good stands and went to considerable expense in making preparations for this fishery, it is reported did not obtain as much as a 'herring tail' to date. The catches of herring in October were very good and during the first week of the month very good fares were taken in the weirs at Seal cove, Grand harbour and Two islands. One night at Cheney's head, the net fishermen got a few herring and by net drifting at South-head some very good catches were made. It was reported that the fishermen on the north shore were 'spudging and seining' all the small herring from an eye to a large net herring, and our reporter is of the opinion along with many others that should this process of catching this very valuable fish continue, herring would become a thing of the past in these waters. On the 10th of October some large herring were netted at Big Duck island, and it was reported that there were signs of large schools of good sized fish off South-head. About 7,700 half barrels of herring have been put up for market during the season and 800,000 small boxes of smoked fish. 4,000 barrels of fresh herring were exported to the United States The kippered herring factory output was 1,400 cases canned and about 4,000 cases of smoked kippers.

Pollock fishing opened up very well the early part of the season and on the 9th of May it was reported that some fishermen were seining large quantities of pollock on the Soundings. Off Gannet rock their average was 2,500 pollock per day. Boats

again secured good fares on the Soundings, and on the 16th they were averaging from 100 to 130 quintals daily. Fairly good fishing of pollock was reported after to the middle of August. The total catch is estimated at 3,000 quintals, which is one half of last season's catch.

Dog-fish Pest.

The fishermen have been bothered so much with dog-fish this and other past seasons that they do not operate one half of the fishing season. Now they say that dog-fish spoil their trawls and it costs so much for hooks and ganging to repair their gear every day they operate, the fishermen will not bother with trawling after August comes in. On the other hand, there are so many small herring taken out of the weirs each season for sardines, and small ones still disposed of for lobster bait, that it is impossible for any more net herring to increase in our waters. These sardine herring are sold to the packers at Eastport and Lubec, and our Charlotte county fishermen are being deprived of a livelihood. A few weir owners get something out of it, but the majority of the poor fishermen make only a precarious living at it. It is only a matter of a few years more at the outside, when large herring in these waters will be a thing of the past, and as I have been a fisherman all my life, I can see the effects to the herring fishery, and the decrease of herring since the sardine business first began. Mr. Dixon suggests that 'an export duty be placed on herring to equal at least the United States import, as he firmly believes that such a law would in a very few years be the means of bringing the sardine industry to our shores, and if said industry is to continue, that stringent regulations should be passed as to the size of fish so taken as well as to the quality packed.'

SHIPPIGAN, N.B.

Reporter, Mrs. M. J. Robichaud:

Codfish appeared on out shore in large quantities about May 15. The two first weeks of the season were very favourable to the fishermen. Crafts with crews of four men each arrived in the harbour after having been out on the fishing banks for a week with 3,000 or 4,500 cod. The fishing continued good till the end of June, then it slackened for a month. At the end of the season, cod and bait were plentiful, but no very large catches were reported, owing to heavy gales that prevented fishing boats from venturing on the grounds. Although the season just closed has been unfavourable to the fishermen in every respect, crafts already mentioned caught 500 quintals during the season. The total catch this season is 1,000 quintals below that of last year, there being taken during the past year 11,000 quintals of codfish and haddock.

Halibut made its appearance on the coast early in June, with very light fares being made at the beginning of the season. Halibut struck in fair numbers the middle of July, and one boat prosecuting this fishery returned with 19 fish two of them when weighed registered 200 pounds each; the remainder of the catch tipped the scales from 35 to 100 pounds. About 12,000 pounds were shipped in ice by rail with as near as can be judged, 30,000 pounds stored in freezers to be shipped by rail at the beginning of the winter.

