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A Review of the Nass River Test Fishery Biological Program for 1989

D.R. Southgate, B. Spilsted and L. Jantz

Field Services Branch
Department of Fisheries and Oceans
Prince Rupert, B.C. V8J 1G8

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Fisheries
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Pêches
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Canada

Canadian Data Report of Fisheries and Aquatic Sciences

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TEST FISHERY BIOLOGICAL PROGRAM
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by

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ABSTRACT

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Southgate, D.R., B. Spilsted and A.L. Jantz, 1990. A Review of the Nass River test fishery biological program for 1989. Can. Data Rep. Fish. Aquat. Sci. 805: iii + 73p.

Information relating to the Nass River gillnet test fishery program for 1989 is presented in this report. Daily catch of all salmon species (Oncorhynchus sp.) and steelhead trout (Oncorhynchus mykiss) are detailed by set along with age, sex and length data for sockeye and length, sex and flesh colour data for chinook salmon.

Set times and duration, position in tide cycle, weather and water conditions and water temperature are presented as well. Daily index calculations are tabulated for sockeye and chinook along with escapement estimates for sockeye. In addition, the historical relationships between the annual test fishery index for sockeye and the actual escapement count from the spawning grounds is presented.

RÉSUMÉ

Southgate, D.R., B. Spilsted and A.L. Jantz, 1990. A Review of the Nass River test fishery biological program for 1989. Can. Data Rep. Fish. Aquat. Sci. 805: iii + 73p.

Ce rapport donne des renseignements au sujet du programme de pêche expérimentale au filet maillant mis en oeuvre dans la rivière Nass. Les auteurs précisent les captures quotidiennes de toutes les espèces de saumon (Oncorhynchus sp.) et de truite arc-en-ciel (Oncorhynchus mykiss) par mouillage ainsi que l'âge, la sexe et la longueur des saumons rouges et la longueur, la sexe et la couleur de la chair des saumons quinnats.

Le moment et la durée des mouillages, la position des filets en fonction de la marée, les conditions météorologiques et hydrologiques et la température de l'eau sont également fournis. Le rapport résume des calculs d'indice quotidien pour les saumons rouges et quinnats et estime l'échappée chez les saumons rouges. En outre, il présente les relations historiques entre l'indice annuel de pêche expérimentale du saumon rouge et le véritable dénombrement de géniteurs ayant remonté vers les frayères.

1.0 INTRODUCTION

The Nass River test fishery has been operated annually since 1963, with little change from the original program. The test fishery occurs on the lower Nass River near Monkley Creek, approximately 16 km from the commercial fishing boundary near Kincolith (Fig. 1 and 2). The site is locally referred to as Monkley Dump. Alternate test sites were examined in 1969 but with unfavorable results (Dickson and Vroom, 1970).

The test fishery program provides a daily estimate of the sockeye escapement into the Nass River. This estimate is in the form of a daily index of abundance. It is expressed as a catch per 1,000 fathom-minutes of fishing time, which standardizes catches for daily variability in time fished and length of net used (Henry, 1961).

The data obtained from this operation combined with estimates of the commercial catch in Area 3 provide an indication of the sockeye run size on a daily basis. The ability to approximate the escapement on a daily basis as soon as it has passed through the gauntlet of fisheries is an extremely valuable aid to the precise regulation of the fishery (Todd and Dickson, 1970). Although daily escapement estimates are not calculated for the other species of salmon, the relative abundance and timing of chinook salmon is determined by comparing daily calculated indices throughout the season. This report documents the information collected during the 1989 test fishery program.

2.0 METHODS

The Department of Fisheries and Oceans chartered the North Roamer, a 35 ft. wooden gillnet fishing vessel to conduct the Nass River test fishery for the 1989 season. The charter was obtained following the standard contractual arrangements as outlined in Appendix 1. The test fishery operated from June 2nd to August 16th.

2.1 DRIFT AREA

Daily sets or "drifts" are made only on low slackwater tides. Low tide at the test fishery site usually occurs four to five hours after the low tide listed in the tide book for Prince Rupert Harbour. The 1989 Prince Rupert Harbour tide table can be referred to in Appendix 2. The final decision as to the exact time when slackwater occurs and the corresponding set is made is left to the discretion of the test fisherman. Two sets of approximately 15 minutes in duration are made during each low slackwater tide, with the second occurring immediately after the first. For each 24 hour period, there are 2 low slackwater tides. Therefore, four sets are made each day. Exact times of all drifts are recorded as follows:

1. "Set time", the process of setting out the net in the water, begins when the first cork goes over the drum, and ends when the last cork goes over the drum. This activity is usually 5 minutes in duration.

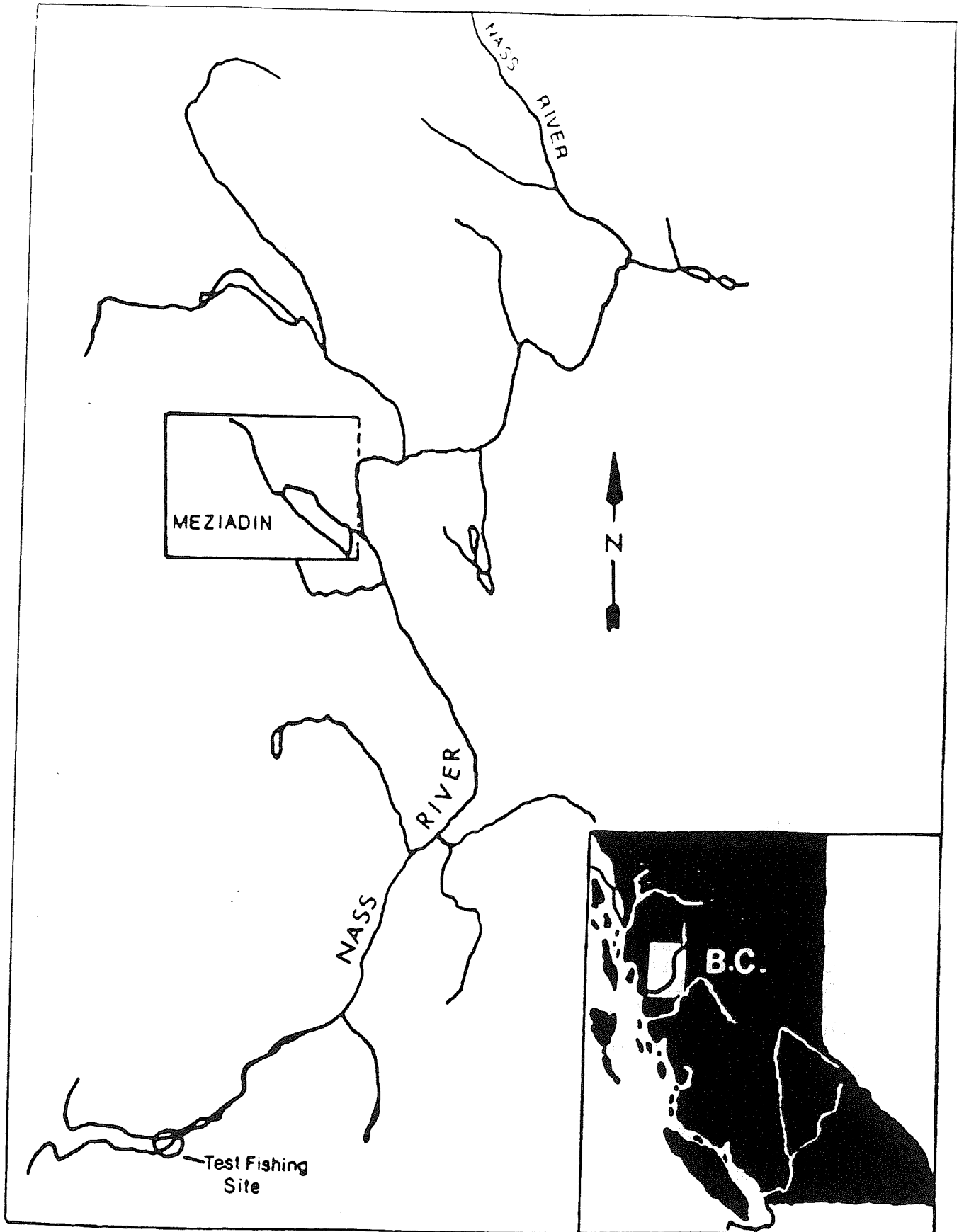


FIGURE 1. The Nass River test fishing location on the lower Nass River within the Nass River watershed.

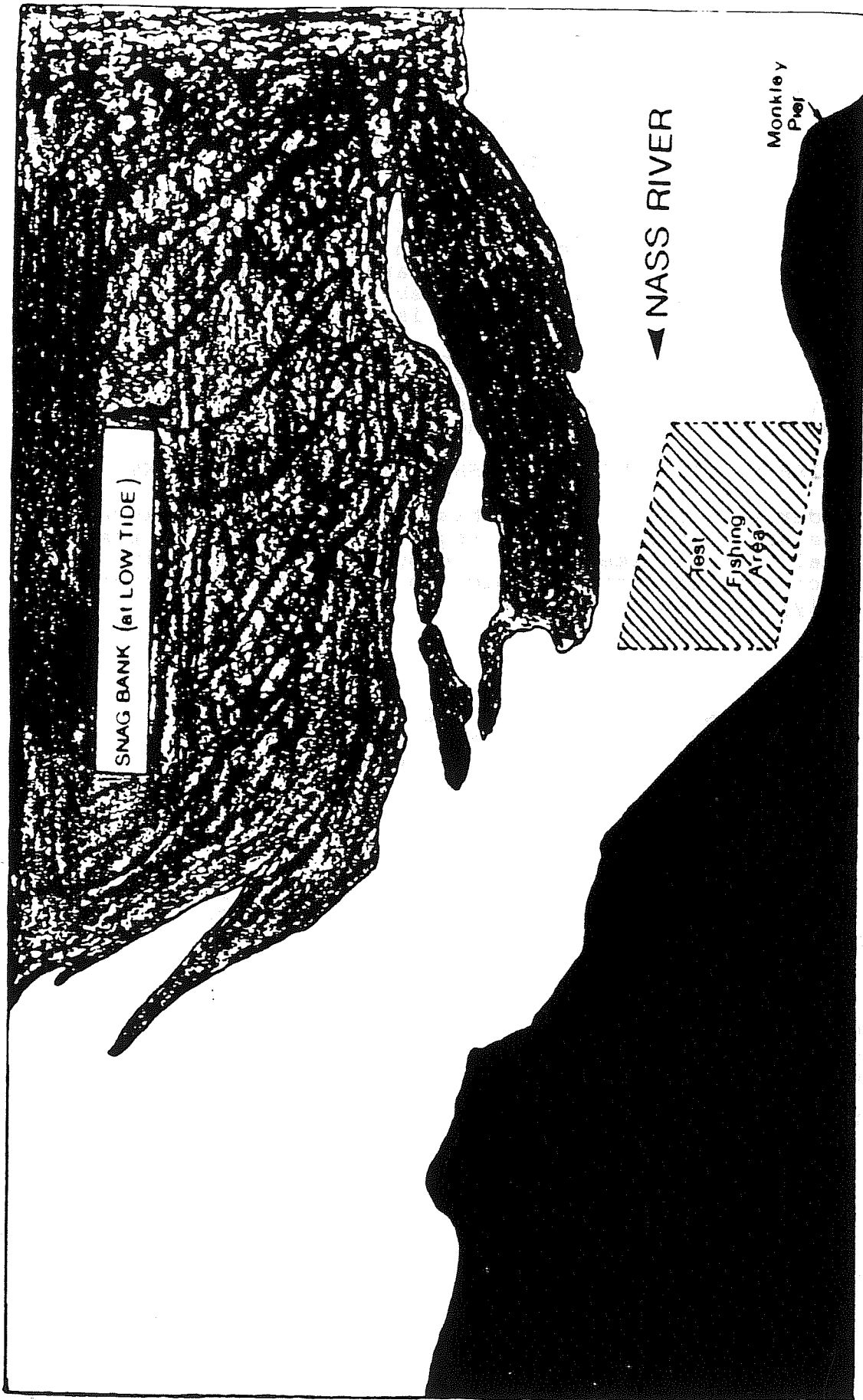


FIGURE 2. Test fishery site on the Nass River between Snag Bank and Monkley Pier.

2. A "drift", or period of time when the net is in the water for the purpose of catching fish, begins when the last cork goes over the drum and all the net is in the water. The standard duration of drift time is set at 10 minutes.

3. Pick up time or "pick time" is the time it takes to drum the net aboard the fishing vessel. It begins when the first cork is brought over the drum and ends when the last cork (terminal part of net) is over the drum. The standard duration of the pick time is set at 8 minutes. Fish and debris are removed as the net is drummed aboard and this activity is included in the pick up time.

When problems occur with the net, such as bunching up or snagging on debris, the fisherman uses his own judgement whether the net is still fishing. Accurate recordings of these times is essential for the calculation of the test fishery index.

2.2 TOTAL FISHING TIME AND TEST FISHERY INDEX CALCULATIONS

In order to calculate the Nass test fishery sockeye index, the total time and total catch is required for each of the four daily sets. Total fishing time equals the sum of the drift time (10 minutes) plus 1/2 of both the set and pick up times (5 minutes and 8 minutes respectively) as described above.

Example:

Total fishing time for a set:

5 min. set time/2	=	2.5 minutes.
10 min drift time	=	10.0 minutes.
8 min. pick up time/2	=	4.0 minutes.

Total fishing time for a set = 16.5 minutes.

Daily catch index=

daily catch x 1,000 / 100 fathom net length x total fishing time, and is expressed as a daily catch per 1,000 fathom-minutes of fishing time.

2.3 TEST NETS

Three identical nets are used during the program and are alternated on a daily basis to allow for repairs. Each net is 100 fathoms in length and consists of three separate panels, each of which is 33 1/3 fathoms in length. The three mesh sizes that make up the net, one size for each panel, are as follows:

1. 4" mesh, 50 meshes deep.
2. 4 1/2" mesh, 45 meshes deep.
3. 5" mesh, 40 meshes deep.

Net twine consists of #23 - n.9.13 twine, with a Momoi shade 3 (light green) color. A river lead line (200 - 220 lbs) is used and the net is hung in a 2:1 ratio.

2.4 SAMPLING

Sampling information is recorded by the fisherman in a log book upon completion of each set. This includes date, set times, catch by species, weather and water conditions as well as local seal abundance. All sockeye caught are sampled as follows:

1. sex noted
2. scale samples (2) taken
3. hypural length measured
4. nose/fork length measured

Similar sampling is carried out on all chinook salmon, with the exception that 5 scales are taken instead of the 2 required for sockeye. Electrophoretic and brain parasite samples are taken from sockeye as part of the on-going International Sockeye Sampling Program.

2.5 DELIVERY OF CATCH

The catch is delivered by the fisherman on a weekly basis to a local Prince Rupert processing plant. Due to the remoteness of the test fishery location, the fisherman must leave the site to deliver his fish immediately after the first set series on Wednesday of each week and is back at the test site to complete the second set series on Friday, unless other arrangements have been made. No test fishing is conducted during the period the test fisherman is absent from the site. Daily indices covering this period of time are obtained by averaging the catch information for the first set series on Wednesday and the second set series on Friday.

3.0 RESULTS

The daily set information of the Nass River test fishery for 1989 is presented in Appendix 3. This information includes daily set and pick up times, total fishing time and catch of all species. The 1989 cumulative test fishery index totaled 273.91 for sockeye and 42.72 for large chinook. Appendix 4 presents the daily and cumulative indices for sockeye and chinook for 1989.

A total of 1,076 sockeye and 141 chinook were sampled during the 1989 Nass River gillnet test fishery program. The biological information collected for each fish sampled in 1989 is recorded in Appendix 5 for sockeye and Appendix 6 for chinook.

Weekly age composition of sockeye by sex is presented in Appendix 7. Weekly and annual mean hypural and nose/fork lengths of sockeye by sex and age class are presented in Appendix 8. Nass River daily and cumulative test fishing indices of escapement as well as cumulative indices and escapements for sockeye for the years 1980 to 1989 are given in Appendices 9 and 10 respectively. Chinook test fishery escapement indices for the years 1980 to 1989 are recorded in Appendix 11.

Appendix 12 presents the historical relationship between the annual

sockeye test fishing index predicted escapement and the actual recorded escapement past the test fishery. The 1989 Nass River test fishery index calculation indicated a total sockeye run of 184,889 while the actual recorded returns past the test fishery was set at 119,826, which includes 112,307 escapement to spawning grounds plus a 7,519 piece native food fishery catch.

REFERENCES

Dickson, F.V. and P.R. Vroom. 1970. An investigation into an alternate test-fishing site on the Nass River, 1969. Dept. Fisheries and Forestry, Fisheries Service, Pacific Region. Tech. Rept. No. 1970-4: 15p.

Henry, K.A. 1961. Racial identification of Fraser River sockeye salmon by means of scales and its applications to salmon management. I.P.S.F.C. Bull. No. XII: 97p.

