Data from the Commercial Fishery for Arctic Charr, *Salvelinus alpinus* (L.), in the Cambridge Bay, District of Keewatin and Igloolik Areas, Northwest Territories, 1989-1990.

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by

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ABSTRACT

Carder, G.W. 1991. Data from the commercial fishery for Arctic charr, Salvelinus alpinus (L.), in the Cambridge Bay, District of Keewatin and Igloolik areas, Northwest Territories, 1989-1990. Can. Data Rep. Fish. Aquat. Sci. 848: vi + 40 p.

Biological samples from Arctic charr commercial fisheries were collected during 1989 and 1990. Samples were taken from Ekalluk River, Ellice River, Halovik River, Jayco River, Lauchlan River, and Paliryuak River in the Cambridge Bay area; from Gifford River, Kukaluk River and Ravn River in the Igloolik area; and from Arviat, Baker Foreland, Chesterfield Inlet (Fish Bay), Copperneedle River, Corbett Inlet, Ferguson River, Maguse River, Pistol Bay, Rankin Inlet and Wilson Bay in the District of Keewatin. Quotas and harvest information from these areas are presented as well.

Key words: Catch composition; catch statistics; commercial fishing; exploitation; fishery management; monitoring.

RESUME

Carder, G.W. 1991. Data from the commercial fishery for Arctic charr, Salvelinus alpinus (L.), in the Cambridge Bay, District of Keewatin and Igloolik areas, Northwest Territories, 1989-1990. Can. Data Rep. Fish. Aquat. Sci. 848: vi + 40 p.

Des échantillons biologiques provenant de la pêche commerciale à l'omble arctique ont été recueillis en 1989 et en 1990. Les échantillons ont été recueillis dans les rivières Ekalluk, Ellice, Halovik, Jayco, Lauchlan et Paliryuak dans la région de Cambridge Bay, dans les rivières Gifford, Kukaluk et Ravn dans la région d'Igloolik ainsi qu'à Arviat, à la pointe Baker, à Chesterfield Inlet (Fish Bay), dans la rivière Copperneedle, dans la baie Corbett, dans la rivière Ferguson, à Maguse River, dans la baie Pistol, à Rankin Inlet et dans la baie Wilson dans le district du Keewatin. De l'information sur les contingents et la récolte dans ces régions est également présentée.

Mots-clés: composition de la récolte; statistiques sur la récolte; pêche commerciale; exploitation; gestion des pêches; surveillance.

INTRODUCTION

The Department of Fisheries and Oceans (DFO) has monitored the commercial fishery at Cambridge Bay, Northwest Territories (NWT) since 1971 (Kristofferson and Carder 1980; Carder 1981, 1983, 1988; Carder and Low 1985; Carder and Stewart 1989) and in the District of Keewatin, Northwest Territories since 1972 (Carder 1983, 1988; Carder and Peet 1983; Carder and Low 1985; Carder and Stewart 1989; MacDonell 1989). During 1990, biological data were collected from the Gifford, Kukaluk and Ravn rivers in the Igloolik area.

Information collected from biological samples taken from commercial fisheries in the Cambridge Bay, District of Keewatin and Igloolik areas were used to assess the status of anadromous Arctic charr stocks. Biological data obtained during 1989 and 1990 are presented in this report. Quotas and harvest statistics are presented as well.

MATERIALS AND METHODS

THE FISHERIES

The early history of the Cambridge Bay fishery is described by Barlishen and Webber (1973) and the District of Keewatin commercial fishery by Carder and Peet (1983). More recent data and a description of the Cambridge Bay area can be found in Kristofferson and Carder (1980); Carder (1981, 1983, 1988); Carder and Low (1985); Carder and Stewart (1989). Similar information for the District of Keewatin area can be found in Carder (1983, 1988); Carder and Peet (1983); Carder and Low (1985); Carder and Stewart (1989); MacDonell (1989) and Yonge (1987a, 1987b).

Commercial data from the Igloolik commercial fishery over the years has been limited. Historical and recent information on quotas and production figures from this area can be found in Yaremchuk et al. (1989). Various exploratory fisheries have been conducted in the area over the years. Information collected from exploratory fishery programs have been used to determine the feasibility of commercial fishing in specific waterbodies and has been used for determining various quota allocations. Data collected from exploratory fisheries conducted in the Igloolik area are found in Kroeker (1985); McGowan (1985, 1989) and Kristofferson and McGowan (1981).

The Cambridge Bay and District of Keewatin fisheries were sampled during summer and the Igloolik fisheries during winter. Fisheries that occur during open water periods of the year are called summer fisheries and fisheries that occur during ice-covered periods are called winter fisheries.

Arctic charr are caught primarily by gillnets with a mesh size of 139 mm, stretched measure. During 1989 and 1990 Jayco River was fished using a fish weir (saputit) (Carder 1981; Kristofferson et al. 1986). Fishing locations are shown in Fig. 1, 2, 3 and 4.

SAMPLING PROGRAM

Sampling methods for the Cambridge Bay and Keewatin fisheries are described in Kristofferson and Carder (1980) and Carder and Peet (1983). Fish from the Cambridge Bay fisheries in 1989 and 1990 were sampled during the following months:

River	Month	River	Month
Ekalluk R.	August	Lauchlan R.	July
Halovik R.	July	Ellice R.	August
Paliryuak R.	July	Jayco R.	August and September

Fish from the 1989 and 1990 Keewatin fisheries were sampled during August and early September. Igloolik fisheries took place during February, 1990 and were sampled at the Freshwater Fish Marketing Corporation in Winnipeg during March of 1990.

Fish were randomly sampled for fork length (± 1mm) and dressed weight (± 50 g). Sagittal otoliths were taken and stored dry in coin envelopes. In the laboratory they were ground on a fine carborundum stone and placed in benzyl benzoate for clearing before being read under a binocular dissecting microscope (30X). A reflecting light source against a black background was used to highlight the annual growth zones which were counted to determine the age. The method of aging followed Grainger (1953), as in past years.

DATA ANALYSIS

Data were analyzed using a Micro Vax II computer. The Statistical Analysis System (SAS 1985) was used to generate length, weight, age, sex and stage of maturity summaries and to perform basic calculation and statistical analysis.

Relative condition factor (K) was calculated using the formula:

$$K = \frac{W \times 10^5}{L^3}$$

where:

W = round weight in grams
L = fork length in millimetres

RESULTS

Quotas and harvest data are shown in Table 1. A summary of length, weight and age data from all commercial fisheries sampled during 1989 and 1990 are presented in Table 2. Biological data are presented in Tables 3 to 60. All tables of length data designate the lower boundary of the length interval (e.g. 450 indicates length interval 450 - 499 mm).

ACKNOWLEDGMENTS

The author wishes to thank the commercial fishermen of the Arviat, Cambridge Bay, Chesterfield Inlet, Igloolik, Rankin Inlet and Whale Cove areas and also the staff of Kakivak Fisher Foods, Arviat; Ikaluktutiak Cooperative Ltd, Cambridge Bay; Iqalukpik Fish Plant, Chesterfield Inlet; and Issatik Food Plant, Rankin Inlet.

Summer field assistance at Cambridge Bay was provided by K. Seto (1989) and S. Gray (1990). Summer field assistance at Rankin Inlet was provided by Johnny Ittinuar (1989-90), L. Ittinuar (1989-90), J. Tattuinee (1989) and D. Watson (1990). Assistance in Igloolik was provided by T. Ikkumaq and members of the Hunters and Trappers Association.

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REFERENCES

Barlishen, W.J., and T.N. Webber. 1973. A history of the development of commercial fishing in the Cambridge Bay area of the Northwest Territories. Unpublished report for the Federal-Territorial Task Force Report on Fisheries Development in the Northwest Territories. 37 p. (copy in the Freshwater Institute library)

Carder, G.W. 1981. Data from the commercial fishery for Arctic charr, Salvelinus alpinus (Linnaeus), in the Cambridge Bay Area, Northwest Territories, 1979-80. Can. Data Rep. Fish. Aquat. Sci. 284: v + 22 p.

Carder, G.W. 1983. Data from the commercial fishery for Arctic charr, Salvelinus alpinus (Linnaeus), in the Cambridge Bay and Rankin Inlet areas, Northwest Territories, 1981-82. Can. Data Rep. Fish. Aquat. Sci. 391: v + 24 p.

