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## **Summary of British Columbia Herring Sampling Data for the 1989-90 Season**

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1990

**Canadian Data Report of  
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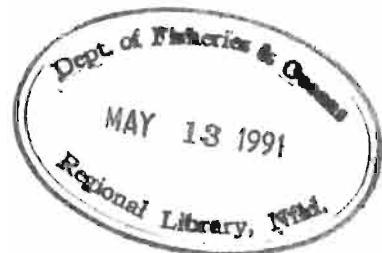
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SAMPLING DATA FOR THE 1989-90 SEASON

by

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## ABSTRACT

Hamer, L. and J. Schweigert. 1990. Summary of British Columbia herring sampling data for the 1989-90 season. Can. Data Rep. Fish. Aquat. Sci. 819: 111 p.

Age compositions and the average length and weight at age, the sex ratio, and the maturity stages of herring samples combined by geographical area, time period, gear type, and source are tabulated for the 1989-90 season. Tables are given for two geographical groupings: statistical areas and sections.

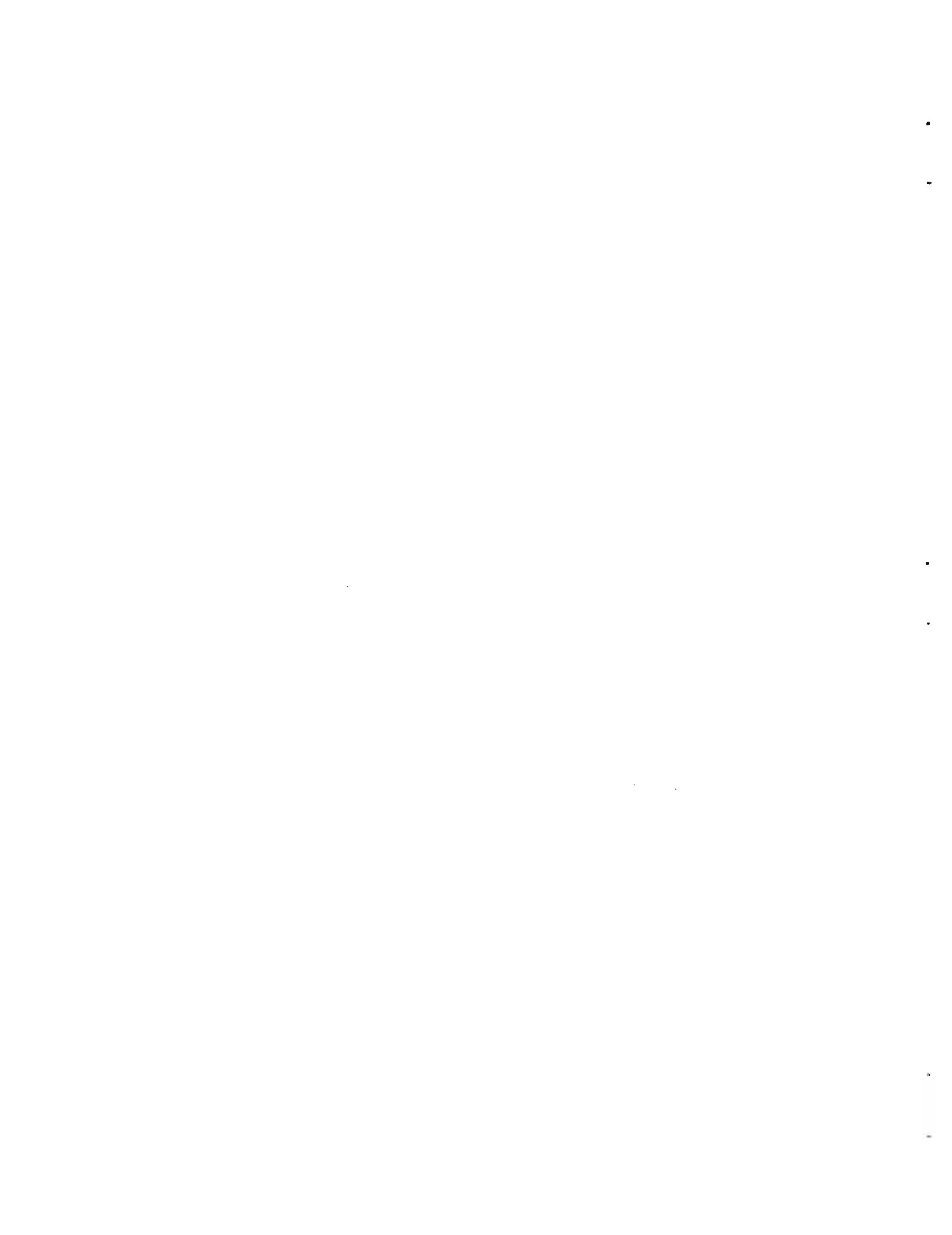
Key words: herring samples, age composition, geographical groupings

## RÉSUMÉ

Hamer, L. and J. Schweigert. 1990. Summary of British Columbia herring sampling data for the 1989-90 season. Can. Data Rep. Fish. Aquat. Sci. 819: 111 p.

Ce rapport présente, par région géographique, période de l'année, genre d'engin de pêche et provenance, la répartition par âge, la taille moyenne et le poids en fonction de l'âge, la proportion par sexe et les stades de maturité de harengs échantillonnés en 1989-1990. Les tableaux sont divisés en deux regroupements géographiques: zones statistiques et sections.

Mots-clés: harengs échantillonnés, répartition par âge, regroupements géographiques



## INTRODUCTION

Biological samples of herring are collected and sampled annually for length, weight, sex, maturity, age, and gonad weight. This information is used in stock assessments, and for determining stock characteristics. As well, it is useful to fishery managers located along the coast of British Columbia. This report summarizes biological characteristics by geographical groupings, time periods, gear, and source types.

Individual fish records since the 1950-51 season are maintained on computer files. These files provide a 40-year series of data accessible for analyses and modelling.

## METHODS

The catch sampling program collects samples from a variety of sources.

Pre-fishery charters provide the majority of samples. Charter vessels assess all major herring stocks to get biological sampling data, and to provide information for management of roe fisheries (Armstrong, 1989). (A 'major' stock is a stock that can regularly support roe fisheries.) Charter timing is set to ensure that the vessels are available before and during the main spawning in each area. Department of Fisheries and Oceans (DFO) staff on board the charter vessels collect samples from the test sets.

Commercial samples are obtained from two types of fisheries: roe fisheries, and food and bait fisheries. Roe fisheries are sampled with the goal of getting ten samples from each seine fishery, and six samples from each gillnet fishery. A sampling plan is designed for each fishery to ensure that the sample series collected represents the catch in time, gear distribution, and space. The food and bait fisheries are currently very small both in quota and numbers of vessels licensed to fish (Chalmers, 1989). Consequently, each vessel participating in the food and bait fishery is expected to provide a biological sample.

Various programs within DFO organized research cruises and collected biological samples.

All biological samples are frozen on board vessels and shipped to the Pacific Biological Station where they are processed following standard procedures described by Hamer (1989). An additional processing procedure, measuring gonad lengths, was done this year.