Herring did not appear as early as in former years, owing to the ice lying close inshore; but though late in appearing were reported quite plentiful. Some boats made two trips of 100 barrels each in five days. About 8,500 barrels were salted in bulk for lobsters bait, and about 10,000 barrels were utilized on the farms as fertilizer, with 400 barrels being salted for shipping. The fall herring have been more than plentiful. In a single night nearly 4,000 herring were caught, and all the herring boats attending the fishery returned home laden down to the gunwale. Out of that big catch about 200 barrels were lost for the want of proper handling. The total amount of herring salted this year is about 3,500 barrels.

Lobster season opened this year with good prospects and continued the same throughout the season. The weather has been reported very favourable to lobster fishing.

There are 24 factories located at this station, and the average pack was about 360 cases making a total of 8,640 cases for the entire season.

Mackerel were first reported in July, but very few were taken at this station this season; the fares being good for a few days only with some boats reporting from 150 to 200 in a day's fishing. Owing to the scarcity of mackerel on the coast the fishermen abandoned this fishery and vigorously prosecuted other branches of the fisheries. About 12,000 mackerel were caught and shipped fresh to the United States.

Salmon fishing has been reported good this year, and the fishery is considered better than last season. About 2,000 salmon or 800 more than 1902 catch, were stopped during the salmon season, which have been exported frozen to the United States marked. There is still a portion of the total catch stored up in freezers here, which will be shipped also at the beginning of the winter to the same market.

Smelts appear to have been in abundance this season. Several mesh nets reported from 25 to 40 pounds daily, and fishers with hooks were reported doing well.

Clam fishing grounds are not yet exhausted. About 4,000 barrels were canned, which realized for those engaged in this industry the sum of $4,500. About 4,000 barrels were used by the codfishers during the season as bait.

Bait.—Clams are used as bait at the beginning of the season. Later on, fishermen utilize what is termed salted summer herring. For the fall fishery, squid is brought in requisition, when obtainable.

PROVINCE OF QUEBEC.

GRAND RIVER, P.Q.

Reporter, Mrs. John Carbery :

Caplin were not reported this season.

Cod fishing inshore in this vicinity has been very poor; but the bank fishery was reported fair to the arrival on the coast of dog-fish in the month of August, when all the branches of fishing industry became dull.

Herring were taken in fair quantities the first part of the season, but the July catch was very poor, which continued so until quite lately; some nets only reporting as many as two barrels.

Lobsters as usual gave every promise of being plentiful during the season and fair catches were made from the opening of the season to the 28th of May. From now to the close of the season the fares of lobsters were small, and the total catch of crustaceans at this station is said to be decreasing every year.

Mackerel continue to become very scarce along these shores. Some very young mackerel were reported schooling along the beaches this fall, but were not large enough to mesh.

Salmon.—Rough weather on the coast this season prevented the usual run of salmon, and as a result the catch was light.

Squid struck in on the coast very late in the season and were of little use to the bait fishermen as all operations had already been suspended.

Our Reporter adds: 'That notwithstanding the fact that the Gaspé catch of cod as a whole is below the average the catch at this station is up to the mark. This with the increased price of fish and the prospects for better prices for those, who have stocks on hand is of such an encouraging nature as to induce our fish merchants to continue their fishing operations with as much vigour as in the past. Owing to the great number

of dog-fish in our waters of late years, the fishermen have been considerably annoyed and the people of this place are preparing petitions, which will in the near future be forwarded to the government praying for a bonus on each quintal or draft caught to enable the fishermen to earn a living at the fishing industry as in the past, for should the quantities of dog-fish remain in our waters, the fishing in the months of August and September, which is usually good, with fish abundant, would be almost nil. The largest fishing boats used in this bay employ but two men each, but sometimes the services of a boy are required. Very good catches are said to be made when boats return with say from 20 to 40 or even 45 drafts of fish. This is the most they can carry, and in some cases the heads of the members of the finny tribe have to be removed in order to make room. A good catch would represent from fifteen to thirty, and fair from eight to fifteen drafts. Bankers leaving for the grounds on Monday sometimes make two trips per week, but at times owing to storms and scarcity of bait make but one.'