Todd, I.S. and F.V. Dickson. 1970. Nass River sockeye salmon. A review of the commercial fishery and a summary of the 1963 to 1969 biological programs. D.F.O. Tech. Rpt. No. 1970-10: 73p.

APPENDIX 1. Nass test fishery charter contract.



Fisheries
and Oceans

Pêches
et océans

SALMONID ENHANCEMENT PROGRAM

INVITATION TO TENDER

SEALED TENDERS, addressed to the Head, Contracts Section, Materiel Management Division, Department of Fisheries and Oceans, Pacific Region, 4th Floor, Registry Office, 555 West Hastings Street, Vancouver, BC V6B 5G3, and marked:

TENDERS FOR:

NASS TEST PROGRAM

VC 89 - 052

will be received up to 2:00 p.m. local time, March 10, 1989 for the following services:

One gillnet vessel for testfishing on the Nass River at the site commonly referred to as Monkley Dump. Testfishing to commence on or about the 4th of June, 1989, and terminate no later than August 5, 1989; approximately 59 days.

Skipper will also provide deckhand for biological sampling and record keeping.

The lowest or any bid will not necessarily be accepted. Payment of the service contract is to be from the sale of fish caught during the operation. Bids are to be expressed in pounds of Sockeye per day.

Tender forms are available from the Fisheries office in Prince Rupert, or through the Registry Office at 555 West Hastings Street, Vancouver, BC V6B 5G3; (604) 666-0984.

For further information and/or to receive a copy of the tender form, please call David Southgate or Les Jantz in Prince Rupert at 624-0468.

A.R. Charette
Head, Contracts Section
Materiel Management Division
Management Services Branch

Canada

APPENDIX 1. Cont.

GENERAL

1. The Department of Fisheries will be responsible for installation and removal of the test float.
2. The department of Fisheries will supply all necessary sampling equipment.
3. The test fisherman must demonstrate an ability and willingness to communicate his interpretation of stock habits to DFO representatives only. Discretion must be used when communicating on private frequencies.
4. Test fisherman will carry out all necessary sampling before he proceeds with the removal of the catch. The catch will be delivered on a weekly basis, attempting to accommodate both DFO and the test fisherman.
5. Test fisherman will not be eligible to enter the commercial fishery while on charter to DFO.
6. Test fisherman must have valid 1989 " A " license.
7. In the event of a shortfall, Sockeye prices will be based on the 1989 average landed value as determined through consultation with industry. On Oct 2, 1989 Sockeye prices from North Coast processing plants will be averaged (B.C. Packers, Ocean Fisheries, J.S. MacMillan and the Fishermans Co-op). Co-op prices will have to be estimated because of their pricing structure. Prices from cash buyers will NOT be used. A formal agreement with the successful applicant and DFO will be signed before the start of the program. Other species will be converted to Sockeye.
8. Cost of relaying information daily to the DFO offices (telephone calls) are to be borne by the fisherman.
9. Services will be for a minimum of twenty (20) days and a maximum of one hundred (100) days.

APPENDIX 1. Cont.

Details and Conditions are as follows:

1. Vessel to be supplied with operator.
2. Fisherman must be fully knowledgeable in commercial gillnetting with a minimum of ten (10) years experience. The fisherman must have fished and be familiar with the area to be tested; Area 3 (Nass River Management unit 3-12).
3. Fisherman will be requested to carry out electrophoretic sampling during the charter.
4. a) Fisherman will be responsible for delivery of catch to the processing plant of his choice. (i.e. fisherman will provide ice boxes/suitable vehicle or arrange for delivery of catch with a packer at his expense.) Copies of delivery slips must be give to DFO personnel after each delivery.
 b) In the case of private sales, the fisherman is required to supply DFO with receipts.
5. Fisherman must be prepared to work at any hour of the day or night. A minimum of four (4) - ten (10) minute sets are required during each 24 hour period.
6. All nets and lines will be supplied by DFO. (Fisherman will have to repair test nets continually throughout the program.)
7. Vessel Requirements:
 - a) Vessel must conform fully with M.O.T. safety regulations and be in excellent overall condition.
 - b) Radar is required.
 - c) The test fisherman will be required to supply all fuel, water, lubricants, etc.
 - d) The vessel must have ample room behind the drum for two (2) persons to tag and sample, if required.
8. Deckhand Requirements:
 - a) Must have previous experience in salmon gillnetting (minimum 2 years).
 - b) Some knowledge and ability in the following sampling techniques on salmonids: species identification, scale removal, fin clipping, lengths, sexing, electrophoretic sampling, otoliths, fecundity, spaghetti and peterson disc tagging.
 - c) Must be able to keep neat, accurate records.

(Please describe the deckhand experience/knowledge thoroughly.)

APPENDIX 1. Cont.

Department of Fisheries
 Fisheries Management
 555 West Hastings Street
 Vancouver, B.C.
 V6B 5G3

OFFER TO TESTFISH - TENDER FORM

I/we the undersigned, hereby offer the following gillnet vessel to partake in the area _____ test fishing in accordance with the terms and conditions attached:

- 1) Name of Vessel _____.
- 2) Name(s) of Owner(s) _____.
- 3) Address of Owner(s) _____.
- 4) Location of vessel (for inspection purposes) _____.
- 5) Name of Operator _____.
- 6) Number of years licensed salmon fishing experience _____.
- 7) a) Number of years fished in Area 3 _____.
- b) Number of years fished in Nass River (management unit 3-12) _____.
- 8) Previous Test Fishing experience inside Test area _____.
- 9) Previous Test Fishing experience outside Test area _____.
- 10) Vessel length _____ Beam _____.
- 11) Vessel construction - Material _____.
- 12) Vessel construction - Date _____.
- 13) Expiry date of MOT inspection _____.
- 14) Gross tonnage _____ Registered tonnage _____.
- 15) Engine make _____ H.P. _____.
- 16) Fuel type _____.
- 17) Cruising speed _____.
- 18) Radiotelephone(s): Make _____.
- 19) Radar (make) _____ Sounder (model) _____.

APPENDIX 1. Cont.

- 20) Life saving equipment carried _____.
- 21) Service to commence and terminate at _____.
- 22) Deckhand:
- a) Number of years fishing as gillnet deckhand _____.
- b) Sampling experience _____.
- _____.
- 23) Bid on rate per day to be expressed in pounds of sockeye (with deckhand included) _____.
- 24) Signature(s) of registered Owner(s) _____.
- Date _____.

Deckhand Experience

APPENDIX 2. Prince Rupert Harbour daily tide table.

PRINCE RUPERT (FST)

TIDE TABLES

1989									
JULY JUBILEE					AUGUST ADULT				
Day	Time	H	M	Hour	Day	Time	H	M	Hour
1	0515	27	8	16	0540	23	10	0600	0515
TH	1735	18.4	5.1	1225	1205	18.0	5.1	1225	0700
JE	2330	20.8	6.0	21	1755	18.0	6.0	21	0900
2	0610	18.5	17	0820	0615	17	0845	21	0915
FR	1810	18.8	21	1815	1810	18.8	21	1815	2050
VE									
3	0705	22.7	6.9	10	0700	22.3	6.2	10	0855
SA	1320	18.4	5.8	SU	1330	17.8	5.4	MO	1405
SA	1855	18.8	6.1	SA	1855	18.8	6.1	SA	1905
4	0745	22.7	6.9	10	0850	20.7	6.3	4	0920
SU	1410	18.8	5.8	MO	1420	18.3	5.9	TU	1430
SA	1845	18.8	6.1	SA	1845	18.8	6.1	SA	1845
5	0150	22.4	6.8	20	0130	20.9	6.4	5	0225
MO	0830	18.8	5.8	TU	0840	18.3	5.4	WE	0850
LU	2030	17.3	2.2	MA	2015	17.0	2.4	WE	2105
6	0235	21.7	6.6	21	0215	21.0	6.4	6	0305
TU	0820	18.8	5.8	WE	0830	18.3	5.4	TH	0840
TU	1340	18.8	5.8	WE	1350	18.3	5.4	TH	1400
7	0320	20.7	6.3	22	0300	20.0	6.1	7	0345
WE	1005	18.8	5.8	TH	1015	18.3	5.4	FR	1025
WE	1825	18.8	5.8	TH	1835	18.3	5.4	FR	1845
8	0410	18.8	5.8	23	0340	18.3	5.4	23	0420
TH	1710	18.8	5.8	23	1710	18.8	5.8	23	1715
JE	2300	18.8	5.8	23	2300	18.8	5.8	23	2305
9	0500	18.8	5.8	24	0430	18.3	5.4	24	0510
FR	1800	18.8	5.8	24	1800	18.8	5.8	24	1805
VE									
10	0000	18.8	5.8	25	0530	18.4	5.4	25	0615
SA	1220	18.4	4.7	26	1145	18.8	5.8	26	1230
SA	1855	17.4	5.3	26	1820	18.1	5.8	26	1835
11	0105	18.8	5.8	26	0120	18.3	5.4	26	0135
SU	0700	18.8	5.8	26	0700	18.8	5.8	26	0705
SU	1310	18.8	5.8	26	1310	18.8	5.8	26	1315
12	0215	18.8	5.8	27	0215	18.8	5.8	27	0220
MO	1400	18.8	5.8	27	1400	18.8	5.8	27	1405
MO	2035	17.0	5.2	27	2035	17.0	5.2	27	2040
13	0315	18.8	5.8	28	0315	18.8	5.8	28	0320
TU	1500	18.8	5.8	28	1500	18.8	5.8	28	1505
MA	2125	18.8	5.8	28	2125	18.8	5.8	28	2130
14	0410	18.8	5.8	29	0400	18.3	5.4	29	0415
WE	1555	18.1	2.0	29	1555	18.1	2.0	29	1600
WE	2210	18.8	5.8	29	2210	18.8	5.8	29	2215
15	0455	18.8	5.8	30	0455	18.8	5.8	30	0500
TH	1645	18.8	5.8	30	1645	18.8	5.8	30	1650
JE	2240	18.1	5.8	30	2240	18.1	5.8	30	2245

SEPTEMBER SEPTEMBER									
Day	Time	H	M	Hour	Day	Time	H	M	Hour
1	0150	20.7	6.3	16	0150	20.7	6.3	16	0150
2	0205	20.8	6.4	17	0205	20.8	6.4	17	0205
3	0220	20.9	6.5	18	0220	20.9	6.5	18	0220
4	0235	21.0	6.6	19	0235	21.0	6.6	19	0235
5	0250	21.1	6.7	20	0250	21.1	6.7	20	0250
6	0305	21.2	6.8	21	0305	21.2	6.8	21	0305
7	0320	21.3	6.9	22	0320	21.3	6.9	22	0320
8	0335	21.4	7.0	23	0335	21.4	7.0	23	0335
9	0350	21.5	7.1	24	0350	21.5	7.1	24	0350
10	0405	21.6	7.2	25	0405	21.6	7.2	25	0405
11	0420	21.7	7.3	26	0420	21.7	7.3	26	0420
12	0435	21.8	7.4	27	0435	21.8	7.4	27	0435
13	0450	21.9	7.5	28	0450	21.9	7.5	28	0450
14	0505	22.0	7.6	29	0505	22.0	7.6	29	0505
15	0520	22.1	7.7	30	0520	22.1	7.7	30	0520

APPENDIX 3. Daily set information for the Nass test fishery, 1989.

DATE	SET #	SET TIME		PICK TIME		ACTUAL FISHING TIME	CATCH IN PIECES						
		HOURS	MIN	HOURS	MIN		SOCKEYE	LG. CHINOOK	JK. CHINOOK	PINKS	COHO	CHUM	STHD
JUNE 3	1	11	58	12	9	12.5	0	0	0	0	0	0	0
		11	59	12	13								
	2	12	20	12	32	13	0	0	0	0	0	0	0
		12	22	12	36								
	3	22	55	23	7	14.5	2	1	1	0	0	0	0
22		57	23	14									
4	23	18	23	30	13.5	0	0	0	0	0	0	0	
	23	20	23	35									
					TOTAL	53.5	2	1	1	0	0	0	0
JUNE 4	1	12	48	13	0	16	0	0	0	0	0	0	0
		12	50	13	10								
	2	13	15	13	27	13.5	0	0	0	0	0	0	0
		13	17	13	32								
	3					0							
4					0								
					TOTAL	29.5	0	0	0	0	0	0	0
JUNE 5	1	0	0	0	12	16	0	0	0	0	0	0	1
		0	2	0	22								
	2					0							
	3	13	55	14	6	14.5	0	0	0	0	0	0	0
13		56	14	14									
4	14	20	14	32	15	1	0	0	0	0	0	0	
	14	22	14	40									
					TOTAL	45.5	1	0	0	0	0	0	1
JUNE 6	1					0							
	2					0							
	3	14	50	15	2	15.5	0	0	0	0	0	0	0
		14	52	15	11								
	4	15	16	15	28	13.5	0	0	0	0	0	0	0
15		18	15	33									
					TOTAL	29	0	0	0	0	0	0	0
JUNE 7	1	2	19	2	31	14.5	2	0	0	0	0	0	0
		2	21	2	38								
	2	2	41	2	53	15.5	2	1	0	0	0	0	0
		2	43	3	2								
	3	15	39	15	51	13.5	0	1	0	0	0	0	0
		15	41	15	56								
	4	16	0	16	12	14	1	0	0	0	0	0	0
		16	2	16	18								
					TOTAL	57.5	5	2	0	0	0	0	0

APPENDIX 3 Cont. Daily set information for the Nass test fishery, 1989.

DATE	SET #	SET TIME		PICK TIME		ACTUAL FISHING TIME	CATCH IN PIECES						
		HOURS	MIN	HOURS	MIN		SOCKEYE	LG. CHINOOK	JK. CHINOOK	PINKS	COHO	CHUM	STHD
JUNE 13	1					0							
	2					0							
	3	20	11	20	23	15	8	0	1	0	0	0	0
	4	20	38	20	50	13.5	1	2	0	0	0	0	0
		20	40	20	55								
					TOTAL	28.5	9	2	1	0	0	0	0
JUNE 14	1	10	23	10	31	10	1	2	0	0	0	0	0
		10	24	10	36								
	2	10	43	10	51	9	0	2	0	0	0	0	0
		10	45	10	55								
	3	20	53	21	5	16	7	4	0	0	0	0	0
		20	55	21	15								
	4	21	22	21	34	15.5	4	1	1	0	0	0	0
		21	24	21	43								
					TOTAL	50.5	12	9	1	0	0	0	0
JUNE 15	1	11	34	11	43	10	2	0	0	0	0	0	0
		11	36	11	47								
	2	11	54	12	2	10.5	0	1	0	0	0	0	0
		11	56	12	9								
	3	21	13	21	25	14	3	0	0	0	0	0	0
		21	15	21	31								
	4	21	37	21	45	12	2	0	0	0	0	0	0
		21	39	21	55								
					TOTAL	46.5	7	1	0	0	0	0	0
JUNE 16	1	12	12	12	24	13	0	1	0	0	0	0	0
		12	14	12	28								
	2	12	34	12	46	13	1	1	0	0	0	0	0
		12	36	12	50								
	3	22	8	22	20	15	4	6	0	0	0	0	0
		22	10	22	28								
	4	22	31	22	43	14	1	0	0	0	0	0	0
		22	33	22	49								
					TOTAL	55	6	8	0	0	0	0	0
JUNE 17	1	12	3	12	15	13.5	3	4	0	0	0	0	0
		12	5	12	20								
	2	12	23	12	35	13	0	1	0	0	0	0	0
		12	25	12	39								
	3	22	15	22	27	14	1	2	0	0	0	0	0
		22	17	22	33								
	4	22	40	22	52	13.5	0	0	0	0	0	0	0
		22	42	22	57								
					TOTAL	54	4	7	0	0	0	0	0

APPENDIX 3 Cont. Daily set information for the Nass test fishery, 1989.

DATE	SET #	SET TIME		PICK TIME		ACTUAL FISHING TIME	CATCH IN PIECES						
		HOURS	MIN	HOURS	MIN		SOCKEYE	LG. CHINOOK	JK. CHINOOK	PINKS	COHO	CHUM	STHD
JUNE 18	1	11	53	12	5	15	7	1	0	0	0	0	0
		11	55	12	13								
	2	12	16	12	28	13	1	2	0	0	0	0	0
		12	18	12	32								
	3	22	37	22	49	14.5	3	3	0	0	0	0	0
22		39	22	56									
4	23	2	23	14	13.5	2	1	1	0	0	0	0	
	23	4	23	19									
						TOTAL	56	13	7	1	0	0	0
JUNE 19	1	12	45	12	57	15	6	2	0	0	0	0	0
		12	47	13	5								
	2	13	7	13	19	13.5	3	0	0	0	0	0	0
		13	9	13	24								
	3	22	59	23	11	19	24	11	1	0	0	0	0
23		1	23	27									
4	23	32	23	44	14	5	1	0	0	0	0	0	
	23	34	23	50									
						TOTAL	61.5	38	14	1	0	0	0
JUNE 20	1	13	23	13	35	14.5	13	3	0	0	0	0	0
		13	25	13	42								
	2	13	45	13	57	13.5	5	4	0	0	0	0	0
		13	47	14	2								
	3	23	42	23	50	10.5	4	0	0	0	0	0	0
23		44	23	57									
4	0	0	0	12	15	3	2	0	0	0	0	0	
	0	2	0	20									
						TOTAL	53.5	25	9	0	0	0	0
JUNE 21	1	13	41	13	53	13	4	5	0	0	0	0	0
		13	43	13	57								
	2	13	59	14	11	14	1	0	0	0	0	0	0
		14	1	14	17								
3					0								
4					0								
						TOTAL	27	5	5	0	0	0	0
JUNE 22	1					0							
	2					0							
	3					0							
	4					0							
						TOTAL	0	0	0	0	0	0	0

APPENDIX 3 Cont. Daily set information for the Nass test fishery, 1989.