Gonad maturities are classified according to a modified Hjort maturity scale (Table 1). Female roe maturities in the data summaries are defined as:

Immature	- Hjort stages 1 - 4
Mature	- Hjort stages 5 - 6
Spent	- Hjort stages 7 - 8.

Fish classified as immature in estimating the sex ratio are those whose gonads were not sufficiently developed for sex determination.

## DATA COMPILATION AND SCREENING

The recorded data are entered onto computer tapes. The data are screened by computer for relationships between age, length, and weight which are outside the normal range for the coast as a whole (mean +/- 2 standard deviations). Anomalies are listed and the associated data checked for possible errors in recording or coding. Gonad length and weight relationships were determined, and values outside of a range of 3 standard deviations from the mean were deleted.

## AGE DETERMINATION

Herring ages follow the "year of life" convention. Therefore, fish in their first year are designated as age "0+". (In previous sample summaries, an age 0+ fish would have been reported as age 1, an age 1+ fish would have been reported as age 2, etc.). There has been no change in the ageing method - only in the way the ages are reported (i.e., herring birthdays are at spawning, and not on January 1, which is the convention for many other fish species).

A revised system of ageing herring has been used since the 1987-88 season. Before that season, a fish was either assigned an age or was classified as unageable. With the revised ageing system, the option of two possible ages was used when it was difficult to positively determine an age. We have not determined how best to incorporate this additional information into estimates of age compositions. As a result, the age compositions in this report are based only on fish for which a single age was assigned.

## RESULTS

Four hundred and fifty biological samples were processed in the 1989-90 season.

Thirteen vessels were chartered to help manage the 1990 roe herring fisheries through hydro-acoustic surveys and test fishing (Table 2). An additional three vessels were chartered to assist in spawn assessment after the fisheries were over. A total of 295 pre-fishery charter samples were processed. Seventeen of these samples were processed as a special study to see if there were differences between fish taken at different times during the pumping procedure (i.e. pumping the fish from the seine net into the hold of a vessel).

The 1990 roe herring fisheries occurred in the Queen Charlotte Islands, Prince Rupert District, Strait of Georgia, and West Coast of Vancouver Island assessment regions (Figs. 1-6), between March 11 and April 8. All fisheries opened in areas which have supported fisheries during the past ten years except the 2W license area, where seines fished in Port Louis. The quota for the 1990 fisheries was 30,705 tonnes, 3015 tonnes less than the 1989 quota. One hundred and twenty-four samples were processed from the 15 openings (Table 3).

The food and bait herring fisheries took place in Johnstone Strait and the Strait of Georgia during November and December of 1989. Each of the two vessels licensed to fish in Johnstone Strait supplied a sample, and seven samples were collected from the 18 vessels eligible to fish in the Strait of Georgia.

Research samples in the 1989-90 season were collected from two sources. The La Perouse project conducted a research cruise (August 13-22, 1989), to study offshore herring year-class strength and production. The vessel chartered for this project, the F/V OCEAN KING, collected five samples. Another six research samples were acquired by the DFO seiner WALKER ROCK, which conducts annual fall and winter hydroacoustic surveys in the lower Strait of Georgia.

The following types of information, with associated table numbers, are summarized in this report:

Maturity stages for Pacific herring	Table 1
Charter vessel information	Table 2
Roe herring fishery summaries	Table 3
Codes for sample data	Table 4
Week numbers for sample data	Table 5
Sample summaries	Table 6
Data summaries	Tables 7-13.

The data summaries include various groupings of samples by geographical areas, time periods, gear and source types. Each summary contains information on the age composition, the average length and weight at age, the sex ratio, and the maturity stages of the combined samples in that report.

#### ACKNOWLEDGMENTS

Margaret Burke, Karen Charles, and Diana Little of the Fish Ageing Unit determined the ages. J.O.Thomas and Associates Ltd. collected the roe fishery samples, and Tideview Services processed all samples.

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- Parrish, B.B. and A. Saville. 1965. The biology of the northeast Atlantic herring populations. Oceanogr. Mar. Biol. Annu. Rev. 3: 323-373.

Table 1. Maturity stages for Pacific herring (adapted from Bowers and Holliday 1961; Parrish and Saville 1965). These descriptions are intended as general guidelines. Length of time samples have been frozen, thawing time, and different handling procedures may alter the colour of the gonads. Therefore, the texture of the gonad is also used to assess maturity. The timing description is also a general guideline due to the wide range in spawn timing on the British Columbia coast.

Stage	State of Maturity	Gonad appearance	Description	Timing
I	Undeveloped	Thread-shaped	Virgin herring with small gonads, less than 2 mm broad. Accurate macroscopic determination of sex not possible. Fat is visible in the body cavity.	Year-round for young herring usually less than 150 mm in length. (However, some herring as small as 125 mm may have mature gonads.)
II	Starting	Ribbon-shaped	Gonads increased in breadth to 3-5 mm. Sex determination difficult. Testes reddish-grey coloured and knife-shaped. Ovaries reddish-wine coloured and bullet-shaped at tip. (The gonads of virgins and some repeat spawners cannot be differentiated macroscopically.) Fat is visible in the body cavity.	Late spring and early summer.
III	Developing	Tube-like	Gonads thickened, increased in breadth (5-15 mm) and elongated, but not extending full length of body cavity. Ovaries red to reddish-orange, granular in appearance, and bullet-shaped at the tip. Testes reddish-grey, smooth in appearance, and knife-shaped.	Usually late summer to early fall, but may extend into winter and early spring.
IV	Maturing	Prominent	Gonads extend full length of body cavity. Ovaries reddish-orange to yellow; eggs distinguishable, opaque, variable in size and separate. Testes mostly grey, firmer, and will ooze milt if sliced with a knife. Blood vessels often clearly visible in the ovary and testes walls.	Usually late fall and winter, but may extend to as late as March. (Slightly earlier in males than females.)
V	Mature	Bulging	Few or no blood vessels visible in gonad walls. Walls of body cavity thin. Ovaries gold-yellow, firm and will often break into sections. Eggs mostly transparent and uniform in size. Testes usually milk-white, soft and plump; and milt will flow under pressure.	Mid-winter to late spring.

Table 1 (cont'd)

Stage	State of Maturity	Gonad appearance	Description	Timing
VI	Ripe	Running	Gonads do not hold their shape. Ovaries look and feel gelatinous. Segmentation is lost. Eggs are transparent and sticky to the touch. Testes runny, and have a curdled appearance. Milt flows easily without external pressure.	A few days prior to spawning (usually in late winter to spring).
VII	Spent	Baggy	Gonads slack. Sex determination difficult. Ovaries may contain a few residual eggs. Testes limp and bloodshot. Body wall thin and no fat present; blood in body cavity.	Spring for the first few weeks following spawning.
VIII	Recovering	Compressed	Gonads wide-coloured and usually longer, fuller and not as slack as Stage VII. Blood vessels prominent. Little or no fat in the body cavity.	Late spring and early summer.

Table 2. 1990 herring charter vessels by region and duration, and biological samples by vessel.