Carder, G.W. 1988. Data from the commercial fishery for Arctic charr, Salvelinus alpinus (L.), in the Northwest Territories, 1985-86. Can. Data Rep. Fish. Aquat. Sci. 681: v + 35 p.

Carder, G.W., and G. Low. 1985. Data from the commercial fishery for Arctic charr, Salvelinus alpinus (Linnaeus), in the Cambridge Bay and Rankin Inlet areas, Northwest Territories, 1983-84. Can. Data Rep. Fish. Aquat. Sci. 519: v + 26 p.

Carder, G.W., and R.F. Peet. 1983. Data from the commercial fishery for Arctic char, Salvelinus alpinus (Linnaeus), in the district of Keewatin, Northwest Territories, 1973-1981. Can. Data Rep. Fish. Aquat. Sci. 357: vii + 65 p.

Carder, G.W., and D.B. Stewart. 1989. Data from the commercial fishery for Arctic charr, Salvelinus alpinus (L.), in the central and Keewatin regions of the Northwest Territories, 1987-88. Can. Data Rep. Fish. Aquat. Sci. 766: vi + 47 p.

Grainger, E.H. 1953. On the age, growth, migration, reproductive potential and feeding habits of the Arctic char (Salvelinus alpinus) of Frobisher Bay, Baffin Island. J. Fish. Res. Board Can. 10(6): 326-370.

Kristofferson, A.H., and G.W. Carder. 1980. Data from the commercial fishery for Arctic charr, Salvelinus alpinus (Linnaeus), in the Cambridge Bay area, Northwest Territories, 1971-78. Can. Data Rep. Fish. Aquat. Sci. 184: v + 25 p.

Kristofferson, A.H., and D.K. McGowan. 1981. Data on Arctic charr, Salvelinus alpinus (Linnaeus), collected from test fisheries in the Baffin Region, Northwest Territories, 1975-1979. Can. Data Rep. Fish. Aquat. Sci. 255: vi + 43 p.

Kristofferson, A.H., D.K. McGowan, and W.J. Ward. 1986. Fish weirs for the commercial harvest of searun Arctic charr in the Northwest Territories. Can. Ind. Rep. Fish. Aquat. Sci. 174: iv + 31 p.

Kroeker, K. 1985. Steensby Inlet test fishery 1985 final report. North/South Consultants Inc. Winnipeg, MB for Department of Fisheries and Oceans. viii + 94 p.

McGowan, D.K. 1985. Data from test fisheries conducted in the Baffin and Central Arctic Regions, Northwest Territories, 1980-84. Can. Data Rep. Fish. Aquat. Sci. 531: v + 68 p.

McGowan, D.K. 1989. Data from test fisheries conducted in the Northwest Territories, 1985-88. Can. Data Rep. Fish. Aquat. Sci. 756: vi + 121 p.

MacDonell, D.S. 1989. Report on the 1989 tagging and sampling program for Arctic char near Arviat and the Maguse River, N.W.T. North/South Consultants Inc. Winnipeg, MB for Department of Fisheries and Oceans. vi + 62 p.

SAS INSTITUTE INC. 1985. SAS user's guide: basics Version 5 Edition. SAS Institute Inc. Cary, NC. 1290 p.

Yaremchuk, G.C.B., M.M. Roberge, D.K. McGowan, G.W. Carder, B. Wong, and C.J.Read. 1989. Commercial harvests of major fish species from the Northwest Territories, 1945 to 1987. Can. Data Rep. Fish. Aquat. Sci. 751: iv + 129 p.

Yonge, L. 1987a. Analysis of the economic performance of the commercial fishery at Eskimo Point, NWT, summer season 1987. Report prepared for the Department of Economic Development and Tourism, Government of the Northwest Territories. 13 p. (copy in the Freshwater Institute library)

Yonge, L. 1987b. An economic analysis of the 1987 Whale Cove commercial char fishery. Report prepared for the Department of Economic Development and Tourism, Government of the Northwest Territories. 35 p. (copy in the Freshwater Institute Library)

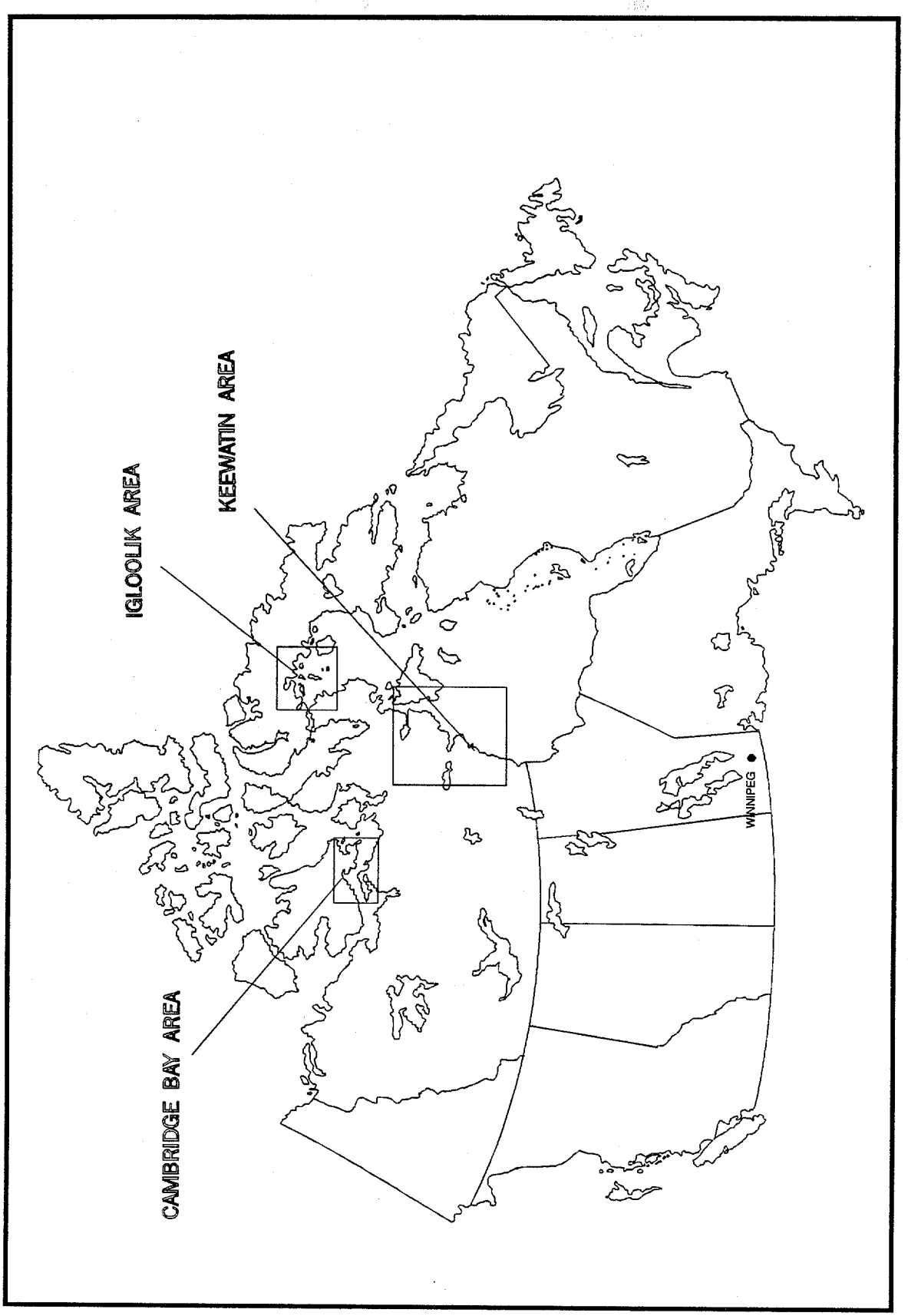

Fig. 1. Map of Canada showing commercial fishing areas for anadromous Arctic charr referred to in this report.