L'ANSE AUX GASCONS, P.Q.

Reporter, Mrs. A. E. Brotherton:

Caplin.—None were reported this season, at this station.

Codfish appeared about May 13, in light quantities and from the 16th to 29th of the month, the catches varied from good to fair. Reports received from the bankers were very encouraging with some crafts reporting 25 drafts on the 30th. The bankers were reported again making successful trips in June on the 10th, with a scarcity of codfish inshore. During the remainder of the month of June and in July the fishing was from fair to poor and to the close of the season the catch was a fair average. On the whole, codfishing was reported fair but the total catch is 2,000 quintals below that of last year, there being caught this season 7,000 quintals. Scarcity of bait was reported the first of the season and dog-fish were also on the coast and troublesome from the month of July to that of September.

Herring struck in light quantities in May from the 1st to 12th, and a few excellent stops were made from the latter date to the 20th. Good fishing was reported the week of the 23rd of May with a varying catch from fair to poor after to July 10. With the exception of a few very good catches the latter part of July and an occasional one in August, the herring fishery was reported fair to the end of the season. The herring catch this season was considered not as good as last season and was used for bait.

Lobster fishing began about May 1 in fair catches, which improved to very good the next day. Reports received for the balance of the month indicated varied fishing from very good to fair. Lobster were on the shores in fair quantities on June 1, and light after to the close of the season, which has been said to be a good one, though not as successful as the previous season. About 200 cases will represent the total catch for the season, which is on a par with that of 1901.

Salmon were reported for the first this season, when on the coast in very light numbers. Fair fishing of salmon was reported on the 9th, 10th, 20th, 26th and 27th of June and also in July on the 1st and 7th. The salmon fishery this season was not up to the average for this station. About 4,000 pounds were shipped in ice to Dalhousie, N.B., which is 5,000 pounds less than the shipment of last year.

Squid struck in fair on August 28, and light quantities were taken after to the 23rd of September, when the fishery became fair again. The catch of squid in October from the 2nd to 15th, varied from fair to poor. The squid fishery this season has been reported on an average fair.

Dog-fish as stated above were very troublesome when on the coast this season.

NEWPORT POINT, P.Q.

Reporter, Mrs. Meunier :

Codfish were in fair quantities on the coast in May from the 13th, and bankers were making fairly good hauls. 9 drafts was the catch on the 14th with from 15 to 20 drafts reported on the 16th. After the strong winds had abated on the 22nd, codfishing was reported good to the last of the month. The June fishing varied from very good to fair and large vessels operating off shore averaged from 10 to 26 drafts between the 12th and 19th. A fair average catch was reported in July with bankers landing 45 drafts on the 10th. Although the weather was very much against fishing in August, the fishermen from the banks reported from 15 to 40 drafts of codfish on the 8th. The catches in the month of September were from good to poor with some crafts unloading for 15 drafts and other for 25 drafts from the off shore fishery. Good codfishing was reported on October 1, and very light on the 5th and 6th. A large supply of bait was procurable on the 9th of the same month and several bankers did well and reported fares varying from 26 to 30 drafts. The following day on the 10th, fair quantities of cod were taken in shore. About 8,500, drafts was the total catch for the season.

Herring made a very good appearance on May 2, after which the fishing became on an average fair throughout the month, continuing the same to June 7. Good quantities were taken on the 12th and 19th with the herring fishery fair in shore on the 18th. Very large bodies of herring were on the coast on the 20th and a day or two later the fish moved off and nothing of any note was reported until the following month of July on the 7th and 8th, 25th and 31st when fair stops of herring were made. During the remainder of the season to October 1, on which date the last report was received, the herring fishery varied from good to poor. Total catch estimated at 1,000 barrels which is 50 per cent less than last season.