Region	Vessel	Duration	Samples processed
Queen Charlotte Islands	KARENORA	28/02 - 25/03	18
	OCEAN CLOUD	08/03 - 02/04	28
	SEMIDI	12/03 - 06/04	16
Prince Rupert District	OCEAN ROYAL	20/03 - 04/04*	19
	VENTUROUS	14/03 - 08/04	25
Central Coast	FISHER LASSIE II	03/03 - 28/03	22
	OCEAN ROYAL	12/03 - 15/03*	4
	WESTERN PRINCESS	01/03 - 26/03	27
Strait of Georgia/ Johnstone Strait	OCEAN ROYAL	04/03 - 10/03*	5
	ROYAL MARINER I	20/02 - 17/03	29
	VAMPY I	23/02 - 21/03	32
West Coast Vancouver Island	ANTE B	20/02 - 17/03	23
	ELLING K	20/02 - 17/03	15
	PACIFIC QUEST	23/02 - 20/03	19
	WESTVIEW NO. 1	26/02 - 23/03	13
<hr/>			
*Split Charter			
<hr/>			
Total			295
<hr/>			

Table 3. Summary of 1990 roe herring fisheries.

Region	Gear	Management Areas	Date	Opening Time	Duration	Hauled Catch (tonnes)
Queen Charlotte Islands	SN	2-92-97	18/03/90	1030	6:49	1583
	SN	2-31,32,33	26/03/90	0930	4:17	5262
	GN	2-12,13,14,16	08/04/90	0830	9:10	1131
Prince Rupert District	GN	4-5,7,8,9	28/03/90	0830	12:30	2268
	SN	5-4,5,8,9	03/04/90	0932	8:28	651
	SN	5-4,5,8,9	04/04/90	0701	11:13	896
Central Coast	SN	7-14	19/03/90	1102	4:58	3159
	SN	7-13,14	24/03/90	0902	0:16	1503
	GN	6-16,18,7-18	28/03/90	1000	8:00	1483
	GN	6-16,18,7-18,19	28/03/90	0800	7:30	1367
Strait of Georgia	GN	14-9,11,12,13	14/03/90	1600	17:30	2046
	GN	14-1,2,3,4,5,9	22/03/90	1130	39:30	5443
		17-4,5,6,7,10,16				
West Coast Vancouver Island	SN	23-8,9,10	11/03/90	1001	4:59	2994
	SN	23-8,9,10,11	12/03/90	1000	4:52	3623
	GN	24-6,7	21/03/90	1000	7:00	1991

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Table 4. Codings for British Columbia herring sampling data.

A. Gear	B. Source
19 Gillnet	0 Roe fishery
29 Seine	1 Bait fishery
20 Salmon seine	2 Research - inshore
21 Other seine	3 Research - offshore
70 Beach seine	4 Other
50 Other trawl	5 Pre-fishery charter
59 Herring trawl	6 Food
01 Other	
C. Preservation	D. Sex
0 Frozen	1 Male
1 Fresh	2 Female
2 Salted	3 Unknown
3 Other	
4 Brined	

Table 5. Week numbers for Pacific herring data for the 1989-90 season.

Week Number	Duration	Week Number	Duration
1.	JULY 1	27.	DEC. 24 - DEC. 30
2.	JULY 2 - JULY 8	28.	DEC. 31 - JAN. 6
3.	JULY 9 - JULY 15	29.	JAN. 7 - JAN. 13
4.	JULY 16 - JULY 22	30.	JAN. 14 - JAN. 20
5.	JULY 23 - JULY 29	31.	JAN. 21 - JAN. 27
6.	JULY 30 - AUG. 5	32.	JAN. 28 - FEB. 3
7.	AUG. 6 - AUG. 12	33.	FEB. 4 - FEB. 10
8.	AUG. 13 - AUG. 19	34.	FEB. 11 - FEB. 17
9.	AUG. 20 - AUG. 26	35.	FEB. 18 - FEB. 24
10.	AUG. 27 - SEPT. 2	36.	FEB. 25 - MAR. 3
11.	SEPT. 3 - SEPT. 9	37.	MAR. 4 - MAR. 10
12.	SEPT. 10 - SEPT. 16	38.	MAR. 11 - MAR. 17
13.	SEPT. 17 - SEPT. 23	39.	MAR. 18 - MAR. 24
14.	SEPT. 24 - SEPT. 30	40.	MAR. 25 - MAR. 31
15.	OCT. 1 - OCT. 7	41.	APR. 1 - APR. 7
16.	OCT. 8 - OCT. 14	42.	APR. 8 - APR. 14
17.	OCT. 15 - OCT. 21	43.	APR. 15 - APR. 21
18.	OCT. 22 - OCT. 28	44.	APR. 22 - APR. 28
19.	OCT. 29 - NOV. 4	45.	APR. 29 - MAY 5
20.	NOV. 5 - NOV. 11	46.	MAY 6 - MAY 12
21.	NOV. 12 - NOV. 18	47.	MAY 13 - MAY 19
22.	NOV. 19 - NOV. 25	48.	MAY 20 - MAY 26
23.	NOV. 26 - DEC. 2	49.	MAY 27 - JUNE 2
24.	DEC. 3 - DEC. 9	50.	JUNE 3 - JUNE 9
25.	DEC. 10 - DEC. 16	51.	JUNE 10 - JUNE 16
26.	DEC. 17 - DEC. 23	52.	JUNE 17 - JUNE 23
		53.	JUNE 24 - JUNE 30

Table 6. 1989 - 90 sample information by area and location.