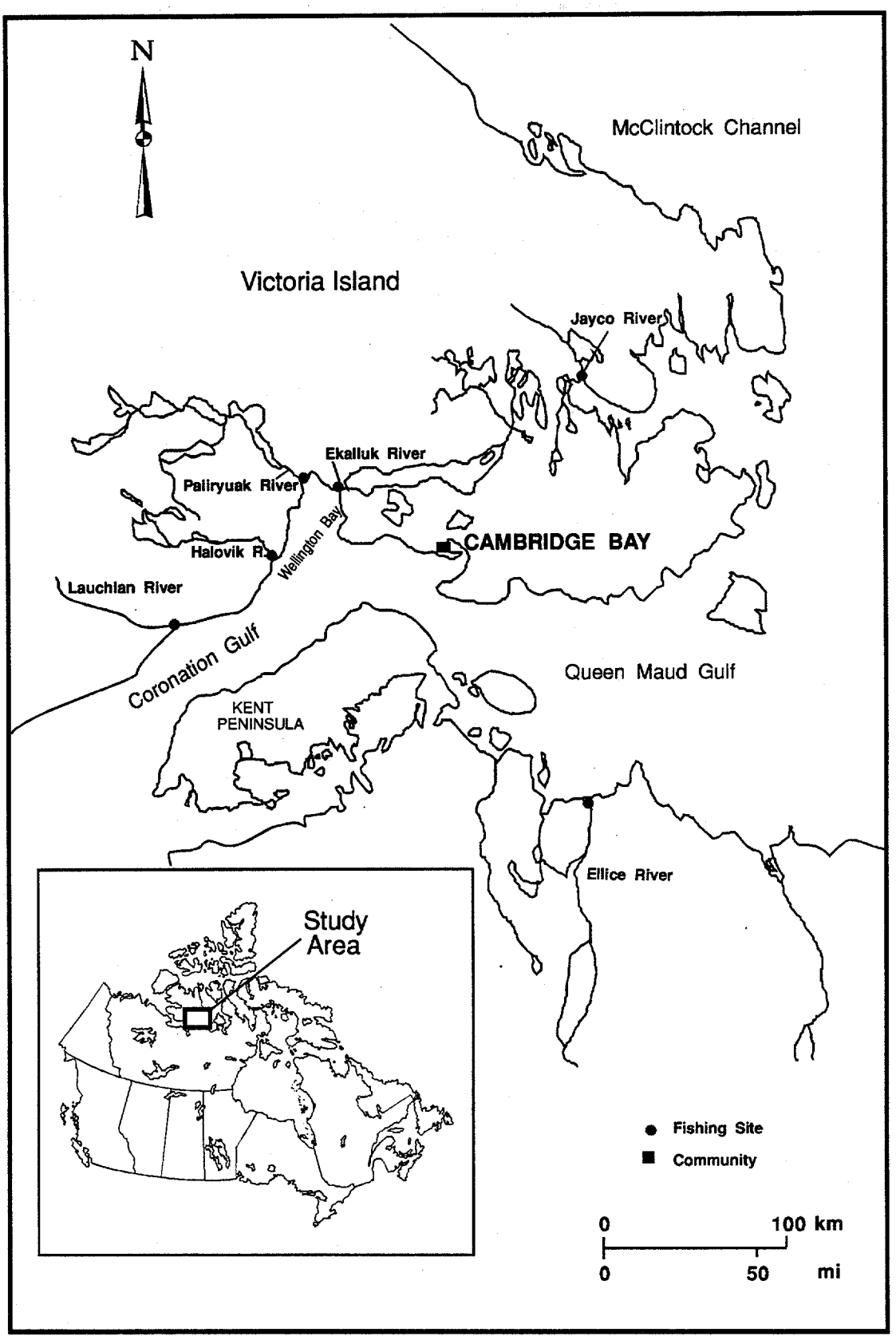

Fig. 2. Map of the Cambridge Bay area showing commercial fishing sites.

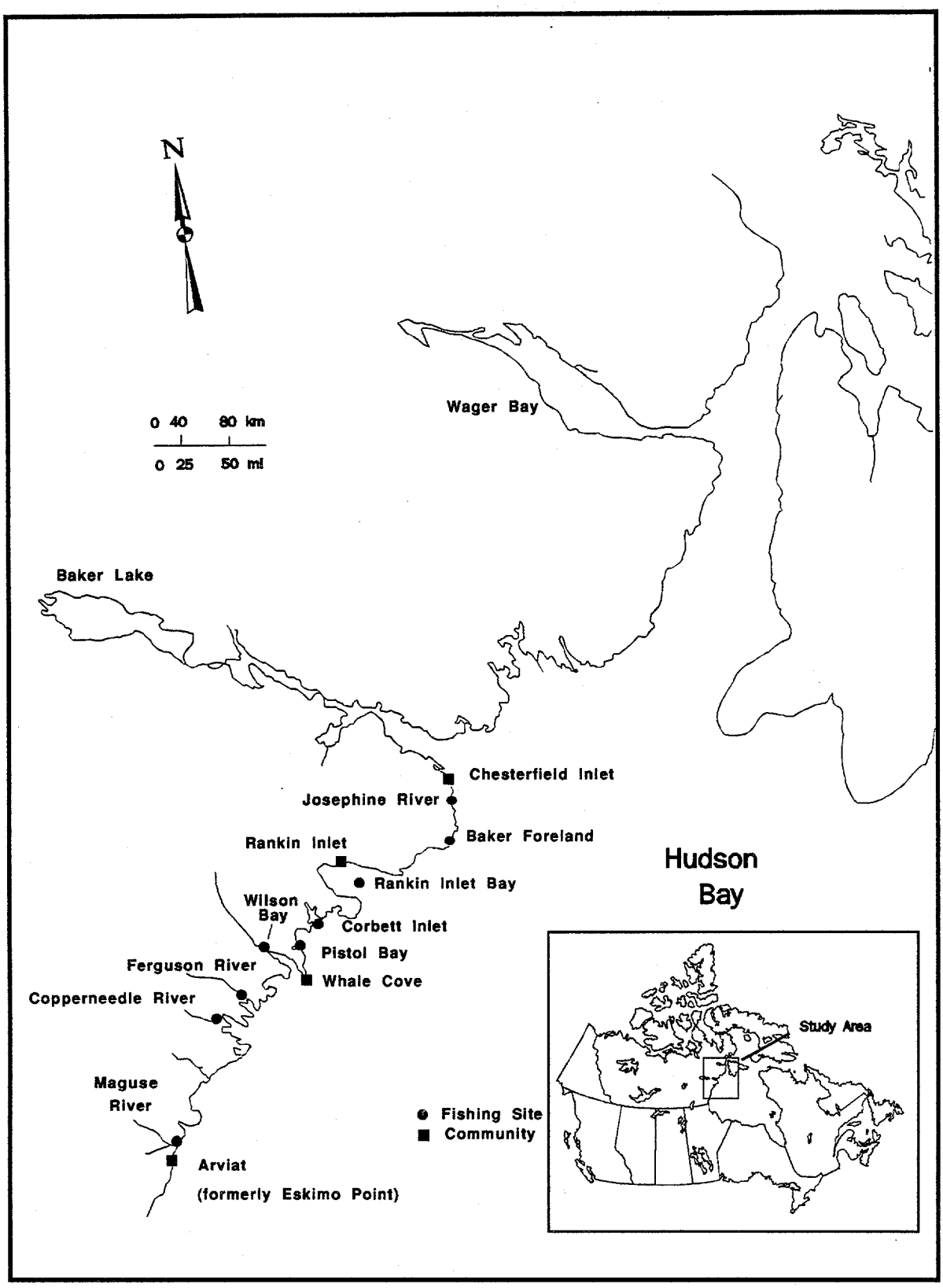

Fig. 3. Map of the District of Keewatin showing commercial fishing sites.