DATE	SET #	SET TIME		PICK TIME		ACTUAL FISHING TIME	CATCH IN PIECES						
		HOURS	MIN	HOURS	MIN		SOCKEYE	LG. CHINOOK	JK. CHINOOK	PINKS	COHO	CHUM	STHD
JUNE 23	1					0							
	2					0							
	3	15	14	15	26	13.5	4	2	1	0	0	0	0
		15	16	15	31								
	4	15	34	15	41	9	6	2	0	0	0	0	0
15		36	15	47									
						TOTAL	22.5	10	4	1	0	0	0
JUNE 24	1	2	38	2	49	16	6	2	0	0	0	0	1
		2	39	3	0								
	2	3	4	3	16	14	1	0	3	0	0	0	0
		3	6	3	22								
	3	15	53	16	5	14	4	2	0	0	0	0	0
		15	55	16	11								
4	16	13	16	25	13	1	0	0	0	0	0	0	
	16	15	16	29									
						TOTAL	57	12	4	3	0	0	0
JUNE 25	1	3	58	4	10	15	4	2	0	0	0	0	0
		4	0	4	18								
	2	4	22	4	34	18	5	1	0	0	0	0	0
		4	24	4	48								
	3	16	43	16	55	14	5	0	0	0	0	0	0
		16	45	17	1								
4	17	5	17	17	14	1	2	0	0	0	0	0	
	17	7	17	23									
						TOTAL	61	15	5	0	0	0	0
JUNE 26	1	5	40	5	52	15	5	1	1	0	0	0	0
		5	42	6	0								
	2	6	5	6	17	13	0	1	0	0	0	0	0
		6	7	6	21								
	3	17	34	17	46	14	7	0	0	0	0	0	0
		17	36	17	52								
4	17	57	18	9	14	5	0	0	0	0	0	0	
	17	59	18	15									
						TOTAL	56	17	2	1	0	0	0
JUNE 27	1	6	36	6	48	13.5	5	3	0	0	0	0	0
		6	38	6	53								
	2	6	58	7	10	13.5	2	2	0	0	0	0	0
		7	0	7	15								
	3	18	2	18	14	16.5	12	2	2	0	0	0	0
		18	4	18	25								
4	18	30	18	42	13	1	1	0	0	0	0	0	
	18	32	18	46									
						TOTAL	56.5	20	8	2	0	0	0

APPENDIX 3 Cont. Daily set information for the Nass test fishery, 1989.

DATE	SET #	SET TIME		PICK TIME		ACTUAL FISHING TIME	CATCH IN PIECES						
		HOURS	MIN	HOURS	MIN		SOCKEYE	LG. CHINOOK	JK. CHINOOK	PINKS	COHO	CHUM	STHD
JUNE 28	1	7	32	7	44	14	7	3	0	0	0	0	0
		7	34	7	50								
	2	7	55	8	7	14.5	6	3	0	0	0	0	0
		7	57	8	14								
	3					0							
4					0								
						TOTAL	28.5	13	6	0	0	0	0
JUNE 29	1					0							
	2					0							
	3					0							
	4					0							
							TOTAL	0	0	0	0	0	0
JUNE 30	1					0							
	2					0							
	3	20	37	20	49	13	5	1	0	0	0	0	0
		20	39	20	53								
	4	20	55	21	7	13.5	2	1	0	0	0	0	0
20		57	21	12									
						TOTAL	26.5	7	2	0	0	0	0
JULY 1	1	10	46	10	57	13	0	2	0	0	0	0	0
		10	47	11	2								
	2	11	6	11	18	13	2	3	1	0	0	0	0
		11	8	11	22								
	3	21	22	21	34	15	6	2	0	0	0	0	0
21		24	21	42									
4	21	46	21	58	16	8	1	1	0	0	0	0	
	21	48	22	8									
						TOTAL	57	16	8	2	0	0	0
JULY 2	1	11	33	11	45	14	10	4	0	0	0	0	0
		11	35	11	51								
	2	11	55	12	8	13.5	5	0	1	0	0	0	0
		11	58	12	12								
	3	22	31	22	43	15	4	4	5	0	0	0	0
22		33	22	51									
4	22	53	23	5	13.5	2	2	0	0	0	0	0	
	22	55	23	10									
						TOTAL	56	21	10	6	0	0	0

APPENDIX 3 Cont. Daily set information for the Nass test fishery, 1989.

DATE	SET #	SET TIME		PICK TIME		ACTUAL FISHING TIME	CATCH IN PIECES							
		HOURS	MIN	HOURS	MIN		SOCKEYE	LG. CHINOOK	JK. CHINOOK	PINKS	COHO	CHUM	STHD	
JULY 8	1	3	13	3	25	15.5	9	1	4	3	1	0	0	
		3	15	3	34									
	2	3	36	3	48	15	7	1	2	1	1	0	0	
		3	38	3	56									
	3	15	23	15	35	16	23	0	5	1	0	0	0	
15		25	15	45										
4	15	47	15	59	14.5	9	0	1	3	0	0	0		
		15	49	16	6									
						TOTAL	61	48	2	12	8	2	0	0
JULY 9	1	3	50	4	2	16	13	1	0	3	0	1	0	
		3	51	4	11									
	2	4	16	4	28	13.5	4	0	0	1	0	0	0	
		4	18	4	33									
	3	15	52	16	4	16.5	26	1	3	4	0	0	0	
15		54	16	15										
4	16	20	16	32	14.5	12	1	0	1	0	0	0		
		16	22	16	39									
						TOTAL	60.5	55	3	3	9	0	1	0
JULY 10	1	5	12	5	23	16	29	1	2	1	0	0	0	
		5	13	5	34									
	2	5	43	5	55	14.5	12	2	0	0	0	0	0	
		5	45	6	2									
	3	16	27	16	37	16	34	1	1	5	0	0	0	
16		29	16	51										
4	16	57	17	9	14	10	0	1	1	0	0	0		
		16	59	17	15									
						TOTAL	60.5	85	4	4	7	0	0	0
JULY 11	1	6	7	6	19	13.5	27	0	0	1	0	0	0	
		6	9	6	24									
	2	6	32	6	44	14	20	3	1	1	0	0	0	
		6	34	6	50									
	3	17	39	17	51	16.5	26	0	1	10	0	0	0	
17		41	18	2										
4	18	8	18	20	13.5	4	0	1	3	0	0	0		
	18	10	18	25										
						TOTAL	57.5	77	3	3	15	0	0	0
JULY 12	1	7	28	7	40	13	5	0	0	1	0	0	0	
		7	30	7	44									
	2	7	51	8	3	13.5	11	2	0	0	0	0	0	
		7	53	8	8									
	3					0								
4					0									
						TOTAL	26.5	16	2	0	1	0	0	0

APPENDIX 3 Cont. Daily set information for the Nass test fishery, 1989.

DATE	SET #	SET TIME		PICK TIME		ACTUAL FISHING TIME	CATCH IN PIECES							
		HOURS	MIN	HOURS	MIN		SOCKEYE	LG. CHINOOK	JK. CHINOOK	PINKS	COHO	CHUM	STHD	
JULY 13	1					0								
	2					0								
	3					0								
	4					0								
						TOTAL	0	0	0	0	0	0	0	
JULY 14	1					0								
	2					0								
	3	20	7	20	19	15	12	0	0	3	0	0	0	
	4	20	32	20	44	13.5	4	0	0	2	0	0	0	
		20	34	20	49									
						TOTAL	28.5	16	0	0	5	0	0	0
JULY 15	1	10	24	10	35	15	12	2	0	4	0	0	0	
		10	25	10	44									
	2	10	51	11	3	14.5	8	1	0	1	0	0	0	
		10	53	11	10									
3	20	35	20	47	20	22	2	2	3	0	0	0		
	20	37	21	5										
4	21	8	21	20	14	4	0	0	5	1	0	0		
	21	10	21	26										
						TOTAL	63.5	46	5	2	13	1	0	0
JULY 16	1	11	4	11	16	20.5	32	0	0	14	0	0	0	
		11	6	11	35									
	2	11	41	11	53	15.5	15	0	0	6	0	0	0	
		11	43	12	2									
3	21	19	21	31	14	7	0	0	11	0	0	0		
	21	21	21	37										
4	21	39	21	51	14.5	7	0	1	7	0	0	0		
	21	41	21	58										
						TOTAL	64.5	61	0	1	38	0	0	0
JULY 17	1	11	39	11	51	14.5	18	0	0	13	0	0	0	
		11	41	11	58									
	2	12	3	12	15	17	14	0	3	22	0	0	0	
		12	5	12	27									
3	22	3	22	15	14	22	0	0	8	0	0	0		
	22	5	22	21										
4	22	28	22	40	13.5	8	0	0	1	0	0	0		
	22	30	22	45										
						TOTAL	59	62	0	3	44	0	0	0

APPENDIX 3 Cont. Daily set information for the Nass test fishery, 1989.

DATE	SET #	SET TIME		PICK TIME		ACTUAL FISHING TIME	CATCH IN PIECES						
		HOURS	MIN	HOURS	MIN		SOCKEYE	LG. CHINOOK	JK. CHINOOK	PINKS	COHO	CHUM	STHD
JULY 18	1	12	7	12	19	16	17	0	0	25	0	0	0
		12	9	12	29								
	2	12	31	12	43	15.5	17	0	1	18	0	0	2
		12	33	12	52								
	3	22	46	22	57	17.5	14	0	2	30	3	0	0
22		49	23	13									
4	23	15	23	27	14	6	0	0	10	0	0	0	
	23	17	23	33									
					TOTAL	63	54	0	3	83	3	0	2
JULY 19	1	12	38	12	50	17.5	12	0	0	47	1	0	0
		12	40	13	3								
	2	13	7	13	19	17	4	0	0	62	0	0	0
		13	9	13	31								
	3					0							
4					0								
					TOTAL	34.5	16	0	0	109	1	0	0
JULY 20	1					0							
	2					0							
	3					0							
	4					0							
						TOTAL	0	0	0	0	0	0	0
JULY 21	1					0							
	2					0							
	3	13	50	14	2	20	4	0	1	73	1	0	1
		13	51	14	19								
	4	14	22	14	29	14	7	0	3	63	5	0	0
14		24	14	45									
					TOTAL	34	11	0	4	136	6	0	1
JULY 22	1	1	22	1	34	20.5	8	0	0	60	0	0	0
		1	24	1	53								
	2					0							
	3	14	14	14	26	19	5	0	0	49	0	0	0
14		16	14	42									
4	14	45	14	57	13	2	0	0	45	0	0	0	
	14	47	15	1									
					TOTAL	52.5	15	0	0	154	0	0	0

APPENDIX 3 Cont. Daily set information for the Nass test fishery, 1989.

DATE	SET #	SET TIME		PICK TIME		ACTUAL FISHING TIME	CATCH IN PIECES						
		HOURS	MIN	HOURS	MIN		SOCKEYE	LG. CHINOOK	JK. CHINOOK	PINKS	COHO	CHUM	STHD
JULY 28	1					0							
	2					0							
	3	19	15	19	27	27	13	1	0	159	0	0	0
	4	19	17	19	59								
	4	20	1	20	13	16.5	5	1	0	23	0	0	0
		20	3	20	24								
					TOTAL	43.5	18	2	0	182	0	0	0
JULY 29	1	9	34	9	40	18	16	1	0	71	2	0	0
		9	36	10	6								
	2	10	14	10	26	16.5	4	0	0	46	1	0	0
		10	16	10	37								
	3	20	23	20	34	23.5	10	0	0	79	8	0	0
	20	24	21	0									
					TOTAL	58	30	1	0	196	11	0	0
JULY 30	1	10	32	10	44	25	11	1	0	110	7	0	0
		10	34	11	12								
	2	11	14	11	26	17	6	0	0	8	2	0	0
		11	16	11	38								
	3	21	18	21	30	28.5	17	0	0	150	13	0	0
	21	20	22	5									
					TOTAL	70.5	34	1	0	268	22	0	0
JULY 31	1	11	18	11	30	23.5	10	0	0	154	3	0	0
		11	20	11	55								
	2	12	0	12	12	22.5	6	0	0	129	3	0	1
		12	2	12	35								
	3	22	13	22	25	15	9	0	0	45	0	0	0
	22	15	22	33									
4	22	40	22	52	21.5	2	0	0	99	1	0	0	
	22	42	23	13									
					TOTAL	82.5	27	0	0	427	7	0	1
AUG. 1	1	11	50	12	2	21	12	0	0	102	2	0	1
		11	52	12	22								
	2	12	28	12	40	17.5	5	0	0	56	1	0	0
		12	30	12	53								
	3	22	58	23	10	18.5	4	2	0	57	6	0	0
	23	0	23	25									
					TOTAL	57	21	2	0	215	9	0	1

APPENDIX 3 Cont. Daily set information for the Nass test fishery, 1989.

DATE	SET #	SET TIME		PICK TIME		ACTUAL FISHING TIME	CATCH IN PIECES							
		HOURS	MIN	HOURS	MIN		SOCKEYE	LG. CHINOOK	JK. CHINOOK	PINKS	COHO	CHUM	STHD	
AUG. 2	1	12	25	12	36	23.5	10	0	0	132	6	0	1	
		12	26	13	2									
	2	13	8	13	20	15	2	0	0	41	1	0	0	
		13	10	13	28	0								
	3					0								
	4					0								
						TOTAL	38.5	12	0	0	173	7	0	1
AUG. 3	1					0								
	2					0								
	3					0								
	4					0								
						TOTAL	0	0	0	0	0	0	0	
AUG. 4	1					0								
	2					0								
	3					0								
	4					0								
						TOTAL	0	0	0	0	0	0	0	
AUG. 5	1					0								
	2					0								
	3	14	3	14	15	19.5	7	0	0	110	5	0	0	
		14	5	14	32									
4	14	41	14	53	14	0	0	0	39	1	0	0		
	14	43	14	59										
						TOTAL	33.5	7	0	0	149	6	0	0
AUG. 6	1	2	20	2	32	18.5	2	0	0	55	1	0	0	
		2	22	2	47									
	2	2	50	3	2	15	0	0	0	24	0	0	0	
		2	52	3	10									
	3	14	25	14	36	22.5	7	2	0	156	12	0	0	
		14	26	15	0									
	4	15	5	15	11	10	1	0	0	57	4	0	0	
		15	7	15	21									
						TOTAL	66	10	2	0	292	17	0	0

APPENDIX 4. Daily and cumulative index calculation of sockeye and chinook salmon at the Nass test fishery, 1989.