Area	Section	Location	Sample						Pre	No. of fish Sampled	Aged
			Number	Year	Mon	Day	Gear	Source			
2W	6	ANTHONY ISLAND	113	90	3	7	29	5	0	100	96
2W	6	FLAMINGO INLET	110	90	3	19	29	5	0	100	95
2W	5	INSKIP CHANNEL	276	90	4	5	29	5	0	100	94
2W	2	KIOKATHLI INLET	304	90	3	18	29	0	0	100	94
2W	2	KIOKATHLI INLET	322	90	3	18	29	0	0	100	94
2W	6	LOUSCOONE INLET	107	90	3	26	29	5	0	100	97
2W	6	LOUSCOONE INLET	117	90	3	20	29	5	0	100	96
2W	6	LOUSCOONE INLET	119	90	3	19	29	5	0	100	97
2W	6	LOUSCOONE INLET	132	90	3	23	29	5	0	100	98
2W	6	LOUSCOONE INLET	133	90	3	24	29	5	0	100	97
2W	6	LOUSCOONE INLET	136	90	3	18	29	5	0	100	90
2W	6	LOUSCOONE INLET	153	90	3	26	29	0	0	100	89
2W	6	LOUSCOONE INLET	191	90	3	11	29	5	0	100	96
2W	6	LOUSCOONE INLET	224	90	3	26	29	0	0	100	96
2W	6	LOUSCOONE INLET	247	90	3	26	29	0	0	100	97
2W	6	LOUSCOONE INLET	250	90	3	26	29	0	0	100	90
2W	6	LOUSCOONE INLET	272	90	3	27	29	5	0	100	93
2W	6	LOUSCOONE INLET	274	90	3	28	29	5	0	100	92
2W	6	LOUSCOONE INLET	315	90	3	26	29	0	0	100	95
2W	6	LOUSCOONE INLET	330	90	3	26	29	0	0	100	94
2W	6	LOUSCOONE INLET E.	296	90	3	26	29	0	0	100	92
2W	6	LOUSCOONE INLET W.	300	90	3	26	29	0	0	100	92
2W	6	LOUSCOONE INLET W.	303	90	3	26	29	0	0	100	95
2W	6	LOUSCOONE INLET W.	306	90	3	26	29	0	0	100	94
2W	2	OGILIVIE ISLAND	335	90	3	18	29	0	0	100	73
2W	2	PORT CHANAL	130	90	3	3	29	5	0	100	92
2W	2	PORT LOUIS	121	90	3	2	29	5	0	100	92
2W	2	PORT LOUIS	129	90	3	10	29	5	0	100	92
2W	2	PORT LOUIS	161	90	3	17	29	5	0	100	96
2W	2	PORT LOUIS	295	90	3	18	29	0	0	100	95
2W	2	PORT LOUIS	309	90	3	18	29	0	0	100	86
2W	2	PORT LOUIS	319	90	3	18	29	0	0	99	95
2W	3	RENNELL SOUND	108	90	3	14	29	5	0	100	92
2W	3	RENNELL SOUND	116	90	3	22	29	5	0	100	96
2W	3	RENNELL SOUND	126	90	3	22	29	5	0	100	90
2W	3	RENNELL SOUND	134	90	3	1	29	5	0	100	96
2W	3	RENNELL SOUND	357	90	3	22	29	5	0	52	50
2W	3	RENNELL SOUND	360	90	3	21	29	5	0	100	93
2W	3	RENNELL SOUND	362	90	3	21	29	5	0	100	95
2W	3	RENNELL SOUND	366	90	3	22	29	5	0	100	90
2W	3	RENNELL SOUND	371	90	3	22	29	5	0	92	90
2W	3	RENNELL SOUND	373	90	3	22	29	5	0	25	0
2W	3	RENNELL SOUND	374	90	3	21	29	5	0	100	92
2W	3	RENNELL SOUND	375	90	3	21	29	5	0	100	94
2W	3	RENNELL SOUND	396	90	3	15	29	5	0	100	97
2W	3	SEAL INLET	131	90	3	1	29	5	0	100	92

Table 6 (cont'd)

Area	Section	Location	Sample						No. of fish		
			Number	Year	Mon	Day	Gear	Source	Pre	Sampled	Aged
2W	3	SEAL INLET	135	90	3	9	29	5	0	100	92
2W	6	SKINDASKUN ISLAND	109	90	3	22	29	5	0	100	94
2W	6	SKINDASKUN ISLAND	128	90	3	24	29	5	0	100	94
2W	2	TINGLEY COVE	302	90	3	18	29	0	0	98	93
2W	2	TINGLEY COVE	347	90	3	18	29	0	0	100	92
2W	6	TUGA POINT	370	90	3	26	29	0	0	100	88
2W	6	TUGA POINT	397	90	3	26	29	0	0	100	89
2E	25	BOLKUS ISLANDS	188	90	3	16	29	5	0	100	91
2E	21	BURNABY ISLAND N.	332	90	4	8	19	0	0	100	60
2E	21	BURNABY STRAIT	260	90	3	20	29	5	0	100	94
2E	21	BURNABY STRAIT	265	90	3	24	29	5	0	100	90
2E	21	BURNABY STRAIT	285	90	3	25	29	5	0	100	91
2E	21	BURNABY STRAIT	407	90	3	9	29	5	0	100	94
2E	23	DAWSON COVE	270	90	4	3	29	5	0	100	95
2E	25	HUSTON INLET	187	90	3	13	29	5	0	100	91
2E	25	HUSTON INLET	194	90	3	15	29	5	0	100	92
2E	25	HUSTON INLET	261	90	3	20	29	5	0	100	96
2E	25	HUSTON INLET	268	90	3	27	29	5	0	100	95
2E	25	HUSTON INLET	271	90	3	23	29	5	0	100	94
2E	21	HUXLEY ISLAND	115	90	3	6	29	5	0	100	97
2E	21	HUXLEY ISLAND	263	90	3	22	29	5	0	100	90
2E	21	JUAN PEREZ SOUND	279	90	3	19	29	5	0	100	97
2E	24	KILMINGTON POINT	273	90	4	4	29	5	0	100	95
2E	21	NOMAD ISLET	298	90	4	8	19	0	0	100	69
2E	25	PELICAN POINT	264	90	3	28	29	5	0	100	93
2E	21	SECTION COVE	354	90	4	8	19	0	0	100	63
2E	21	SECTION ISLAND	297	90	4	8	19	0	0	100	75
2E	21	SECTION ISLAND	323	90	4	8	19	0	0	100	67
2E	21	SECTION ISLAND	324	90	4	8	19	0	0	100	42
2E	21	SECTION ISLAND	334	90	4	8	19	0	0	100	57
2E	21	SEDGWICK BAY	114	90	3	6	29	5	0	100	93
2E	21	SEDGWICK BAY	182	90	3	10	29	5	0	100	95
2E	21	SEDGWICK BAY	257	90	3	24	29	5	0	100	92
2E	21	SEDGWICK BAY	259	90	3	31	29	5	0	100	93
2E	21	SEDGWICK BAY	266	90	3	21	29	5	0	100	94
2E	21	SEDGWICK BAY	275	90	3	14	29	5	0	100	96
2E	21	SEDGWICK BAY	284	90	3	18	29	5	0	100	90
2E	24	SELWYN INLET	258	90	4	1	29	5	0	100	94
2E	25	SKINCUTTLE INLET	267	90	3	8	29	5	0	100	97
2E	25	SWAN BAY	262	90	3	28	29	5	0	100	93
2E	25	SWAN BAY	363	90	3	28	29	5	0	100	96
2E	25	SWAN BAY	364	90	3	29	29	5	0	99	90
2E	25	SWAN BAY	372	90	3	28	29	5	0	100	91
3	33	PORT SIMPSON	178	90	3	26	29	5	0	100	92
3	33	PORT SIMPSON	183	90	3	24	29	5	0	100	96
3	33	PORT SIMPSON	190	90	3	22	29	5	0	100	95
3	33	PORT SIMPSON	338	90	3	15	29	5	0	100	95
3	33	PORT SIMPSON	341	90	3	14	29	5	0	100	98
3	33	PORT SIMPSON	351	90	3	15	29	5	0	100	93

Table 6 (cont'd)