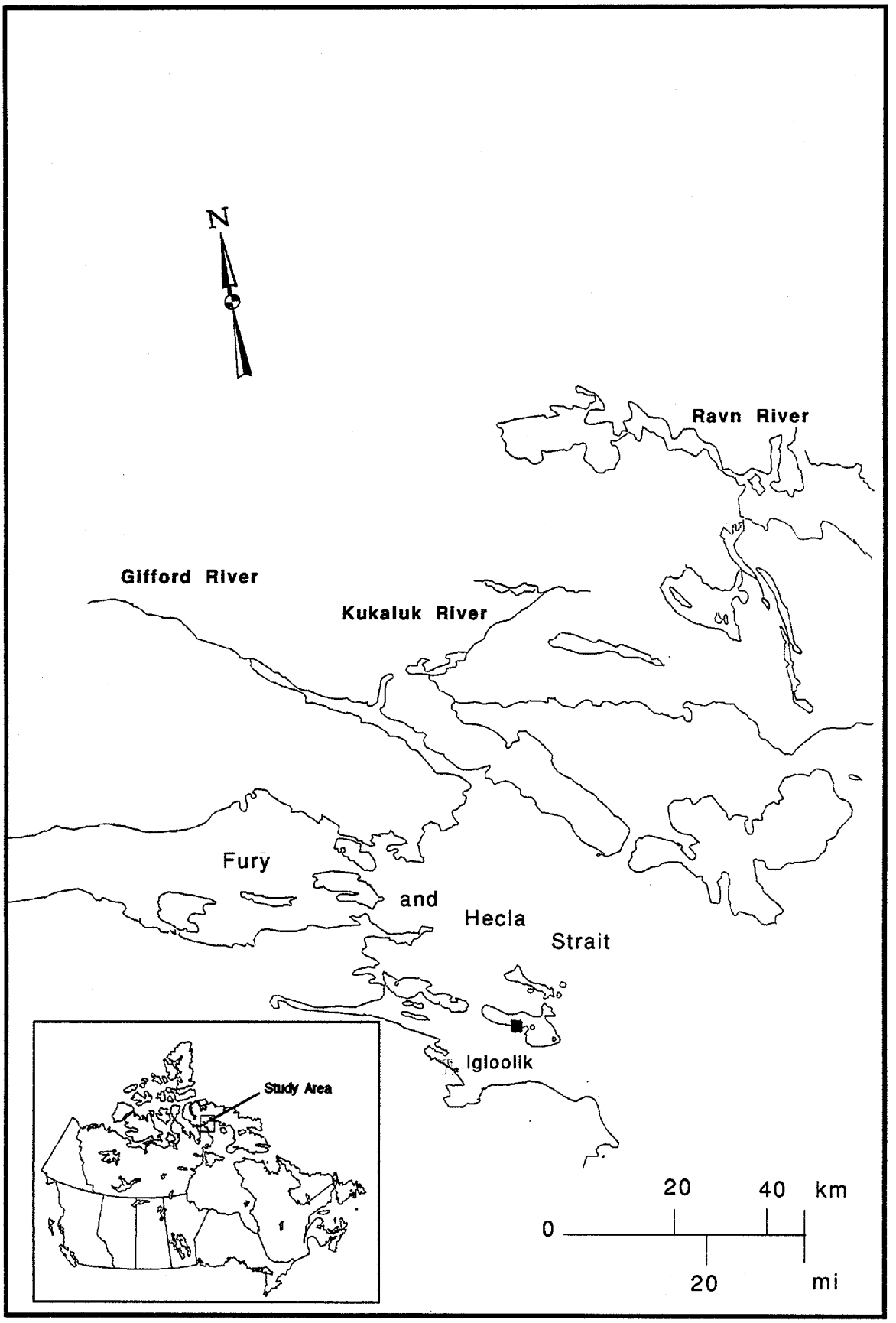

Fig. 4. Map of the Igloolik area showing commercial fishing sites.

Table 1. Annual commercial quotas and harvest of anadromous Arctic charr by fishery sampled in the Northwest Territories during 1989 and 1990.

	Quota (kg) 1989 and 1990	Production (kg) 1989	Production (kg) 1990
Cambridge Bay Area			
Ekalluk River	14 500	13 565[1] (10 852)[2]	15 294 (12 235)
Paliryuak River (Surrey River)	9 100	9 176 (7 341)	9 318 (7 454)
Halovik River (30 Mile)	6 800	6 857 (5 486)	6 971 (5 577)
Lauchlan River (Byron Bay)	9 100	9 184 (7 347)	8 938 (7 150)
Ellice River	6 000	5 969 (4 775)	6 371 (5 097)
Jayco River	13 600	12 866 (10 293)	12 865 (10 292)
Keewatin Area[3]			
Chesterfield Inlet (Fish Bay)	4 500	5 122 (4 454)	1 943 (1 690)
Baker Foreland	4 600	4 772 (4 150)	1 689 (1 469)
Rankin Inlet	9 100	Closed	Closed
Corbett Inlet	4 500	4 439 (3 860)	835 (726)
Pistol Bay	2 300	3 010 (2 617)	1 312 (1 141)
Wilson Bay	7 000[4] (summer) 8 000[5]	7 179 (6 243)	8 103 (7 046)
	3 000[4] (winter) 2 000[5]	Nil	Nil

Table 1. Continued.

	Quota (kg) 1989 and 1990	Production (kg) 1989	Production (kg) 1990
Ferguson River	13 600	11 412 (9 923)	8 452 (7 350)
Copperneedle River	4 500	1 622 (1 410)	3 023 (2 629)
Maguse River	4 500	536 (466)	386 (336)
Arviat	4 500	3 705 (3 222)	294 (256)
Igloolik Area[3]			
Gifford River	3 600	3 632 (3 158)	3 600 (3 130)
Kukaluk River	3 600	3 600 (3 130)	3 600 (3 130)
Ravn River	9 100	4 836 (4 205)	8 500 (7 391)

1 Round weight calculated using a dressed weight to round weight conversion factor of 1.25 (includes estimate of culls).

2 Dressed weight (viscera and gills removed).

3 Round weight calculated using a dressed weight to round weight conversion factor of 1.15 (does not include restimate of culls).

4 Quota during 1989 fishing period.

5 Quota during 1990 fishing period.

Table 2. Summary of biological data from samples of anadromous Arctic charr commercial fisheries, 1989-1990.

Location	Year	Sample Size	Mean			Range		
			FL (mm)	DRWT[1](g)	AGE (yr)	FL (mm)	DRWT (g)	AGE (yr)
Ekalluk River	1989	209	645	3203	13.6	484 - 859	1200 - 7500	9 - 21
	1990	240	621	2596	12.7	481 - 806	1145 - 5605	8 - 20
Paliryuak River	1989	208	666	2852	14.6	548 - 862	1350 - 6500	10 - 23
	1990	210	658	2801	13.2	507 - 815	1250 - 4750	10 - 18
Halovik River	1989	210	668	2957	14.6	500 - 805	1150 - 5150	10 - 21
Lauchlan River	1989	210	673	2807	14.6	528 - 840	1300 - 5150	10 - 22
	1990	104	702	3100	13.9	523 - 828	1250 - 4750	10 - 21
Ellice River	1989	210	626	3216	11.1	497 - 802	1650 - 6900	8 - 18
	1990	208	657	3359	10.9	481 - 810	1240 - 6600	8 - 15
Jayco River	1989	210	628	2517	16.5	480 - 787	1050 - 5000	10 - 26
	1990	210	658	2750	16.1	502 - 772	1160 - 4910	10 - 23
Chesterfield Inlet	1989	160	589	2123	10.9	468 - 755	1050 - 4700	8 - 15
Fish Bay)	1990	137	587	2332	9.9	498 - 820	1200 - 6050	7 - 15
Baker Foreland	1989	158	597	2439	10.2	510 - 738	1450 - 4600	8 - 14
	1990	157	603	2376	10.0	488 - 760	1250 - 4300	7 - 14
Rankin Inlet Bay	1989	70	601	2882 (rd)[2]	9.6	514 - 774	1900 - 6100 (rd)	7 - 12
	1990	82	605	3003 (rd)	9.8	505 - 770	1808 - 5300 (rd)	7 - 12
Corbett Inlet	1989	106	603	2603	9.9	495 - 740	1400 - 5300	7 - 13
	1990	75	598	2594	9.1	490 - 740	1400 - 4650	6 - 12
Pistol Bay	1989	62	602	2420	10.1	505 - 705	1450 - 3900	7 - 12
Wilson Bay	1989	95	605	2426	10.5	497 - 720	1250 - 4400	8 - 14
	1990	199	616	2842	9.8	511 - 790	1600 - 6700	6 - 14

2. Continued.

Location	Year	Sample Size	Mean			Range		
			FL (mm)	DRWT[1](g)	AGE (yr)	FL (mm)	DRWT (g)	AGE (yr)
Ferguson River	1989	111	623	2809	10.7	520 - 810	1550 - 5050	8 - 16
	1990	202	641	3180	10.5	490 - 795	1450 - 5900	7 - 13
Copperneedle River	1990	212	602	2702	9.2	445 - 790	1100 - 6050	6 - 13
Arviat	1989[3]	115	623	2472	9.6	445 - 772	700 - 5775	5 - 12
	1990	79	581	2462	8.3	415 - 781	850 - 5700	6 - 12
Maguse River	1989[3]	57	606	2450	9.4	469 - 750	1075 - 4900	5 - 13
Gifford River	1990	146	666	3193	18.7	474 - 901	916 - 7887	13 - 25
Kukaluk River	1990	102	640	2802	19.6	470 - 847	950 - 6550	13 - 28
Ravn River	1990	166	630	2637	19.4	506 - 808	1073 - 4656	10 - 27

[1] DRWT = dressed weight (gills and viscera removed)

[2] rd = round weight (gills and viscera not removed)

[3] = data from MacDonell (1989).