Lobster operations commenced very good this season on May 2, and from fair to poor fishing followed for the next five or six days. Fair reports were received daily of the lobster fishery from the 12th to 23rd, when strong winds were now prevailing. The latter part of the month and to the close of the season, very light quantities of lobsters were taken excepting May 25 and 26, on which days the fishing was fair. The total catch of lobsters is estimated at 52,000 pounds.

Salmon were reported in fair quantities on May 25, and in very light numbers after on July 7.

Squid were reported as having first struck in on coast in fair quantities on August 3 and 4. Light fares were taken to the 16th and larger fares on the 17th and 19th. Fair fishing was reported on the 21st and 26th and very good on the 24th. Squid struck in plentiful again on October 1 and good numbers were on the coast on the 9th.

PASPEBIAC, P.Q.

Reporter, Miss. Ada Beck :

Cod-fishing began in real earnest the third week in May, although cod were taken in small quantities a few days previous. The fishery was reported in a good condition to June 20, when it gradually weakened all through July and a portion of August. The September and October catches were on an average fair, and it is reported that owing to the great scarcity of codfish in mid-summer, the codfishery was considered rather poor this season.

Caplin were on the coast but eight or ten days, during which time good catches were made. The fish appeared first about May 28.

Haddock.—Although no special haddock fishing is carried on at this station, there was a fair quantity of fish caught, during the season, which was disposed of as a second quality of codfish.

Herring were the first fish to visit this station in the spring appearing on the shores the last week of April, which was two weeks earlier than the previous year, and were reported taken in catches varying from very good to fair to June 13. The catches were very poor and irregular afterwards to the month of September, when herring struck in fair shoals, which increased to larger numbers on October 10, permitting the fishermen to secure all the herring they could salt, which realized for them good prices.

Lobsters came on shore early in April and were taken in fair quantities to May 10, after which operations were almost entirely suspended though a few catches were made to the last of June.

Salmon were reported on May 18, 23 and 28, on which dates fair catches were made. A few small fares were taken in June, and the salmon fishery was said to be a light one this season.

Squid were very scarce the past season and were only reported when a few fish were taken in July and August.

Clams were utilized for bait when herring and squid were very scarce on the coast. Clams are always found on the shores in large quantities and proved to be a good substitute during the season, in which they were used quite extensively at this station.

PERCÉ, P.Q.

Reporter, Mr. E. G. Tuzo:

Caplin.—No caplin struck on the coast this season.

Codfish.—The codfishery on this part of the coast has been throughout the season much below the average, owing chiefly to the scarcity of bait, which has prevailed all along. The quality of cod taken was not as good as usual and the cod livers were very meagre, consequently very little cod oil. Light quantities of cod were reported for the first on May the 9th, and on the 13th, a good appearance was noticed. The fishing was fair the early part of the season, and in September cod were taken in catches varying from good to fair. A few fair quantities of codfish were on the coast during the month of October.

Herring were reported in good quantities on the 6th and 7th of May and to the latter end of the month were reported in catches, which varied from good to poor. Several good stops of herring were made in June and July with fair catches reported occasionally to the 25th of September. In comparison with other seasons, the herring fishery this year is said to have been a reduced catch.

Lobsters were taken in fair quantities in May from the 5th to the 15th, but on the 16th and 18th, the fishing improved and good fares were reported. From the 18th to the 31st, excepting a few stormy days, lobster and trappers reported catches from fair to poor. The first week in June the lobster catch was on an average fair, and light after to the close of the season. Lobsters were reported a trifle better this season than last and the size was also said to have been larger.

Squid.—Although squid was reported on the coast the early part of September in fair quantities, and the latter part in numbers varying from very good to poor, the supply of this favourite bait-fish in the fall was reported very scarce. Bait freezers are reported badly needed in this district.

Mackerel.—Very few mackerel were reported caught at this station during the past season.

Dog-fish were reported on the coast in August in large numbers and materially affected the catch of cod. It is hoped that the Dominion Government may be induced to offer a bounty towards their destruction.