Area	Section	Location	Sample Number	Year				Gear	Source	Pre	No. of fish Sampled Aged	
				Mon	Day	Gear	Source				No. of fish Sampled	Aged
3	33	PORT SIMPSON	406	90	3	17	29	5	0	100	96	
4	42	BIG BAY	186	90	3	27	29	5	0	100	95	
4	42	BIG BAY	203	90	3	25	29	5	0	100	95	
4	42	BIG BAY	307	90	3	28	19	0	0	100	81	
4	42	BURNT CLIFF IS.	312	90	3	28	19	0	0	100	86	
4	42	HOGAN LEDGE	318	90	3	28	19	0	0	100	73	
4	43	HUNT INLET	195	90	3	29	29	5	0	100	94	
4	43	HUNT INLET	207	90	3	30	29	5	0	100	94	
4	42	PEARL HARBOUR	177	90	3	23	29	5	0	100	90	
4	42	PEARL HARBOUR	179	90	3	21	29	5	0	100	96	
4	42	PEARL HARBOUR	184	90	3	21	29	5	0	100	92	
4	42	PEARL HARBOUR	189	90	3	25	29	5	0	100	95	
4	42	PEARL HARBOUR	192	90	3	26	29	5	0	100	95	
4	42	SHATTOCK POINT	185	90	3	24	29	5	0	100	95	
4	42	SIMPSON POINT	321	90	3	28	19	0	0	100	83	
4	42	SIMPSON POINT	327	90	3	28	19	0	0	100	77	
4	42	TRENHAM POINT	308	90	3	28	19	0	0	100	64	
4	42	TRENHAM POINT	336	90	3	28	19	0	0	100	80	
5	52	ABSAKOM ISLAND	339	90	4	6	29	5	0	100	87	
5	52	ABSAKOM ISLAND	380	90	4	5	29	5	0	100	94	
5	52	ABSAKOM ISLAND	414	90	3	29	29	5	0	100	91	
5	52	GURD ISLAND	337	90	3	21	29	5	0	100	94	
5	52	GURD POINT	269	90	3	30	29	5	0	100	92	
5	52	GURD POINT	340	90	3	31	29	5	0	100	95	
5	52	KITKATLA CREEK	206	90	4	2	29	5	0	100	89	
5	52	KITKATLA CREEK	215	90	4	3	29	5	0	100	97	
5	52	KITKATLA CREEK	291	90	4	4	29	0	0	100	92	
5	52	KITKATLA CREEK	305	90	4	3	29	0	0	100	84	
5	52	KITKATLA CREEK	310	90	4	3	29	0	0	100	92	
5	52	KITKATLA CREEK	313	90	4	4	29	0	0	100	88	
5	52	KITKATLA CREEK	314	90	4	4	29	0	0	100	85	
5	52	KITKATLA CREEK	328	90	4	3	29	0	0	100	82	
5	52	KITKATLA INLET	193	90	4	1	29	5	0	100	93	
5	52	KITKATLA INLET	209	90	4	2	29	5	0	100	93	
5	52	KITKATLA INLET	213	90	3	31	29	5	0	100	93	
5	52	KITKATLA INLET	286	90	4	1	29	5	0	100	94	
5	52	KITKATLA INLET	355	90	3	25	29	5	0	100	95	
5	52	KITKATLA INLET	381	90	3	23	29	5	0	100	93	
5	52	KITKATLA INLET	403	90	3	30	29	5	0	100	95	
5	52	NESS ISLANDS	287	90	4	4	29	0	0	100	86	
5	52	ROBERT ISLAND	289	90	4	4	29	0	0	100	85	
5	52	ROBERT ISLAND	316	90	4	4	29	0	0	100	91	
5	52	SNASS POINT	180	90	4	4	29	5	0	100	94	
5	52	SNASS POINT	278	90	4	2	29	5	0	100	92	

Table 6 (cont'd)

Area	Section	Location	Sample						No. of fish		
			Number	Year	Mon	Day	Gear	Source	Pre	Sampled	Aged
5	52	SNASS POINT	317	90	4	3	29	0	0	100	97
5	52	SNASS POINT	343	90	4	4	29	5	0	100	93
5	52	SNASS POINT	348	90	4	5	29	5	0	100	91
5	52	SNASS POINT	389	90	4	4	29	0	0	100	86
5	52	WILCOX GROUP	422	90	3	28	29	5	0	100	95
5	52	WILLIS BAY	345	90	3	26	29	5	0	100	87
5	52	WILLIS BAY	353	90	3	29	29	5	0	100	91
5	52	WILLIS BAY	378	90	3	24	29	5	0	100	85
5	52	WILLIS BAY	379	90	3	27	29	5	0	100	91
5	52	WILLIS BAY	385	90	3	19	29	5	0	100	92
5	52	WILLIS BAY	390	90	3	29	29	5	0	100	93
5	52	WILLIS BAY	405	90	3	22	29	5	0	100	95
6	67	JAMIESON POINT	350	90	3	16	29	5	0	100	93
6	67	JAMIESON POINT	382	90	3	3	29	5	0	100	93
6	67	KITASU BAY	199	90	3	28	19	0	0	100	72
6	67	KITASU BAY	218	90	3	28	19	0	0	100	65
6	67	KITASU BAY	293	90	3	28	19	0	0	100	76
6	67	KITASU BAY	326	90	3	28	19	0	0	100	73
6	67	KWAKWA CREEK	352	90	3	4	29	5	0	100	91
6	67	MARVIN ISLANDS	237	90	3	15	29	5	0	100	95
6	67	MARVIN ISLANDS	241	90	3	17	29	5	0	100	96
6	67	MARVIN ISLANDS	398	90	3	20	29	5	0	100	97
6	67	OSMENT INLET	356	90	3	29	19	0	0	100	85
6	67	PARSONS ANCHORAGE	283	90	3	23	29	5	0	100	92
6	67	PARSONS ANCHORAGE	349	90	3	16	29	5	0	100	93
6	67	PARSONS ANCHORAGE	388	90	3	9	29	5	0	100	97
6	67	PARSONS ANCHORAGE	401	90	3	21	29	5	0	100	93
6	67	THISTLE PASSAGE	342	90	3	23	29	5	0	100	96
6	67	WEST HIGGINS PASS	157	90	3	26	29	5	0	100	96
6	67	WEST HIGGINS PASS	239	90	3	22	29	5	0	100	94
6	67	WEST HIGGINS PASS	242	90	3	11	29	5	0	100	91
6	67	WILBY POINT	238	90	3	8	29	5	0	100	92
6	67	WILBY POINT	243	90	3	23	29	5	0	100	93
6	67	WILBY POINT	344	90	3	28	19	0	0	100	92
6	67	WINGATE POINT	420	90	3	4	29	5	0	100	96
7	72	BERRY INLET	158	90	3	16	29	5	0	77	73
7	72	BERRY INLET	359	90	3	24	29	5	0	100	94
7	72	BERRY INLET	361	90	3	24	29	5	0	83	74
7	72	BERRY INLET	365	90	3	25	29	5	0	100	90
7	72	BERRY INLET	367	90	3	25	29	5	0	100	92
7	72	BERRY INLET	369	90	3	25	29	5	0	100	91
7	72	BERRY INLET	419	90	3	25	29	5	0	100	95
7	74	DUNDIVAN INLET	145	90	3	6	29	5	0	100	91
7	74	DUNDIVAN INLET	418	90	3	16	29	5	0	100	93

Table 6 (cont'd)