Table 3. Age composition of Arctic charr taken by the commercial fishery at Ekalluk River, 1989.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
9	7	4	535	35	1821	359
10	10	6	550	30	2005	473
11	10	6	590	41	2470	753
12	22	13	591	53	2402	667
13	29	18	640	45	3034	759
14	31	19	646	33	3147	579
15	30	18	664	40	3483	708
16	10	6	723	76	4695	1796
17	6	4	670	41	3375	639
18	6	4	746	81	4925	1520
19	2	1	810	59	4825	460
20	1	1	782	-	4550	-
21	1	1	805	-	6150	-
TOTAL	165					
MEAN			640	71	3136	1122
MEAN AGE	13.6					

Table 4. Length composition of Arctic charr taken by the commercial fishery at Ekalluk River, 1989.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
450	1	0	484	1200	-
500	14	7	524	1686	260
550	42	20	574	2195	261
600	58	28	627	2830	384
650	54	26	674	3508	527
700	20	10	719	4325	437
750	15	7	769	5357	699
800	3	1	815	6733	693
850	2	1	855	5875	1025
TOTAL	209				
MEAN			645	3203	1155

Table 5. Age composition of Arctic charr taken by the commercial fishery at Ekalluk River, 1990.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
8	1	0	578	-	1795	-
9	7	3	554	38	1808	401
10	28	13	575	42	2051	532
11	30	14	592	38	2215	479
12	40	19	605	40	2357	543
13	32	15	620	45	2587	648
14	29	14	655	48	2999	760
15	21	10	664	55	3297	906
16	12	6	645	63	2862	798
17	6	3	708	83	3484	1230
18	2	1	799	1	4573	880
20	2	1	654	35	2695	134
TOTAL	210					
MEAN			620	60	2578	807
MEAN AGE	12.7					

Table 6. Length composition of Arctic charr taken by the commercial fishery at Ekalluk River, 1990.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
450	2	1	490	1210	92
500	21	9	534	1583	132
550	72	30	575	1981	267
600	74	31	622	2549	247
650	46	19	673	3235	355
700	15	6	717	3924	324
750	9	4	773	4779	597
800	1	0	806	5360	-
TOTAL	240				
MEAN			621	2596	839

Table 7. Age composition of Arctic charr taken by the commercial fishery at Paliryuak River, 1989.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
10	1	1	600	-	2050	-
11	2	1	595	60	2000	636
12	15	10	625	33	2373	495
13	23	15	637	33	2550	470
14	35	23	659	38	2824	564
15	39	25	682	51	3106	786
16	24	16	682	49	3017	583
17	8	5	709	36	3431	723
18	1	1	709	-	2550	-
19	4	3	705	33	3088	582
20	1	1	764	-	3600	-
23	1	1	649	-	2600	-
TOTAL	154					
MEAN			665	49	2865	676
MEAN AGE	14.6					

Table 8. Length composition of Arctic charr taken by the commercial fishery at Paliryuak River, 1989.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
500	2	1	548	1400	71
550	17	8	583	1915	140
600	58	28	625	2348	260
650	81	39	672	2913	353
700	38	18	723	3553	614
750	9	4	768	4067	614
800	2	1	811	3825	35
850	1	0	862	6500	-
TOTAL	208				
MEAN			666	2852	737

Table 9. Age composition of Arctic charr taken by the commercial fishery at Paliryuak River, 1990.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
10	9	6	614	44	2253	527
11	22	15	618	49	2569	735
12	16	11	641	31	2638	407
13	33	22	662	39	2870	496
14	37	25	667	39	2847	614
15	19	13	674	39	2849	545
16	4	3	696	56	3369	896
17	3	2	696	41	3200	755
18	4	3	700	64	3113	887
TOTAL	147					
MEAN			656	47	2780	616
MEAN AGE	13.2					

Table 10. Length composition of Arctic charr taken by the commercial fishery at Paliryuak River, 1990.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
500	3	1	523	1333	144
550	18	9	584	2211	585
600	71	34	627	2427	237
650	77	37	672	2901	306
700	33	16	721	3483	504
750	7	3	756	4257	457
800	1	0	815	3850	-
TOTAL	210				
MEAN			658	2801	623

Table 11. Age composition of Arctic charr taken by the commercial fishery at Halovik River, 1989.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
10	2	1	553	67	1450	424
11	3	2	567	73	1817	797
12	13	8	613	31	2385	726
13	30	20	652	43	2828	579
14	33	22	666	39	2944	526
15	36	24	671	39	2956	625
16	13	8	700	29	3346	513
17	9	6	701	54	3511	804
18	4	3	716	79	3288	696
19	5	3	740	44	3750	497
20	4	3	753	40	4338	685
21	1	1	740	-	4000	-
TOTAL	153					
MEAN			668	54	2981	736
MEAN AGE	14.6					

Table 12. Length composition of Arctic charr taken by the commercial fishery at Halovik River, 1989.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
500	3	1	515	1267	202
550	12	6	585	1913	221
600	71	34	629	2455	341
650	58	28	673	3003	301
700	53	25	718	3604	408
750	12	6	765	4238	705
800	1	0	805	3900	-
TOTAL	210				
MEAN			668	2957	727

Table 13. Age composition of Arctic charr taken by the commercial fishery at Lauchlan River, 1989.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
10	1	1	528	-	1350	-
11	2	1	626	21	2225	247
12	14	9	622	39	2314	453
13	35	23	637	34	2547	507
14	32	21	662	45	2833	647
15	30	19	655	44	2700	613
16	17	11	687	56	2959	702
17	8	5	735	30	3519	501
18	7	5	747	40	3329	703
19	5	3	730	73	3410	739
20	1	1	770	-	4250	-
21	1	1	709	-	2400	-
22	1	1	742	-	3300	-
TOTAL	154					
MEAN			664	56	2778	675
MEAN AGE	14.6					

Table 14. Length composition of Arctic charr taken by the commercial fishery at Lauchlan River, 1989.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
500	2	1	531	1325	35
550	14	7	588	2004	340
600	69	33	627	2382	237
650	59	28	672	2831	371
700	43	20	726	3276	569
750	21	10	772	3738	667
800	2	1	820	4000	354
TOTAL	210				
MEAN			673	2807	665

Table 15. Age composition of Arctic charr taken by the commercial fishery at Lauchlan River, 1990.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
10	3	4	619	20	2300	361
11	3	4	638	12	2650	100
12	14	20	667	37	2879	440
13	15	22	694	40	3257	600
14	11	16	688	32	2864	484
15	11	16	701	51	3159	803
16	3	4	745	44	3417	506
17	5	7	719	52	2920	574
18	1	1	715	-	2800	-
19	1	1	822	-	4100	-
20	1	1	828	-	3650	-
21	1	1	760	-	3700	-
TOTAL	69					
MEAN			692	51	3034	601
MEAN AGE	13.9					

Table 16. Length composition of Arctic charr taken by the commercial fishery at Lauchlan River, 1990.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
500	1	1	523	1250	-
600	22	21	633	2464	266
650	29	28	675	2874	405
700	25	24	721	3272	509
750	23	22	770	3780	554
800	4	4	813	3713	452
TOTAL	104				
MEAN			702	3100	671