DATE	DAILY		CUMULATIVE		DATE	DAILY		CUMULATIVE		DATE	DAILY		CUMULATIVE	
	SOCKEYE	LG. CHINOOK	SOCKEYE	LG. CHINOOK		SOCKEYE	LG. CHINOOK	SOCKEYE	LG. CHINOOK		SOCKEYE	LG. CHINOOK	SOCKEYE	LG. CHINOOK
JUNE 1	0.00	0.00	0.00	0.00	JULY 1	2.81	1.40	62.84	32.49	AUG. 1	3.68	0.35	254.82	42.42
2	0.00	0.00	0.00	0.00	2	3.75	1.79	66.59	34.28	2	3.12	0.00	257.94	42.42
3	0.37	0.19	0.37	0.19	3	3.89	1.06	70.48	35.34	3	2.77	0.00	260.71	42.42
4	0.00	0.00	0.37	0.19	4	3.75	1.25	74.23	36.59	4	2.43	0.00	263.14	42.42
5	0.22	0.00	0.59	0.19	5	7.34	0.00	81.57	36.59	5	2.09	0.00	265.23	42.42
6	0.00	0.00	0.59	0.19	6	7.52	0.11	89.09	36.70	6	1.52	0.30	266.75	42.72
7	0.87	0.35	1.46	0.54	7	7.70	0.22	96.79	36.92	7	2.45	0.00	269.20	42.72
8	0.70	0.70	2.16	1.24	8	7.87	0.33	104.66	37.25	8	2.12	0.00	271.32	42.72
9	0.70	2.43	2.86	3.67	9	9.09	0.50	113.75	37.75	9	2.59	0.00	273.91	42.72
10	2.07	2.24	4.93	5.91	10	14.05	0.66	127.80	38.41					
11	0.75	0.75	5.68	6.66	11	13.39	0.52	141.19	38.93					
12	1.96	0.73	7.64	7.39	12	6.04	0.75	147.23	39.68					
13	3.16	0.70	10.80	8.09	13	5.83	0.38	153.06	40.06					
14	2.38	1.78	13.18	9.87	14	5.61	0.00	158.67	40.06					
15	1.51	0.22	14.69	10.09	15	7.24	0.79	165.91	40.85					
16	1.09	1.45	15.78	11.54	16	9.46	0.00	175.37	40.85					
17	0.74	1.30	16.52	12.84	17	10.51	0.00	185.88	40.85					
18	2.32	1.25	18.84	14.09	18	8.57	0.00	194.45	40.85					
19	6.18	2.28	25.02	16.37	19	4.64	0.00	199.09	40.85					
20	4.67	1.68	29.69	18.05	20	3.94	0.00	203.03	40.85					
21	1.85	1.85	31.54	19.90	21	3.24	0.00	206.27	40.85					
22	2.10	1.82	33.64	21.72	22	2.86	0.00	209.13	40.85					
23	4.44	1.78	38.08	23.50	23	5.04	0.00	214.17	40.85					
24	2.11	0.70	40.19	24.20	24	6.79	0.00	220.96	40.85					
25	2.46	0.82	42.65	25.02	25	4.32	0.00	225.28	40.85					
26	3.04	0.36	45.69	25.38	26	4.26	0.15	229.54	41.00					
27	3.54	1.42	49.23	26.80	27	4.20	0.30	233.74	41.30					
28	4.56	2.11	53.79	28.91	28	4.14	0.46	237.88	41.76					
29	3.60	1.43	57.39	30.34	29	5.17	0.17	243.05	41.93					
30	2.64	0.75	60.03	31.09	30	4.82	0.14	247.87	42.07					
					31	3.27	0.00	251.14	42.07					

APPENDIX 5. 1989 Nass River gillnet test fishery sockeye age, sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE
June 3	1	568	712	M		4 ₁
	2	568	677	F		5 ₂
June 7	3	494	607	M		4 ₁
	4	550	680	F		5 ₁
	5	462	561	F		4 ₂
June 8	6	518	627	M		4 ₁
	7	544	659	F		5 ₁
	8	558	669	F		5 ₂
	9	488	612	M		4 ₂
June 9	10	460	558	F		4 ₁
	11	510	632	F		4 ₂
	12	533	652	F		5 ₁
June 10	13	450	553	M		3 ₁
	14	455	548	M		4 ₁
	15	555	697	M		5 ₂
	16	473	585	F		4 ₂
	17	512	650	M		4 ₁
	18	568	712	M		6 ₁
	19	537	660	F		5 ₃
	20	530	664	F		6 ₂
	21	553	688	M		6 ₃
	22	570	712	M		5 ₃
June 11	23	480	583	F		4 ₂
	24	460	563	F		4 ₁
	25	470	589	F		6 ₂
June 13	26	560	691	F		5 ₂
	27	483	600	F		4 ₂
June 14	28	530	663	M		R ₂
	29	550	690	F		5 ₂
	30	555	687	F		5 ₂
	31	530	667	F	(9+10)	6 ₂
	32	590	720	M	(10+9)	6 ₃
	33	510	627	F		R ₃
	34	490	590	F		R

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age, sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE	
June 14	35	495	618	M		4 ¹	
	36	560	685	F	(10+11)	6 ³	
	37	500	612	M		4 ¹	
	38	570	712	M		5 ¹	
	39	530	650	F	(9+9)	6 ²	
	40	530	643	M		5 ³	
	41	540	650	M		5 ²	
	42	480	587	F		NP	
	43	500	640	M		4 ²	
	44	590	730	M		4 ¹	
	June 15	45	490	602	F	(12+11)	5 ²
		46	485	606	F		5 ³
		47	540	690	M		R ³
		48	570	720	M	(8+12)	5 ²
49		525	655	F		6 ³	
50		475	583	F		5 ²	
June 16	51	510	635	F		4 ¹	
	52	430	550	M		4 ¹	
	53	475	580	F		3 ¹	
	54	485	595	M	(10+10)	4 ¹	
	55	530	675	M	(8+10)	5 ³	
June 17	56	560	690	F		6 ³	
	57	480	597	F		6 ³	
	58	485	595	F	(7+8)	R ³	
	59	470	595	M		5 ³	
June 18	60	455	560	F		4 ²	
	61	550	690	M		4 ¹	
	62	520	635	F		5 ²	
	63	560	690	F	(9+9)	4 ²	
	64	503	620	F		6 ³	
	65	495	610	F		4 ²	
	66	530	670	M		4 ¹	
	67	500	635	M		5 ²	
	68	545	681	M	(8+9)	R ²	
						6 ³	

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age, sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE
June 18	69	541	677	M		R
	70	500	663	M		4 ₁
	71	490	610	F		4 ₁
June 19	72	515	650	M	(9+11)	6 ₁
	73	545	675	M		4 ₃
	74	550	695	M		4 ₁
	75	533	665	M		4 ₁
	76	590	733	F	(8+11)	6 ₁
	77	435	585	M		4 ₃
	78	512	643	F		5 ₁
	79	545	690	M		4 ₂
	80	473	575	F		4 ₁
	81	550	675	F		5 ₁
	82	530	655	F	(6+8)	6 ₂
	83	455	575	F		4 ₃
	84	470	590	F		4 ₁
	85	555	705	M		5 ₁
	86	510	653	M		4 ₂
	87	460	568	F		4 ₁
	88	480	600	F		4 ₁
	89	473	580	F		4 ₁
	90	570	710	M		5 ₁
	91	530	655	M		4 ₂
92	560	690	M		4 ₁	
93	510	625	F		R	
94	465	570	F	(7+10)	4 ₁	
95	480	595	F		5 ₃	
96	540	670	F		R	
97	531	682	M		5 ₂	
98	510	615	M	(9+10)	4 ₁	
99	560	700	M		5 ₃	
100	500	645	F		5 ₂	
June 19	101	510	630	M		R
	102	532	663	M		4 ₁

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age, sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE
June 19	103	510	640	M		4 ₁
	104	453	563	F		4 ₁
	105	463	565	F		4 ₁
	106	572	693	M		R ₁
	107	593	742	M	(10+12)	6 ₃
	108	490	600	M		4 ₂
June 20	109	550	680	F		5 ₂
	110	470	595	M		R ₂
	111	583	741	M		R
	112	491	595	F		R
	113	525	640	F		4 ₂
	114	481	590	F		R ₂
	115	473	585	F		4 ₁
	116	581	712	F		R ₁
	117	563	685	F	(9+9)	6 ₃
	118	491	600	F		R ₃
	119	503	623	F	(10+9)	5 ₃
	120	506	615	F		4 ₁
	121	515	633	F		NP
	122	571	700	M		5 ₂
	123	581	722	F		5 ₂
	124	600	733	F		5 ₂
	125	603	742	M		5 ₂
	126	463	563	F		R ₂
	127	483	610	F		4 ₁
	128	490	606	M		4 ₂
129	560	690	M		5 ₂	
130	480	590	M		4 ₂	
131	490	606	F		4 ₁	
132	475	585	M		4 ₁	
133	509	625	F		4 ₁	
June 21	134	570	700	M	(9+9)	6 ₃
	135	463	570	F		4 ₁
	136	460	563	F		4 ₁

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age, sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE
June 21	137	470	595	F		R
June 23	138	481	590	F		5 ³
	139	485	600	F	(8+9)	5 ³
	140	510	630	M	(6+10)	5 ³
	141	460	555	M		4 ²
	142	522	643	M		4 ¹
	143	450	563	F		4 ²
	144	490	600	F		4 ²
	145	540	670	M		6 ²
	146	484	593	F	(7+12)	5 ³
	147	580	720	M		5 ³
June 24	148	490	610	M		4 ²
	149	461	580	F		4 ²
	150	441	570	F		4 ²
June 24	151	463	575	F		4 ¹
	152	520	644	M		6 ²
	153	538	660	F		5 ³
	154	520	660	M		4 ²
	155	460	565	F	(8+10)	5 ²
	156	520	630	F		5 ³
	157	483	600	F		4 ²
	158	491	590	F		4 ¹
	159	500	614	M		4 ²
June 25	160	560	683	M		5 ²
	161	572	705	M		6 ²
	162	492	591	F	(10+11)	5 ³
	163	482	584	M		4 ³
	164	478	590	M		4 ²
	165	448	553	F		4 ¹
	166	506	606	F	(7+9)	5 ²
	167	468	580	F		4 ³
	168	556	688	M		4 ¹
	169	544	668	F		6 ³
	170	530	644	F		5 ³
						2

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age, sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE	
June 25	171	458	547	F	(9+12)	5 ₃	
	172	467	556	F		R ₃	
	173	500	600	F		5 ₃	
	174	493	596	F		4 ₃	
June 26	175	489	592	F	(7+9)	5 ₂	
	176	490	591	F	(6+8)	5 ₃	
	177	494	610	F		6 ₃	
	178	577	705	M	6 ₃	6 ₃	
	179	584	706	M		6 ₃	
	180	490	600	M		(7+9)	5 ₃
	181	521	662	F	4 ₁	4 ₁	
	182	508	614	F		5 ₂	
	183	556	686	F	5 ₂	5 ₂	
	184	592	720	M		6 ₂	
	185	607	740	F	5 ₃	5 ₃	
	186	516	625	F		W ₂	
	187	475	579	F	(8+8)	5 ₃	
	188	463	571	F		R ₃	
	189	533	652	F		4 ₂	
	June 27	190	500	610	F	4 ₁	4 ₁
		191	500	600	F		4 ₂
192		561	688	F	6 ₃	6 ₃	
193		506	600	F		W ₃	
194		503	605	F	4 ₂	4 ₂	
195		503	609	F		R ₂	
196		478	582	F	4 ₂	4 ₂	
197		523	631	F		(7+10)	5 ₃
198		477	575	F	4 ₂	4 ₂	
199		573	695	M		(9+9)	5 ₃
June 27	200	467	563	F	R ₃	R ₃	
	201	478	570	F		4 ₂	
	202	484	583	F	R ₂	R ₂	
	203	500	600	F		R	
	204	546	667	F	5 ₂		

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age,
sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE
June 27	205	497	608	F		R
	206	507	615	F		4 ²
	207	505	608	F	(5+5)	5 ³
	208	520	618	F	(7+9)	5 ³
	209	502	610	F		4 ³
	210	573	697	M		4 ¹ 6 ³
June 28	211	465	560	F		R ³
	212	522	625	M		4 ²
	213	500	600	F	(7+8)	5 ³
	214	570	700	M		6 ³
	215	485	585	F		4 ³
	216	525	653	M		4 ¹
	217	590	720	M		4 ²
	218	517	634	M		6 ³
	219	514	623	F	(8+11)	4 ³ 5 ¹
	220	455	552	F		5 ³
	221	565	680	M		4 ²
	222	580	705	M		6 ² 6 ³
	223	470	580	F		6 ³ R
June 30	224	528	642	F		6 ³
	225	475	564	F		4 ³
	226	573	700	M		4 ²
	227	553	675	F		5 ²
	228	523	630	F	(10+11)	5 ²
	229	573	708	M		6 ³ 5 ³
July 1	230	510	617	F		5 ²
	231	565	686	M		5 ²
	232	508	627	M		4 ²
	233	560	700	M	(8+8)	5 ²
	234	472	579	F		4 ³
	235	473	574	F		4 ²
	236	500	610	M		4 ²
	237	480	577	F		4 ²
	238	538	645	M	(7+9)	5 ² 5 ³

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age, sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE
July 1	239	517	622	M	(8+11)	5 ³
	240	559	671	M		6 ³
	241	454	545	F		W ³
	242	517	622	M	(8+8)	5 ³
	243	543	650	F		5 ²
	244	457	552	F		4 ²
	245	584	696	M		5 ²
July 2	246	514	616	F	(8+9)	5 ²
	247	537	647	F		W ³
	248	592	720	M		5 ²
	249	500	608	F	(9+10)	5 ³
	250	512	620	F		4 ²
July 2	251	550	683	M		6 ²
	252	537	645	F		5 ³
	253	453	552	F		4 ²
	254	517	620	F	(7+8)	5 ²
	255	503	600	F		4 ²
	256	522	633	F	(7+7)	5 ²
	257	472	575	M		4 ³
	258	575	703	M		W ²
	259	536	651	F		6 ³
	260	512	628	M		4 ²
	261	488	608	M	(5+8)	5 ²
	262	510	615	F		R ³
	263	520	636	M		R
	264	525	644	M		W
July 3	265	480	590	F		4 ²
	266	477	573	F	(6+7)	5 ²
	267	518	625	F		R ³
	268	462	570	F		R
	269	470	562	F		4 ²
	270	490	600	F		4 ²
	271	518	625	F		4 ²
	272	522	634	F		4 ²

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age,
sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE	
July 3	273	610	753	M	(8+8)	6 ³	
	274	457	560	F		5 ³	
	275	480	572	M		4 ³	
	276	567	661	M		6 ²	
	277	518	620	F		4 ³	
	278	531	640	F		4 ²	
	279	500	615	F		5 ²	
	280	572	712	M		4 ²	
	281	500	595	F		6 ²	
	282	482	594	F		6 ³	
	283	492	587	F		W	
	284	461	558	F		4	
	285	449	547	M		4 ²	
	July 4	286	490	582		M	4 ²
		287	472	577		F	4 ²
288		490	600	M	5 ²		
289		480	584	F	5 ³		
290		472	565	F	5 ³		
291		455	551	F	R		
292		570	694	F	4		
293		492	592	M	4 ²		
294		550	661	F	6 ²		
295		480	588	F	6 ³		
296		465	570	F	4 ³		
297		512	622	M	4 ²		
298		520	628	F	5 ³		
299		470	578	M	5 ³		
300		538	657	F	6 ³		
July 4	301	561	696	F	6 ²		
	302	494	592	M	5 ³		
	303	567	700	M	W		
	304	538	668	F	6 ²		
	305	552	690	F	6 ³		
	306	540	651	M	R		

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age, sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE	
July 5	307	432	572	F		4 ₂	
	308	463	584	F		4 ₂	
	309	546	673	M		W ₂	
	310	443	547	F	(6+8)	5 ₃	
	311	457	558	F		NP ₃	
	312	450	547	F		R	
	313	495	623	F		NP	
	314	420	533	F		4 ₂	
	315	558	712	M		6 ₂	
	316	547	662	F		R ₃	
	317	458	538	F		NP	
	318	471	598	F	(7+9)	5 ₃	
	319	471	585	M		4 ₂	
	320	533	687	M		5 ₂	
	321	458	573	F		4 ₂	
	322	597	738	M		6 ₁	
	323	482	584	F		R ₃	
	324	547	673	M		5 ₂	
	325	471	597	M		NP	
	326	558	698	F		6 ₃	
	327	471	584	F	(8+9)	5 ₃	
	328	471	572	F		R ₃	
	329	533	686	M		6 ₃	
	330	432	547	F	(7+11)	5 ₃	
	331	482	610	M		4 ₂	
	332	482	610	F		4 ₂	
	333	458	572	M		4 ₂	
	July 8	334	456	563	F		4 ₂
		335	428	520	M		4 ₂
		336	506	608	M		4 ₂
		337	483	578	F		4 ₂
		338	492	590	F		4 ₂
339		520	630	F		5 ₂	
340		565	680	F		5 ₂	

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age,
sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE
July 8	341	472	568	F		4 ²
	342	444	530	F		4 ²
	343	420	520	F		4 ²
	344	512	611	F		4 ²
	345	583	710	M		5 ²
	346	515	635	M		W ²
	347	556	682	F		6 ³
	348	490	600	F		R ³
	349	460	550	F		4 ²
	350	500	634	F		4 ²
July 8	351	440	544	M		4 ²
	352	508	600	F		4 ²
	353	520	625	F		R ²
	354	540	673	F		5 ²
	355	455	570	F		R ²
	356	438	550	M		4 ²
	357	440	548	F		4 ²
	358	500	600	M	(7+9)	5 ³
	359	550	680	M		5 ²
	360	530	635	F		R ²
	361	490	600	F	(6+10)	5 ³
	362	498	600	M		4 ²
	363	500	610	M	(6+11)	5 ³
	364	480	580	F		4 ²
	365	445	545	F		4 ²
	366	455	540	F		4 ²
	367	548	628	F		5 ²
	368	521	620	M		6 ³
	369	483	608	M		4 ²
	370	520	635	F		5 ²
	371	480	590	F	(7+9)	5 ³
	372	450	573	M		4 ²
	373	543	670	M		5 ²
	374	545	650	F		6 ³