Area	Section	Location		Sample						No. of fish		
				Number	Year	Mon	Day	Gear	Source	Pre	Sampled	Aged
7	77	EAST HIGGINS PASS		277	90	3	6	29	5	0	100	89
7	77	EAST HIGGINS PASS		346	90	3	10	29	5	0	100	95
7	73	LAMA PASSAGE		280	90	3	2	29	5	0	100	96
7	73	LAMA PASSAGE		426	90	3	12	29	5	0	100	90
7	72	NEEKAS INLET		227	90	3	24	29	0	0	100	86
7	72	NEEKAS INLET		251	90	3	21	29	0	0	100	91
7	72	NEEKAS INLET		290	90	3	24	29	0	0	100	86
7	72	NEEKAS INLET		292	90	3	19	29	0	0	100	87
7	72	NEEKAS INLET		299	90	3	19	29	0	0	100	89
7	72	NEEKAS INLET		311	90	3	19	29	0	0	100	87
7	72	NEEKAS INLET		320	90	3	24	29	0	0	100	89
7	72	NEEKAS INLET		325	90	3	19	29	0	0	100	87
7	72	NEEKAS INLET		331	90	3	19	29	0	0	100	92
7	72	NEEKAS INLET		333	90	3	19	29	0	0	100	74
7	72	NEEKAS INLET		402	90	3	19	29	0	0	100	87
7	72	NEEKAS INLET		409	90	3	24	29	0	0	100	88
7	74	NORMAN MORRISON BAY		139	90	3	6	29	5	0	100	89
7	74	RAYMOND PASS		164	90	3	8	29	5	0	100	94
7	74	RAYMOND PASS		166	90	3	15	29	5	0	99	81
7	74	SEAFORTH CHANNEL		140	90	3	10	29	5	0	100	91
7	74	SEAFORTH CHANNEL		423	90	3	1	29	5	0	100	90
7	72	SPILLER CHANNEL		137	90	3	14	29	5	0	95	67
7	72	SPILLER CHANNEL		138	90	3	12	29	5	0	100	94
7	72	SPILLER CHANNEL		143	90	3	17	29	5	0	100	95
7	72	SPILLER CHANNEL		144	90	3	23	29	5	0	100	91
7	72	SPILLER CHANNEL		149	90	3	19	29	0	0	100	84
7	72	SPILLER CHANNEL		151	90	3	19	29	0	0	100	74
7	72	SPILLER CHANNEL		156	90	3	24	29	0	0	100	89
7	72	SPILLER CHANNEL		169	90	3	19	29	0	0	100	86
7	72	SPILLER CHANNEL		174	90	3	7	29	5	0	100	93
7	72	SPILLER CHANNEL		176	90	3	21	29	5	0	100	95
7	72	SPILLER CHANNEL		229	90	3	24	29	0	0	100	92
7	72	SPILLER CHANNEL		230	90	3	19	29	0	0	100	90
7	72	SPILLER CHANNEL		248	90	3	24	29	0	0	100	93
7	72	SPILLER CHANNEL		256	90	3	24	29	0	0	100	86
7	72	SPILLER CHANNEL		281	90	3	2	29	5	0	100	95
7	72	SPILLER CHANNEL		294	90	3	24	29	0	0	100	89
7	72	SPILLER CHANNEL		301	90	3	24	29	0	0	100	83
7	72	SPILLER CHANNEL		329	90	3	24	29	0	0	100	90
7	72	SPILLER CHANNEL		392	90	3	23	29	5	0	100	94
7	72	SPILLER CHANNEL		400	90	3	19	29	0	0	100	88
7	72	SPILLER CHANNEL		428	90	3	18	29	5	0	100	92
7	72	SPILLER LAGOON		282	90	3	18	29	5	0	100	90
7	72	SPILLER LAGOON		424	90	3	12	29	5	0	100	87

Table 6 (cont'd)

Area	Section	Location	Sample Number	Year					Gear	Source	Pre	No. of fish Sampled	No. of fish Aged
				Mon	Day								
7	74	STRYKER BAY	146	90	3	4	29		5	0	100	91	
7	74	STRYKER BAY	173	90	3	28	19		0	0	100	74	
7	74	STRYKER BAY	216	90	3	28	19		0	0	100	72	
7	74	STRYKER BAY	226	90	3	28	19		0	0	100	74	
7	74	STRYKER BAY	288	90	3	29	19		0	0	100	57	
7	74	STRYKER ISLAND	142	90	3	20	29		5	0	100	94	
7	74	THOMPSON BAY	223	90	3	29	19		0	0	100	41	
7	74	THOMPSON BAY	228	90	3	29	19		0	0	100	66	
8	85	FAIRMILE PASSAGE	204	90	3	14	29		5	0	100	91	
8	85	KWAKSHUA CHANNEL	141	90	3	3	29		5	0	100	92	
8	85	KWAKSHUA CHANNEL	175	90	3	9	29		5	0	100	97	
8	85	KWAKSHUA CHANNEL	208	90	3	15	29		5	0	100	94	
8	85	KWAKSHUA CHANNEL	416	90	3	4	29		5	0	100	95	
9	93	KILBELLA BAY	201	90	3	14	29		5	0	100	72	
10	102	TAKUSH HARBOUR	196	90	3	12	29		5	0	100	90	
12	125	BOND SOUND	246	90	3	7	29		5	0	100	86	
12	125	RETREAT PASSAGE	205	90	3	10	29		5	0	100	90	
13	132	DEEPWATER BAY	21	89	12	5	29		6	0	100	92	
13	132	DEEPWATER BAY	22	89	12	5	29		6	0	100	94	
13	132	DEEPWATER BAY	45	90	2	24	29		5	0	100	92	
13	132	DEEPWATER BAY	240	90	3	5	29		5	0	100	94	
13	132	DEEPWATER BAY	244	90	3	4	29		5	0	100	89	
13	132	DEEPWATER BAY	245	90	3	4	29		5	0	100	94	
14	142	BAYNES SOUND	41	90	2	20	29		5	0	100	91	
14	142	BAYNES SOUND	51	90	3	18	29		5	0	100	86	
14	142	BAYNES SOUND	425	90	2	20	29		5	0	100	94	
14	142	CAPE LAZO	167	90	3	14	19		0	0	100	69	
14	142	CAPE LAZO	202	90	3	14	19		0	0	100	75	
14	142	CAPE LAZO	214	90	3	14	19		0	0	100	80	
14	142	CAPE LAZO	219	90	3	14	19		0	0	100	75	
14	142	CAPE LAZO	222	90	3	14	19		0	0	100	75	
14	142	CAPE LAZO	233	90	3	14	19		0	0	100	75	
14	142	COMOX BAR	393	90	3	7	29		2	0	100	93	
14	142	DEEP BAY	3	90	3	2	29		5	0	100	95	
14	142	FILLONGLEY PARK	9	90	3	5	29		5	0	100	87	
14	143	FRENCH CREEK	58	90	3	4	29		5	0	100	91	
14	143	FRENCH CREEK	147	90	3	22	19		0	0	100	73	
14	143	FRENCH CREEK	165	90	3	22	19		0	0	100	69	
14	143	FRENCH CREEK	236	90	3	22	19		0	0	100	77	
14	142	HORNBY ISLAND	411	90	3	3	29		5	0	100	95	
14	142	KOMAS BLUFF	377	90	3	18	29		2	0	100	92	
14	142	LAMBERT CHANNEL	1	90	2	27	29		5	0	100	90	
14	142	LAMBERT CHANNEL	4	90	3	10	29		5	0	100	92	
14	142	LAMBERT CHANNEL	8	90	3	6	29		5	0	100	94	

