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Annual Summary of Fish and Marine Mammal Harvest Data for the Northwest Territories

Volume 2

1989 - 1990



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et Océans

Fisheries
and Oceans

Canada

D. K. McGOWAN

**Annual Summary of
Fish and Marine Mammal Harvest Data
for the Northwest Territories**

Volume 2

1989 -1990

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INTRODUCTION

This is the fish and marine mammal harvest statistics report on information collected by the Department of Fisheries and Oceans (DFO) for the Northwest Territories for the period 01 April 1989 to 31 March 1990. Harvest statistics are presented for the entire N.W.T. and for each of three DFO administrative areas.

The report details harvest statistics for each of the commercial and exploratory fisheries, marine mammal harvesting and recreational fisheries. Data on domestic fishing and the harvest of seals are not currently available. These data will be reported at such time as DFO's harvest statistics programs are expanded to monitor these fisheries.

In addition to harvest data, related information is presented on the landed value of commercial harvests, the number of commercial and recreational fishing licenses issued, and the number of sports fishing lodges. Commercial and exploratory fisheries for which effort data (number of days, number and size of nets) and biological samples (weight and length measurements, aging structures, maturation information) have been collected are identified.

The report consolidates harvest statistics and related information collected by DFO staff in area offices in Inuvik, Hay River and Iqaluit and regional headquarters in Winnipeg. Some of the information presented was provided by the Government of the Northwest Territories. The Department of Renewable Resources compiles vendor sales reports which were the source of the recreational fishing license information. The Northwest Territories Fishing Guide, published by TravelArctic, was the source of information on the number and bed capacity of sports fishing lodges.

While in the past harvest studies for the NWT fishery have largely addressed specific fisheries, three recent projects provide a comprehensive review of the N.W.T. fishery. Yaremchuk et al (1989) summarized commercial harvest statistics collected by DFO and other agencies from the inception of commercial fishing in 1945 through to 1987. McGowan (1989) summarized the results of test fisheries conducted in the N.W.T. during 1985 to 1988. Strong (1989) summarized the narwhal, beluga and walrus harvest for the period 1948 to 1987 using information collected by DFO starting in the latter part of the 1970's, and earlier information collected by other agencies and individual researchers.

This report is the second in a series that is prepared annually to ensure that DFO harvest information is readily accessible to DFO staff and clients.

DATA SOURCES AND DATA COLLECTION

DFO maintains Area offices in the Western Arctic (Inuvik), the South/Central Arctic (Yellowknife and Hay River) and the Eastern Arctic (Iqaluit and Rankin Inlet) (Fig. 1). The Areas implement fishery and habitat management plans and programs through allocation, licensing, monitoring and compliance activities. While the same basic fish and marine mammal harvest data are used for management purposes, the Areas tailor the data collection methods to reflect differences in the nature and organization of the fisheries.

WESTERN ARCTIC AREA

Commercial Fisheries

Commercial fishermen in the Western Arctic fish primarily for their own use, but may sell some of their harvest locally. Markets are not organized formally, so it is not feasible to collect data at the point of sale using methods common to commercial fisheries elsewhere in the N.W.T.

DFO conducts a mail out survey of license holders requesting information for the entire year on the number of days fished, the gear used, and the number of fish of each species caught and sold. Commercial harvest data are reported by community rather than by waterbody since the survey does not ask fishermen to identify the waters fished. Nor does it ask fishermen to report on the amount they were paid for fish sales. Landed values are therefore estimated based on estimated spot prices for fish and could be subject to error. Another possible source of error comes from estimating the weight of commercial harvest by multiplying the reported numbers of fish harvested by an estimated average weight for each species. And finally, the data are likely affected by recall error because fishermen are asked to report on their fishing activities for an entire year.

In 1989/90, 28 of 58 commercial license holders participated in the survey. No attempt has been made to estimate the harvest of all commercial fishermen based on this sample.

Marine Mammal Harvests

The Inuvialuit Harvest Study, initiated under the land claim settlement for the Western Arctic, enables monitoring of domestic fish and some marine mammal harvests of the six Western Arctic communities in the Inuvialuit Settlement Area (Fig. 2). Data are collected on a monthly basis by personal interviews with hunters and fishermen in each community and then collated and analyzed by the Harvest Study Coordinator.

The Fisheries Joint Management Committee (FJMC), also established under the terms of the land claim settlement for the Western Arctic, advises the Minister of Fisheries and Oceans on matters relating to the Inuvialuit Settlement Region fisheries. The FJMC, made up of equal representatives of Government and the

Inuvialuit Game Council, runs a separate harvest monitoring program for beluga and walrus. This study is designed to provide more precise information than the Harvest Study to ensure that sound management advice can be provided for these two species.

DFO, under the terms of reference for both studies, and with the co-operation of the Inuvialuit, has access to the data they generate.

Recreational Fisheries

The recreational fishery sector primarily consists of a resident sport fishery (approximately 1 195 license holders) and, secondarily, of the tourism lodge-based fishery (3 lodges).

There was no recreational fishery monitoring in 1989/90.

SOUTH/CENTRAL ARCTIC AREA

Commercial Fisheries

The South/Central Arctic Area has the largest and most organized commercial fisheries in the N.W.T. The Great Slave Lake fishery alone accounts for about 80% of the total commercial fishery production in the N.W.T.

Much of the commercial production in the South/Central Arctic Area is marketed through the Freshwater Fish Marketing Corporation (FFMC), which is the sole buyer and seller of N.W.T. freshwater fish production destined for intra-provincial and export trade. The quotas on Great Slave Lake, and other inland fisheries delivering to the FFMC, are monitored by maintaining a running total of the FFMC's daily catch records.

Harvest data for N.W.T. commercial fisheries are typically reported for the fiscal year period 01 April to 31 March of the following year. Great Slave and Kakisa Lakes however, are opened on November 1st and remain open until the quota is reached or October 31st of the following year. This is done on the request of the fishermen to ensure that there will be quota available for a winter fishery. Section 3 presents both the production data used by the area office in Hay River for quota management (Tables 3A.5 and 3A.7) and the data reported by the FFMC (Tables 3A.6 and 3A.8). The differences between the data reported in these two tables are mainly due to the exclusion of culls and local sales from the FFMC data reports.

Fishermen making deliveries directly to the FFMC are paid an initial price on delivery and a final payment after the end of the fiscal year which is dependant on the FFMC's profits. As this report series will, in future years, be published on a timely basis and in advance of final payments, such payments are excluded from this report. Appendix 1 shows the amount of final payments, by species, for the past five years.

Much of the Arctic charr harvested in the South/Central Arctic Area is delivered to the fish plant operated by the Ikaluktutiak Co-operative in Cambridge Bay. The Co-op also coordinates the fishing and pays most of the fishing expenses. It provides a "grub stake" to the fishermen at the beginning of each fishing season and pays an initial per kilogram price for their catch on delivery. Some of the commercial harvest is sold locally, but most is shipped, at the expense of the Co-op, to the FFMC in Winnipeg. The Co-op makes a second payment to the fishermen, usually in December, based on the final payment from the FFMC for the previous year's production. A third payment, based on the surplus from the fishery after operating and marketing expenses, is made in April or May. Landed value is calculated from the sum of the first and third payments made to fishermen. In 1989/90 the initial payment was \$1.10/kg (round weight equivalent) and the third was \$1.14/kg.

The remaining charr fisheries in the South/Central Arctic Area are of a much smaller scale and sales are made either between communities or locally. Sales slips from co-operatives or Hunters and Trappers Associations provide data on the harvest and landed values.

Marine Mammal Harvests

The marine mammal harvests reported here occur only in the high arctic region of the South/Central Arctic Area, and are limited almost entirely to beluga. Data on this harvest have been made available through the co-operation of the Kitikmeot Hunters and Trappers' Association and the Department of Renewable Resources, Government of the Northwest Territories.

Recreational Fisheries

There is a significant recreational fishery on waterbodies close to the major population centres of Yellowknife and Hay River. The lodge-access recreational fishery is also important, with 37 lodges offering access to remote waterbodies. Eighty percent (80%) of all resident sports fishing licenses and 71% of all non-resident license sales are sold in the South/Central Arctic area.

Only the lodge-access fishery was monitored in 1989/90 and that monitoring was limited to the angler diary program on Great Bear Lake and Blachford Lake. The program, conducted in cooperation with fishing lodges, is a voluntary reporting system in which guests record their fishing effort and catches in diaries. The lodge staff forward completed diaries to DFO for analysis and reporting.

EASTERN ARCTIC AREA

Commercial Fisheries

The Eastern Arctic Area primarily consists of small-scale arctic charr commercial fisheries. In recent years there has also been inshore marine exploratory fishing off the coast of Baffin Island, the species of interest being turbot, cod, scallops and shrimp. The most active of these developmental fisheries has been the Pangnirtung turbot fishery.

Baffin Island Inuit also participate in the offshore fishery for northern shrimp, but the monitoring of this large-scale fishery is done by DFO's Atlantic Fisheries Service under the Northern Shrimp Management Plan.

Most of the Keewatin (West Hudson Bay) charr fisheries deliver to fish plants in Whale Cove, Chesterfield Inlet, Arviat and Rankin Inlet. With the exception of the plant in Arviat, which is an independently operated business, these plants are operated by the Hunters and Trappers or Fishermen's Associations. The plants buy fish from fishermen, wash, freeze and pack, and then ship their production to the FFMC. Reliable harvest information can be obtained from the FFMC sales slips.

The price the fishermen receive is set by the plant and is based on the FFMC's initial price, less their anticipated expenses. The total payments made by the plants to fishermen are the landed values shown in Table 4A.4. The fishermen rarely receive a final payment because the FFMC's final payment is used to pay the plants' outstanding operating expenses.

The harvest from the remaining Keewatin charr fisheries and from the Baffin Island charr fisheries are sold within the N.W.T. The harvest data for these fisheries is collected by Government of the Northwest Territories Renewable Resource officers from sales tickets and is considered to be fairly accurate.

Marine Mammals

N.W.T. marine mammal harvesting is concentrated in the Eastern Arctic Area, with virtually all of the narwhal and walrus harvest and 64% of the beluga harvest.

Accurate data on the narwhal harvest are provided by monitoring tag returns. The walrus and beluga harvests are monitored in co-operation with Renewable Resources by observations of community hunts. As this method depends on a Renewable Resource Officer or a Fishery Officer being present when hunting occurs, much of the harvest data are incomplete or missing.

For the short term, pending land claims, this problem should be alleviated in the Keewatin Region since agreement is being negotiated with the Keewatin Wildlife Federation and the Government of the Northwest Territories that should provide DFO access to data collected through the Keewatin Harvest Study. Unfortunately, the Baffin Region Harvest Study data are not available to DFO and as a result, marine mammal harvest data for Baffin communities will remain unreliable.

Recreational Fisheries

Resident recreational fishing is of importance (1 526 licenses sold), but the fishing lodge industry in the Eastern Arctic is limited to 14 lodges.

No monitoring studies were conducted on any recreational fisheries in the Eastern Arctic during 1989/90.

GLOSSARY OF TERMS

Commercial Fisheries

Commercial fishing is fishing for sale or barter. Schedule V of the N.W.T. Fisheries Regulations specify the waters in which commercial fishing can take place. These waters are closed to commercial fishing unless opened by variation notice made by the Regional Director General, Central and Arctic Region.

Data Source

The data contained in this report come from a variety of sources. In the detailed tables showing the harvest from specific commercial or exploratory fisheries the data source is indicated by one of the following codes:

DCR = Freshwater Fish Marketing Corporation's daily catch records. These record daily totals of the purchases made by agents of the Corporation in terms of the species, weight and price paid.

EFL = Data provided to fulfil the conditions of an exploratory fishing license.

FJM = Fisheries Joint Management Committee's Harvest Study data for the Inuvialuit Settlement Area.

FO = Fisheries Officers observations or estimations.

FSV = Mail out survey of fishermen (Western Arctic)

FYA = Five year average. For many communities, there are years during which there is no monitoring of the marine mammal harvests. In these years an average is calculated from the most recent five years of data available. This provides some indication of harvest levels in recent years, but in no way is intended as a precise estimate of the community's harvest.

RRO = Verbal reports from Renewable Resource officers, based on their observations and estimations.

STR = Sales slips or trade records collected by either DFO staff or Renewable Resource officers.

TAG = The harvest of narwhal is under quota and monitored by a tag system. Each community is given a limited number of tags and this represents the maximum number of narwhal that can be harvested. Each time a narwhal is harvested a portion of the tag is returned to DFO, providing an accurate count of the harvest.

Data Quality

With the exception of those areas where a five year average is used (see FYA above) because of lack of monitoring, a data quality measure is given in terms of the "maximum estimated error." These are estimated by the area

biologists, based on their knowledge of the fishery, and are a measure of the maximum error that could possibly be associated with the data. For example, a data quality measure of +/-50% would indicate that a reported harvest of 1000 kgs could, in the worse cases, be either 500 kgs or 1500 kgs.

Where the data source is listed as "FYA" the range of harvest values is presented for the years from which the FYA has been calculated.