POINT ST. PETER, P.Q.

Reporter, Mrs. M. J. Bond:

Codfish, did not commence this season until about the 16th of May, a fortnight later than last year, on which day cod were taken for the first in large quantities only, as very few fishing crafts were launched. In fact the fishermen were only making preparations when the fish appeared on the coast and a few days more shall have elapsed before the fisheries will be prosecuted with any degree of earnestness. The weather was reported so very changeable and very rough at times, that the boats launched were unable to proceed to the fishing grounds. In June and July, bank codfishing was good when weather permitted, but bait was a scarce commodity and in August the best boat reported 5 drafts. Codfish were on an average fair in September with some crafts reporting as high as 20 drafts, and during the remainder of the season a few good catches. The total catch for the season is estimated at 3,000 drafts.

Herring.—Fair catches of herring were reported the early part of May and on the 18th a good supply of this fish was secured for bait. The weather was rough the 1st of June and the inshore fishery was dull, but towards the latter end of the month several boats stopped good quantities on the banks, where the fish hovered during the month of July. Herring were reported plentiful in August on the 5th, and fair on the 18th, but no catches were taken after to the end of the season, in which it is estimated that 100 barrels will represent the total catch.

Lobsters.—It was reported on May 8, that lobsters were taken in fair catches from the opening of the season to the 16th of same month, when the fishing improved and lobsters were plentiful to the 31st. The weather set in rough early in June, and with the exception of a few fair hauls the catch was light to June 22, when all lobster traps were reported being removed ashore. About 850 cases were packed at this station this season.

Squid were first used for bait on August 22, when light quantities struck on shore. The following week, saw large bodies of dog-fish on the grounds, which greatly prevented line fishing. Fair catches were taken in September from the 2nd to the 16th, and also in October 3, which supplied local needs. About 5 barrels were taken inshore, and boats reported 50 barrels. Advices to the bureau on Oct. 18, reported squid still plentiful, with good catches of cod to date.

No caplin or mackerel were reported at this station during the past season.

SEVEN ISLANDS, P.Q.

Reporter, Mr. P. E. Vignault:

Caplin.—Were only reported twice during the season and then in June on the 22nd and 26th, with good fishing.

Cod appeared in this division on or about the same dates as caplin, in fair numbers which continued quite regular throughout the following months of July and August. Good hauls were reported in September on the 8th, 12th and 17th and in October on the 3rd, with a fair report on the 12th of the same month. The catch this season is reported about one-quarter of that of last year's, which is attributed to the very stormy weather that prevented the boats from attending the offshore grounds.

Mackerel.—Were reported first when they were schooling off this coast the early part of July and again in August on the 10th; but the catch was reported very light, which was due to the rough weather.

Salmon.—Were first reported in the rivers on June 2, though a few salmon were caught on the 27th of last month. Light catches were also reported on the 22nd and 26th of June; very stormy weather, mostly easterly winds, from May 20th to 1st of July greatly interfered with fishing operations outside of the rivers,

Launce.—Fair quantities of launce were taken in June on the 22nd and 26th and in July on the 1st and 6th. Very good fishing was reported in the same month on the 9th, 11th and 14th, and good on the 25th. Catches varying from very good to poor were made in August with launce being reported good on the 2nd of September. The opinion is general in this division that the fisheries have been very poor this season in comparison with former seasons as very inclement and rough weather seriously interrupted fishing operations.

Squid.—No squid was reported at this station this season, which accounts for the small catch of codfish reported.

MOISIE RIVER, P.Q.

Codfish were taken at regular intervals in July and August in fair catches and poor during the month of September, as very rough weather was reported almost daily.

Salmon were first reported in light catches in May on the 27th, with a varied catch from good to poor from the 9th to 27th of June. Good salmon fishing was reported in July on the 1st and fair on the 6th.