Table 6 (cont'd)

Area	Section	Location	Sample						Source	Pre	No. of fish Sampled	Aged
			Number	Year	Mon	Day	Gear					
14	142	LAMBERT CHANNEL	10	90	3	2	29	5	0	100	95	
14	142	LAMBERT CHANNEL	13	90	3	7	29	5	0	100	94	
14	142	LAMBERT CHANNEL	17	90	3	5	29	5	0	100	87	
14	142	LAMBERT CHANNEL	52	90	3	16	29	5	0	100	90	
14	142	LAMBERT CHANNEL	55	90	3	1	29	5	0	100	92	
14	143	MADRONA POINT	16	90	3	12	29	5	0	100	94	
14	143	MISTAKEN ISLAND	57	90	3	4	29	5	0	100	90	
14	143	NORTHWEST BAY	152	90	3	22	19	0	0	100	71	
14	143	NORTHWEST BAY	200	90	3	22	19	0	0	100	83	
14	143	PARKSVILLE	217	90	3	22	19	0	0	100	57	
14	143	PARKSVILLE BAY	20	90	3	11	29	5	0	100	90	
14	142	SEAL ISLETS	399	90	3	7	29	2	0	100	86	
14	142	SHINGLE SPIT	2	90	3	4	29	5	0	100	92	
14	142	SHINGLE SPIT	6	90	3	4	29	5	0	100	87	
14	142	SHINGLE SPIT	7	90	3	6	29	5	0	100	92	
14	142	SHINGLE SPIT	56	90	3	16	29	5	0	100	94	
15	152	POWELL RIVER MILL	5	90	2	28	29	5	0	100	91	
15	152	POWELL RIVER MILL	23	90	2	22	29	5	0	100	92	
15	152	POWELL RIVER MILL	32	90	2	26	29	5	0	100	89	
15	152	POWELL RIVER MILL	37	90	3	5	29	5	0	100	95	
15	152	POWELL RIVER MILL	386	90	2	21	29	5	0	100	95	
15	152	POWELL RIVER MILL	391	90	2	25	29	5	0	100	94	
15	152	POWELL RIVER MILL	415	90	2	22	29	5	0	100	98	
15	152	POWELL RIVER MILL	427	90	2	23	29	5	0	100	92	
15	152	WESTVIEW	38	90	3	5	29	5	0	100	90	
17	172	BLUNDEN POINT	53	90	3	12	29	5	0	100	94	
17	173	BOAT HARBOUR	11	90	3	10	29	5	0	100	91	
17	173	BOAT HARBOUR	12	90	3	8	29	5	0	100	90	
17	173	BOAT HARBOUR	60	90	3	13	29	5	0	100	88	
17	173	COFFIN POINT (IS.)	82	90	3	21	29	5	0	100	88	
17	173	COFFIN POINT (IS.)	154	90	3	23	19	0	0	100	77	
17	173	COFFIN POINT (IS.)	198	90	3	22	19	0	0	100	60	
17	173	COFFIN POINT (IS.)	255	90	3	22	19	0	0	100	64	
17	173	DE COURCY ISLAND	14	90	3	12	29	5	0	100	90	
17	173	DODD NARROWS N.	15	90	3	11	29	5	0	100	88	
17	173	FLAT TOP ISLANDS	170	90	3	22	19	0	0	100	83	
17	173	Harmac	33	90	2	23	29	5	0	100	81	
17	172	JACK POINT	19	90	3	11	29	5	0	100	85	
17	173	KULLEET BAY	12	89	11	20	29	6	0	100	81	
17	173	KULLEET BAY	148	90	3	23	19	0	0	100	60	
17	173	LADYSMITH HARBOUR	155	90	3	22	19	0	0	100	68	
17	172	MAUDE ISLAND	7	89	12	12	29	2	0	100	94	
17	172	NEWCASTLE IS. E.	18	90	3	10	29	5	0	100	91	
17	173	NORTHUMBERLAND CH.	95	90	3	20	29	5	0	100	92	

Table 6 (cont'd)

Area	Section	Location	Sample						Gear	Source	Pre	No. of fish Sampled	
			Number	Year	Mon	Day	29	Aged					
17	173	NORTHUMBERLAND CH.	383	90	1	23	29	2	0	100	0	100	93
17	173	PYLADES CHANNEL	5	89	11	7	29	6	0	100	0	100	83
17	173	PYLADES CHANNEL	46	90	3	1	29	5	0	100	0	100	89
17	173	RUXTON PASS	122	90	3	16	29	5	0	100	0	100	83
17	172	SNAKE ISLAND	3	89	11	29	29	2	0	100	0	100	89
17	172	SNAKE ISLAND	22	90	3	1	29	5	0	100	0	100	94
17	172	SNAKE ISLAND	39	90	2	27	29	5	0	100	0	100	94
17	172	SNAKE ISLAND	43	90	3	3	29	5	0	100	0	100	93
17	172	SNAKE ISLAND	44	90	2	23	29	5	0	100	0	100	95
17	172	SNAKE ISLAND	395	90	3	7	29	5	0	100	0	100	90
17	172	SNAKE ISLAND	417	90	2	24	29	5	0	100	0	100	90
17	173	STUART CHANNEL	1	89	11	21	29	6	0	100	0	100	72
17	173	STUART CHANNEL	8	89	11	22	29	6	0	100	0	100	87
17	173	STUART CHANNEL	13	89	11	21	29	6	0	100	0	100	89
17	173	STUART CHANNEL	14	89	11	22	29	6	0	100	0	100	90
17	173	STUART CHANNEL	88	90	3	17	29	5	0	100	0	100	91
17	173	STUART CHANNEL	96	90	3	18	29	5	0	100	0	100	91
17	173	STUART CHANNEL	120	90	3	21	29	5	0	100	0	100	94
17	173	TRINCOMALI CH,	59	90	3	2	29	5	0	100	0	100	90
17	173	TRINCOMALI CH.	387	90	2	25	29	5	0	100	0	100	85
17	173	TRINCOMALI CH.	404	90	2	27	29	5	0	100	0	100	91
17	172	WALLIS POINT	421	90	3	14	29	5	0	100	0	100	90
17	173	YELLOW POINT	9	89	12	12	29	6	0	100	0	100	62
17	173	YELLOW POINT	150	90	3	23	19	0	0	100	0	100	80
17	173	YELLOW PT. (NORTH)	123	90	3	15	29	5	0	100	0	100	93
18	182	NAVY CHANNEL	410	90	2	26	29	5	0	100	0	100	93
18	182	PLUMPER SOUND	36	90	2	25	29	5	0	100	0	100	89
21	219	JUAN DE FUCA CANYON	20	89	9	29	59	4	0	40	0	40	19
21	219	NITINAT CANYON	15	89	9	3	59	4	0	82	0	82	51
21	219	NITINAT CANYON	16	89	9	3	59	4	0	90	0	90	73
21	219	NITINAT CANYON	18	89	8	24	59	4	0	86	0	86	64
21	219	SWIFTSURE BANK	10	89	8	20	59	3	0	100	0	100	14
23	239	BIG BANK +	17	89	8	2	59	4	0	65	0	65	33
23	232	BRYANT ISLANDS	49	90	2	28	29	5	0	100	0	100	90
23	232	BRYANT ISLANDS	159	90	3	11	29	0	0	100	0	100	81
23	232	CAPSTAN ISLAND	70	90	3	11	29	5	0	100	0	100	95
23	232	CAPSTAN ISLAND	80	90	3	18	29	5	0	100	0	100	96
23	232	CHROW ISLANDS	34	90	2	27	29	5	0	100	0	100	97
23	232	CHROW ISLANDS	73	90	3	3	29	5	0	100	0	100	97
23	232	CHROW ISLANDS	76	90	3	20	29	5	0	100	0	100	85
23	232	COASTER CHANNEL	71	90	3	3	29	5	0	100	0	100	92
23	232	COASTER CHANNEL	412	90	3	4	29	5	0	100	0	100	94
23	232	DAVID CHANNEL	65	90	3	10	29	5	0	100	0	100	94
23	232	DAVID ISLAND	50	90	2	21	29	5	0	100	0	100	86