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age, sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE
July 8	375	433	525	F		R
	376	493	615	M		6 ₃
	377	473	580	F		4 ₂
	378	533	670	M		6 ₃
	379	433	536	F		4 ₂
	380	430	533	F		4 ₂
	381	455	560	F		4 ₂
	July 9	382	460	565	F	
383		440	555	F		4 ₂
384		520	635	F		5 ₂
385		480	590	M		4 ₂
386		500	620	F		R ₂
387		520	623	F		5 ₂
388		480	590	F		4 ₂
389		510	625	F	(8+10)	5 ₃
390		490	600	M		4 ₂
391		540	663	M		5 ₂
392		460	573	F	(5+9)	5 ₃
393		470	570	F		4 ₂
394		460	565	F		4 ₂
395		510	540	F		W ₂
396		420	500	F		4 ₂
397		490	610	F		6 ₃
398		565	695	M		5 ₂
399		480	570	F	(10+13)	5 ₃
400		500	615	M		4 ₂
July 9		401	540	680	M	
	402	460	568	F		4 ₂
	403	460	560	F		4 ₂
	404	450	555	F		4 ₂
	405	470	575	F		4 ₂
	406	530	665	M	(6+9)	5 ₃
	407	440	545	F	(6+10)	5 ₃
	408	430	530	F		4 ₂

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age, sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE	
July 9	409	470	565	F		4 ²	
	410	450	550	F		5 ²	
	411	530	642	F	(6+11)	5 ²	
	412	442	540	F		4 ³	
	413	453	560	F		4 ²	
	414	485	595	F		4 ²	
	415	475	595	M		4 ²	
	416	415	515	F		4 ²	
	417	418	520	F		5 ²	
	418	500	612	F		4 ²	
	419	470	585	M		5 ²	
	420	500	620	F	(8+9)	5 ²	
	421	500	606	M		4 ³	
	422	480	585	F		4 ²	
	423	520	650	F		R ²	
	424	490	605	M		6 ³	
	425	530	675	M		NP	
	426	440	540	F		4 ²	
	427	465	580	M		4 ²	
	428	465	570	F		4 ¹	
	429	490	600	M		4 ²	
	430	470	580	F	(7+9)	5 ³	
	431	475	575	F		4 ²	
	July 10	432	480	590	M		4 ²
		433	570	708	M		6 ²
434		543	685	M		R ³	
435		450	560	F		R	
436		500	640	M		5 ²	
437		520	635	F		6 ³	
438		450	565	M		4 ²	
439		450	545	F		4 ²	
440		400	500	F		4 ²	
441		445	530	F		4 ²	
442		480	588	F	(7+10)	5 ³	

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age, sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE
July 10	443	450	545	F		4 ²
	444	500	630	M		5 ²
	445	410	520	F		4 ²
	446	440	550	F	(7+7)	5 ²
	447	470	580	M		W ³
	448	570	690	F		6 ³
	449	560	712	M		6 ³
	450	550	670	M		6 ³
	July 10	451	540	675	M	
452		525	640	M		R ²
453		370	480	F		4 ²
454		460	565	F		4 ²
455		564	688	M		6 ³
456		460	560	F		4 ³
457		460	560	M		4 ²
458		505	615	F		4 ²
459		440	540	F		4 ²
460		510	620	F		5 ²
461		550	675	M		6 ²
462		450	560	M		4 ³
463		520	635	F		5 ²
464		450	555	M		4 ²
465		480	605	M	(7+8)	5 ²
466		463	650	F		4 ³
467		478	580	F		4 ²
468		480	600	F		4 ²
469		450	554	F		R ²
470		430	533	F		R
471		430	555	F	(8+9)	5 ³
472		480	595	F		W ³
473		480	605	M		W
474		480	575	F		4 ²
475		530	650	F		R ²
476		520	635	F		R

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age, sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE
July 10	477	528	655	F		R
	478	510	630	M		4 ²
	479	460	580	M		4 ²
	480	560	685	F		5 ²
	481	445	550	F		4 ²
	482	440	665	F		6 ²
	483	450	560	F		4 ³
	484	430	532	F		4 ²
	485	555	673	F		6 ²
	486	565	700	M		6 ³
	487	520	645	F	(8+9)	5 ³
	488	460	555	F		4 ³
	489	485	590	F		4 ²
	490	490	595	F		4 ²
	491	455	560	F		R ²
	492	540	665	F		6 ³
	493	500	610	F	(7+9)	5 ³
	494	475	583	M		4 ²
	495	470	580	M		4 ²
	496	470	600	M		R ²
497	433	515	F		4 ²	
498	470	580	M		4 ²	
499	475	600	F		4 ²	
July 10	500	463	573	M		4 ²
	501	470	573	F		4 ²
	502	514	635	F		5 ²
	503	540	668	F		5 ²
	504	460	559	F		4 ²
	505	460	553	F		4 ²
	506	440	548	M		4 ²
	507	492	620	F		5 ²
	508	470	595	M		4 ²
	509	440	543	F		4 ²
	510	460	568	F		4 ²

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age, sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE
July 10	511	430	535	F		4 ₂
	512	463	565	F		4 ₂
	513	455	573	M		R ₂
	514	480	580	M		R
July 11	515	440	543	F		4 ₂
	516	510	650	F		5 ₂
	517	530	645	F		5 ₂
	518	533	652	F		W ₂
	519	463	564	F		4 ₂
	520	460	556	F		4 ₂
	521	481	593	M		4 ₂
	522	412	523	F		W ₂
	523	488	588	F		W
	524	480	600	M		4 ₂
	525	543	668	M		6 ₂
	526	443	545	F		4 ₃
	527	540	673	M		W ₂
	528	522	643	F		5 ₂
	529	500	615	M		5 ₂
	530	444	663	F		4 ₂
	531	398	500	F	(8+7)	5 ₂
	532	526	648	M		R ₃
	533	480	600	M		4 ₂
	534	463	580	M		W ₂
	535	500	630	M		5 ₂
	536	545	678	M		5 ₂
	537	458	563	F		4 ₂
	538	478	582	F		R ₂
	539	518	640	M	(10+9)	5 ₃
	540	470	570	M		4 ₂
	541	525	650	M		5 ₂
	542	480	600	F		4 ₂
	543	480	580	F	(8+9)	5 ₂
	544	550	695	M		6 ₃

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age,
sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE
July 11	545	553	641	F		R
	546	460	540	F		4 ²
	547	478	573	F	(9+9)	5 ³
	548	505	610	F		4 ¹
	549	450	545	F		4 ²
	550	478	580	M	(7+9)	5 ²
July 11	551	470	580	F	(9+8)	5 ³
	552	480	557	M		4 ³
	553	490	575	M	(6+9)	5 ²
	554	500	633	M		5 ³
	555	480	585	F		4 ²
	556	552	643	M		4 ²
	557	458	568	F		5 ²
	558	530	640	M	(9+10)	4 ²
	559	466	590	F		5 ³
	560	520	650	F		4 ²
	561	482	550	F	(6+10)	5 ²
	562	475	600	M		5 ³
	563	530	660	F		4 ²
	564	550	680	F		6 ³
	565	425	530	F		R
	566	480	595	F		4 ²
	567	495	615	M		6 ³
	568	530	645	F		5 ³
	569	458	580	F		4 ²
	570	595	740	M		4 ²
	571	468	573	M		6 ³
	572	470	590	F		4 ²
	573	420	533	F		R
	574	440	530	M		4 ²
	575	530	645	F		4 ²
	576	530	663	M		R
	577	533	640	F		5 ²
	578	500	628	F		4 ²

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age, sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE	
July 11	579	450	550	F		4 ²	
	580	462	560	F		4 ²	
	581	460	562	F		4 ²	
	582	525	640	M		4 ²	
	583	470	585	F		4 ²	
	584	430	538	M		4 ²	
	585	475	590	M		R ²	
	586	455	560	F		4 ²	
	587	420	513	F		4 ²	
	July 12	588	553	686	F		6 ²
		589	470	578	F		5 ³
		590	460	560	M		4 ²
		591	540	695	M		5 ²
		592	500	640	M		W ²
593		550	710	M		6 ³	
594		458	565	F		4 ²	
595		448	532	F		4 ²	
596		480	580	F		4 ²	
597		450	555	M		4 ²	
598		450	554	F		4 ²	
599		540	690	M		6 ²	
600		450	589	M		4 ²	
July 12		601	440	540	F		4 ²
July 14	602	520	670	M		5 ²	
	603	555	700	M		6 ²	
	604	460	580	F		6 ³	
	605	583	703	F		4 ²	
	606	460	550	F		6 ³	
	607	453	576	M		4 ²	
	608	450	548	F	(13+20)	5 ²	
	609	527	653	F		5 ³	
	610	503	627	F		5 ²	
	611	470	580	F		4 ²	
	612	475	530	M		4 ²	

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age,
sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE
July 16	681	490	630	F		5 ₂
	682	465	570	F		4 ₂
	683	440	540	F		4 ₂
	684	410	510	F		4 ₂
	685	450	555	M		4 ₂
	686	450	568	M		4 ₂
	687	525	640	M		6 ₂
	688	600	750	M		6 ₃
	689	465	570	F		RG ₃
	690	500	640	F		6 ₃
	691	450	540	F		4 ₂
	692	460	580	M		4 ₂
	693	483	590	F		4 ₂
	694	508	620	F		6 ₂
	695	471	570	F		4 ₃
	696	480	591	M		4 ₂
	697	443	540	F		4 ₂
	698	420	520	F		4 ₂
	699	450	570	M		4 ₂
	700	470	600	F	(8+11)	5 ₂
	701	450	550	F		4 ₃
	702	440	553	F		4 ₂
	703	440	552	F		4 ₂
	704	470	564	F	(6+8)	5 ₂
	705	470	580	F	(10+11)	5 ₃
	706	550	558	F		RG ₃
	707	530	668	M	(8+9)	5 ₃
	708	460	570	F		RG ₂
	709	470	580	F		5 ₃
	710	470	581	F	(7+9)	5 ₃
	711	550	635	F		6 ₃
	712	470	570	F		4 ₂
	713	445	555	F		4 ₂
	714	490	600	F	(7+10)	5 ₂
						3

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age, sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE
July 16	715	460	610	F		4 ₂
	716	470	590	M		4 ₂
	717	620	790	M		6 ₃
	718	575	730	F		5 ₃
	719	405	510	F		4 ₂
	720	450	566	F		4 ₂
July 17	721	470	590	M		4 ₂
	722	460	575	M	(6+10)	5 ₃
	723	500	620	F		6 ₃
	724	470	610	M		4 ₂
	725	485	610	M		4 ₂
	726	500	612	F		5 ₂
	727	425	536	F		4 ₂
	728	464	576	F		4 ₂
	729	460	570	F		4 ₂
	730	440	550	F		4 ₂
	731	470	588	F	(6+9)	5 ₃
	732	512	643	M		4 ₂
	733	448	578	M		4 ₂
	734	494	612	M		4 ₂
	735	510	636	F		5 ₂
	736	580	728	M		6 ₃
	737	480	580	F		4 ₂
	738	478	590	M		4 ₂
	739	410	500	F		4 ₂
	740	570	735	M		6 ₃
	741	442	543	F		4 ₂
	742	550	706	F		6 ₃
	743	510	618	F		5 ₃
	744	443	546	F		4 ₂
	745	458	560	F		4 ₂
	746	460	582	F		4 ₂
	747	461	574	F		4 ₂
	748	445	560	F		4 ₂

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age, sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE
July 17	749	448	538	F		R
	750	488	606	M		4 ₂
	751	535	670	M		5 ₂
	752	540	690	M		6 ₃
	753	540	670	M		5 ₂
	754	540	682	M		5 ₂
	755	565	710	M		5 ₂
	756	540	680	M		5 ₂
	757	553	700	M		6 ₃
	758	480	621	M		4 ₂
	759	490	610	M		4 ₂
	760	520	660	M		4 ₂
	761	545	680	F		6 ₃
	762	460	580	F		4 ₂
	763	450	570	F		4 ₂
	764	440	555	F		4 ₂
	765	460	570	F	(7+7)	5 ₃
	766	470	580	F		4 ₂
	767	460	580	M	(8+8)	5 ₃
	768	470	600	F		4 ₂
	769	430	550	M		4 ₂
	770	460	580	F		4 ₂
	771	450	564	F		4 ₂
	772	450	555	F		4 ₂
	773	480	600	F	(8+11)	5 ₃
	774	455	550	F		W
	775	460	560	F	(8+8)	5 ₃
	776	460	555	F		4 ₂
	777	430	520	F		4 ₂
778	430	530	F		4 ₂	
779	460	585	F		4 ₂	
July 18	780	570	720	F		6 ₃
	781	550	680	F		5 ₂
	782	530	645	F		4 ₂

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age,
sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE	
July 18	783	510	625	F		W	
	784	500	629	M		5 ²	
	785	570	740	M		6 ² ₃	
	786	560	700	M		5 ² ₃	
	787	528	660	F		6 ² ₃	
	788	580	730	M		6 ³ ₃	
	789	540	700	M		6 ³ ₃	
	790	548	690	M		5 ³ ₂	
	791	460	580	F		4 ² ₂	
	792	470	573	F	(6+10)	5 ² ₃	
	793	450	570	M		4 ² ₂	
	794	470	580	F		4 ² ₂	
	795	480	612	M		4 ² ₂	
	796	448	540	F		4 ² ₂	
	797	512	630	F		4 ² ₂	
	798	460	560	F		4 ² ₂	
	799	470	570	F	(7+9)	5 ² ₃	
	800	522	648	F		5 ² ₃	
	July 18	801	460	575	F		6 ² ₃
		802	480	600	M		4 ² ₂
803		430	528	F		4 ² ₂	
804		430	532	F		RG	
805		498	608	F	(8+10)	5 ³ ₂	
806		438	534	F		4 ² ₂	
807		463	571	F		4 ² ₂	
808		462	560	F		4 ² ₂	
809		448	558	F		4 ² ₂	
810		460	570	M		4 ² ₂	
811		433	545	F		4 ² ₂	
812		420	540	F		4 ² ₂	
813		470	590	M		4 ² ₂	
814		450	560	F		4 ² ₂	
815		470	580	F		4 ² ₂	
816		438	550	F	(6+8)	5 ² ₃	

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age, sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE	
July 18	817	470	580	F	(7+8)	5 ₃	
	818	460	580	F		4 ₂	
	819	480	590	M		4 ₂	
	820	500	625	F		6 ₃	
	821	460	585	M		4 ₂	
	822	510	630	F		6 ₃	
	823	540	663	M		W ³	
	824	470	590	F		4 ₂	
	825	450	558	F		4 ₂	
	826	500	627	M		4 ₂	
	827	447	557	F		RG ²	
	828	450	549	F		4 ₂	
	829	485	600	F		4 ₂	
	830	540	687	F		6 ₃	
	831	490	620	M		4 ₂	
	832	530	670	F		W ²	
	July 19	833	480	600	F		4 ₂
		834	470	590	M		4 ₂
		835	480	585	F	(7+7)	5 ₃
		836	520	645	F		RG ³
837		480	610	M		4 ₂	
838		495	600	F		6 ₃	
839		430	530	F	(5+9)	5 ₃	
840		395	490	F		4 ₂	
841		430	530	F		4 ₂	
842		460	590	M		4 ₂	
843		490	595	F	(6+7)	5 ₃	
844		460	577	M		4 ₂	
845		580	727	M		6 ₃	
846		470	590	F		4 ₂	
847		450	559	F		4 ₂	
848		354	443	F		R ²	
July 21		849	445	560	F		4 ₂
	850	440	545	F		4 ₂	

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age,
sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE
July 21	851	560	690	F		5 ²
	852	468	575	F	(7+15)	5 ³
	853	465	575	F		RG
	854	525	645	M	(6+10)	5 ³
	855	450	558	F	(7+9)	5 ³
	856	435	540	F		4 ²
	857	453	561	F	(6+9)	5 ²
July 22	858	490	626	M	(5+9)	5 ³
	859	420	545	F		4 ²
	860	460	562	F		4 ²
	861	460	575	M		4 ²
	862	500	618	F		5 ²
	863	410	530	F		4 ²
	864	429	654	M		RG
	865	450	570	M		RG
	866	410	515	F		4 ²
	867	450	560	F		4 ²
	868	470	590	F		4 ²
	869	540	681	F		6 ²
	870	433	532	F		RG
	871	452	560	F		4 ²
	872	460	570	F		4 ²
	873	425	538	F		4 ²
	July 23	874	480	600	M	
875		520	672	M		6 ²
876		530	664	F		5 ³
877		470	600	F		W ²
878		430	540	F		4 ²
879		455	565	M		RG
880		560	700	M		W
881		470	573	F		4 ²
882		480	585	F		4 ²
883		500	620	F		6 ²
884		490	610	F		4 ³