Exploratory Fisheries

To commercially fish a waterbody that is not listed on Schedule V of the N.W.T. Fisheries Regulations, a fisherman or fishing company must apply to DFO for an exploratory fishing license. This license identifies the quota for each species, the gear that can be used, the number of fish DFO requires for biological samples, and the information the proponent must provide on their fishing effort. If an exploratory fishery is shown to have stocks sufficient to support a commercial fishery, after five years of fishing, it may be added to Schedule V of the N.W.T. Fisheries Regulations.

Harvest

The numbers shown as harvest reflect an estimate of the total weight of fish or total number of marine mammals harvested. Fish harvests are reported in the live or round weight equivalent. Because fishermen can actually sell fish in a variety of forms (round, gutted and gutted with head off), conversion factors are used to determine the live weight equivalent.

In the Western Arctic, where harvests are reported by fishermen as numbers of fish, the round equivalent weights are estimated by multiplying by an estimate of the average weight of each species.

Marine mammal harvests are reported by community and are based on the best data available on the number of animals landed. Currently, no corrections are made for animals lost. If there are no data available, the five year average for the community is reported to provide an indication of the historical level of harvesting activity.

Landed Value

The landed value represents the payments received by commercial fishermen for sales of their fish. For those fishermen selling their harvest to the FFMC, these values do not include final payments (see Appendix 1). For the less organized markets in the Eastern and Western Arctic areas, landed values are estimated by multiplying the harvest weight by the estimated average prices received.

(11)

This is an abbreviation for land locked. It is used to differentiate landed locked arctic charr from anadromous arctic charr. Almost all of the arctic charr harvested in the N.W.T. is anadromous.

rd kgs

This is an abbreviation for round weight equivalent kilograms.

Resident

With respect to sports fishing licenses, a resident refers to both Northwest Territorial residents and residents of the rest of Canada.

Non-resident

With respect to sports fishing licenses, a non-resident refers to non-Canadian residents.

Sports Fishing License

The Fisheries Act and its regulations stipulate that people between 16 and 65 years of age wishing to sport fish in the N.W.T. must purchase a sport fishing license.

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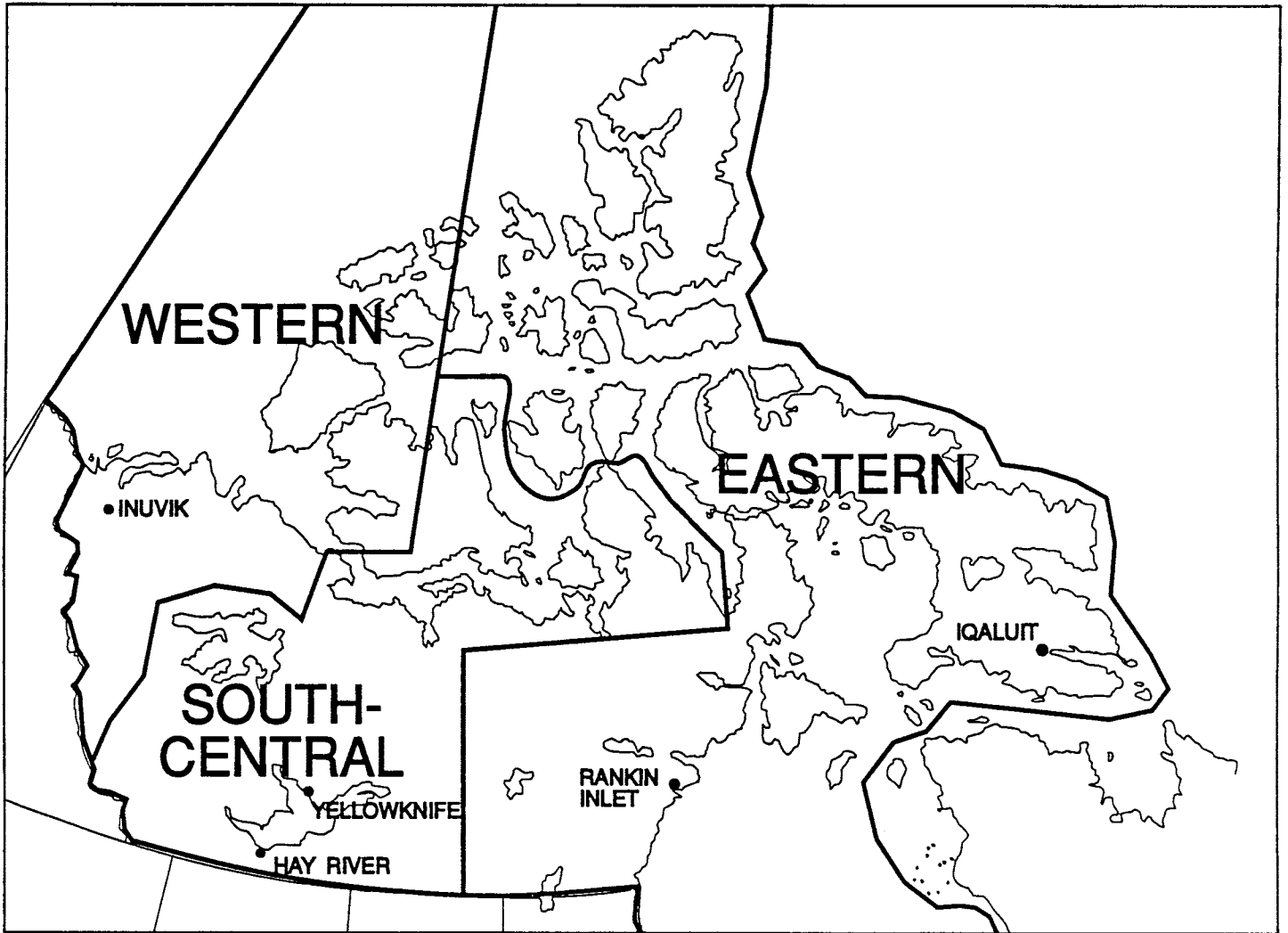
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SECTION 1
NORTHWEST TERRITORIES SUMMARY



Figure 1
Northwest Territories
Department of Fisheries and Oceans
Administrative Areas



NORTHWEST TERRITORIES
1989/90 STATISTICAL HIGHLIGHTS

Commercial and Exploratory Fisheries

- 101 waterbodies opened for commercial fishing under Schedule V of the N.W.T. Fisheries Regulations, of which 74 were fished;
- 891 commercial fishing licenses sold to 742 fishermen;
- 77 waterbodies opened for exploratory fisheries, of which 44 were fished;
- Total reported commercial and exploratory fishery landings of 2 333 393 kg and landed value of \$2 715 817;
- Principal commercial and exploratory species harvested were lake whitefish (60% of landings), turbot (11%), arctic charr (9%), and northern pike (8%);
- Great Slave Lake accounted for 79% of the NWT commercial harvest.

Recreational Fisheries

- 17 371 recreational fishing licenses sold, including 13 807 resident and 3 564 non-resident licenses;
- 54 lodges with a total bed capacity of 1 012;
- 7 776 gamefish harvested by Great Bear Lake lodge-access fishery, of which 77% were lake trout.

Marine Mammal Harvest

- Marine mammal harvest of 688 beluga, 342 narwhal and 291 walrus. In addition, 8 beluga were trapped and frozen over in Husky Lake in the Western Arctic Area.

A. COMMERCIAL AND EXPLORATORY FISHERIES

Table 1A.1 Northwest Territories, Schedule V Commercial Fisheries,
Harvests and Landed Values, by Area, 1989/90

Area	Number of Schedule V Fisheries		Harvest (rd kgs)	Landed Value ^a (\$)
	Opened	Fished		
Western Arctic	9	9	13 172	14 217
South/Central Arctic	33	27	1 883 362	1 771 838
Eastern Arctic	59	38	109 958	357 660
Total	101	74	2 006 492	2 143 715

^a does not include final payments for harvest delivered to the FFMC, see Appendix 1.

Table 1A.2 Northwest Territories, Schedule V Commercial Fisheries,
Harvests and Landed Values, by Species, 1989/90

Species	Harvest (rd kgs)	Landed Value ^a (\$)
Arctic charr	168 948	490 605
Arctic charr (11)	568	1 945
Lake whitefish	1 371 016	1 188 397
Broad whitefish	8 039	9 325
Lake trout	132 530	124 833
Walleye	41 002	73 277
Northern pike	181 753	105 216
Inconnu	101 331	148 243
Other	1 306	1 874
Total	2 006 492	2 143 715

^a does not include final payments for harvest delivered to the FFMC, see Appendix 1.

Table 1A.3 Northwest Territories, Exploratory Fisheries,
Harvests and Landed Values, by Area, 1989/90

Area	Number of Exploratory Licenses	Number of Waterbodies		Harvest (rd kgs)	Landed Value (\$)
		Licensed	Fished		
Western Arctic	3	3	3	15 568	18 354
South/Central Arctic	12 ^a	35	11	10 130	28 087
Eastern Arctic	25	39	30	301 201	525 661
Total	40	77	44	326 899	572 102

^a includes an exploratory license issued for a gear change on the Jayco River (Schedule V No. IV-14), but not the harvest associated with this license.

Table 1A.4 Northwest Territories, Exploratory Fisheries,
Harvests and Landed Values, by Species, 1989/90

Species	Harvest (rd kgs)	Landed Value (\$)
Arctic charr	47 572	165 565
Lake whitefish	7 067	3 737
Broad whitefish	5 781	6 745
Lake trout	546	1 983
Walleye	202	444
Northern pike	1 670	1 560
Inconnu	474	991
Turbot	255 212	382 665
Scallops	8 000	8 000
Atlantic cod	200	200
Clams	170	212
Shrimp	5	0
Total	326 899	572 102

Table 1A.5 Northwest Territories, Schedule V Commercial Fisheries
and Exploratory Fisheries, Total Harvests and
Landed Values, 1989/90.

Area	Harvest (rd kgs)	Landed Value ^a (\$)
Western Arctic	28 742	32 571
South/Central Arctic	1 893 492	1 799 925
Eastern Arctic	411 159	883 321
Total	2 333 393	2 715 817

^a does not include final payment for harvest delivered to the
FFMC, see Appendix 1.

Table 1A.6 Northwest Territories,
Commercial Fishing License Sales
and Number of Licensed Commercial Fishermen,
by Area, 1989/90

Area	Number of Licenses Sold	Number of Licensed Fishermen
Western Arctic	58	58
South/Central Arctic	252	243
Eastern Arctic	581	441
Total	891	742

B. MARINE MAMMAL HARVESTSTable 1B.1 Northwest Territories, Marine Mammal Harvests,
by Species and Area, 1989/90

Area	Beluga	Narwhal	Walrus
Western Arctic	244 ^a	0	0
South/Central Arctic	5	1	0
Eastern Arctic	447	341	291
Total	696	342	291

^a Includes 8 beluga frozen over in Husky Lake.

C. RECREATIONAL FISHERIES

Table 1C.1 Northwest Territories, Resident and Non-resident Sports Fishing License Sales and Revenues, 1989/90

Category	Number of Licenses Sold	Revenues
Resident	13 807	\$69 035
Non-resident	3 564	\$53 460
Total	17 371	\$122 495

Table 1C.2 Northwest Territories, Resident and Non-resident Sports Fishing License Sales Trend

Year	Resident	Non-resident	Total
1980/81	10 656	4 468	15 124
1981/82	11 484	3 962	15 446
1982/83	11 402	3 289	14 691
1983/84	10 842	3 421	14 263
1984/85	12 656	3 363	16 019
1985/86	13 821	3 626	17 447
1986/87	11 909	3 284	15 193
1987/88	13 502	3 802	17 304
1988/89	13 353	3 363	16 716
1989/90	13 807	3 564	17 371

Table 1C.3 Northwest Territories, Resident and Non-resident Sports Fishing License Sales and Revenues, by Area^a, 1989/90.

Area	Resident		Non-resident		Total	
	Number Sold	Revenues	Number Sold	Revenues	Number Sold	Revenues
Western Arctic	1 195	\$ 5 975	296	\$ 4 440	1 491	\$ 10 415
South/Central Arctic	11 086	\$ 55 430	2 533	\$ 37 995	13 619	\$ 93 425
Eastern Arctic	1 526	\$ 7 630	735	\$ 11 025	2 261	\$ 18 655
Total	13 807	\$ 69 035	3 564	\$ 53 460	17 371	\$122 495

^a Sales and revenues for each area are approximate because the GNWT Department of Renewable Resources, which is responsible for the sale of sports fishing licenses, has administrative areas that do not correspond exactly with the DFO administrative areas.