Launce.—Very good catches of launce were reported in July on the 9th, 11th and 14th, with good being reported on the 25th. Launce was in good quantities in August on the 4th and fair on the 11th.

STE. MARGUERITE RIVER, P.Q.

Cod were reported fair in July on the 25th, and also in August when regular catches were made. A few light hauls were taken on the 4th and 8th of September.

Salmon.—Good salmon fishing was reported in June on the 22nd and 26th, with small fares being taken in July from 1st to 14th.

Launce were plentiful in July on the 25th, with the catches varying from very good to poor during the month of August.

STE. ADELAIDE DE PABOS, P.Q.

Reporter Miss Christina Mauger:—

Codfish were reported on May 13 in small quantities both on the banks and the in-shore fisheries. Fair fishing was reported in-shore on the 26th and the off-shore crafts reported codfish plentiful on the banks, with some boats reporting 21 drafts. Both branches of the codfishery were good on May 31 and bankers hailed for 43 drafts. On June first, cod were plentiful, but bait was scarce and high winds prevailed. The fishing continued poor after to June 30 owing to foggy and windy weather, which prevailed on the coast. From 15 to 20 drafts were the catches reported on the latter date, when the weather became unsettled to July 20 and poor hauls were made. To August 8, very large quantities of codfish were on the banks and the bank boats made fares varying from 25 to 45 drafts. During the remainder of the season the catch of cod was light owing to the inclemency of the weather and it is reported that the bank boats averaged 150 quintals each. The total catch is considered not as good as that of last year.

Herring were first reported this season on May 2 in fair catches which remained the same to the 6th. Good stops of herring were made to the 14th, with fair fishing

reported to June 5. The herring fishery afterwards varied from fair to poor to the end of the season. No herring were reported salted at this station the past season.

Lobsters were reported from the 2nd to the 11th of May in fair quantities and for a few days good fishing prevailed. Owing to the unsettled state of the weather the lobster fishery was poor to the close of the season.

Salmon were first on the coast on May 30, and fair catches were taken in June from the 6th to the 15th. During the remainder of the season the salmon fishery was light.

Squid were first reported on the coast in August 15, and quantities were taken to September 16, when squid struck in fair quantities. Fair catches were also reported on the 21st and 29th.

SOUTH-WEST POINT ANTICOSTI, P. Q.

Reporter, Miss Z. Lemieux:

Codfish appeared on the coast this season on May 29, one week later than last year, and were taken in fair quantities to June 3. The catch was light afterwards for the next two weeks, when the fishing improved to a fair condition again. Reports received later indicated fair fishing in the months of July and August. The largest quantity of codfish was taken in English bay, and scarcity of bait and inclement weather caused a suspension of fishing operations during the remainder of the season. The total catch for this season is considered a medium one.

Herring struck in along our shores on May 21, when light quantities were taken at Fox bay. Fair fishing was reported from the 23rd to 27th, which increased to very good on the 28th, 29th and 30th with very favourable weather. From June 1 to 7 good stop of herring were taken in Ellis and Fox bay, after which the catches varied from very good to fair to the end of the month. The herring fishery was dull after as bad weather during the remainder of the season interfered greatly with fishing operations.

Lobsters, with the weather conditions, reported very fair, and were said to be plentiful from May 22nd to 27th, and scarce after to the first week in June. Fair catches were made to July 25, followed by heavy winds and gales which destroyed a considerable portion of the gear set, and nothing was reported afterwards to the close of the season.

Salmon reported very scarce this season at South-west point, but at Shallop creek between the dates of July 7 and 19 fair fishing was reported, and from the latter date to the end of the month, salmon were taken in catches verying from fair to poor. Those engaged in this important industry consider the run this season a good one.

Caplin.—Appeared around the Island the last day of May in fair quantities and catches were also reported from July 1 to 4.

Squid.—As in last season, squid is reported as not having visited this portion of the fair coast.

MAGDALEN ISLANDS, P. Q.