Table 17. Age composition of Arctic charr taken by the commercial fishery at Ellice River, 1989.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
8	5	3	558	32	2250	545
9	24	15	563	32	2217	375
10	32	19	599	35	2777	607
11	41	25	631	55	3307	832
12	38	23	664	55	3870	1097
13	13	8	676	67	4196	1477
14	5	3	673	71	3950	1272
15	4	2	670	55	4038	1013
17	1	1	700	-	3900	-
18	2	1	754	54	4875	1096
TOTAL	165					
MEAN			628	64	3273	1103
MEAN AGE	11.1					

Table 18. Length composition of Arctic charr taken by the commercial fishery at Ellice River, 1989.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
450	1	0	497	1650	-
500	16	8	536	2059	365
550	63	30	576	2467	526
600	61	29	622	3002	305
650	40	19	673	3894	526
700	23	11	722	4752	590
750	5	2	778	6170	577
800	1	0	802	6200	-
TOTAL	210				
MEAN			626	3216	1053

Table 19. Age composition of Arctic charr taken by the commercial fishery at Ellice River, 1990.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
8	3	2	547	58	1925	594
9	14	8	602	19	2417	261
10	51	30	623	33	2838	480
11	52	30	662	48	3425	967
12	35	20	704	59	4249	1190
13	10	6	698	37	3908	538
14	5	3	728	58	4627	1141
15	2	1	748	13	4473	95
TOTAL	172					
MEAN			657	59	3386	1056
MEAN AGE	10.9					

Table 20. Length composition of Arctic charr taken by the commercial fishery at Ellice River, 1990.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
450	1	0	481	1240	-
500	3	1	541	2143	713
550	22	11	581	2213	223
600	85	41	624	2767	295
650	43	21	674	3530	578
700	40	19	719	4394	442
750	11	5	772	5561	701
800	3	1	804	6133	387
TOTAL	208				
MEAN			657	3359	1041

Table 21. Age composition of Arctic charr taken by the commercial fishery at Jayco River, 1989.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
10	1	1	480	-	1050	-
11	2	1	586	32	1950	354
12	2	1	554	37	1725	530
13	5	3	579	22	1850	423
14	26	17	600	49	2231	587
15	30	20	617	43	2472	618
16	16	11	633	34	2625	550
17	26	17	639	46	2585	770
18	8	5	645	39	2681	541
19	8	5	648	49	2850	731
20	10	7	661	57	2980	899
21	7	5	675	53	3057	935
22	5	3	640	35	2620	740
23	2	1	648	32	2725	247
26	1	1	703	-	2750	-
TOTAL	149					
MEAN			626	51	2522	712
MEAN AGE	16.5					

Table 22. Length composition of Arctic charr taken by the commercial fishery at Jayco River, 1989.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
450	1	0	480	1050	-
500	10	5	531	1525	243
550	47	22	576	1898	285
600	73	35	623	2364	298
650	66	31	670	3026	400
700	11	5	712	3705	520
750	2	1	777	4975	35
TOTAL	210				
MEAN			628	2517	692

Table 23. Age composition of Arctic charr taken by the commercial fishery at Jayco River, 1990.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
10	1	1	571	-	1650	-
11	1	1	577	-	2055	-
12	7	5	617	43	2226	418
13	8	6	642	69	2991	481
14	14	10	646	50	2673	664
15	26	19	649	44	2685	588
16	28	21	663	58	2948	852
17	17	13	659	60	2928	815
18	14	10	691	44	3195	790
19	4	3	653	107	2683	1506
20	5	4	688	93	3081	1444
21	6	4	674	78	2643	793
22	1	1	725	-	3740	-
23	2	1	596	47	1655	276
TOTAL	134					
MEAN			656	59	2810	804
MEAN AGE	16.1					

Table 24. Length composition of Arctic charr taken by the commercial fishery at Jayco River, 1990.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
500	6	3	527	1874	436
550	26	12	575	1823	485
600	61	29	627	2307	319
650	64	30	674	2912	482
700	40	19	720	3459	538
750	13	6	761	4106	516
TOTAL	210				
MEAN			658	2750	778

Table 25. Age composition of Arctic charr taken by the commercial fishery at Chesterfield Inlet (Fish Bay), 1989.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
8	4	3	515	44	1400	354
9	12	10	555	27	1846	278
10	35	28	579	34	1957	400
11	37	30	603	51	2331	670
12	25	20	595	40	2126	398
13	8	6	618	68	2531	977
14	2	2	653	25	2750	71
15	2	2	632	33	2600	283
TOTAL	125					
MEAN			590	48	2133	579
MEAN AGE	10.9					

Table 26. Length composition of Arctic charr taken by the commercial fishery at Chesterfield Inlet (Fish Bay), 1989.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
450	2	1	478	1125	106
500	32	20	536	1581	138
550	71	44	575	1936	177
600	34	21	620	2407	297
650	19	12	667	3087	291
700	1	1	725	4250	-
750	1	1	755	4700	-
TOTAL	160				
MEAN			589	2123	575

Table 27. Age composition of Arctic charr taken by the commercial fishery at Chesterfield Inlet (Fish Bay), 1990.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
7	4	4	541	25	1988	266
8	12	11	551	35	1975	447
9	26	24	567	40	2142	496
10	33	30	593	32	2447	459
11	23	21	607	47	2530	748
12	4	4	576	20	1950	158
13	5	5	639	28	2850	526
14	1	1	820	-	6050	-
15	1	1	670	-	2750	-
TOTAL	109					
MEAN			587	49	2359	673
MEAN AGE	9.9					

Table 28. Length composition of Arctic charr taken by the commercial fishery at Chesterfield Inlet (Fish Bay), 1990.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
450	1	1	498	1550	-
500	28	20	532	1770	226
550	60	44	573	2143	282
600	33	24	616	2632	405
650	13	9	673	3262	466
700	1	1	715	4500	-
800	1	1	820	6050	-
TOTAL	137				
MEAN			587	2332	654

Table 29. Age composition of Arctic charr taken by the commercial fishery at Baker Foreland, 1989.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
8	6	5	571	24	2100	200
9	33	26	575	32	2209	406
10	43	34	610	43	2633	573
11	29	23	604	47	2484	615
12	13	10	611	45	2492	531
13	2	2	647	69	3125	1308
14	2	2	622	62	2650	849
TOTAL	128					
MEAN			599	44	2459	567
MEAN AGE	10.2					

Table 30. Length composition of Arctic charr taken by the commercial fishery at Baker Foreland, 1989.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
500	22	14	538	1877	298
550	75	47	578	2201	188
600	36	23	618	2669	272
650	19	12	664	3182	505
700	6	4	711	3750	622
TOTAL	158				
MEAN			597	2439	550

Table 31. Age composition of Arctic charr taken by the commercial fishery at Baker Foreland, 1990.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
7	2	2	565	42	2225	389
8	12	9	577	29	2071	298
9	27	21	583	37	2257	423
10	52	41	597	36	2319	444
11	20	16	640	54	2825	765
12	12	9	629	37	2521	432
13	2	2	615	81	2475	1025
14	1	1	682	-	3100	-
TOTAL	128					
MEAN			602	45	2388	537
MEAN AGE	10.0					

Table 32. Length composition of Arctic charr taken by the commercial fishery at Baker Foreland, 1990.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
450	1	1	488	1400	-
500	14	9	534	1750	227
550	65	41	578	2048	235
600	52	33	619	2541	305
650	20	13	670	3140	381
700	4	3	713	3788	170
750	1	1	760	3900	-
TOTAL	157				
MEAN			603	2376	558

Table 33. Age composition of Arctic charr taken by test gillnet (139 mm) at Rankin Inlet, 1989.