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age,
sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE
July 23	885	450	550	F		4 ₂
	886	450	560	M		4 ₂
	887	530	655	F		5 ₂
	888	490	620	M		4 ₂
	889	455	560	M		4 ₂ RG
	890	450	551	F		W
	891	510	640	F		5
	892	490	614	M		4 ₂
	893	475	613	M		4 ₂ RG
	894	550	694	M		5
	895	480	610	M		4 ₂
	896	425	530	F		4 ₂ RG
	897	450	566	M		4
	898	465	600	M		4 ₂
	899	450	560	F		4 ₂
July 23	901	396	498	F		4 ₂
	902	480	600	F	(6+8)	4 ₂ 5 ₃
	903	458	562	F		RG
	904	476	590	F		5
	905	436	540	F		4 ₂
July 24	906	508	638	F		4 ₂
	907	540	670	M		4 ₂
	908	520	650	M	(7+8)	5 ₂
	909	480	615	M		5 ₃
	910	450	585	F	(7+8)	5 ₂
	911	585	730	M		5 ₃
	912	520	660	M		5 ₂
	913	510	640	M		5 ₂
	914	410	518	F		NA
	915	440	536	F		4 ₂
	916	440	536	F		4 ₂
	917	540	670	F		6 ₃
	918	494	626	F		5 ₃
	917	480	610	F	(5+9)	5 ₂
	918	495	640	M		5 ₃ 5 ₂

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age, sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE
July 24	919	440	545	F	(7+9)	5 ₃
	920	440	540	F		4 ₂
	921	470	580	F	(7+9)	5 ₂
	922	470	600	M		RG ₃
	923	450	560	F		4 ₂
	924	470	580	F	(8+9)	5 ₃
	925	475	580	F		RG ₃
	926	463	560	F		RG
	927	520	653	M		5 ₂
	928	510	650	F		5 ₂
	929	540	670	F		6 ₂
	930	455	570	F		5 ₃
	931	445	550	F		4 ₂
	932	484	600	M		4 ₂
	933	450	555	F		RG ₂
	934	450	564	M		4 ₂
	935	455	570	F	(7+9)	5 ₃
	936	510	660	M		RG ₃
	937	445	550	F		W
	938	455	560	F		RG
	939	460	590	M		4 ₂
	940	585	738	M		5 ₂
	941	450	560	F	(7+12)	5 ₃
	942	490	630	F		5 ₂
	943	460	580	M		4 ₂
	944	445	540	F	(5+14)	5 ₂
	945	450	560	M		4 ₃
	946	560	721	M		6 ₂
	947	535	675	F		5 ₃
	948	510	640	F		NP ₂
	949	510	655	M		5 ₂
	950	560	690	F		6 ₃
	July 24	951	440	525	F	
952		440	560	M		4 ₂

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age,
sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE
July 24	953	491	608	M		4 ₂
	954	490	595	F	(6+9)	5 ₃
	955	470	575	F		RG
	956	455	560	M		4 ₂
	957	447	545	F		4 ₂
	958	448	590	F		RG
July 25	959	560	712	M		5 ₂
	960	500	616	F	(6+9)	5 ₃
	961	500	610	F		6 ₃
	962	600	770	M		4 ₂
	963	470	585	M		4 ₂
	964	490	600	F		RG
	965	480	591	F		5 ₂
	966	458	565	F		4 ₂
	967	463	580	M		4 ₂
	968	431	530	F		W ₂
	969	480	610	M	(8+10)	5 ₃
	970	470	578	F		4 ₂
	971	451	550	F		RG
	972	420	511	F		4 ₂
	973	595	745	M		W ₂
	974	575	720	M		6 ₃
	975	550	700	M		5 ₂
	976	594	736	M		6 ₂
	977	550	688	F		6 ₃
	978	510	630	F	(6+9)	5 ₃
	979	500	610	F	(6+9)	5 ₃
	980	460	570	F		4 ₂
	981	470	570	F		4 ₂
	982	530	656	F		5 ₂
	983	465	570	F		RG
	984	450	555	F		4 ₂
	985	470	570	F		4 ₂
	986	470	600	M	(5+9)	5 ₃

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age, sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE
July 25	987	470	598	M		5 ₂
	988	490	615	M	(6+9)	5 ₃
	989	480	600	M		W ³
	990	505	630	M	(9+9)	5 ₃
	991	490	623	M	(6+8)	5 ₃
	992	520	656	F		RG ³
	993	500	612	F		W
	994	450	585	F		4 ₂
	995	475	580	M		RG
	996	450	563	F		4 ₂
July 26	997	450	580	M	(9+10)	5 ₃
	998	615	795	F		6 ₃
	999	570	715	M		6 ₃
July 26	1000	465	570	F		4 ₂
	1001	455	563	F		4 ₂
July 28	1002	580	725	M		W ²
	1003	523	665	F		W
	1004	544	685	F		6 ₃
	1005	580	725	F		6 ₃
	1006	525	680	M	(9+10)	5 ₃
	1007	545	675	M		5 ₃
	1008	460	580	M		W ²
	1009	480	600	F		RG
	1010	526	640	F		W
	1011	494	618	M	(9+10)	5 ₃
	1012	441	555	F		4 ₂
	1013	510	650	M		W ²
	1014	420	518	F		4 ₂
	1015	450	560	F		4 ₂
	1016	510	630	F		5 ₂
	1017	460	590	M		W ²
	1018	500	630	F		RG
	1019	500	615	F		RG
	1020	510	633	F		5 ₂

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age, sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE
July 28	1021	490	600	F		4 ₂
	1022	460	573	F		4 ₂
	1023	510	640	M		RG
	1024	474	592	M	(10+11)	5 ₃
	1025	484	593	F		5 ₂
	1026	460	565	F		4 ₂
July 29	1027	470	587	F		4 ₂
	1028	420	530	M		4 ₁
	1029	430	536	F	(5+13)	5 ₂
	1030	448	566	M		5 ₃
	1031	453	588	M		4 ₂
	1032	510	650	F		RG
	1033	450	570	F		5 ₂
	1034	470	580	M		RG
	1035	440	543	F		4 ₂
	1036	460	563	F		4 ₂
	1037	463	560	F	(8+10)	4 ₂
	1038	465	555	F		5 ₃
	1039	490	605	F	(7+10)	4 ₂
	1040	488	595	F		5 ₃
	1041	540	665	F		4 ₂
	1042	450	550	F		5 ₂
	1043	465	555	F		W ₂
	1044	420	518	F		5 ₂
July 30	1045	450	560	F		RG
	1046	570	690	F		W
	1047	580	720	F		5 ₂
	1048	585	715	F		UD
	1049	525	650	F		UD
	1050	505	620	F		5 ₂
July 30	1051	518	623	F		4 ₂
	1052	502	605	M		UD
	1053	475	590	F		4 ₂
	1054	418	512	F	(11+13)	5 ₂ 3

APPENDIX 5 Cont. 1989 Nass River gillnet test fishery sockeye age,
sex and length data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	CIRCULI COUNTS	AGE
July 30	1055	448	555	F	(7+10)	5 ₃
	1056	500	615	F		RG
	1057	570	775	F		4 ₂
	1058	475	575	M		4 ₂
	1059	515	625	M		4 ₂
	1060	450	548	M	(9+12)	5 ₂
	1061	465	570	F		6 ₃
	1062	408	500	F		5 ₃
	1063	505	610	F		UD
	1064	530	655	F		UD
	1065	520	625	M	(6+11)	5 ₃
	1066	470	575	F		4 ₂
	1067	495	600	F		4 ₂
	1068	510	640	F		RG
	1069	480	580	F		UD
	1070	475	585	M		4 ₂
	1071	400	500	M		4 ₂
	1072	445	545	M		W ₂
	1073	455	565	M		5 ₂
	1074	470	575	M		UD
1075	550	648	F		5 ₂	
1076	530	655	F		W	

APPENDIX 6. 1989 Nass River gillnet test fishery chinook length,
sex and flesh colour data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	COLOUR
June 3	1	775	961	F	R
	2	852	1097	M	W
June 7	3	606	752	M	R
	4	665	818	M	R
June 9	5	778	991	M	R
	6	795	984	F	R
	7	773	955	F	R
	8	705	893	M	R
	9	732	912	F	R
	10	771	983	M	R
	11	741	905	F	R
	12	700	973	M	W
	13	685	860	M	R
	14	641	808	M	R
	15	710	920	M	W
June 10	16	835	1080	M	R
	17	785	983	F	R
	18	650	820	M	R
	19	725	895	F	W
	20	712	890	F	R
	21	550	683	M	R
	22	793	993	F	R
	23	815	1038	M	R
	24	750	917	F	R
June 13	25	720	900	F	R
	26	690	860	F	W
June 14	27	595	740	M	R
	28	606	773	F	R
	29	740	917	M	R
	30	645	850	M	R
	31	680	860	M	R
	32	750	945	F	R
	33	640	820	F	R
	34	550	680	F	R

APPENDIX 6 Cont. 1989 Nass River gillnet test fishery chinook
length, sex and flesh colour data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	COLOUR
June 14	35	670	830	F	R
June 15	36	680	870	M	R
	37	660	883	M	R
	38	800	1011	M	R
June 16	39	665	845	M	R
	40	665	830	M	R
	41	660	835	F	R
	42	662	840	M	R
	43	560	723	F	R
	44	700	870	F	R
June 16	45	685	840	F	R
	46	830	1060	F	R
June 17	47	655	840	M	R
	48	650	850	M	R
June 18	49	710	895	F	R
	50	635	800	F	R
	51	725	930	M	R
	52	753	940	F	R
	53	700	907	F	R
June 19	54	533	663	F	R
	55	492	610	F	R
	56	531	681	M	R
	57	771	980	F	R
	58	550	700	F	R
	59	760	930	F	R
	60	820	1046	F	W
	61	757	941	F	R
	62	760	970	F	R
	63	665	835	F	R
June 20	64	755	943	F	R
	65	740	905	F	R
	66	720	900	F	R
	67	660	825	F	R
	68	842	1062	F	R

APPENDIX 6 Cont. 1989 Nass River gillnet test fishery chinook
length, sex and flesh colour data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	COLOUR
June 20	69	712	900	F	R
	70	690	860	F	R
June 21	71	620	800	F	R
	72	800	1018	M	W
	73	740	940	F	R
	74	600	745	F	R
June 23	75	785	1000	M	R
	76	650	815	F	R
	77	723	895	F	R
June 24	78	600	756	F	R
	79	685	890	F	R
	80	767	970	F	R
	81	563	710	M	R
June 25	82	706	880	F	R
	83	545	680	F	R
	84	634	795	F	R
	85	549	663	M	R
	86	698	858	F	R
June 26	87	615	758	F	R
June 27	88	770	955	F	R
	89	733	925	F	R
	90	843	1096	M	R
June 27	91	765	948	F	R
	92	732	880	M	R
	93	668	830	M	W
	94	650	800	M	R
June 28	95	880	1145	M	R
	96	772	992	M	R
	97	655	805	F	R
	98	626	783	M	R
June 30	99	790	968	F	W
	100	650	805	F	R
July 1	101	720	900	M	R
	102	560	695	F	R

APPENDIX 6 Cont. 1989 Nass River gillnet test fishery chinook
length, sex and flesh colour data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	COLOUR
July 1	103	618	770	M	W
	104	712	866	F	R
	105	655	808	F	R
	106	690	840	M	R
	107	553	688	M	R
July 2	108	572	718	M	R
	109	773	975	F	R
	110	680	837	M	R
	111	753	950	M	R
	112	560	715	M	R
	113	685	844	M	R
	114	636	794	F	R
	115	653	820	M	R
July 3	116	890	1210	M	R
	117	760	998	M	R
	118	632	805	F	R
	119	630	777	F	R
	120	727	883	F	R
	121	668	853	F	R
July 4	122	705	874	F	R
	123	665	826	M	R
	124	615	760	F	R
	125	658	823	F	R
July 4	126	714	882	M	R
	127	761	975	M	R
	128	780	863	F	R
July 8	129	750	940	F	R
July 9	130	590	730	M	R
	131	540	695	M	R
July 10	132	560	708	F	R
	133	560	699	M	R
	134	530	660	F	R
	135	700	873	M	W
July 11	136	550	710	F	R

APPENDIX 6 Cont. 1989 Nass River gillnet test fishery chinook
length, sex and flesh colour data.

DATE	Sample #	HYPURAL LENGTH	NOSE FORK LENGTH	SEX	COLOUR
July 11	137	640	810	M	R
	138	800	1000	F	R
July 12	139	830	1042	M	R
July 15	140	650	810	M	R
	141	820	1043	F	W

APPENDIX 7. Weekly and annual summary of sockeye age composition data from the Nass River test fishery, 1989.

WEEK ENDING	SEX	#	3 ₁ %	#	4 ₁ %	#	4 ₂ %	#	5 ₂ %	#	5 ₃ %	#	6 ₂ %	#	6 ₃ %	TOTAL # ALL AGE CLASSES
JUNE 03	M			1	100.0											1
	F							1	100.0							1
	TOTAL (M+F)			1	50.0			1	50.0							2
JUNE 10	M	1	10.0	4	40.0	1	10.0	2	20.0					2	20.0	10
	F			4	33.3	2	16.7	5	41.7					1	8.3	12
	TOTAL (M+F)	1	4.5	8	36.4	3	13.6	7	31.8					3	13.6	22
JUNE 17	M	1	7.7	3	23.1	1	7.7	4	30.8	1	7.7			3	23.1	13
	F			3	18.8	2	12.5	4	25.0	2	12.5	1	6.3	4	25.0	16
	TOTAL (M+F)	1	3.4	6	20.7	3	10.3	8	27.6	3	10.3	1	3.4	7	24.1	29
JUNE 24	M			13	35.1	7	18.9	9	24.3	2	5.4			6	16.2	37
	F			21	44.7	8	17.0	8	17.0	6	12.8			4	8.5	47
	TOTAL (M+F)			34	40.5	15	17.9	17	20.2	8	9.5			10	11.9	84
JULY 01	M			2	6.9	5	17.2	4	13.8	6	20.7			12	41.4	29
	F			5	11.1	15	33.3	8	17.8	13	28.9			4	8.9	45
	TOTAL (M+F)			7	9.5	20	27.0	12	16.2	19	25.7			16	21.6	74
JULY 08	M					15	35.7	9	21.4	5	11.9			13	31.0	42
	F			1	1.5	38	56.7	7	10.4	15	22.4			6	9.0	67
	TOTAL (M+F)			1	0.9	53	48.6	16	14.7	20	18.3			19	17.4	109
JULY 15	M					47	52.8	17	19.1	9	10.1			16	18.0	89
	F			2	1.3	93	60.0	24	15.5	22	14.2			14	9.0	155
	TOTAL (M+F)			2	0.8	140	57.4	41	16.8	31	12.7			30	12.3	244
JULY 22	M					34	54.8	10	16.1	7	11.3			11	17.7	62
	F					83	61.9	11	8.2	24	17.9			16	11.9	134
	TOTAL (M+F)					117	59.7	21	10.7	31	15.8			27	13.8	196
JULY 29	M					21	43.8	12	25.0	10	20.8			5	10.4	48
	F			1	1.2	38	46.9	17	21.0	16	19.8			9	11.1	81
	TOTAL (M+F)			1	0.8	59	45.7	29	22.5	26	20.2			14	10.9	129
AUG. 05	M					4	57.1	1	14.3	2	28.6					7
	F					5	38.5	5	38.5	2	15.4			1	7.7	13
	TOTAL (M+F)					9	45.0	6	30.0	4	20.0			1	5.0	20

1989																
TOTAL MALE		2	0.6	23	6.8	135	39.9	68	20.1	42	12.4	0	0.0	68	20.1	338
TOTAL FEMALE		0	0.0	37	6.5	284	49.7	90	15.8	100	17.5	1	0.2	59	10.3	571
TOTAL (M + F)		2	0.2	60	6.6	419	46.1	158	17.4	142	15.6	1	0.1	127	14.0	909*

*Note: There were 167 age samples not readable of 1076 samples taken.

APPENDIX 8. Weekly and annual mean hypural (HYP.) and nose/fork (N/F) lengths (mm) of sockeye by sex and age class.

WEEK ENDING	SEX	---3---		---4---		---5---		---6---	
		HYP.	N/F	HYP.	N/F	HYP.	N/F	HYP.	N/F
JUNE 03	M	568	712						
	F			568	677				
JUNE 10	M	503	624	563	705			561	700
	F	476	585	544	664			530	664
JUNE 17	M	498	623	558	694	485	595	563	705
	F	487	599	548	681	488	599	545	673
JUNE 24	M	515	651	564	703	510	623	547	681
	F	475	589	549	677	480	590	561	691
JULY 01	M	498	612	571	691	533	647	574	700
	F	495	609	544	662	500	601	532	652
JULY 08	M	458	573	556	686	485	593	553	682
	F			537	647	485	593	547	667
JULY 15	M	485	590	518	647	499	614	554	692
	F			509	626	475	581	524	652
JULY 22	M			542	679	483	607	569	721
	F			522	649	468	577	523	649
JULY 29	M	470	587	531	673	490	620	564	713
	F			503	628	470	583	548	684
AUG. 05	M			455	565	485	587		
	F			506	616	433	534	465	570
1989	M	512	642	541	675	497	615	560	698
MEAN	F	479	592	522	643	477	585	533	660

APPENDIX 9. Mass River daily and cumulative test fishing indices of escapement for sockeye, 1980 - 1989.