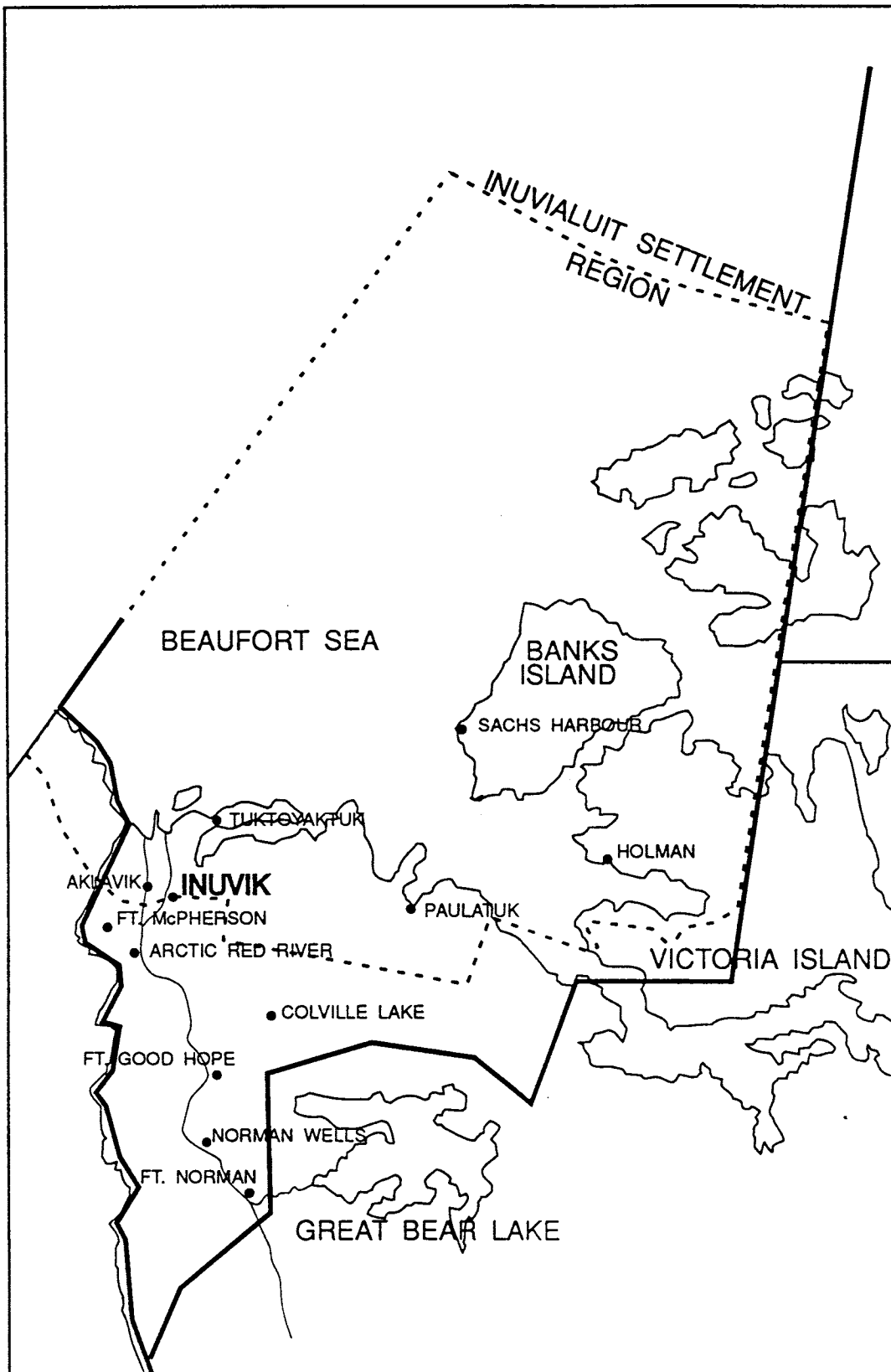
Table 1C.4 Northwest Territories, Number of Licensed Fishing Lodges and Total Bed Capacity, by Area, 1989/90

Area	Lodges	Total Bed Capacity
Western Arctic	3	51
South/Central Arctic	37	724
Eastern Arctic	14	237
Total	54	1 012

SECTION 2
WESTERN ARCTIC AREA



Figure 2
WESTERN ARCTIC AREA



WESTERN ARCTIC AREA
1989/90 STATISTICAL HIGHLIGHTS

Commercial and Exploratory Fisheries

- 9 waterbodies opened for commercial fishing under Schedule V of the N.W.T. Fisheries Regulations, all of which were fished;
- 58 commercial fishing licenses sold to 58 fishermen in 5 Western Arctic communities;
- 48% of commercial license holders reported landings to DFO;
- Reported commercial landings of 80 179 kg, 84% of which was retained by fishermen for their own use;
- 3 waterbodies were licensed for exploratory fisheries and all were fished;
- Total reported commercial (sales) and exploratory fishery landings of 28 742 kg and landed value of \$ 32 571;
- Principal commercial species reported sold were broad whitefish (48% of sales volume), lake whitefish (28%), and northern pike (14%);

Recreational Fisheries

- 1 491 recreational fishing licenses sold, including 1 195 resident and 296 non-resident licenses;
- 3 lodges with a total bed capacity of 51 beds.

Marine Mammal Harvest

- Marine mammal landed harvest of 236 beluga. An additional 8 beluga were trapped and frozen over in Husky Lake.

A. COMMERCIAL AND EXPLORATORY FISHERIES

Table 2A.1 Western Arctic Area, Schedule V Commercial Fisheries, Total Harvest, Amount Sold and Sales Value, by Species, 1989/90

Species	Total Harvest ^a (rd kgs)	Amount Sold ^a (rd kgs)	Sales Value ^b (\$)
Arctic charr	1 091	98	537
Lake whitefish	11 166	1 378	551
Broad whitefish	28 108	8 039	9 325
Lake trout	544	0	0
Northern pike	8 354	2 346	2 158
Inconnu	16 979	306	640
Cisco	1 080	400	400
Burbot	12 795	606	606
Others	509	0	0
Total	80 625	13 172	14 217

^a Summary of information provided in a survey in which 48% of all commercial fishermen responded.

^b Sales values estimated by multiplying the number of fish sold by the estimated average price.

Table 2A.2 Western Arctic Area, Exploratory Fisheries, Harvests and Landed Values, by Species, 1989/90

Species	Harvest (rd kgs)	Landed Value (\$)
Arctic charr	1 179	6 498
Lake whitefish	6 471	2 580
Broad whitefish	5 781	6 745
Lake trout	2	0
Northern pike	1 661	1 540
Inconnu	474	991
Total	15 568	18 354

Table 2A.3

Western Arctic Area
Active Schedule V Commercial Fisheries
1989/90

Waterbody Name	Schedule V Number	Location	Open Season	Species	Quota (rd kgs)
Alfred Lake	I-1	65-34N 126-33W	01Jun89 to 31Mar90	Whitefish ^a Lake Trout)) 2 800
Kagloryuak River	IV-16	70-17N 111-30W	01Jul89 to 30Sep89	Arctic charr	4 500
Kuujjua River (Minto Inlet)	IV-21	71-16N 116-78W	01Jul89 to 31Mar90	Arctic charr	600
Liverpool Bay	I-11	69-45N 130-00W	25Nov89 to 31Mar90	Herring Cisco Inconnu	2 000 11 400 1 200
Mackenzie Delta (Area I)	I-12	68-00N 135-00W	01Jun89 to 31Mar90	Whitefish ^a Lake trout Cisco Burbot Northern pike	2 300 2 300 2 300)) 4 600
Mackenzie Delta (Area II)	I-13	68-15N 125-20W	01Jun89 to 31Mar90	Whitefish ^a Cisco Lake trout Burbot Northern pike	9 100 2 300 2 300)) 4 600
Mackenzie Delta (Area III)	I-14	68-20N 135-00W	01Jun89 to 31Mar90	Whitefish ^a Cisco Lake trout Burbot Northern pike	45 500 2 300 2 300)) 4 600
Mackenzie Delta (Area IV)	I-15	69-20N 135-00W	01Jun89 to 31Mar90	Lake trout Inconnu Whitefish ^a	2 300 4 600 4 600
Mackenzie Delta (Area V)	I-16	63-30N 132-45W	01Jun89 to 31Mar90	Whitefish ^a Herring Cisco	4 600 500 500

^a Combined lake whitefish and broad whitefish quota

Table 2A.4 Western Arctic Area, Harvests, Sales and Sales Values of Surveyed Commercial License Holders^a, by Community, 1989/90

Community	Waters Fished	Species	Number of Fish	Harvest Weight ^b (rd kgs)	Sales ^b (rd kgs)	Sales Value ^c (\$)
Aklavik	Mackenzie Delta (Areas I & II)	Broad whitefish	2 909	6 691	736	854
		Lake whitefish	2 209	2 872	0	0
		Arctic charr	559	727	98	537
		Inconnu	2 360	10 620	225	470
		Northern pike	2 335	5 371	0	0
		Burbot	2 679	8 037	600	600
		Mullet (Suckers)	19	19	0	0
		Cisco	900	360	0	0
		Herring	15	6	0	0
Arctic Red River	Mackenzie Delta (Area V)	Broad whitefish	1 700	3 910	575	667
		Lake whitefish	3 400	4 420	0	0
		Inconnu	980	4 410	0	0
		Northern pike	65	150	0	0
		Burbot	180	540	0	0
		Mullet (Suckers)	60	60	0	0
		Herring	160	64	0	0
Holman Island	Kuujuua River Kagloryuak R.	Arctic charr	280	364	0	0
		Lake trout	100	400	0	0
Inuvik	Mackenzie Delta (Areas II & III) Liverpool Bay	Broad whitefish	6 712	15 438	6 555	7 604
		Lake whitefish	2 980	3 874	1 378	551
		Inconnu	413	1 859	14	28
		Northern pike	1 230	2 829	2 346	2 158
		Burbot	1 406	4 218	6	6
		Mullet (Suckers)	20	20	0	0
	Lake Trout	36	144	0	0	
Tuktoy-aktuk	Mackenzie Delta (Area IV) Liverpool Bay	Broad whitefish	900	2 070	173	200
		Inconnu	20	90	68	141
		Cisco	1 800	720	400	400
		Herring	850	340	0	0

^a summary of information provided in a survey in which 58% of all commercial fishery license holders responded.

^b catches were reported as numbers of fish, so the weight of the harvest and sales are estimated by multiplying by the estimated average weight of each species.

^c sales values estimated by multiplying the number of fish sold by a rough estimate of the average price.

TABLE 2A.5
WESTERN ARCTIC AREA
EXPLORATORY FISHERIES
1989/90

License Number, Waterbody Name and Location	Species	Gear or Mesh Size	Quota (rd kgs)	Harvest (kgs)	Landed Value	Data Source	Data Quality	Other Data Available	Contact
TF-89/90-16									
Mackenzie River (Horseshoe Bend - Holmes Creek) 70-13N 112-58W	B. Whitefish L. Whitefish Northern Pike Inconnu	140mm	16 000 6 000 6 000 6 000	5 781 6 451 1 661 474	\$6 745 \$2 580 \$1 540 \$ 991	EFL	+/- 0%	102 samples 28 samples	P. Lemieux
TF-89/90-18									
Naioagvok River 70-15N 112-20W	Arctic Charr	Upstream Trap	1 500	1 179	\$6 498	EFL	+/- 0%	105 samples	P. Lemieux
TF-89/90-22									
Aubry Lake 67-20N 126-25W	L. Whitefish Lake Trout	140mm	2 000 2 000	20 2	\$ 0 \$ 0	EFL	+/- 0%		

Table 2A.6
 Western Arctic Area,
 Commercial Fishing License Sales and
 Number of Licensed Commercial Fishermen, by Community
 1989/90

Community	Resident		Non-resident		Total	
	Licenses	Fishermen	Licenses	Fishermen	Licenses	Fishermen
Aklavik	19	19	0	0	19	19
Arctic Red River	2	2	0	0	2	2
Fort Good Hope	0	0	0	0	0	0
Fort McPherson	3	3	0	0	3	3
Fort Norman	0	0	0	0	0	0
Holman	0	0	0	0	0	0
Inuvik	32	32	0	0	32	32
Norman Wells	0	0	0	0	0	0
Paulatuk	0	0	0	0	0	0
Sachs Harbour	0	0	0	0	0	0
Tuktoyaktuk	2	2	0	0	2	2
Total	58	58	0	0	58	58

B. MARINE MAMMAL HARVESTS

Table 2B.1 Western Arctic Area, Marine Mammal Harvests^a,
by Species and Community, 1989/90

Community	Species	Number Landed	Data Source	Data Quality
Aklavik	Beluga	15	FJM	+/- 5%
	Walrus	0	FJM	n/a
Holman Island	Beluga	0	FJM	n/a
	Walrus	0	FJM	n/a
Inuvik	Beluga	109 ^b	FJM	+/- 5%
	Walrus	0	FJM	n/a
Paulatuk	Beluga	4	FJM	+/- 5%
	Walrus	0	FJM	n/a
Sachs Harbour	Beluga	0	FJM	n/a
	Walrus	0	FJM	n/a
Tuktoyaktuk	Beluga	108 ^b	FJM	+/- 5%
	Walrus	0	FJM	n/a
Western Arctic Totals	Beluga	244 ^b		
	Walrus	0		

^a Quantities are landed harvest with no corrections for animals lost.