AGE (YR)	MALES N	%	LENGTH(MM) MEAN	LENGTH(MM) SD	WEIGHT(G) MEAN	WEIGHT(G) SD	K	FEMALES N	%	LENGTH(MM) MEAN	LENGTH(MM) SD	WEIGHT(G) MEAN	WEIGHT(G) SD	K	COMBINED N	%	LENGTH(MM) MEAN	LENGTH(MM) SD	WEIGHT(G) MEAN	WEIGHT(G) SD	K	% FEMALE
7	1	3	560	-	2200	-	1.25	-	-	-	-	-	-	-	1	2	560	-	2200	-	1.25	-
8	1	3	517	-	1900	-	1.37	3	12	543	26	2217	257	1.39	4	7	536	25	2138	263	1.38	75
9	19	56	592	27	2792	367	1.34	9	35	573	21	2372	313	1.26	28	47	586	27	2657	399	1.32	32
10	7	21	633	68	3486	1206	1.34	8	31	610	28	2788	422	1.22	15	25	621	50	3113	918	1.27	53
11	5	15	678	56	4030	1173	1.26	5	19	610	38	2900	674	1.26	10	17	644	58	3465	1081	1.26	50
12	1	3	743	-	5500	-	1.34	1	4	610	-	2500	-	1.10	2	3	677	94	4000	2121	1.22	50
TOTAL	34							26							60							
MEAN			614	59	3153	981	1.33			590	35	2588	474	1.25			604	51	2908	844	1.30	43
MEAN AGE		9.5								9.7							9.6					

Table 34. Length composition of Arctic charr taken by test gillnet (139 mm) at Rankin Inlet, 1989.

LENGTH INTERVAL (MM)	MALES N	%	LENGTH(MM) MEAN	WEIGHT(G) MEAN	WEIGHT(G) SD	K	FEMALES N	%	LENGTH(MM) MEAN	WEIGHT(G) MEAN	WEIGHT(G) SD	K	COMBINED N	%	LENGTH(MM) MEAN	WEIGHT(G) MEAN	WEIGHT(G) SD	K	% FEMALE
500	4	10	527	2013	131	1.37	2	6	528	2025	35	1.38	6	9	527	2017	103	1.38	33
550	15	38	579	2623	227	1.35	16	52	569	2322	278	1.26	31	44	573	2468	294	1.30	52
600	14	36	621	3121	242	1.30	11	35	619	2905	220	1.23	25	36	620	3026	253	1.27	44
650	2	5	667	3900	424	1.31	2	6	666	3900	71	1.32	4	6	667	3900	248	1.32	50
700	3	8	736	5267	208	1.33	-	-	-	-	-	-	3	4	736	5267	208	1.33	-
750	1	3	774	6100	-	1.32	-	-	-	-	-	-	1	1	774	6100	-	1.32	-
TOTAL	39						31						70						
MEAN			610	3097	950	1.33			590	2611	515	1.26			601	2882	820	1.30	44

Table 35. Age composition of Arctic charr taken by test gillnet (139mm) at Rankin Inlet, 1990.

AGE	MALES							FEMALES							COMBINED							
			LENGTH(MM)		WEIGHT(G)					LENGTH(MM)		WEIGHT(G)					LENGTH(MM)		WEIGHT(G)			%
(YR)	N	%	MEAN	SD	MEAN	SD	K	N	%	MEAN	SD	MEAN	SD	K	N	%	MEAN	SD	MEAN	SD	K	FEMALE
7	1	4	525	-	2107	-	1.46	-	-	-	-	-	-	-	2	3	523	4	1979	182	1.39	-
8	9	35	547	30	2399	387	1.46	2	8	557	47	2448	798	1.39	13	19	553	30	2407	392	1.42	18
9	5	19	604	45	2780	641	1.25	4	15	575	10	2328	153	1.23	12	18	582	39	2509	498	1.26	44
10	4	15	574	47	2838	780	1.48	11	42	607	25	2963	565	1.32	21	31	605	34	3012	580	1.35	73
11	2	8	654	153	3649	1966	1.26	5	19	635	35	3220	606	1.25	8	12	649	69	3544	1059	1.27	71
12	5	19	698	51	4190	1007	1.22	4	15	638	26	3523	965	1.33	12	18	658	50	3795	918	1.33	44
TOTAL	26							26							68							
MEAN			599	76	2969	998	1.36			608	36	2961	690	1.30			603	57	2978	846	1.34	50
MEAN AGE		9.5								10.2							9.8					

Table 36. Length composition of Arctic charr taken by test gillnet (139mm) at Rankin Inlet, 1990.

LENGTH	MALES						FEMALES						COMBINED						
INTERVAL			LENGTH(MM)	WEIGHT(G)				LENGTH(MM)	WEIGHT(G)					LENGTH(MM)	WEIGHT(G)			%
(MM)	N	%	MEAN	MEAN	SD	K	N	%	MEAN	MEAN	SD	K	N	%	MEAN	MEAN	SD	K	FEMALE
500	12	39	530	2165	229	1.45	2	7	524	2001	165	1.39	17	21	529	2113	215	1.43	14
550	5	16	582	2758	397	1.40	11	37	578	2559	553	1.32	21	26	580	2704	613	1.38	69
600	6	19	616	3246	309	1.39	14	47	627	3295	504	1.33	30	37	626	3218	403	1.31	70
650	5	16	669	3463	278	1.16	3	10	663	3742	548	1.28	9	11	665	3577	364	1.21	38
700	1	3	726	5231	-	1.37	-	-	-	-	-	-	3	4	727	4810	505	1.26	-
750	2	6	766	5170	185	1.15	-	-	-	-	-	-	2	2	766	5170	185	1.15	-
TOTAL	31						30						82						
MEAN			599	2972	940	1.36			606	2984	694	1.33			605	3003	812	1.34	49

Table 37. Age composition of Arctic charr taken by the commercial fishery at Corbett Inlet, 1989.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
7	2	2	496	1	1450	71
8	8	9	552	35	2031	370
9	27	29	591	44	2472	530
10	23	24	613	53	2754	756
11	26	28	614	39	2735	552
12	6	6	645	50	2925	514
13	2	2	620	28	2475	389
TOTAL	94					
MEAN			602	50	2584	633
MEAN AGE	9.9					

Table 38. Length composition of Arctic charr taken by the commercial fishery at Corbett Inlet, 1989.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
450	2	2	496	1450	71
500	15	14	529	1817	183
550	25	24	578	2300	276
600	53	50	621	2732	244
650	7	7	672	3621	459
700	4	4	729	4538	688
TOTAL	106				
MEAN			603	2603	658

Table 39. Age composition of Arctic charr taken by the commercial fishery at Corbett Inlet, 1990.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
6	3	6	501	12	1533	153
7	4	9	527	31	1750	108
8	11	23	573	22	2455	551
9	6	13	579	37	2292	427
10	17	36	607	35	2556	472
11	4	9	704	57	3850	1244
12	2	4	660	11	2975	460
TOTAL	47					
MEAN			592	58	2493	746
MEAN AGE	9.1					

Table 40. Length composition of Arctic charr taken by the commercial fishery at Corbett Inlet, 1990.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
450	3	4	493	1517	126
500	12	16	533	1929	317
550	27	36	578	2398	378
600	19	25	620	2666	453
650	10	13	671	3355	593
700	4	5	727	4475	166
TOTAL	75				
MEAN			598	2594	750

Table 41. Age composition of Arctic charr taken by the commercial fishery at Pistol Bay, 1989.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
7	1	2	505	-	1550	-
8	2	4	593	40	2200	141
9	13	23	576	48	2250	666
10	20	35	607	41	2450	521
11	14	25	617	49	2568	527
12	7	12	621	26	2493	197
TOTAL	57					
MEAN			602	46	2414	533
MEAN AGE	10.1					

Table 42. Length composition of Arctic charr taken by the commercial fishery at Pistol Bay, 1989.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
500	8	13	529	1663	200
550	20	32	573	2120	234
600	25	40	624	2602	233
650	8	13	669	3231	394
700	1	2	705	3450	-
TOTAL	62				
MEAN			602	2420	532

Table 43. Age composition of Arctic charr taken by the commercial fishery at Wilson Bay, 1989.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
8	2	3	551	62	2050	495
9	15	21	570	38	2080	479
10	18	25	601	38	2403	595
11	24	33	620	38	2560	451
12	9	12	625	34	2589	451
13	4	5	663	32	3088	596
14	1	1	720	-	3800	-
TOTAL	73					
MEAN			607	46	2458	567
MEAN AGE	10.5					