Reporter, Mr. J. A. Lebourdais.

Cod.—Although cod and lobsters were reported fairly abundant on May 5, the severity of the weather on the coast prevented codfish trawlers from attending their trawls and the lobster-fishermen from getting their traps and gear in order for early fishing. The fishery in May was on an average fair, as the severe weather was very much against successful fishing. Very large quantities of cod were around the Islands in June and good catches reported when bait could be obtained. The catch of cod was light in July owing partly to a scarcity of bait, and partly to stormy weather. Scarcely

anything was done during the month of August as bait continued scarce and bad weather compelled the boats to remain close inshore where codfish were not so plentiful. The first week in September cod appeared in fair quantities on the south and south-east parts of the Islands and scarce in other localities, which continued the same to the 28th of September, when it was reported that the majority of the fishermen had ceased operating for the season, owing to the scarcity of fish and the roughness of the weather.

Herring have been abundant since April 20th. They first appeared at Amherst harbour, then all around the Islands, principally in Pleasant bay. A fleet of strange vessel called in and secured a sufficient quantity of herring for bait as well as supplies for lobster factories. Large quantities of herring were stopped on the 25th of May, and on the 1st of June herring were reported scarce in Pleasant bay, with a few inside in the Lagoon, which was the last of the spring school. A later report, on June 8th, brought intelligence that a few scattered herring were caught in traps at Grand Etang. Nothing reported afterwards.

Lobsters.—The first report received of this fishery on May 5, indicated an abundance of lobsters on the coast, but as the weather was very boisterous, only about one-half of the lobster gear could be set with any degree of safety. Very good catches were being made and the fishing to date (May 18) was reported to be in a better condition than the corresponding period of last year. Lobsters were taken in fair catches towards the latter part of May, and the N.W. gales which prevailed a few days during this time destroyed and damaged a quantity of traps and gear. The prospects for lobster fishing about that time were said to be good, if the weather permitted. The month of June opened with the fishery fair, which increased to very good during the middle of the month, after which the catches diminished to the 6th of July, when lobsters were fair in some localities on the north part of the Islands and scarce after to the close of the season. The fishing in this branch of the fishery this season is considered much better than in former years.

Mackerel.—First appearance of mackerel on the coast this spring was noted on June 1st, when a few were reported in nets, with good prospects. Light fare were taken to the 10th, on which date mackerel struck in plentifully, and the following day good catches were made. Very few were taken during the balance of the month. Signs of improvement were noticeable in the mackerel fishery about the 15th of July, as the fish were now hooking freely and boats prosecuting the fishery on the north part of the islands did fairly well on Saturday the 18th. Good reports from the southern side on the 22nd and 23rd were received with a scarcity of fish in the Pleasant bay district and the north side. In some fishing localities around the islands, mackerel were reported on August 10th fairly abundant, with boats doing well. The weather was reported unfavourable, and the following week fair schools of mackerel were on shore but were not hooking freely. Throughout the remainder of the month, the weather was stormy and very little was done, particularly in Pleasant bay, where mackerel news was reported very dull. With the weather partly fair on September 7th, good fishing was reported on the east, north and west sides and poor on the south. All branches of the fisheries were dull on the 14th, with the exception of this important industry which was being operated by most of the fishing crafts with good results on the east side of the islands. The prospects for fishing were becoming poorer as the season advanced owing to the severity of the weather all along the coast line. The catch was light afterwards. Nothing worth mentioning being done, and the report of the 28th September, was to the effect that nearly all of the fishermen have hauled out of that branch of fishing, as well as the netters who have given up fishing for the season. The spring catch was said to be very satisfactory indeed; but that of the fall was not as successful as in years past, which is attributed to the strong winds and stormy weather which were prevalent during the mackerel voyage.

I have the honour to be, sir, your obedient servant,

A. D. MACKERROW,
Clerk in charge, F. I. Bureau.