DATE	1980		1981		1982		1983		1984		1985		1986		1987		1988		1989		10 YR
	DAILY	CUM.	DAILY	CUM.	DAILY	CUM.	DAILY	CUM.	DAILY	CUM.	DAILY	CUM.	DAILY	CUM.	DAILY	CUM.	DAILY	CUM.	DAILY	CUM.	CUM.
JUNE 3	2.13	2.13																			0.67
4	3.05	5.18	0.00	0.00																	0.37
5	2.80	7.98	1.33	1.33	0.17	0.17															0.00
6	0.00	7.98	2.08	3.41	3.21	3.38															0.22
7	0.00	7.98	1.43	4.84	3.77	7.15	0.93	0.93	2.41	4.55											0.59
8	1.14	9.12	2.44	7.28	4.07	11.22	2.04	2.97	0.90	6.74											0.68
9	1.43	10.55	2.56	9.84	6.17	17.39	0.57	3.54	1.85	8.59	1.94	16.78									0.00
10	1.78	12.33	3.71	13.55	12.69	30.08	0.93	4.47	5.46	14.05	1.60	18.38									0.00
11	2.50	14.83	4.47	18.02	10.95	41.03	1.66	6.13	2.41	16.46	0.49	18.87									0.00
12	2.60	17.43	6.86	24.88	2.77	43.80	4.46	10.59	4.07	20.53	1.29	20.16									0.00
13	4.44	21.87	6.05	30.93	1.00	44.80	2.59	13.18	3.89	24.42	0.37	20.53									0.00
14	3.52	25.39	6.05	36.98	0.59	45.39	3.93	17.11	3.70	28.12	2.50	23.03									0.16
15	3.64	29.03	7.04	44.02	1.89	47.28	5.13	22.24	7.54	35.66	3.17	26.20									0.00
16	8.77	37.80	6.20	50.22	3.19	50.47	6.33	28.57	8.98	44.64	5.92	29.11									0.16
17	11.00	48.80	1.33	51.55	4.48	54.95	4.47	33.04	6.61	51.25	2.52	34.63									0.16
18	13.79	62.59	5.30	56.85	8.65	63.60	5.52	38.56	4.83	56.08	7.21	41.84									0.16
19	7.24	69.83	2.37	59.22	11.77	75.37	9.32	47.88	9.43	65.51	6.11	47.95									0.16
20	6.52	76.35	5.36	64.58	17.30	92.67	6.67	54.55	9.87	75.38	5.00	52.95									0.16
21	4.88	81.23	12.00	76.58	12.81	105.48	5.34	59.89	10.31	85.69	7.10	60.05									0.16
22	6.36	87.59	15.71	92.29	5.71	111.19	3.93	63.82	6.50	92.19	8.50	68.55									0.16
23	7.60	95.19	2.68	94.97	7.68	118.87	3.57	67.39	4.61	96.80	6.24	74.79									0.16
24	6.36	101.55	1.89	96.86	9.65	128.52	3.21	70.60	3.87	100.67	11.53	86.32									0.16
25	5.42	106.97	5.26	102.12	14.19	142.71	5.00	75.60	0.00	100.67	12.55	98.87									0.16
26	7.93	114.90	8.83	110.95	21.82	164.53	2.85	78.45	0.00	100.67	15.29	114.16									0.16
27	4.90	119.80	10.64	121.59	16.66	181.19	5.83	84.28	1.04	101.71	10.81	124.97									0.16
28	4.81	124.61	11.93	133.52	15.64	196.83	10.97	95.25	2.08	103.79	6.33	131.30									0.16
29	7.68	132.29	16.66	150.18	12.26	209.09	5.00	100.25	2.96	106.75	10.99	142.29									0.16
30	8.08	140.37	15.87	166.05	9.88	218.97	5.61	105.86	9.26	116.01	3.70	145.99									0.16
JULY 1	6.29	146.66	10.17	176.22	7.00	225.97	6.21	112.07	5.29	121.30	0.00	145.99									0.16
2	3.93	150.59	5.56	181.78	9.50	235.47	10.98	123.05	17.35	138.65	2.67	148.66									0.16
3	9.64	160.23	9.68	191.46	8.98	244.45	9.51	132.56	15.00	153.65	4.19	152.85									0.16
4	8.26	168.51	12.00	203.46	6.44	250.89	11.97	144.53	11.12	164.77	6.00	158.85									0.16
5	4.26	172.77	10.83	214.29	6.38	257.27	11.45	155.98	7.24	172.01	7.81	166.66									0.16
6	3.39	176.16	9.47	223.76	3.10	260.37	9.33	165.31	8.62	180.63	12.55	179.21									0.16
7	8.78	184.94	11.93	235.69	4.77	265.14	7.63	172.94	7.19	187.82	14.17	193.38									0.16

APPENDIX 9 Cont. Mass River daily and cumulative test fishing indices of escapement for sockeye, 1980 - 1989.

DATE	1980		1981		1982		1983		1984		1985		1986		1987		1988		1989		10 YR
	DAILY	CUM.	DAILY	CUM.	DAILY	CUM.	DAILY	CUM.	DAILY	CUM.	DAILY	CUM.	DAILY	CUM.	DAILY	CUM.	DAILY	CUM.	DAILY	CUM.	AVG.
JULY 8	4.37	189.31	2.19	237.88	6.43	271.57	5.93	178.87	7.02	194.84	15.21	208.59	0.63	131.84	9.38	115.04	12.88	154.15	7.87	104.66	178.68
9	1.54	190.85	0.89	238.77	1.96	273.53	4.11	182.98	5.19	200.03	16.58	225.17	3.88	135.72	6.84	121.88	12.58	166.73	9.09	113.75	184.94
10	1.66	192.51	2.83	241.60	11.36	284.89	2.98	185.96	5.37	205.40	4.67	229.84	3.13	138.85	4.30	126.18	14.21	180.94	14.05	127.80	191.40
11	1.88	194.39	3.33	244.93	17.83	302.72	3.16	189.12	5.54	210.94	6.86	236.70	4.45	143.30	8.63	134.81	8.94	189.88	13.39	141.19	198.80
12	0.96	195.35	6.11	251.04	9.67	312.39	5.92	195.04	7.33	218.27	9.06	245.76	5.76	149.06	6.74	141.55	6.00	195.88	6.04	147.23	205.16
13	2.20	197.55	10.97	262.01	0.73	313.12	5.32	200.36	4.65	222.92	11.25	257.01	11.23	160.29	7.15	148.70	4.33	200.21	5.83	153.06	211.52
14	3.08	200.63	7.64	269.65	3.20	316.32	6.16	206.52	11.23	234.15	13.88	270.89	9.93	170.22	14.70	163.40	4.20	204.41	5.61	158.67	219.49
15	1.73	202.36	6.55	276.20	5.66	321.98	7.00	213.52	9.12	243.27	14.13	285.02	5.04	175.26	2.14	165.54	4.07	208.48	7.24	165.91	225.75
16	3.08	205.44	7.03	283.23	5.08	327.06	7.46	220.98	9.17	252.44	8.00	293.02	0.64	175.90	3.19	168.73	5.22	213.70	9.46	175.37	231.59
17	8.21	213.65	8.97	292.20	9.49	336.55	8.18	229.16	9.33	261.77	8.75	301.77	1.69	177.59	4.23	172.96	6.78	220.48	10.51	185.88	239.20
18	3.78	217.43	8.59	300.79	10.48	347.03	7.03	236.19	6.39	268.16	8.98	310.75	2.92	180.51	10.54	183.50	7.56	228.04	8.57	194.45	246.69
19	1.67	219.10	7.12	307.91	11.67	358.70	8.19	244.38	3.45	271.61	9.21	319.96	4.15	184.66	9.52	193.02	5.79	233.83	4.64	199.09	253.23
20	3.72	222.82	4.92	312.83	11.00	369.70	4.51	248.89	6.45	278.06	14.00	333.96	15.24	199.90	7.55	200.57	2.76	236.59	3.94	203.03	260.64
21	5.71	228.53	10.65	323.48	8.34	378.04	3.12	252.01	9.18	287.24	14.30	348.26	8.73	208.63	7.23	207.80	2.65	239.24	3.24	206.27	267.95
22	6.94	235.47	6.33	329.81	5.67	383.71	1.72	253.73	10.97	298.21	11.01	359.27	10.34	218.97	1.94	209.74	2.54	241.78	2.86	209.13	273.98
23	7.22	242.69	10.32	340.13	6.89	390.60	1.97	255.70	5.34	303.55	10.79	370.06	3.75	222.72	1.53	211.27	1.45	243.23	5.04	214.17	279.41
24	3.04	245.73	9.63	349.76	8.33	398.93	3.28	258.98	1.97	305.52	5.48	375.54	3.54	226.26	0.76	212.03	2.50	245.73	6.79	220.96	283.94
25	1.70	247.43	8.28	358.04	6.50	405.43	5.71	264.69	3.09	308.61	6.71	382.25	3.33	229.59	0.86	212.89	5.85	251.58	4.32	225.28	288.58
26	1.13	248.56	15.28	373.32	7.66	413.09	5.93	270.62	4.21	312.82	5.53	387.78	3.12	232.71	1.78	214.67	2.45	254.03	4.26	229.54	293.71
27	4.28	252.84	14.06	387.38	8.39	421.48	0.94	271.56	2.30	315.12	5.95	393.73	6.47	239.18	3.09	217.76	0.24	254.27	4.20	233.74	298.71
28		252.84		387.38	5.74	427.22	1.31	272.87	0.93	316.05	7.90	401.63	11.24	250.42	3.36	221.12	2.22	256.49	4.14	237.88	302.39
29		252.84		387.38		427.22	1.02	273.89	2.58	318.63	9.94	411.57	5.56	255.98	3.86	224.98		258.82	5.17	243.05	305.44
30		252.84		387.38		427.22	4.12	278.01	2.14	320.77	3.26	414.83	1.82	257.80	2.60	227.58		258.82	4.82	247.87	307.31
31		252.84		387.38		427.22	6.89	284.90	0.74	321.51	1.56	416.39	2.51	260.31	0.51	228.09		258.82	3.27	251.14	308.86
AUG. 1		252.84		387.38		427.22		284.90		321.51		416.39	3.20	263.51		228.09		258.82	3.68	254.82	309.55
2		252.84		387.38		427.22		284.90		321.51		416.39	3.88	267.39		228.09		258.82	3.12	257.94	310.25
3		252.84		387.38		427.22		284.90		321.51		416.39	3.33	270.72		228.09		258.82	2.77	260.71	310.86
4		252.84		387.38		427.22		284.90		321.51		416.39	4.00	274.72		228.09		258.82	2.43	263.14	311.50
5		252.84		387.38		427.22		284.90		321.51		416.39	3.69	278.41		228.09		258.82	2.09	265.23	312.08
6		252.84		387.38		427.22		284.90		321.51		416.39	1.57	279.98		228.09		258.82	1.52	266.75	312.39
7		252.84		387.38		427.22		284.90		321.51		416.39		279.98		228.09		258.82	2.45	269.20	312.63
8		252.84		387.38		427.22		284.90		321.51		416.39		279.98		228.09		258.82	2.12	271.32	312.85
9		252.84		387.38		427.22		284.90		321.51		416.39		279.98		228.09		258.82	2.59	273.91	313.10

APPENDIX 10. Mass River test fishing cumulative indices and escapements for sockeye, 1980 - 1989.

DATE	1980		1981		1982		1983		1984		1985		1986		1987		1988		1989		10 YR. AVG. ESC. CUM. ESC.
	CUM.	ESC.	CUM.	ESC.	CUM.	ESC.	CUM.	ESC.	CUM.	ESC.	CUM.	ESC.	CUM.	ESC.	CUM.	ESC.	CUM.	ESC.	CUM.	ESC.	
JUNE 3	2.13	1374											0.16	113	0.00	0			0.37	250	434
4	5.18	3341	0.00	0									0.16	113	0.17	142			0.37	250	769
5	7.98	5147	1.33	912	128		2.14	1289					0.16	113	0.51	427			0.59	398	1202
6	7.98	5147	3.41	2338	2542		4.55	2741					0.16	113	0.68	570	0.00	0	0.59	398	1731
7	7.98	5147	4.84	3318	5376	0.93	629	3518					0.16	113	1.06	889	0.00	0	1.46	986	2220
8	9.12	5883	7.28	4991	8437	2.97	2010	4060					0.16	113	1.44	1207	0.00	0	2.16	1458	3129
9	10.55	6805	9.84	6747	13077	3.54	2395	5174	16.78	15046			0.16	113	1.60	1341	0.19	107	2.86	1931	5273
10	12.33	7953	13.55	9290	22619	4.47	3025	8463	18.38	16480			0.16	113	1.60	1341	0.76	427	4.93	3328	7304
11	14.83	9566	18.02	12355	30853	6.13	4148	9914	18.87	16919			0.16	113	1.81	1517	1.33	747	5.68	3834	8997
12	17.43	11243	24.88	17058	32936	10.59	7166	20.53	12366	20.16	18076		0.16	113	2.23	1869	2.64	1484	7.64	5157	10747
13	21.87	14107	30.93	21206	44.80	33688	13.18	8918	24.42	14709	20.53	18408	0.76	535	2.86	2397	4.49	2523	10.80	7290	12378
14	25.39	16377	36.98	25354	45.39	34131	17.11	11578	28.12	16937	23.03	20649	1.95	1373	3.70	3101	8.00	4496	13.18	8897	14289
15	29.03	18725	44.02	30181	47.28	35553	22.24	15049	35.66	21479	26.20	23492	2.98	2098	4.75	3982	11.05	6210	14.69	9916	16668
16	37.80	24382	50.22	34432	50.47	37951	28.57	19332	44.64	26887	29.11	26101	3.16	2225	9.55	8005	13.10	7362	15.78	10652	19733
17	48.80	31477	51.55	35344	54.95	41320	33.04	22357	51.25	30869	34.63	31050	4.13	2907	12.79	10721	14.15	7952	16.52	11151	22515
18	62.59	40372	56.85	38978	63.60	47824	38.56	26092	56.08	33778	41.84	37515	6.75	4752	16.47	13806	16.51	9279	18.84	12717	26511
19	69.83	45042	59.22	40602	75.37	56675	47.88	32399	65.51	39458	47.95	42994	11.97	8426	21.63	18131	17.94	10082	25.02	16889	31070
20	76.35	49248	64.58	44277	92.67	69684	54.55	36912	75.38	45402	52.95	47477	15.09	10623	27.87	23361	24.50	13769	29.69	20041	36079
21	81.23	52395	76.58	52505	105.48	79316	59.89	40525	85.69	51612	60.05	53843	16.11	11341	31.80	26655	31.67	17799	31.54	21290	40728
22	87.59	56498	92.29	63276	111.19	83610	63.82	43185	92.19	55227	68.55	61464	19.17	13495	35.92	30109	38.71	21755	33.64	22707	45163
23	95.19	61400	94.97	65113	118.87	89385	67.39	45600	96.80	58304	74.79	67059	23.17	16311	40.22	33713	45.62	25638	38.08	25704	48823
24	101.55	65502	96.86	66409	128.52	96641	70.60	47773	100.67	60635	86.32	77397	27.30	19218	45.22	37904	52.39	29443	40.19	27128	52805
25	106.97	68998	102.12	70016	142.71	107312	75.60	51156	100.67	60635	98.87	88650	30.51	21478	51.11	42842	57.44	32281	42.65	28789	57216
26	114.90	74113	110.95	76070	164.53	123719	78.45	53084	100.67	60635	114.16	102360	34.32	24160	57.89	48525	64.16	36058	45.69	30841	62957
27	119.80	77274	121.59	83365	181.19	136247	84.28	57029	101.71	61261	124.97	112052	40.94	28820	62.41	52313	76.25	42853	49.23	33230	68445
28	124.61	80377	133.52	91544	196.83	148008	95.25	64452	103.79	62514	131.30	117728	50.37	35459	66.30	55574	90.86	51063	53.79	36308	74303
29	132.29	85330	150.18	102967	209.09	157227	100.25	67856	106.75	64297	142.29	127582	63.00	44350	70.69	59254	97.04	54537	57.39	38738	80212
30	140.37	90542	166.05	113847	218.97	164656	105.86	71632	116.01	69874	145.99	130899	72.55	51073	75.85	63579	102.10	57380	60.03	40520	85400
JULY 1	146.66	94599	176.22	120820	225.97	169920	112.07	75834	121.30	73061	145.99	130899	85.97	60520	80.34	67343	106.04	59595	62.84	42417	89501
2	150.59	97134	181.78	124632	235.47	177063	123.05	83264	138.65	83511	148.66	133293	96.24	67750	84.16	70545	108.87	61185	66.59	44948	94333
3	160.23	103352	191.46	131269	244.45	183816	132.56	89699	153.65	92546	152.85	137050	104.77	73755	87.31	73185	117.57	66074	70.48	47574	99832
4	168.51	108693	203.46	139497	250.89	188658	144.53	97798	164.77	99243	158.85	142430	113.31	79767	89.81	75281	123.76	69553	74.23	50105	105103
5	172.77	111441	214.29	146922	257.27	193456	155.98	105546	172.01	103604	166.66	149433	121.85	85779	95.01	79639	129.47	72762	81.57	55060	110364
6	176.16	113628	223.76	153415	260.37	195787	165.31	111860	180.63	108796	179.21	160686	127.52	89770	98.81	82825	133.04	74769	89.09	60136	115167
7	184.94	119291	235.69	161594	265.14	199374	172.94	117023	187.82	113127	193.38	173391	131.21	92368	105.66	88567	141.27	79394	96.79	65333	120946

APPENDIX 10 Cont. Mass River test fishing cumulative indices and escapements for sockeye, 1980 - 1989.