Table 44. Length composition of arctic charr taken by the commercial fishery at Wilson Bay, 1989.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
450	1	1	497	1250	-
500	11	12	537	1764	147
550	31	33	577	2113	188
600	35	37	620	2577	270
650	14	15	668	3007	350
700	3	3	707	4017	333
TOTAL	95				
MEAN			605	2426	545

Table 45. Age composition of Arctic charr taken by the commercial fishery at Wilson Bay, 1990.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
6	1	1	511	-	1700	-
7	6	4	558	25	2100	394
8	19	13	576	33	2289	353
9	36	26	599	30	2621	478
10	33	23	615	31	2720	522
11	35	25	637	41	3097	758
12	8	6	668	52	3531	820
13	1	1	700	-	4300	-
14	2	1	758	18	5400	566
TOTAL	141					
MEAN			613	48	2792	746
MEAN AGE	9.8					

Table 46. Length composition of Arctic charr taken by the commercial fishery at Wilson Bay, 1990.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
500	14	7	537	1836	173
550	64	32	578	2344	255
600	74	37	619	2814	428
650	36	18	672	3565	601
700	7	4	720	4621	666
750	4	2	774	5225	1031
TOTAL	199				
MEAN			616	2842	811

Table 47. Age composiition of Arctic charr taken by the commercial fishery at Ferguson River, 1989.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
8	1	1	523	-	1750	-
9	19	21	591	40	2424	481
10	21	23	594	33	2538	432
11	31	34	630	44	2926	664
12	15	16	659	47	3133	506
13	1	1	740	-	4250	-
14	3	3	707	86	3767	1251
16	1	1	650	-	2750	-
TOTAL	92					
MEAN			621	53	2795	664
MEAN AGE	10.7					

Table 48. Length composition of Arctic charr taken by the commercial fishery at Ferguson River, 1989.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
500	7	6	530	1729	138
550	32	29	579	2309	207
600	44	40	623	2777	256
650	17	15	667	3315	288
700	9	8	725	4144	450
750	1	1	785	5050	-
800	1	1	810	4950	-
TOTAL	111				
MEAN			623	2809	697

Table 49. Age composition of Arctic charr taken by the commercial fishery at Ferguson River, 1990.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
7	4	3	541	58	2050	813
8	10	7	575	39	2420	491
9	15	10	601	41	2637	611
10	33	22	637	48	3171	622
11	56	38	650	48	3233	688
12	26	18	686	55	3738	895
13	3	2	710	5	4483	480
TOTAL	147					
MEAN			642	59	3186	815
MEAN AGE	10.5					

Table 50. Length composition of Arctic charr taken by the commercial fishery at Ferguson River, 1990.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
450	1	0	490	1450	-
500	8	4	533	1906	186
550	41	20	578	2406	272
600	70	35	624	2899	351
650	44	22	671	3513	382
700	27	13	720	4259	409
750	11	5	770	4959	551
TOTAL	202				
MEAN			641	3180	842

Table 51. Age composition of Arctic charr taken by the commercial fishery at Copperneedle River, 1990.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
6	3	2	507	54	1717	601
7	29	18	553	37	2043	395
8	36	23	582	39	2418	547
9	20	13	605	37	2778	489
10	30	19	612	41	2880	624
11	29	18	642	52	3100	700
12	9	6	645	50	3394	1124
13	4	3	742	54	4613	1272
TOTAL	160					
MEAN			602	58	2702	805
MEAN AGE	9.2					

Table 52. Length composition of Arctic charr taken by the commercial fishery at Copperneedle River, 1990.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
400	1	0	445	1100	-
450	1	0	494	1400	-
500	33	16	531	1870	205
550	72	34	573	2307	256
600	65	31	620	2899	371
650	29	14	670	3516	461
700	8	4	724	4513	682
750	3	1	777	5333	660
TOTAL	212				
MEAN			602	2702	791

Table 53. Age composition of Arctic charr taken by the commercial fishery at Arviat, 1990.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
6	5	8	517	29	1860	435
7	20	31	551	29	2108	287
8	20	31	571	34	2410	423
9	3	5	591	56	2450	312
10	5	8	626	46	2890	868
11	7	11	639	66	3071	983
12	4	6	718	80	3913	1322
TOTAL	64					
MEAN			582	63	2478	759
MEAN AGE	8.3					

Table 54. Length composition of Arctic charr taken by the commercial fishery at Arviat, 1990.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
400	1	1	415	850	-
450	3	4	487	1550	100
500	20	25	528	1960	401
550	34	43	575	2347	180
600	13	16	628	2904	264
650	4	5	675	3438	686
750	4	5	769	4625	893
TOTAL	79				
MEAN			581	2462	755

Table 55. Age composition of Arctic charr taken by the commercial fishery at Gifford River, 1990.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
13	2	2	561	26	1697	278
14	8	7	568	33	2015	387
15	9	8	594	39	2172	432
16	13	12	578	25	2092	488
17	11	10	651	56	2753	778
18	11	10	655	86	3049	1335
19	4	4	726	11	3851	515
20	16	14	691	76	3577	1080
21	17	15	731	84	4151	1604
22	12	11	743	77	4370	1286
23	5	5	774	48	4631	749
24	2	2	723	4	4200	141
25	1	1	665	-	3150	-
TOTAL	111					
MEAN			668	90	3247	1351
MEAN AGE	18.7					

Table 56. Length composition of Arctic charr taken by the commercial fiishery at Gifford River, 1990.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
450	2	1	478	1058	201
500	7	5	534	1663	240
550	25	17	576	1973	214
600	33	23	618	2480	318
650	24	16	673	3074	495
700	30	21	725	3877	394
750	17	12	779	4948	593
800	7	5	821	5603	768
900	1	1	901	7887	-
TOTAL	146				
MEAN			666	3193	1268

Table 57. Age composition of Arctic charr taken by the commercial fishery at Kukaluk River, 1990.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
13	1	1	542	-	1600	-
14	4	5	592	48	2200	612
15	1	1	501	-	1500	-
16	9	11	563	27	1911	257
17	5	6	571	56	2060	599
18	10	12	642	88	2970	1403
19	11	13	654	68	2941	871
20	9	11	633	52	2522	554
21	15	18	702	83	3617	1477
22	6	7	712	71	3667	1172
23	5	6	668	45	2960	411
24	2	2	719	56	3825	742
25	3	4	675	44	3217	611
28	2	2	657	15	2700	424
TOTAL	83					
MEAN			645	80	2866	1120
MEAN AGE	19.6					

Table 58. Length composition of Arctic charr taken by the commercial fishery at Kukaluk River, 1990.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
450	1	1	470	950	-
500	12	12	532	1592	144
550	19	19	571	2005	288
600	28	27	626	2505	280
650	20	20	675	3048	319
700	12	12	719	3708	523
750	5	5	765	4670	344
800	5	5	823	5740	789
TOTAL	102				
MEAN			640	2802	1085

Table 59. Age composition of Arctic charr taken by the commercial fishery at Ravn River, 1990.

AGE (YR)	NO.	PERCENT	FORK LENGTH(MM) MEAN	FORK LENGTH(MM) SD	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
10	1	1	586	-	2352	-
12	1	1	563	-	1895	-
13	1	1	576	-	1987	-
14	4	4	558	25	1917	346
15	3	3	590	43	2150	427
16	6	5	589	21	2106	154
17	12	11	617	35	2466	378
18	10	9	606	47	2416	621
19	18	16	624	57	2655	703
20	18	16	617	38	2522	373
21	13	12	646	59	2857	716
22	12	11	662	45	3017	501
23	4	4	637	47	2624	698
24	3	3	628	69	2584	911
25	2	2	713	41	3469	522
26	1	1	727	-	4450	-
27	2	2	699	30	3225	177
TOTAL	111					
MEAN			625	53	2607	627
MEAN AGE	19.4					

Table 60. Length composition of Arctic charr taken by the commercial fishery at Ravn River, 1990.

LENGTH INTERVAL (MM)	NO.	PERCENT	MEAN FORK LENGTH(MM)	DRESSED WEIGHT(G) MEAN	DRESSED WEIGHT(G) SD
500	9	5	530	1698	553
550	44	27	578	2054	155
600	63	38	626	2592	234
650	31	19	675	3113	335
700	16	10	723	3710	394
750	2	1	770	4145	213
800	1	1	808	4656	-
TOTAL	166				
MEAN			630	2637	650