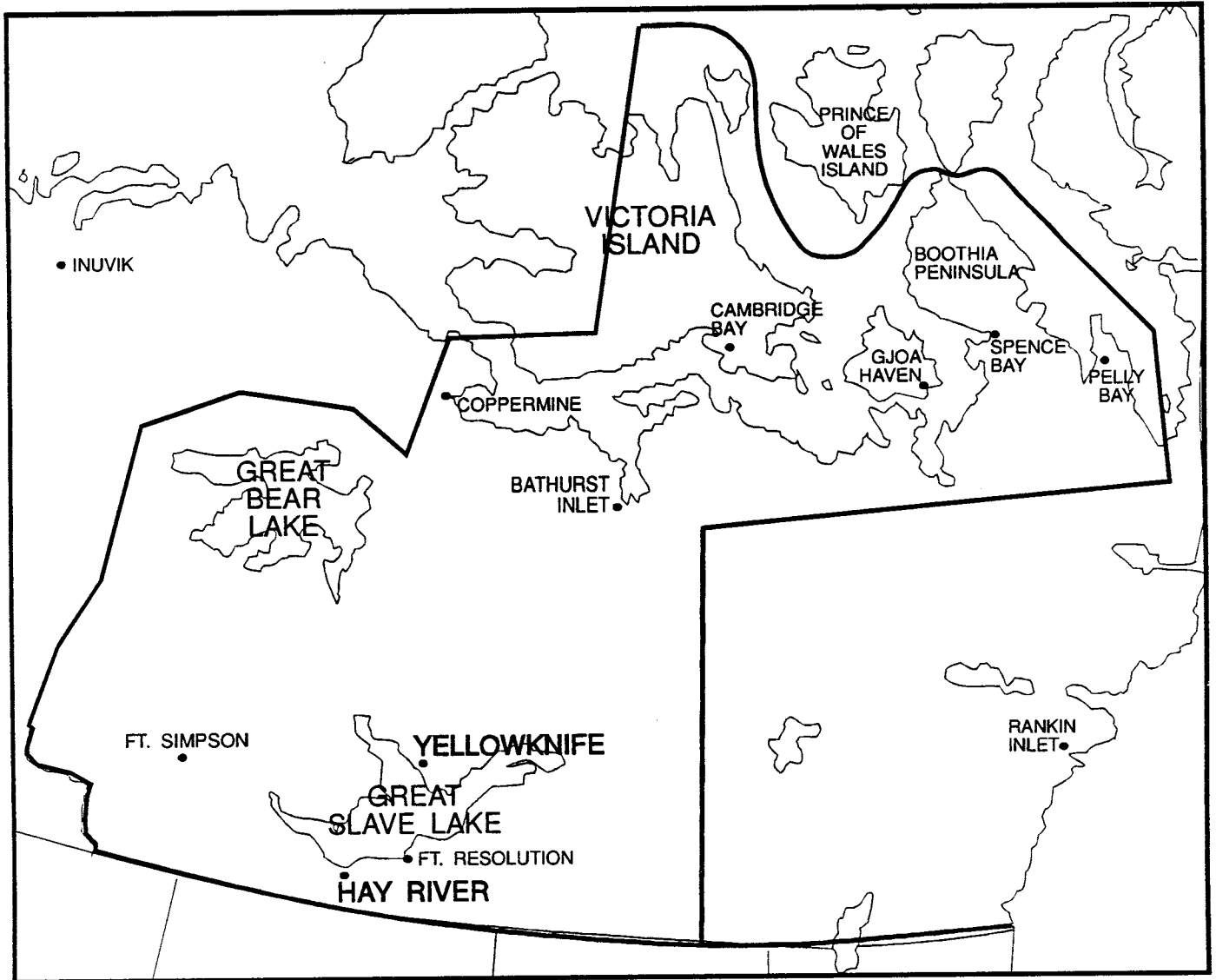
^b includes 125 beluga trapped in Husky Lake: 39 harvested by residents of Tuktoyaktuk; 78 harvested by residents of Inuvik; and 8 frozen over.

n/a = not applicable

SECTION 3
SOUTH/CENTRAL ARCTIC AREA



Figure 3
SOUTH/CENTRAL ARCTIC AREA



SOUTH/CENTRAL ARCTIC AREA
1989/90 STATISTICAL HIGHLIGHTS

Commercial and Exploratory Fisheries

- 33 waterbodies opened for commercial fishing under Schedule V of the N.W.T. Fisheries Regulations, of which 27 were fished;
- 252 commercial fishing licenses were sold to 243 fishermen in 10 South/Central Arctic communities;
- 35 waterbodies licensed for exploratory fisheries, of which 11 were fished;
- Total reported commercial and exploratory fishery landings of 1 893 492 kg and landed value of \$1 799 925;
- Principal commercial species harvested were lake whitefish (72% of landings), northern pike (9%), lake trout (7%), and arctic charr (4%);
- Great Slave Lake accounted for 96% of the Area's commercial fishery landings.

Recreational Fisheries

- 13 619 recreational fishing licenses sold, including 11 086 resident and 2 533 non-resident licenses;
- 37 lodges with a total bed capacity of 724 beds;
- 7 776 gamefish harvested by Great Bear Lake lodge-access fishery, of which 77% were lake trout.

Marine Mammal Harvest

- Marine mammal landed harvest of 5 beluga and 1 narwhal.

A. COMMERCIAL AND EXPLORATORY FISHERIES

Table 3A.1 South/Central Arctic Area, Schedule V Commercial Fisheries, Harvests and Landed Values, by Species, 1989/90

Species	Harvest (rd kgs)	Landed Value ^a (\$)
Arctic charr	60 360	137 052
Lake whitefish	1 369 338	1 186 978
Lake trout	132 230	123 870
Walleye	41 002	73 277
Northern pike	179 407	103 058
Inconnu	101 025	147 603
Total	1 883 362	1 771 838

^a does not include final payments for harvest delivered to the FFMC, see Appendix 1.

Table 3A.2 South/Central Arctic Area, Exploratory Fisheries, Harvests and Landed Values, by Species, 1989/90

Species	Harvest (rd kgs)	Landed Value (\$)
Arctic charr	8 878	24 483
Lake whitefish	526	1 157
Lake trout	515	1 983
Walleye	202	444
Northern Pike	9	20
Total	10 130	28 087

TABLE 3A.3 SOUTH/CENTRAL ARCTIC AREA
ARCTIC CHARR COMMERCIAL FISHERIES
1989/90

Community/ Waterbody Information	Species	Quota (rd kgs)	Harvest	Landed Value	Data Source	Data Quality	Other Data Available	Contact
<u>CAMBRIDGE BAY</u>								
Ekalluk River Sch. V No. : IV-9 Location : 69-25N 106-17W Open Season: 01Aug89-30Sep89	Arctic charr	14 500	13 565	\$30 366	STR	+/- 0%	210 samples catch/effort	G. Low
Ellice River Sch. V No. : IV-10 Location : 68-02N 104-00W Open Season: 01Aug89-30Sep89	Arctic charr	6 000	5 969	\$13 371	STR	+/- 0%	210 samples catch/effort	G. Low
Halovik River (Thirty Mile River) Sch. V No. : IV-13 Location : 69-10N 107-04W Open Season: 01Jul89-30Sep89	Arctic charr	6 800	6 857	\$15 360	STR	+/- 0%	210 samples catch/effort	G. Low
Jayco River Sch. V No. : IV-14 Location : 69-43N 103-18W Open Season: 01Aug89-30Sep89	Arctic charr	13 600	10 293	\$23 056	FO	+/- 0%	210 samples	G. Low
Laughtan River (Byron Bay) Sch. V No. : IV-22 Location : 68-56N 108-30W Open Season: 01Jul89-30Sep89	Arctic charr	9 100	9 184	\$20 572	STR	+/- 0%	210 samples catch/effort	G. Low
Paliryuak (Surrey River) Sch. V No. : IV-27 Location : 69-27N 106-40W Open Season: 01Jul89-30Sep89	Arctic charr	9 100	9 176	\$20 554	FO	+/- 0%	210 samples catch/effort	G. Low
Perry River Sch. V No. : IV-29 Location : 67-43N 102-10W Open Season: 01Jul89-30Sep89	Arctic charr	4 500	NOT FISHED					

TABLE 3A.3 (continued)
SOUTH/CENTRAL ARCTIC AREA
ARCTIC CHARR COMMERCIAL FISHERIES
1989/90

Community/ Waterbody Information	Species	Quota (rd kgs)	Harvest	Landed Value	Data Source	Data Quality	Other Data Available	Contact
<u>CAMBRIDGE BAY (continued)</u>								
Unnamed River (Dease Pt.) Sch. V No. : IV-41 Location : 68-10N 104-58W Open Season: 15Aug89-15Sep89	Arctic charr	2 500	3	\$7	FO	+/-	0%	
Unnamed River (Norway Bay) Sch. V No. : IV-26 Location : 71-05N 104-33W Open Season: 15Aug89-15Sep89	Arctic charr	2 500	0	\$0	RRO	+/-	0%	
<u>COPPERMINE</u>								
Coppermine River Sch. V No. : IV-6 Location : 67-49N 115-04W Open Season: 01Jul89-30Sep89	Arctic charr	600	600	\$2 310	RRO	+/-	0%	
<u>GJOA HAVEN</u>								
Simpson River Sch. V No. : IV-32 Location : 67-48N 100-45W Open Season: 01Aug89-30Sep89	Arctic charr	4 500	0	\$0	RRO	+/-	0%	
<u>PELLY BAY</u>								
Arrowsmith River Sch. V No. : IV-2 Location : 68-23N 90-17W Open Season: 01Oct89-31Mar90	Arctic charr	1 000	NOT FISHED					
Becher River Sch. V No. : IV-3 Location : 68-45N 90-08W Open Season: 01Oct89-31Mar90	Arctic charr	1 000	858	\$1 888	STR	+/-	0%	

TABLE 3A.3 (continued)

SOUTH/CENTRAL ARCTIC AREA
ARCTIC CHARR COMMERCIAL FISHERIES
1989/90

Community/ Waterbody Information	Species	Quota (rd kgs)	Harvest	Landed Value	Data Source	Data Quality	Other Data Available	Contact
<u>PELLEY BAY (continued)</u>								
Keith Bay (Committee Bay) Sch. V No. : IV-17 Location : 68-15N 88-18W Open Season: 01Oct89-31Mar90	Arctic charr	4 500	1 187	\$2 611	STR	+/- 0%		
Kellett River Sch. V No. : IV-18 Location : 68-21N 90-07W Open Season: 01Oct89-31Mar90	Arctic charr	1 000	1 000	\$2 200	STR	+/- 0%		
<u>SPENCE BAY</u>								
Agnew River (Itaunnallic Bay) Sch. V No. : IV-1 Location : 70-40N 92-40W Open Season: 01Oct89-31Mar90	Arctic charr	4 500	NOT FISHED					
Lord Lindsay Lake Sch. V No. : IV-23 Location : 70-10N 92-25W Open Season: 15Sep89-31Mar90	Arctic charr	2 500	1 668	\$4 737	RRO	+/- 0%		
Murchison River Sch. V No. : IV-25 Location : 68-35N 93-30W Open Season: 01Aug89-31Mar90	Arctic charr	9 100	NOT FISHED					

TABLE 3A.4

SOUTH/CENTRAL ARCTIC AREA
 WHITEFISH, LAKE TROUT AND WALLEYE COMMERCIAL FISHERIES
 (excluding Great Slave and Kakisa Lakes)
 1989/90

Waterbody Information	Species	Quota (rd kgs)	Harvest	Landed Value	Data Source	Data Quality	Other Data Available	Contact
<u>McEwan Lake</u> Sch. V No. : II-31 Location : 60-48N 119-57W Open Season: 01Apr89-31Mar90	Lake Whitefish) Lake Trout)	600	0	\$0	RRO	+/- 10		
<u>Pangtium Lake</u> Sch. V No. : IV-28 Location : 69-42N 106-22W Open Season: 20Jan90-31Mar90	Lake Whitefish) Lake Trout)	1 100	1 100	\$2 420	STR	+/- 5%		
<u>Piers Lake</u> Sch. V No. : II-41 Location : 60-20N 111-06W Open Season: 01Apr89-31Mar90	Lake Whitefish) Lake Trout)	4 200	NOT FISHED					
<u>Reade Lake</u> Sch. V No. : II-42 Location : 60-53N 119-55W Open Season: 01Apr89-31Mar90	Lake Whitefish) Lake Trout)	300	0	\$0	RRO	+/- 10		
<u>Ross Lake</u> Sch. V No. : III-47 Location : 62-41N 113-16W Open Season: 01Jun89-15Sep89	Lake Whitefish) Lake Trout)	1 800	91	\$ 200	FO	+/- 10%		
<u>Tathlina Lake</u> Sch. V No. : II-53 Location : 60-30N 117-30W Open Season: 01Apr89-31Mar90	Walleye	20 000	2 067	\$6 139	DCR	+/- 1%	210 samples	G. Low

TABLE 3A.4 (continued)

SOUTH/CENTRAL ARCTIC AREA
 WHITEFISH, LAKE TROUT AND WALLEYE COMMERCIAL FISHERIES
 (excluding Great Slave and Kakisa Lakes)
 1989/90

Waterbody Information	Species	Quota (rd kgs)	Harvest	Landed Value	Data Source	Data Quality	Other Data Available	Contact
<u>Thistlethwaite Lake</u> Sch. V No. : 111-53 Location : 63-10N 113-37W Open Season: 01Mar90-31Mar90	Lake Whitefish) Lake Trout)	1 900	NOT FISHED					
<u>Ioassie Lake</u> Sch. V No. : IV-37 Location : 69-41N 106-39W Open Season: 20Jan90-31Mar90	Lake Whitefish) Lake Trout)	900	900 0	\$1 980	STR	+/- 5%		

Table 3A.5 Great Slave Lake, Harvests by Administrative Areas
November 1, 1988 to October 31, 1989

Area	Species	Quota (rd kgs)	Winter Harvest (rd kgs)	Summer Harvest (rd kgs)	Quota Year Total (rd kgs)
I-WEST	Lake whitefish)		192 182	41 893	234 075
	Lake trout)	227 300	6 433	2 277	8 710
	Northern pike		39 657	7 540	47 197
	Inconnu		2 694	66	2 760
	Walleye		1 040	1	1 041
	TOTAL		242 006	51 777	293 783
I-EAST	Lake whitefish)		103 745	208 585	312 330
	Lake trout)	318 200	7 045	16 745	23 790
	Northern pike		3 714	5 292	9 006
	Inconnu		5 053	24 487	29 540
	Walleye		19	727	746
	Mullet (Suckers)		2	0	2
TOTAL		119 576	255 836	375 412	
II	Lake whitefish)		140 501	160 674	301 175
	Lake trout)	318 200	5 636	8 681	14 317
	Northern pike		15 239	1 801	17 040
	Inconnu		595	117	712
	Walleye		61	10	71
	TOTAL		162 032	171 283	333 315
III	Lake whitefish)		29 260	12 690	41 950
	Lake trout)	45 500	3 140	67	3 207
	Northern pike		2 780	1 959	4 739
	Inconnu		5 395	3 249	8 644
	Walleye		158	58	216
	Mullet (Suckers)		139	0	139
TOTAL		40 733	18 023	58 756 58 895	
IV	Lake whitefish)		115 961	279 200	395 161
	Lake trout)	409 100	847	7 629	8 476
	Northern pike		9 956	18 127	28 083
	Inconnu		1 188	2 641	3 829
	Walleye		1 920	10 892	12 812
	TOTAL		129 872	318 489	448 361
V	Lake whitefish)		11 963	154 680	166 643
	Lake trout)	363 600	394	78 330	78 724
	Northern pike		949	63 476	64 425
	Inconnu		27 381	10 866	38 247
	Walleye		2	5 422	5 424
	TOTAL		40 689	312 774	353 463

continued . . .