DATE	1980		1981		1982		1983		1984		1985		1986		1987		1988		1989		10 YR
	CUM.	ESC.	CUM.	ESC.	CUM.	ESC.	CUM.	ESC.	CUM.	ESC.	CUM.	ESC.	CUM.	ESC.	CUM.	ESC.	CUM.	ESC.	CUM.	ESC.	AVG.
JULY 8	189.31	122110	237.88	163096	271.57	204209	178.87	121035	194.84	117355	208.59	187029	131.84	92811	115.04	96429	154.15	86632	104.66	70646	126135
9	190.85	123103	238.77	163706	273.53	205683	182.98	123816	200.03	120481	225.17	201895	135.72	95543	121.88	102162	166.73	93702	113.75	76781	130687
10	192.51	124174	241.60	165646	284.89	214225	185.96	125833	205.40	123715	229.84	206082	138.85	97746	126.18	105767	180.94	101688	127.80	86265	135114
11	194.39	125386	244.93	167929	302.72	227632	189.12	127971	210.94	127052	236.70	212233	143.30	100879	134.81	113001	189.88	106713	141.19	95303	140410
12	195.35	126006	251.04	172118	312.39	234904	195.04	131977	218.27	131467	245.76	220357	149.06	104933	141.55	118650	195.88	110085	147.23	99380	144988
13	197.55	127425	262.01	179640	313.12	235453	200.36	135577	222.92	134268	257.01	230444	160.29	112839	148.70	124644	200.21	112518	153.06	103316	149612
14	200.63	129411	269.65	184878	316.32	237859	206.52	139745	234.15	141032	270.89	242889	170.22	119829	163.40	136965	204.41	114879	158.67	107102	155459
15	202.36	130527	276.20	189369	321.98	242115	213.52	144482	243.27	146525	285.02	255558	175.26	123377	165.54	138759	208.48	117166	165.91	111989	159987
16	205.44	132514	283.23	194189	327.06	245935	220.98	149530	252.44	152048	293.02	262731	175.90	123828	168.73	141433	213.70	120100	175.37	118375	164068
17	213.65	137809	292.20	200339	336.55	253071	229.16	155065	261.77	157668	301.77	270577	177.59	125018	172.96	144979	220.48	123910	185.88	125469	169390
18	217.43	140248	300.79	206228	347.03	260952	236.19	159822	268.16	161517	310.75	278629	180.51	127073	183.50	153814	228.04	128159	194.45	131254	174769
19	219.10	141325	307.91	211110	358.70	269727	244.38	165364	271.61	163595	319.96	286887	184.66	129995	193.02	161794	233.83	131413	199.09	134386	179559
20	222.82	143724	312.83	214483	369.70	277998	248.89	168415	278.06	167479	333.96	299440	199.90	140723	200.57	168122	236.59	132964	203.03	137045	185039
21	228.53	147407	323.48	221785	378.04	284270	252.01	170526	287.24	173009	348.26	312261	208.63	146869	207.80	174182	239.24	134453	206.27	139232	190400
22	235.47	151884	329.81	226125	383.71	288533	253.73	171690	298.21	179616	359.27	322133	218.97	154148	209.74	175809	241.78	135881	209.13	141163	194698
23	242.69	156541	340.13	233200	390.60	293714	255.70	173023	303.55	182832	370.06	331808	222.72	156788	211.27	177091	243.23	136695	214.17	144565	198626
24	245.73	158502	349.76	239803	398.93	299978	258.98	175243	305.52	184019	375.54	336722	226.26	159280	212.03	177728	245.73	138100	220.96	149148	201852
25	247.43	159598	358.04	245480	405.43	304866	264.69	179107	308.61	185880	382.25	342738	229.59	161624	212.89	178449	251.58	141388	225.28	152064	205119
26	248.56	160327	373.32	255956	413.09	310626	270.62	183119	312.82	188416	387.78	347696	232.71	163820	214.67	179941	254.03	142765	229.54	154940	208761
27	252.84	163088	387.38	265596	421.48	316935	271.56	183755	315.12	189801	393.73	353031	239.18	168375	217.76	182531	254.27	142900	233.74	157775	212379
28	252.84	163088	387.38	265596	427.22	321251	272.87	184642	316.05	190361	401.63	360115	250.42	176288	221.12	185348	256.49	144148	237.88	160569	215140
29	252.84	163088	387.38	265596	427.22	321251	273.89	185332	318.63	191915	411.57	369027	255.98	180202	224.98	188583	258.82	145457	243.05	164059	217451
30	252.84	163088	387.38	265596	427.22	321251	278.01	188120	320.77	193204	414.83	371950	257.80	181483	227.58	190763	258.82	145457	247.87	167312	218822
31	252.84	163088	387.38	265596	427.22	321251	284.90	192782	321.51	193650	416.39	373349	260.31	183250	228.09	191190	258.82	145457	251.14	169520	219913
AUG.1	252.84	163088	387.38	265596	427.22	321251	284.90	192782	321.51	193650	416.39	373349	263.51	185503	228.09	191190	258.82	145457	254.82	172004	220387
2	252.84	163088	387.38	265596	427.22	321251	284.90	192782	321.51	193650	416.39	373349	267.39	188234	228.09	191190	258.82	145457	257.94	174110	220871
3	252.84	163088	387.38	265596	427.22	321251	284.90	192782	321.51	193650	416.39	373349	270.72	190578	228.09	191190	258.82	145457	260.71	175979	221292
4	252.84	163088	387.38	265596	427.22	321251	284.90	192782	321.51	193650	416.39	373349	274.72	192394	228.09	191190	258.82	145457	263.14	177620	221738
5	252.84	163088	387.38	265596	427.22	321251	284.90	192782	321.51	193650	416.39	373349	278.41	195992	228.09	191190	258.82	145457	265.23	179030	222139
6	252.84	163088	387.38	265596	427.22	321251	284.90	192782	321.51	193650	416.39	373349	279.98	197097	228.09	191190	258.82	145457	266.75	180056	222352
7	252.84	163088	387.38	265596	427.22	321251	284.90	192782	321.51	193650	416.39	373349	279.98	197097	228.09	191190	258.82	145457	269.20	181710	222517
8	252.84	163088	387.38	265596	427.22	321251	284.90	192782	321.51	193650	416.39	373349	279.98	197097	228.09	191190	258.82	145457	271.32	183141	222660
9	252.84	163088	387.38	265596	427.22	321251	284.90	192782	321.51	193650	416.39	373349	279.98	197097	228.09	191190	258.82	145457	273.91	184889	222835

APPENDIX 11 Cont. Mass River test fishing indices of escapement for chinook, 1980 - 1989.

DATE	1980		1981		1982		1983		1984		1985		1986		1987		1988		1989		10 YR	
	DAILY	CUM.	DAILY	CUM.	DAILY	CUM.	DAILY	CUM.	DAILY	CUM.	DAILY	CUM.	DAILY	CUM.	DAILY	CUM.	DAILY	CUM.	DAILY	CUM.	CUM.	AVG.
JULY 8	0.54	30.82	1.90	21.70	0.36	16.66	0.68	47.33	1.03	59.00	0.99	43.99	0.47	50.10	0.31	29.64	1.02	34.83	0.33	37.25	37.13	37.13
9	1.89	32.71	0.00	21.70	0.54	17.20	1.07	48.40	0.37	59.37	0.00	43.99	0.47	50.57	0.65	30.29	0.45	35.28	0.50	37.75	37.75	37.75
10	0.42	33.13	0.37	22.07	0.16	17.36	1.23	49.63	0.54	59.91	0.00	43.99	1.56	52.13	0.99	31.28	0.14	35.42	0.66	38.41	38.33	38.33
11	0.00	33.13	0.88	22.95	0.50	17.86	1.23	50.86	0.71	60.62	0.21	44.20	0.78	52.91	1.05	32.33	0.45	35.87	0.52	38.93	38.97	38.97
12	0.96	34.09	0.00	22.95	0.82	18.68	0.74	51.60	0.71	61.33	0.42	44.62	0.00	52.91	0.00	32.33	0.33	36.20	0.75	39.68	39.44	39.44
13	0.00	34.09	0.00	22.95	0.00	18.68	0.52	52.12	0.71	62.04	0.63	45.25	0.14	53.05	0.81	33.14	0.67	36.87	0.38	40.06	39.83	39.83
14	0.00	34.09	0.35	23.30	0.51	19.19	0.57	52.69	2.23	64.27	0.68	45.93	0.71	53.76	1.69	34.83	0.34	37.21	0.00	40.06	40.53	40.53
15	0.38	34.47	0.00	23.30	1.02	20.21	0.61	53.30	0.53	64.80	0.70	46.63	0.46	54.22	0.00	34.83	0.00	37.21	0.79	40.85	40.98	40.98
16	0.00	34.47	0.35	23.65	0.84	21.05	0.47	53.77	2.17	66.97	0.17	46.80	0.32	54.54	0.43	35.26	0.35	37.56	0.00	40.85	41.49	41.49
17	1.09	35.56	0.00	23.65	0.17	21.22	0.15	53.92	1.00	67.97	0.94	47.74	0.34	54.88	0.85	36.11	0.68	38.24	0.00	40.85	42.01	42.01
18	0.74	36.30	0.69	24.34	0.32	21.54	0.49	54.41	1.19	69.16	0.47	48.21	0.33	55.21	0.14	36.25	0.84	39.08	0.00	40.85	42.54	42.54
19	0.93	37.23	0.00	24.34	0.67	22.21	0.15	54.56	1.38	70.54	0.00	48.21	0.31	55.52	0.24	36.49	0.99	40.07	0.00	40.85	43.00	43.00
20	0.19	37.42	0.18	24.52	0.66	22.87	0.00	54.56	1.76	72.30	1.60	49.81	0.14	55.66	0.13	36.62	0.00	40.07	0.00	40.85	43.47	43.47
21	0.00	37.42	0.33	24.85	0.33	23.20	0.16	54.72	0.82	73.12	0.00	49.81	0.56	56.22	0.46	37.08	0.32	40.39	0.00	40.85	43.77	43.77
22	0.39	37.81	1.33	26.18	0.00	23.20	0.31	55.03	0.32	73.44	0.58	50.39	0.55	56.77	0.28	37.36	0.63	41.02	0.00	40.85	44.21	44.21
23	0.00	37.81	0.30	26.48	0.34	23.54	0.00	55.03	1.04	74.48	0.26	50.65	0.47	57.24	0.25	37.61	0.18	41.20	0.00	40.85	44.49	44.49
24	0.42	38.23	0.37	26.85	0.17	23.71	0.35	55.38	0.36	74.84	0.00	50.65	0.49	57.73	0.15	37.76	0.36	41.56	0.00	40.85	44.76	44.76
25	0.56	38.79	0.89	27.74	0.67	24.38	0.32	55.70	0.27	75.11	0.29	50.94	0.50	58.23	0.00	37.76	0.00	41.56	0.00	40.85	45.11	45.11
26	0.00	38.79	0.18	27.92	0.16	24.54	0.00	55.70	0.18	75.29	0.39	51.33	0.52	58.75	0.12	37.88	0.00	41.56	0.15	41.00	45.28	45.28
27	0.00	38.79	0.00	27.92	0.16	24.70	0.32	56.02	0.52	75.81	0.14	51.47	0.00	58.75	0.00	37.88	0.24	41.80	0.30	41.30	45.44	45.44
28	0.00	38.79	0.00	27.92	0.17	24.87	0.33	56.35	0.74	76.55	0.25	51.72	0.92	59.67	0.13	38.01	0.17	41.97	0.46	41.76	45.76	45.76
29	0.00	38.79	0.00	27.92	0.00	24.87	0.00	56.35	0.00	76.55	0.24	51.96	0.83	60.50	0.14	38.15	0.00	41.97	0.17	41.93	45.90	45.90
30	0.00	38.79	0.00	27.92	0.00	24.87	0.00	56.35	0.72	77.27	0.31	52.27	0.15	60.65	0.26	38.41	0.00	41.97	0.14	42.07	46.06	46.06
31	0.00	38.79	0.00	27.92	0.00	24.87	0.00	56.35	0.00	77.27	0.00	52.27	0.10	60.75	0.00	38.41	0.00	41.97	0.00	42.07	46.07	46.07
AUG. 1	0.00	38.79	0.00	27.92	0.00	24.87	0.00	56.35	0.00	77.27	0.00	52.27	0.05	60.80	0.00	38.41	0.00	41.97	0.35	42.42	46.11	46.11
2	0.00	38.79	0.00	27.92	0.00	24.87	0.00	56.35	0.00	77.27	0.00	52.27	0.00	60.80	0.00	38.41	0.00	41.97	0.00	42.42	46.11	46.11
3	0.00	38.79	0.00	27.92	0.00	24.87	0.00	56.35	0.00	77.27	0.00	52.27	0.00	60.80	0.00	38.41	0.00	41.97	0.00	42.42	46.11	46.11
4	0.00	38.79	0.00	27.92	0.00	24.87	0.00	56.35	0.00	77.27	0.00	52.27	0.00	60.80	0.00	38.41	0.00	41.97	0.00	42.42	46.11	46.11
5	0.00	38.79	0.00	27.92	0.00	24.87	0.00	56.35	0.00	77.27	0.00	52.27	0.00	60.80	0.00	38.41	0.00	41.97	0.00	42.42	46.11	46.11
6	0.00	38.79	0.00	27.92	0.00	24.87	0.00	56.35	0.00	77.27	0.00	52.27	0.00	60.80	0.00	38.41	0.00	41.97	0.30	42.72	46.14	46.14
7	0.00	38.79	0.00	27.92	0.00	24.87	0.00	56.35	0.00	77.27	0.00	52.27	0.00	60.80	0.00	38.41	0.00	41.97	0.00	42.72	46.14	46.14
8	0.00	38.79	0.00	27.92	0.00	24.87	0.00	56.35	0.00	77.27	0.00	52.27	0.00	60.80	0.00	38.41	0.00	41.97	0.00	42.72	46.14	46.14
9	0.00	38.79	0.00	27.92	0.00	24.87	0.00	56.35	0.00	77.27	0.00	52.27	0.00	60.80	0.00	38.41	0.00	41.97	0.00	42.72	46.14	46.14

APPENDIX 12. Relationship between the annual Nass test fishery sockeye index of spawning escapement and recorded annual escapement past test fishery from 1963 to 1989.

YEAR	ESCAPEMENT PAST TEST FISHERY	TEST FISHERY INDEX	SPAWNERS PER INDEX	PREDICTED ESCAPEMENT
1963	N/A	182.70	--	--
1964	163845	269.73	607	134890
1965	141242	222.81	634	111405
1966	113039	181.98	621	90990
1967	86713	190.72	455	95360
1968	104542	265.26	394	132730
1969	182312	253.48	719	--
1970	119112	288.49	413	115396
1971	252844	362.95	697	145180
1972	181230	235.18	771	94072
1973	292331	488.56	598	262625
1974	201403	319.69	630	175610
1975	85674	215.76	397	118668
1976	165305	303.76	544	167068
1977	424821	466.28	911	256454
1978	156818	269.70	581	148335
1979	222751	284.56	783	182418
1980	163088	252.84	645	151704
1981	265596	387.38	686	259746
1982	321251	427.22	752	260450
1983	192782	284.90	677	174599
1984	193650	321.51	602	198050
1985	373349	416.39	897	254831
1986	197072	279.98	704	181987
1987	191160	228.09	838	150670
1988	145457	258.82	562	181174
1989	119826	273.91	437	184889
AVG. 64-89	194508	298.08	653	162665
AVG. 64-74	167147	279.90	597	123478
AVG. 75-84	219174	321.39	682	191749
AVG. 80-89	216323	313.10	691	199810

- Note: 1. Esc. past test fishery = spawning esc. + I.F.F. catch data.
 2. Spawners per index = esc. past test fishery / total test fishery index.