Table 3A.5 (continued) Great Slave Lake
Harvests by Administrative Areas
November 1, 1988 to October 31, 1989

Area	Species	Quota (rd kgs)	Winter Harvest (rd kgs)	Summer Harvest (rd kgs)	Quota Year Total (rd kgs)
All	Lake whitefish)		593 612	857 722	1 451 334
Areas	Lake trout)	1 681 900	23 495	113 729	137 224
	Northern pike		72 295	98 195	170 490
	Inconnu		42 306	41 426	83 732
	Walleye		3 200	17 110	20 310
	Mullet (Suckers)		141	0	141
	TOTAL		843 351 735 049	837 594 1 128 182	1 680 945 1 863 231

Note: all quotas for G.S.L. are for whitefish and trout combined.

Table 3A.6 Great Slave Lake Harvest Sold to the
Freshwater Fish Marketing Corporation
and Landed Values to Fishermen,
November 1, 1988 to October 31, 1989

Species	Winter		Summer		Quota Year	
	Harvest Sold (rd kg)	Landed Value ^a (\$)	Harvest Sold (rd kg)	Landed Value ^a (\$)	Harvest Sold (rd kg)	Landed Value ^a (\$)
Whitefish Export	591 705	747 033	846 670	579 719	1 438 675	1 326 752
Lake Trout	21 864	38 199	106 174	89 374	128 038	127 573
Northern Pike	68 632	43 081	92 007	53 613	160 639	96 694
Inconnu	26 398	42 330	57 367	78 686	83 765	121 016
Walleye	3 174	7 742	16 197	27 298	19 371	35 040
Mullet	141	39	0	0	141	39
TOTAL	711 914	878 424	1 118 715	828 690	1 830 629	1 707 114

^a does not include final payments, see Appendix 1.

Table 3A.5 Great Slave Lake, Harvests by Administrative Areas
November 1, 1988 to October 31, 1989

Area	Species	Quota (rd kgs)	Winter Harvest (rd kgs)	Summer Harvest (rd kgs)	Quota Year Total (rd kgs)
I-WEST	Lake whitefish)		192 182	41 893	234 075
	Lake trout)227 300		6 433	2 277	8 710
	Northern pike		39 657	7 540	47 197
	Inconnu		2 694	66	2 760
	Walleye		1 040	1	1 041
	TOTAL		242 006	51 777	293 783
I-EAST	Lake whitefish)		103 745	208 585	312 330
	Lake trout)318 200		7 045	16 745	23 790
	Northern pike		3 714	5 292	9 006
	Inconnu		5 053	24 487	29 540
	Walleye		19	727	746
	Mullet (Suckers)		2	0	2
	TOTAL		119 578	255 836	375 414
II	Lake whitefish)		140 501	160 674	301 175
	Lake trout)318 200		5 636	8 681	14 317
	Northern pike		15 239	1 801	17 040
	Inconnu		595	117	712
	Walleye		61	10	71
	TOTAL		162 032	171 283	333 315
III	Lake whitefish)		29 260	12 690	41 950
	Lake trout) 45 500		3 140	67	3 207
	Northern pike		2 780	1 959	4 739
	Inconnu		5 395	3 249	8 644
	Walleye		158	58	216
	Mullet (Suckers)		139	0	139
	TOTAL		40 872	18 023	58 895
IV	Lake whitefish)		115 961	279 200	395 161
	Lake trout)409 100		847	7 629	8 476
	Northern pike		9 956	18 127	28 083
	Inconnu		1 188	2 641	3 829
	Walleye		1 920	10 892	12 812
	TOTAL		129 872	318 489	448 361
V	Lake whitefish)		11 963	154 680	166 643
	Lake trout)363 600		394	78 330	78 724
	Northern pike		949	63 476	64 425
	Inconnu		27 381	10 866	38 247
	Walleye		2	5 422	5 424
	TOTAL		40 689	312 774	353 463

continued . . .

Table 3A.5 (continued) Great Slave Lake
Harvests by Administrative Areas
November 1, 1988 to October 31, 1989

Area	Species	Quota (rd kgs)	Winter Harvest (rd kgs)	Summer Harvest (rd kgs)	Quota Year Total (rd kgs)
All Areas	Lake whitefish)	1 681 900	593 612	857 722	1 451 334
	Lake trout)		23 495	113 729	137 224
	Northern pike		72 295	98 195	170 490
	Inconnu		42 306	41 426	83 732
	Walleye		3 200	17 110	20 310
	Mullet (Suckers)		141	0	141
	TOTAL		735 049	1 128 182	1 863 231

Note: all quotas for G.S.L. are for whitefish and trout combined.

Table 3A.6 Great Slave Lake Harvest Sold to the
Freshwater Fish Marketing Corporation
and Landed Values to Fishermen,
November 1, 1988 to October 31, 1989

Species	Winter		Summer		Quota Year	
	Harvest Sold (rd kg)	Landed Value ^a (\$)	Harvest Sold (rd kg)	Landed Value ^a (\$)	Harvest Sold (rd kg)	Landed Value ^a (\$)
Whitefish Export	591 705	747 033	846 670	579 719	1 438 675	1 326 752
Lake Trout	21 864	38 199	106 174	89 374	128 038	127 573
Northern Pike	68 632	43 081	92 007	53 613	160 639	96 694
Inconnu	26 398	42 330	57 367	78 686	83 765	121 016
Walleye	3 174	7 742	16 197	27 298	19 371	35 040
Mullet	141	39	0	0	141	39
TOTAL	711 914	878 424	1 118 715	828 690	1 830 629	1 707 114

^a does not include final payments, see Appendix 1.

Table 3A.7

Kakisa Lake
Commercial Harvests
November 1, 1988 to October 31, 1989

Species	Quota (rd kg)	Harvest (rd kg)
Walleye	20 000	19 844
TOTAL		19 844

Table 3A.8

Kakisa Lake Harvests Sold to the
Freshwater Fish Marketing Corporation
and Landed Values to Fishermen,
November 1, 1988 to October 31, 1989

Species	Harvest Sold (rd kg)	Landed Value ^a (\$)
Walleye	19 492	34 834
TOTAL	19 492	34 834

^a does not include final payments, see Appendix 1.

TABLE 3A.9
SOUTH/CENTRAL ARCTIC AREA
EXPLORATORY FISHERIES
1989/90

Licence Number, Waterbody Name and Location	Species	Gear or Mesh Size	Quota (rd kgs)	Harvest Value	Landed Value	Data Source	Data Quality	Other Data Available	Contact
TF-89/90-02 Trout Lake 60-35N 121-10W	L. Trout L. Whitefish Walleye	140mm	1 000 1 000 500	NOT FISHED					
TF-89/90-03 Great Bear Lake Fort Franklin 65-11N 123-25W	L. Trout A. Cisco	140mm 64mm	500 500	NOT FISHED					
TF-89/90-04 Hiukitak River 67-08N 107-10W	Arctic Charr	140mm	1 500	1 500	\$3 300	EFL	+/- 1%	105 samples catch/effort	G. Low
Unnamed River (Hakvaktuq, Hope Bay) 69-08N 92-30W	Arctic Charr	140mm	1 500	1 500	\$3 300	EFL	+/- 1%	94 samples catch/effort	G. Low
TF-89/90-05 Unnamed River/Lake 69-15N 102-05W	Arctic Charr	140mm	1 500	1 725	\$3 795	EFL	+/- 0%	106 samples catch/effort	G. Low
TF-88/89-06 Burnside River 66-50N 108-10W	Arctic Charr	140mm	2 000	365	\$803	EFL	+/- 10%	48 samples	G. Low
Unnamed Lake (Canoe Lake) 66-47N 107-59W	Arctic Charr	140mm	1 000	NOT FISHED					
Unnamed Lake (Molting Lake) 66-58N 108-20W	Arctic Charr	140mm	1 000	NOT FISHED					
Unnamed Lake (Uningtok Lake) 66-43N 107-56W	Arctic Charr	140mm	1 000	NOT FISHED					

TABLE 3A.9 (continued)

SOUTH/CENTRAL ARCTIC AREA
EXPLORATORY FISHERIES
1989/90

Licence Number, Waterbody Name and Location	Species	Gear or Mesh Size	Quota (rd kgs)	Harvest	Landed Value	Data Source	Data Quality	Other Data Available	Contact
TF-89/90-10 Back River 67-15N 95-15W	Arctic Charr	140mm	2 000	NOT FISHED					
Barrow Inlet 68-03N 96-40W	Cod	jigging	2 000	NOT FISHED					
Kaleet Lake 67-37N 97-45W	Cisco (ssp)	64mm	1 000	NOT FISHED					
Port Parry Area 69-40N 97-20W	Arctic Charr	140mm	1 000	272	\$598	EFL	+/- 0%	187 samples catch/effort	G. Low
Sherman Inlet 68-00N 98-20W	Arctic Charr	140mm	2 000	NOT FISHED					
Unnamed R. (Kuptak) Elliot Bay 67-47N 98-30W	Arctic Charr	140mm	2 000	NOT FISHED					
TF-89/90-11 Contwoyto Lake 65-36N 110-39W	Lake Trout	140mm	2 000	NOT FISHED					
Nakyoktok River 68-37N 110-52W	Arctic Charr Lake Trout	140mm	1 500	1 501 515	\$5 779 \$1 983	EFL EFL	+/- 1% +/- 1%		
Unnamed Lake 68-40N 111-21W	Arctic Charr Lake Trout	140mm	1 000	NOT FISHED					

TABLE 3A.9 (continued)
 SOUTH/CENTRAL ARCTIC AREA
 EXPLORATORY FISHERIES
 1989/90

Licence Number, Waterbody Name and Location	Species	Gear or Mesh Size	Quota (rd kgs)	Harvest	Landed Value	Data Source	Data Quality	Other Data Available	Contact
TF-89/90-11 (continued)									
Unnamed Lake 68-37N 111-05W	Arctic Charr Lake Trout	140mm	1 000	NOT FISHED					
Unnamed Lake (Emagyok) 68-15N 116-40W	Lake Trout	140mm	500	NOT FISHED					
Unnamed Lake (Kikiktalik) 68-11N 116-20W	Lake Trout	140mm	1 000	NOT FISHED					
Unnamed Lake (Read Island) 69-12N 112-55W	Arctic Charr	140mm	1 000	1 500	\$5 775	EFL	+/- 5%		
TF-89/90-12									
Krusenstern Lake 69-52N 93-00W	Arctic Charr	140mm	500	NOT FISHED					
Lake Hansteen 69-45N 94-15W	Arctic Charr	140mm	500	NOT FISHED					
Netsilik Lake 769-15 93-05W	Lake Whitefish	140mm	2 000	NOT FISHED					
Tukingayuk Lake 70-02N 93-07W	Arctic Charr	140mm	500	NOT FISHED					
Unnamed Lake (Nurraosiurvik) 68-15N 90-16W	Arctic Charr	140mm	500	NOT FISHED					
Unnamed Lake (Tiniipayuk) 68-55N 90-34W	Arctic Charr	140mm	500	515	\$1 133	EFL	+/- 0%	183 samples catch/effort	G. Low

TABLE 3A.9 (continued)

SOUTH/CENTRAL ARCTIC AREA
EXPLORATORY FISHERIES
1989/90

Licence Number, Waterbody Name and Location	Species	Gear or Mesh Size	Quota (rd kgs)	Harvest	Landed Value	Data Source	Data Quality	Other Data Available	Contact
TF-89/90-24 Abernethy River 70-53N 93-00W	Arctic Charr	140mm	1 000	NOT FISHED					
TF-89/90-29 Berens River 60-11N 122-56W	L. Whitefish Northern Pike Walleye	140mm	400	6 4 57	\$13 \$9 \$125	EFL	+/- 1%	4 samples 27 samples	G. Low G. Low
Star Lake 60-20N 110-46W	L. Whitefish Lake Trout Walleye	140mm	350	NOT FISHED					
Unnamed Lake (Germain) 60-12N 111-03W	Walleye L. Whitefish Lake Trout	140mm	200	143 270 0	\$315 \$594	EFL	+/- 1%	88 samples 179 samples	G. Low G. Low
Unnamed Lake (Jean's) 60-22N 110-54W	L. Whitefish Lake Trout Walleye	140mm	200	NOT FISHED					
Unnamed Lake (Mary's) 60-14N 111-04W	L. Whitefish Lake Trout Walleye	140mm	200	NOT FISHED					
TF-89/90-99 Unnamed Lake (Pete's) 60-12N 111-07W	L. Whitefish Northern Pike Walleye	140mm	0 0 0	250 5 2	\$550 \$11 \$4	EFL	+/- 1%	120 samples	G. Low

Table 3A.10
 South/Central Arctic Area
 Commercial Fishing License Sales and
 Number of Licensed Commercial Fishermen, by Community
 1989/90

	Resident		Non-resident		Total	
	Licenses Sold	Fishermen	Licenses Sold	Fishermen	Licenses Sold	Fishermen
Cambridge Bay	36	35	0	0	36	35
Coppermine	10	10	0	0	10	10
Fort Norman	1	1	0	0	1	1
Fort Smith	3	3	0	0	3	3
Gjoa Haven	4	3	0	0	4	3
Hay River	141	136	2	2	143	138
Kakiska Lake	1	1	0	0	1	1
Pelly Bay	19	17	0	0	19	17
Spence Bay	11	11	0	0	11	11
Yellowknife	23	23	1	1	24	24
Total	249	240	3	3	252	243

Table 3A.11
 South/Central Arctic Area
 Great Slave Lake Operator Licenses
 1989/90

	Class "A"		Class "B"	
	Summer	Winter	Summer	Winter
Number Available	28	32	80	30
Number Issued	20	25	59	17
Number Active	19	31	59	39

B. MARINE MAMMAL HARVESTS

Table 3B.1

South/Central Arctic Area
Marine Mammal Harvests^a,
by Species and Community, 1989/90

Community	Species	Number Landed	Data Source	Data Quality
Bathurst Inlet	Beluga	0	RRO	n/a
	Narwhal	0	RRO	n/a
	Walrus	0	RRO	n/a
Cambridge Bay	Beluga	0	RRO	n/a
	Narwhal	0	RRO	n/a
	Walrus	0	RRO	n/a
Coppermine	Beluga	0	RRO	n/a
	Narwhal	0	RRO	n/a
	Walrus	0	RRO	n/a
Gjoa Haven	Beluga	0	RRO	n/a
	Narwhal	0	RRO	n/a
	Walrus	0	RRO	n/a
Pelly Bay	Beluga	0	RRO	n/a
	Narwhal	1	TAG	+/- 0%
	Walrus	0	RRO	n/a
Spence Bay	Beluga	5 ^b	RRO	+/- 0%
	Narwhal	0	TAG	n/a
	Walrus	0	RRO	n/a
South/Central Arctic Totals	Beluga	5		
	Narwhal	1		
	Walrus	0		

^a Quantities are landed harvest with no corrections for animals lost.

^b Harvested at Creswell Bay.
n/a = not applicable

C. RECREATIONAL FISHERIES

Table 3C.1 Great Bear Lake Angler Diary Program
Response Rate
Summer 1989

Total Number of Guests	961
Number of Diaries Returned	699
Number Filled out Correctly	612
Response Rate	65%

Table 3C.2 Great Bear Lake Angler Diary Program
Three Year Trend of Results

	1987	1988	1989
Number of Guests	1 319	1 145	961
Response Rates	37%	65%	65%
Angling Days per Respondent	5.5	5.5	5.8
Estimated Total Angling Days	7 255	6 298	5 574
Catch per Angler Hour			
- Lake trout	1.26	1.16	1.29
- Northern pike	3.41	3.32	2.55
- Arctic grayling	3.28	3.48	2.48
- All Species	1.44	1.39	1.41
Harvest Estimates			
- Lake trout	8 955	7 058	5 995
- Northern pike	360	374	365
- Arctic grayling	2 756	2 294	1 425
- Other	17	45	0
- Total - All Species	12 088	8 771	7 776

Table 3C.3 Great Bear Lake Angler Diary Program
Reported^a Catch and Effort from
Fly-out Arctic Charr Fishing Trips^b

	1987	1988	1989
Number of respondents reporting on charr fishing	194	358	254
Percent of total number of respondents	36%	45%	36%
Total charr fishing days	252	529	395
Total charr fishing hours	1 196	2 749	2 057
Total charr catch	966	2 303	2 135
Total charr harvest	295	543	435

^a No estimate of total fishing effort or harvest has been made for arctic charr because there is not sufficient information on the fly-out trips of all guests.

^b Fly-out trips were most often to the Coppermine, Tree and Kugaryuak Rivers.

Table 3C.4 Blachford Lake Lodge Angler Diary Program
Response Rate
Summer 1989

Estimated Total Number of Guests Days	331
Number of Diaries Returned	102
Number of Guest Days of Anglers who Returned Diaries	317
% of Estimated Total Number of Guest Days Sampled in Diaries	96%

Table 3C.5 Blachford Lake Lodge Angler Diary Program
Trend Data

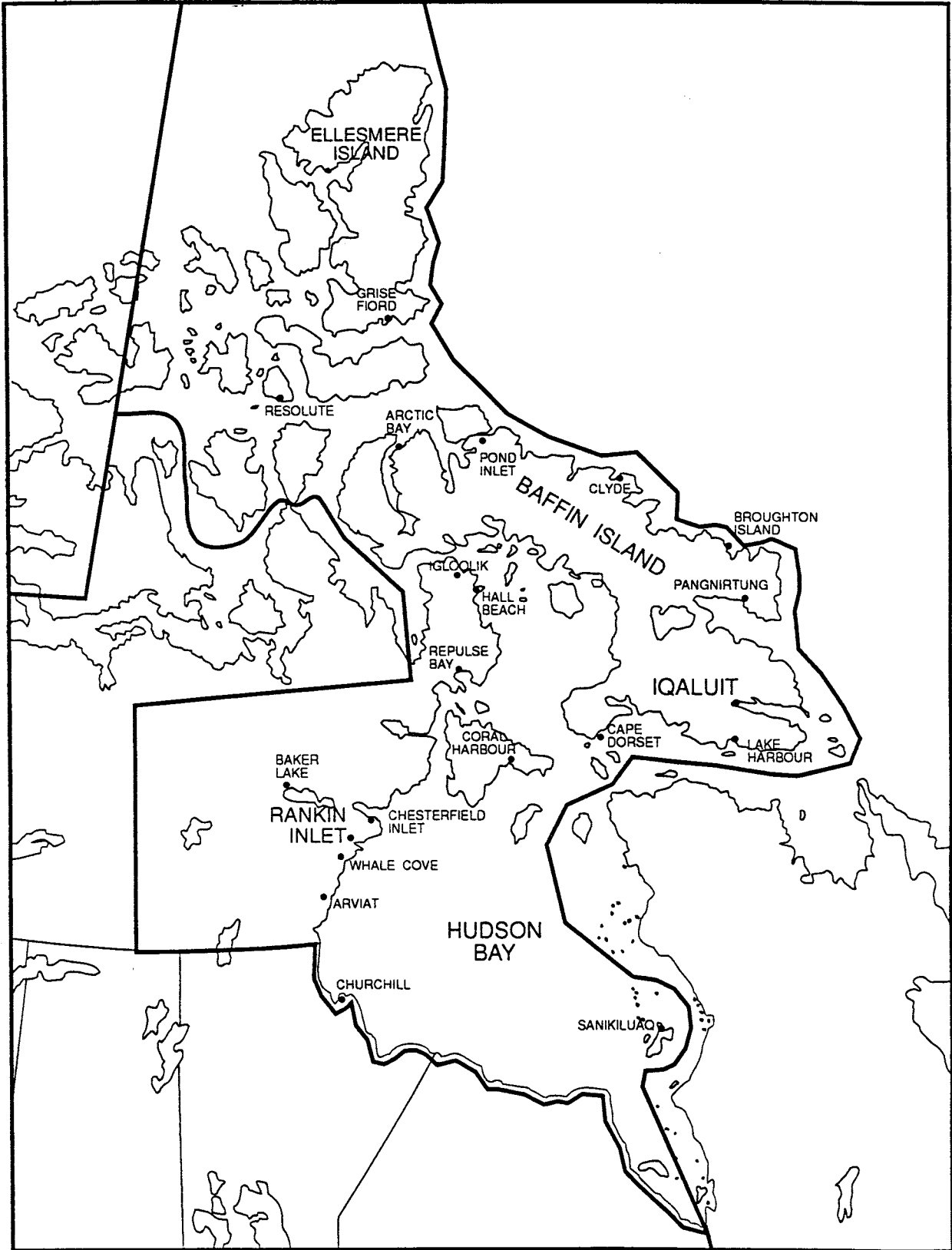
	1983	1984	1985	1986	1987	1988 ^a	1989
Number of Diaries Returned	135	59	67	55	55	56	102
Angler Days Reported	357	174	184	175	146	166	279
Average Angler Days per Diary	2.6	2.9	2.7	3.2	2.7	3.0	2.7
Catch per Angler Hour							
- Lake trout	0.72	0.56	0.68	0.82	0.62	0.74	0.84
- Northern pike	1.47	1.79	1.68	2.17	1.21	0.97	1.55
- All species	0.88	0.78	0.87	1.22	0.81	0.77	1.00
Harvest Estimates							
- Lake trout	n/a	n/a	n/a	n/a	n/a	282	206
- Northern pike	n/a	n/a	n/a	n/a	n/a	71	55
- Others	n/a	n/a	n/a	n/a	n/a	2	71
- All species	n/a	n/a	n/a	n/a	n/a	355	332

^a 1988 was the first year in which sufficient, reliable information was available on the number of guest days of all guests to generate harvest estimates.

SECTION 4
EASTERN ARCTIC AREA



Figure 4
EASTERN ARCTIC AREA



EASTERN ARCTIC AREA
1989/90 STATISTICAL HIGHLIGHTS

Commercial and Exploratory Fisheries

- 59 waterbodies opened for commercial fishing under Schedule V of the N.W.T. Fisheries Regulations;
- 38 waterbodies were commercially fished;
- 581 commercial fishing licenses sold to 441 fishermen in 18 Eastern Arctic communities;
- 29 waterbodies were licensed for exploratory arctic charr fisheries, of which 20 were fished;
- 9 exploratory licenses were issued for 10 marine fisheries, all of which were fished.
- Total reported commercial and exploratory fishery landings of 411 159 kg and landed value of \$ 883 321;
- Principal commercial species harvested were turbot (62% of landings) and arctic charr (36%).

Recreational Fisheries

- 2 261 recreational fishing licenses sold, including 1 526 resident and 735 non-resident licenses;
- 14 lodges with a total bed capacity of 237 beds.

Marine Mammal Harvest

- Marine mammal landed harvest of 447 beluga, 341 narwhal and 291 walrus.

A. COMMERCIAL AND EXPLORATORY FISHERIES

Table 4A.1 Eastern Arctic Area, Schedule V Commercial Fisheries, Harvests and Landed Values, by Species, 1989/90

Species	Harvest (rd kgs)	Landed Value (\$)
Arctic charr	108 490	353 016
Arctic charr (11)	568	1 945
Lake whitefish	300	868
Lake trout	300	963
Cisco	300	868
Total	109 958	357 660

Table 4A.2 Eastern Arctic Area, Exploratory Fisheries Harvests and Landed Values, by Species, 1989/90

Species	Harvest (rd kgs)	Landed Value (\$)
Arctic charr	37 515	134 584
Lake trout	29	0
Lake whitefish	70	0
Scallops	8 000	8 000
Turbot	255 212	382 665
Atlantic cod	200	200
Clams	170	212
Shrimp	5	0
Total	301 201	525 661

TABLE 4A.3
 EASTERN ARCTIC AREA
 BAFFIN AND CENTRAL DISTRICT
 ARCTIC CHARR COMMERCIAL FISHERIES, BY COMMUNITY
 1989/90

Community/ Waterbody Information	Species	Quota (rd kgs)	Harvest	Landed Value	Data Source	Data Quality	Other Data Available	Contact
<u>ARCTIC BAY</u>								
Saputing River Sch. V No. : VI-45 Location : 70-47N 84-56W Open Season: 07Apr89-31Mar90	Arctic charr	9 100	9 000	\$28 440	RRO	+ 10%		
<u>BROUGHTON ISLAND</u>								
Circle Lake Sch. V No. : VI-8 Location : 66-32N 64-10W Open Season: 01Nov89-31Mar90	Arctic charr (II)	3 400	450	\$1 472	RRO	+/- 20%		
Padle River (Kingnait Fiord) Sch. V No. : VI-34 Location : 66-21N 64-22W Open Season: 01Jun89-31Mar90	Arctic charr	3 600	NOT FISHED					
Padle Fiord Area Sch. V No. : VI-35 Location : 66-55N 63-25W Open Season: 01Jun89-31Oct89	Arctic charr	3 600	2 464	\$7 392	RRO	+ 20%		
Nudlung Fiord Sch. V No. : VI-32 Location : 68-17N 67-45W Open Season: 01Jun89-31Mar90	Arctic charr	4 500	599	\$1 797	RRO	+ 20%		

TABLE 4A.3 (continued)
 EASTERN ARCTIC AREA
 BAFFIN AND CENTRAL DISTRICT
 ARCTIC CHARR COMMERCIAL FISHERIES, BY COMMUNITY
 1989/90

Community/ Waterbody Information	Species	Quota (rd kgs)	Harvest	Landed Value	Data Source	Data Quality	Other Data Available	Contact
<u>CAPE DORSET</u>								
Camp Lake Sch. V No. : VI-6 Location : 64-40N 73-57W Open Season: 15Jul89-31Mar90	Arctic charr (ll)	2 700	118	\$473	STR	+ 10%		
<u>CLYDE</u>								
Ayr Lake Sch. V No. : VI-4 Location : 70-24N 70-15W Open Season: 15Nov89-31Mar90	Arctic charr (ll)	6 800	NOT FISHED					
Cape Adair Lake and River Sch. V No. : VI-7 Location : 71-27N 72-00W Open Season: 15Nov89-31Mar90	Arctic charr	2 300	NOT FISHED		COMMERCIALY			
Sam Ford Fiord Area Sch. V No. : VI-44 Location : 70-25N 71-40W Open Season: 15Nov89-31Mar90	Arctic charr	3 600	227	\$625	STR	+ 20%		
Unnamed Lake & River (Dexterity Fiord) Sch. V No. : VI-58 Location : 71-06N 72-45W Open Season: 15Nov89-31Mar90	Arctic charr	900	NOT FISHED					
Unnamed Lake & River (Dexterity Fiord) Sch. V No. : VI-59 Location : 71-12N 72-40W Open Season: 15Nov89-31Mar90	Arctic charr	500	230	\$633	STR	+ 20%		

TABLE 4A.3 (continued)
 EASTERN ARCTIC AREA
 BAFFIN AND CENTRAL DISTRICT
 ARCTIC CHARR COMMERCIAL FISHERIES, BY COMMUNITY
 1989/90

Community/ Waterbody Information	Species	Quota (rd kgs)	Harvest	Landed Value	Data Source	Data Quality	Other Data Available	Contact
<u>IGOOLIK AND HALL BEACH (continued)</u>								
Ravn River Sch. V No. : VI-42 Location : 70-30N 79-50W Open Season: 01Nov89-31Mar90	Arctic charr	9 100	8 500	\$29 750	RRO	+ 10%		
Whyte Lake and River Sch. V No. : VI-50 Location : 70-10N 84-42W Open Season: 01Nov89-31Mar90	Arctic charr	900	500	\$1 750	RRO	+ 20%		
<u>IOALUJIT</u>								
Amadjuak Lake Sch. V No. : VI-2 Location : 65-00N 71-00W Open Season: 25Nov89-31Mar90	Arctic charr	9 100		NOT FISHED				
Nettilling Lake Sch. V No. : VI-31 Location : 66-33N 71-00W Open Season: 01Aug89-30Sep89	Arctic charr	22 700		FISHED UNSUCCESSFULLY			Report	D. Pike
	Arctic charr	22 700		NOT FISHED COMMERCIALY				
Okalik Bay Sch. V No. : VI-33 Location : 64-02N 65-15W Open Season: 01Nov89-31Mar90	Arctic charr	1 400	219	\$630	STR	+ 30%		
Qualluatik Lake Sch. V No. : VI-41 Location : 63-46N 65-07W Open Season: 01Nov89-31Mar90	Arctic charr	700	955	\$2 865	STR	+ 20%		

TABLE 4A.3 (continued)

EASTERN ARCTIC AREA
BAFFIN AND CENTRAL DISTRICT
ARCTIC CHARR COMMERCIAL FISHERIES, BY COMMUNITY
1989/90

Community/ Waterbody Information	Species	Quota (rd kgs)	Harvest	Landed Value	Data Source	Data Quality	Other Data Available	Contact
<u>POND_INLEI (continued)</u>								
Paquet Bay River and Lake Sch. V No. : VI-37 Location : 71-38N 77-20W Open Season: 15Jun89-31Mar90	Arctic charr	1 000	NOT FISHED					
Tugaat River Sch. V No. : VI-48 Location : 72-03N 80-40W Open Season: 01Oct89-31Mar90	Arctic charr	1 000	NOT FISHED					
<u>RESOLUTE</u>								
Stanwell-Fletcher Lake Sch. V No. : IV-33 Location : 72-39N 94-41W Open Season: 17Aug89-31Dec89	Arctic charr	6 800	4 000	\$12 000	RRO	+/-	40%	

TABLE 4A.4
 EASTERN ARCTIC AREA
 KEEWATIN DISTRICT
 COMMERCIAL FISHERIES, BY COMMUNITY
 1989/90

Community/ Waterbody Information	Species	Quota (rd kgs)	Harvest	Landed Value	Data Source	Data Quality	Other Data Available	Contact
<u>ARVIAI</u>								
Copperneedle River Sch. V No. : V-20 Location : 61-52N 93-37W Open Season: 01Jun89-31Oct89	Arctic charr	4 500	1 622	\$4 788	STR	+ 10%	Samples	G. Carder
Eskimo Point Area Sch. V No. : V-28 Location : 61-07N 94-04W Open Season: 01Jun89-31Oct89	Arctic charr	4 500	3 705	\$10 617	STR	+ 10%	Samples	G. Carder
Maguse River Sch. V No. : V-45 Location : 61-17N 94-03W Open Season: 01Jun89-31Oct89	Arctic charr	4 500	536	\$1 738	STR	+ 20%	Samples	G. Carder
Sandy Point Sch. V No. : V-66 Location : 61-45N 93-18W Open Season: 01Jun89-31Oct89	Arctic charr	900	679	\$1 789	STR	+ 10%		
<u>BAKER LAKE</u>								
Baker Lake Sch. V No. : V-3 Location : 64-00N 96-00W Open Season: 01Jun89-31Mar90	Lake Whitefish Lake Trout	22 700	NOT FISHED	COMMERCIALLY				
Stony Point Sch. V No. : V-72 Location : 63-54N 92-45W Open Season: 01Jun89-31Oct89	Arctic charr	6 800	850	\$2 397	STR	+ 10%		

TABLE 4A.4 (continued)

EASTERN ARCTIC AREA
KEEWATIN DISTRICT
COMMERCIAL FISHERIES, BY COMMUNITY
1989/90

Community/ Waterbody Information	Species	Quota (rd kgs)	Harvest	Landed Value	Data Source	Data Quality	Other Data Available	Contact
<u>CHESTERFIELD INLET</u>								
Chesterfield Inlet (Fish Bay) Sch. V No. : V-16 Location : 63-18N 90-45W Open Season: 01Jun89-31Oct89	Arctic charr	4 600	5 112	\$14 684	STR	+ 10%	Samples	G. Carder
Merle Harbour Sch. V No. : V-48 Location : 63-42N 91-24W Open Season: 01Jun89-31Oct89	Arctic charr	2 300	91	\$262	STR	+ 20%		
Ranger Seal Bay Sch. V No. : V-63 Location : 63-45N 91-40W Open Season: 01Jun89-31Oct89	Arctic charr	9 100	NOT FISHED					
Robin Hood Bay Sch. V No. : V-65 Location : 63-45N 92-02W Open Season: 01Jun89-31Oct89	Arctic charr	6 800	594	\$1 705	STR	+ 10%		
Steep Bank Bay Sch. V No. : V-71 Location : 63-36N 91-37W Open Season: 01Jun89-31Oct89	Arctic charr	4 500	522	\$1 206	STR	+ 10%		
<u>CHURCHILL</u>								
Churchill River Area Sch. V No. : V-17 Location : 58-47N 94-12W Open Season: 01Jun89-31Oct89	Arctic charr Lake Whitefish Cisco (spp)	500 500 500	300 300 300	\$868 \$868 \$868	FO FO FO	+/- 30% +/- 30% +/- 30%		

TABLE 4A.4 (continued)

EASTERN ARCTIC AREA
KEEWATIN DISTRICT
COMMERCIAL FISHERIES, BY COMMUNITY
1989/90

Community/ Waterbody Information	Species	Quota (rd kgs)	Harvest	Landed Value	Data Source	Data Quality	Other Data Available	Contact
<u>REPULSE BAY</u>								
Bennett Bay, Wager Bay Sch. V No. : V-8 Location : 65-55N 89-40W Open Season: 01Oct89-31Mar90	Arctic charr	2 300	NOT FISHED	COMMERCIALLY				
Brown River Sch. V No. : V-13 Location : 65-55N 90-55W Open Season: 01Jun89-31Mar90	Arctic charr	6 800	NOT FISHED	COMMERCIALLY				
Curtis River (Committee Bay) Sch. V No. : IV-7 Location : 67-12N 87-28W Open Season: 01Oct89-31Mar90	Arctic charr	4 500	181	\$498	FO	+ 20%		
Gore Bay area Sch. V No. : V-34 Location : 66-22N 84-25W Open Season: 01Jun89-31Mar90	Arctic charr	3 600	NOT FISHED	COMMERCIALLY				
Haviland Bay area Sch. V No. : V-37 Location : 66-31N 85-25W Open Season: 01Jun89-31Oct89	Arctic charr	2 300	NOT FISHED	COMMERCIALLY				
Piksimak River (Douglas Harbour) Sch. V No. : V-58 Location : 63-37N 88-25W Open Season: 01Jun89-31Oct89	Arctic charr	2 300	300	\$825	FO	+/- 30%		
Snowbank River Sch. V No. : V-69 Location : 65-54N 86-30W Open Season: 01Oct89-31Mar90	Arctic charr	2 300	NOT FISHED					

TABLE 4A.4 (continued)

EASTERN ARCTIC AREA
KEEWATIN DISTRICT
COMMERCIAL FISHERIES, BY COMMUNITY
1989/90

Community/ Waterbody Information	Species	Quota (rd kgs)	Harvest	Landed Value	Data Source	Data Quality	Other Data Available	Contact
<u>WHALE COVE</u>								
Ferguson River Sch. V No. : V-29 Location : 62-04N 93-20W Open Season: 01Jun89-31Oct89	Arctic charr	13 600	11 412	\$42 274	STR	+ 10%	Samples	G. Carder
Open Season: 01Nov89-31Mar90	Arctic charr	1 300	NOT FISHED					
Mistake Bay Sch. V No. : V-49 Location : 62-10N 92-57W Open Season: 01Jun89-31Oct89	Arctic charr	2 300	NOT FISHED	COMMERCIALY				
Pistol Bay Sch. V No. : V-59 Location : 62-28N 92-44W Open Season: 01Jun89-31Oct89	Arctic charr	2 300	3 010	\$8 682	STR	+ 10%	Samples	G. Carder
Wilson Bay Sch. V No. : V-79 Location : 62-18N 92-53W Open Season: 01Jun89-30Sep89	Arctic charr	7 000	7 179	\$19 018	STR	+/- 10%	Samples	G. Carder
Open Season: 01Oct89-31Mar90	Arctic charr	3 000	NOT FISHED					

TABLE 4A.5

EASTERN ARCTIC AREA
EXPLORATORY FISHERIES
1989/90

Licence Number, Waterbody Name and Location	Species	Gear or Mesh Size	Quota (rd kgs)	Harvest	Landed Value	Data Source	Data Quality	Other Data Available	Contact
TF-89/90-01 Unnamed Lake (Blanford Bay) 63-31N 71-13W	Arctic Charr	140mm	1 000	NOT FISHED					
Unnamed Lake (North of Pritzler Harbour) 62-10N 67-22W	Arctic Charr	140mm	400	NOT FISHED					
Unnamed Lake (Bond Inlet) 62-15N 67-39W	Arctic Charr	140mm	500	NOT FISHED					
Unnamed Lake (East of Gammarus Cove) 61-58N 66-25W	Arctic Charr	140mm	500	NOT FISHED					
TF-89/90-07 Nettilling Lake 66-33N 71-00W	Arctic Charr	140mm	22 700	0	\$ 0				
TF-89/90-08 Tha-Anne River 60-28N 94-40W	Arctic Charr	140mm	1 000	NOT FISHED					
TF-89/90-09 Brown River/Lake 63-57N 94-16W	Arctic Charr Lake Trout Whitefish	140mm	1 000	351 29 70	\$1 270 \$ 0 \$ 0	RRO	+/- 5%		
Unnamed Lake (1) (Cross Bay) 63-47N 93-32W	Arctic Charr	140mm	1 000	2	\$ 0	RRO	+/- 0%		
Unnamed Lake (2) (Cross Bay) 63-43N 93-20W	Arctic Charr	140mm	1 000	NOT FISHED					

TABLE 4A.5 (continued)
EASTERN ARCTIC AREA
EXPLORATORY FISHERIES
1989/90

Licence Number, Waterbody Name and Location	Species	Gear or Mesh Size	Quota (rd kgs)	Harvest	Landed Value	Data Source	Data Quality	Other Data Available	Contact
TF-89/90-09 (continued) Unnamed Lake (3) (Cross Bay) 63-46N 93-15W	Arctic Charr	140mm	1 000	NOT FISHED					
TF-89/90-13 Ferguson River 62-04N 93-20W	Arctic Charr	140mm	13 600	11 412	\$42 274	STR	+ 10%	100 samples	D. Pike
TF-89/90-14 Thompson River (Duke of York Bay) 65-28N 85-16W	Arctic Charr	140mm	8 400	3 763	\$21 600	STR	+ 20%		
TF-89/90-15 Unnamed Lake (Ikipit) 65-26N 67-38W	Arctic Charr	140mm	1 000	850	\$2 805	RRO	+ 10%	100 samples	D. Pike
Unnamed Lake (Qanayutuk) 65-21N 67-32W	Arctic Charr	140mm	1 000	850	\$2 640	RRO	+ 10%	100 samples	D. Pike
TF-89/90-19 Ross Inlet 67-09N 87-16W	Arctic Charr	140mm	2 500	735	\$2 021	STR	+ 20%		
Tasirjueq River 67-04N 84-52W	Arctic Charr	140mm	2 500	1 580	\$4 344	STR	+ 20%		
TF-89/90-20 Unnamed Lake (Iqalualuit) 63-29N 65-05W	Arctic Charr	140mm	900	833	\$2 391	STR	+ 20%		

EASTERN ARCTIC AREA
EXPLORATORY FISHERIES
1989/90

TABLE 4A.5 (continued)

Licence Number, Waterbody Name and Location	Species	Gear or Mesh Size	Quota (rd kgs)	Harvest	Landed Value	Data Source	Data Quality	Other Data Available	Contact
TF-89/90-21 Kipisa Lake 66-33N 67-57W	Arctic Charr	140mm	2 400	2 080	\$6 425	STR	+ 20%		
Opingivik Lake 65-14N 67-22W	Arctic Charr	140mm	1 400	900	\$2 970	RRO	+ 30%		
TF-89/90-23 Ivisarak Lake 70-34N 86-20W	Arctic Charr	140mm	2 000	1 849	\$5 843	STR	+ 20%	catch/effort	D. Pike
Magda River 71-39N 84-37W	Arctic Charr	140mm	2 000	1 964	\$6 375	STR	+ 20%		
Unnamed Lake (Ikikesarjuk) 71-12N 87-22W	Arctic Charr	140mm	1 000	1 126	\$3 557	STR	+ 20%		
TF-89/90-25 Unnamed Lake (Fox Charlie) 68-43N 68-42W	Arctic Charr	140mm	1 000	NOT FISHED					
Unnamed Lake (Subilik) 68-10N 68-00W	Arctic Charr	140mm	500	NOT FISHED					

TABLE 4A.5 (continued)
 EASTERN ARCTIC AREA
 EXPLORATORY FISHERIES
 1989/90

Licence Number, Waterbody Name and Location	Species	Gear or Mesh Size	Quota (rd kgs)	Harvest	Landed Value	Data Source	Data Quality	Other Data Available	Contact
TF-89/90-26 Nauliniavik Lake 65-13N 63-50W	Arctic Charr	140mm	1 500	2 551	\$8 418	STR	+ 20%		
Unnamed Lake (Anaktuayuit) 65-17N 64-05W	Arctic Charr	140mm	1 000	900	\$2 970	STR	+ 20%		
Unnamed Lake (Anguyatutit) 65-05N 63-42W	Arctic Charr	140mm	1 500	3 652	\$12 051	STR	+ 20%		
TF-89/90-27 Unnamed Lake (Qasigiyut) 64-37N 66-19W	Arctic Charr	140mm	1 000	1 014	\$3 345	STR	+ 20%		
TF-89/90-28 Unnamed Lake (Iyaravung) 66-43N 67-48W	Arctic Charr	140mm	1 400	995	\$3 285	STR	+ 20%		
Unlicensed ^a Nedlukseak Fiord 67-50N 66-30W	Arctic Charr	139mm	--	108	--	RRO	+ 5%	100 samples	D. Pike

^a a fishery within a National Park, therefore not licensed by DFO

TABLE 4A.6

EASTERN ARCTIC AREA
EXPLORATORY MARINE FISHERIES
1989/90

Licence Number, Waterbody Name and Location	Species	Gear or Mesh Size	Quota (rd kgs)	Harvest	Landed Value	Data Source	Data Quality	Other Data Available	Contact
EF-89/90-01 Cumberland Sound	Scallops	drags	100 000	8 000	\$8 000	FO	+/- 20%		
EF-89/90-02 Cumberland Sound	Turbot Shrimp	longlines traps	10 000 5 000	7 5	\$0 \$0	FO FO	+/- 50% +/- 50%	2 samples 100 samples	D. Pike D. Pike
Unnamed Lake	Atlantic Cod	jigs	1 500	200	\$200	FO	+/- 20%	100 samples	D. Pike
EF-89/90-03 Frobisher Bay	Shrimp Scallops Turbot Atlantic Cod	traps drags longlines jigs	5 000 5 000 5 000 5 000	0 0 0 0	\$0 \$0 \$0 \$0	FO FO FO FO		Effort Effort Effort Effort	D. Pike D. Pike D. Pike D. Pike
EF-89/90-04 Admiralty Inlet	Clams	Clam Dredge	5 000	170	\$212	FO	+/- 20%	Samples CPUE	D. Pike
EF-89/90-05 East Baffin Coast Clyde Area	Turbot	Long Lines	10 000	200	\$165	FO	+/- 30%	CPUE	D. Pike
EF-89/90-06 Cumberland Sound	Turbot	Long Lines	300 000	255 000	\$382 500	STR	+/- 10%	250 samples CPUE	D. Pike
EF-89/90-07 Frobisher Bay	Turbot	Long Lines	10 000	0	\$0	FO		Effort	D. Pike
EF-89/90-08 East Baffin Coast Broughton Island Area	Turbot	Long Lines	10 000	5	\$0	RRO	+/- 20%		
EF-5600-17 Hudson Strait	Shrimp	traps	250 000	0	\$0	FO		Awaiting report	

Table 4A.7

Eastern Arctic Area
Commercial Fishing License Sales, by Community
1989/90

Community	Resident		Non-resident		Total	
	Licenses Sold	Fishermen	Licenses Sold	Fishermen	Licenses Sold	Fishermen
Allen Island	2	1	0	0	2	1
Arctic Bay	42	33	0	0	42	33
Arviat	172	90	0	0	172	90
Baker Lake	27	20	0	0	27	20
Broughton Island	12	12	0	0	12	12
Cape Dorset	6	6	0	0	6	6
Chesterfield Inlet	24	21	0	0	24	21
Churchill	0	0	16	16	16	16
Clyde	9	9	0	0	9	9
Coral Harbour	17	17	0	0	17	17
Hall Beach	20	18	0	0	20	18
Igloolik	15	11	0	0	15	11
Iqaluit	7	4	0	0	7	4
Pangnirtung	99	77	0	0	99	77
Pond Inlet	18	17	0	0	18	17
Rankin Inlet	23	21	0	0	23	21
Repulse Bay	18	13	0	0	18	13
Resolute Bay	1	1	0	0	1	1
Whale Cove	53	38	0	0	53	38
Total	565	425	16	16	581	441

B. MARINE MAMMAL HARVESTS

Table 4B.1

Eastern Arctic Area
Marine Mammal Harvests,
by Region and Species, 1989/90

Region	Beluga	Narwhal	Walrus
High Arctic	52	285	167
South Baffin/ Hudson Strait	128	40	49
West Hudson Bay	248	16	70
East Hudson Bay	19	0	5
Total	447	341	291

Table 4B.2

Eastern Arctic Area
Marine Mammal Harvests,
by Community and Species, 1989/90

Region/Community	Species	Number Landed	Data Source	Data Quality	Years with Reported Harvest used in FYA
<u>High Arctic</u>					
Arctic Bay	Beluga	3	FYA	0 - 13	1983-87
	Narwhal	99	TAG	+ 10%	
	Walrus	1	FYA	0 - 2	1984-88
Broughton Island	Beluga	0	RRO	n/a	
	Narwhal	46	TAG	+ 10%	
	Walrus	15	RRO	+ 50%	
Clyde	Beluga	0	RRO	n/a	
	Narwhal	36	TAG	+ 10%	
	Walrus	0	RRO	n/a	

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Table 4B.2 (continued) Eastern Arctic Area
Marine Mammal Harvest,
by Community and Species, 1989/90

Region/Community	Species	Number Landed	Data Source	Data Quality	Years with Reported Harvest used in FYA
<u>High Arctic (continued)</u>					
Cresswell Bay	Beluga	9	FYA	0 - 20	1984-88
	Narwhal	19	TAG	+ 50%	- includes Resolute Bay harvest
	Walrus	0	-	n/a	- no historical data
Grise Fiord	Beluga	8	FO	+ 10%	
	Narwhal	5	TAG	+ 10%	
	Walrus	7	FYA	4 - 10	1983, 1985-88
Hall Beach	Beluga	11	RRO	1 - 21	1984-88
	Narwhal	3	TAG	+ 10%	
	Walrus	74	FYA	26 - 100	1984-88
Igloolik	Beluga	8	RRO	+ 50%	
	Narwhal	0	TAG	n/a	
	Walrus	63	RRO	+ 100%	
Pond Inlet	Beluga	1	RRO	+ 300%	
	Narwhal	77	TAG	+ 10%	
	Walrus	3	RRO	+ 100%	
Resolute Bay	Beluga	12	RRO	+ 50%	
	Narwhal	0	TAG	n/a	- see Cresswell Bay
	Walrus	4	RRO	+ 100%	
<u>South Baffin/Hudson Strait</u>					
Cape Dorset	Beluga	18	FYA	2 - 46	1983, 1985-88
	Narwhal	0	TAG	n/a	
	Walrus	24	FYA	4 - 59	1982-85, 1987
Iqaluit	Beluga	40	FO	+ 10	
	Narwhal	0	TAG	n/a	
	Walrus	8	FO	+ 300%	
Lake Harbour	Beluga	28	RRO	+ 10	
	Narwhal	0	TAG	n/a	
	Walrus	9	RRO	+ 50	
Pangnirtung	Beluga	42	RRO	+ 10	
	Narwhal	40	TAG	+ 50%	
	Walrus	8	RRO	+ 50	

. . . continued

Table 4B.2 (continued) Eastern Arctic Area
Marine Mammal Harvest,
by Community and Species, 1989/90

Region/Community	Species	Number Landed	Data Source	Data Quality	Years with Reported Harvest used in FYA
<u>West Hudson Bay</u>					
Arviat	Beluga	70	FYA	61 - 85	1983-87
	Narwhal	0	TAG	n/a	
	Walrus	0	FYA	0 - 1	1983-87
Chesterfield Inlet	Beluga	20	FYA	5 - 34	1983-87
	Narwhal	0	TAG	n/a	
	Walrus	9	FYA	0 - 20	1982-86
Churchill	Beluga ^a	4	FO	+/- 0	
	Narwhal	0	TAG	n/a	
	Walrus	0	FYA	0	never harvested
Coral Harbour	Beluga	67	FYA	29 - 116	1983-87
	Narwhal	0	TAG	n/a	
	Walrus	45	FYA	34 - 67	1983-87
Rankin Inlet	Beluga	40	FYA	30 - 69	1983-87
	Narwhal	0	TAG	n/a	
	Walrus	5	FYA	0 - 15	1983-87
Repulse Bay	Beluga	20	FYA	3 - 30	1983-87
	Narwhal	16	TAG	+ 20%	
	Walrus	11	FYA	5 - 18	1983-87
Whale Cove	Beluga	27	FO	+/- 20%	
	Narwhal	0	TAG	n/a	
	Walrus	0	FYA	0 - 2	1983-87
<u>Eastern Hudson Bay</u>					
Sanikiluaq	Beluga	19	FYA	5 - 28	1983-87
	Narwhal	0	TAG	n/a	
	Walrus	5	FYA	1 - 10	1983-87

^a includes live capture of beluga

n/a = not applicable

APPENDIX 1
FINAL PAYMENTS

The Freshwater Fish Marketing Corporations usually makes a final payment to fishermen in November or December following the end of the fiscal year (April 30). The final payments vary from year to year, depending on the marketed value the FFMC received for each species. The prices at which the FFMC is able to market fish are set largely by world fish markets as approximately 80% of the FFMC's sales are exports.

The following table shows the final payments made for the species harvested in the Northwest Territories for the past five years.

Freshwater Fish Marketing Corporation
Final Payments
by Species and Fiscal Year
(\$ per round equivalent kg)

Species	1985/86	1986/87	1987/88	1988/89	1989/90
Whitefish					
Export	0.13	0.06	0.37	0.40	0.23
Continental	0.13	0.06	--	--	--
Smoker	0.13	--	--	0.40	--
Walleye	0.67	1.98	2.22	0.44	0
Lake Trout	0	0	0.22	0	0
Northern Pike	0.31	0.62	0.43	0.31	0.07
Arctic Charr	0.11	0.96	3.01	1.13	0.31
Inconnu	0.20	0.46	0.69	0.47	0
Burbot	--	0	0	--	--
Mullet (suckers)	--	--	--	0	--

-- no sales

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