Table 6 (cont'd)

Area	Section	Location	Sample						Gear	Source	Pre	No. of fish Sampled	No. of fish Aged
			Number	Year	Mon	Day	29						
23	232	DAVID ISLAND	254	90	3	11	29	0	0	100	66		
23	239	FINGER BANK +	2	89	8	21	59	3	0	100	87		
23	232	FORBES ISLAND	21	90	2	21	29	5	0	100	96		
23	232	FORBES ISLAND	30	90	2	28	29	5	0	100	95		
23	232	FORBES ISLAND	48	90	2	25	29	5	0	100	97		
23	232	FORBES ISLAND	68	90	3	1	29	5	0	100	95		
23	232	FORBES ISLAND	78	90	3	4	29	5	0	100	94		
23	232	FORBES ISLAND	172	90	3	12	29	0	0	100	91		
23	232	FORBES ISLAND	231	90	3	11	29	0	0	98	81		
23	232	FORBES ISLAND	235	90	3	12	29	0	0	100	83		
23	239	FORTY MILE BANK	6	89	8	17	59	3	0	100	86		
23	239	FORTY MILE BANK	11	89	8	17	59	3	0	100	77		
23	232	HERMIT ISLET	221	90	3	12	29	0	0	100	88		
23	233	IMPERIAL EAGLE	35	90	2	23	29	5	0	100	92		
23	233	IMPERIAL EAGLE CH.	28	90	2	27	29	5	0	100	94		
23	239	LOUDOUN CANYON	19	89	9	2	59	4	0	66	46		
23	232	LYALL POINT	47	90	2	20	29	5	0	100	96		
23	232	MACOAH PASSAGE	160	90	3	11	29	0	0	99	83		
23	232	MACOAH PASSAGE	210	90	3	12	29	0	0	100	83		
23	232	MACOAH PASSAGE	211	90	3	12	29	0	0	100	95		
23	232	MACOAH PASSAGE	225	90	3	11	29	0	0	100	85		
23	232	MACOAH PASSAGE	253	90	3	12	29	0	0	100	84		
23	232	MACOAH PASSAGE	358	90	3	11	29	0	0	100	63		
23	232	MACOAH PASSAGE	368	90	3	11	29	0	0	100	82		
23	232	MACOAH PASSAGE	394	90	3	12	29	0	0	100	76		
23	232	MAYNE BAY	25	90	2	22	29	5	0	100	95		
23	232	MAYNE BAY	74	90	3	5	29	5	0	100	92		
23	231	RAINY BAY	24	90	2	25	29	5	0	100	92		
23	232	SECHART CHANNEL	40	90	2	25	29	5	0	100	88		
23	232	SECHART CHANNEL	75	90	3	8	29	5	0	100	91		
23	232	SHEARS ISLANDS	77	90	3	7	29	5	0	100	92		
23	239	SOUTH WEST CORNER +	4	89	8	18	59	3	0	100	70		
23	232	SPILLING ISLET	62	90	3	6	29	5	0	100	87		
23	232	ST. INES ISLAND	232	90	3	11	29	0	0	100	93		
23	232	STOPPER ISLANDS	31	90	2	24	29	5	0	100	92		
23	232	STOPPER ISLANDS	63	90	3	9	29	5	0	100	96		
23	232	STOPPER ISLANDS	171	90	3	11	29	0	0	100	82		
23	232	STOPPER ISLANDS	212	90	3	12	29	0	0	100	84		
23	233	SWALE ROCK	67	90	3	2	29	5	0	100	91		
24	244	BAWDEN BAY	124	90	3	14	29	5	0	100	87		
24	245	ELBOW BANK	162	90	3	21	19	0	0	100	78		
24	245	ELBOW BANK	197	90	3	21	19	0	0	100	77		
24	245	ELBOW BANK	220	90	3	21	19	0	0	100	65		
24	245	ELBOW BANK	234	90	3	21	19	0	0	100	78		

Table 6 (cont'd)

Area	Section	Location	Sample Number	Year	Mon Day			Gear	Source	Pre	No. of fish Sampled Aged	
24	245	ELBOW BANK	249	90	3	21	19	0	0	100	87	
24	245	ELBOW BANK	252	90	3	21	19	0	0	100	60	
24	245	EPPER PASS	168	90	3	12	29	5	0	100	95	
24	245	HECATE BAY	111	90	3	10	29	5	0	89	80	
24	245	KRAAN ISLAND	81	90	3	14	29	5	0	100	91	
24	244	MATILDA INLET	118	90	3	8	29	5	0	100	96	
24	244	MILLAR CHANNEL	97	90	3	17	29	5	0	99	94	
24	244	MILLAR CHANNEL	127	90	3	8	29	5	0	100	92	
24	243	SHELTER INLET	90	90	3	17	29	5	0	100	90	
24	243	STARLING POINT	85	90	3	15	29	5	0	100	96	
24	243	STARLING POINT	125	90	3	4	29	5	0	100	96	
24	243	STARLING POINT	376	90	3	4	29	5	0	100	89	
24	243	STARLING POINT	413	90	3	2	29	5	0	96	91	
24	243	SYDNEY INLET	42	90	2	22	29	5	0	100	93	
24	243	SYDNEY INLET	64	90	3	6	29	5	0	100	90	
24	243	SYDNEY INLET	66	90	3	7	29	5	0	100	87	
24	243	SYDNEY INLET	79	90	3	5	29	5	0	100	91	
24	243	SYDNEY INLET	86	90	3	10	29	5	0	100	89	
24	243	SYDNEY INLET	87	90	3	10	29	5	0	100	93	
24	243	SYDNEY INLET	89	90	3	9	29	5	0	100	93	
24	243	SYDNEY INLET	103	90	3	16	29	5	0	100	94	
24	243	SYDNEY INLET	105	90	3	11	29	5	0	100	96	
24	243	SYDNEY INLET	112	90	3	6	29	5	0	100	89	
24	243	SYDNEY INLET	163	90	2	28	29	5	0	100	93	
24	243	SYDNEY INLET	384	90	3	3	29	5	0	100	97	
24	243	SYDNEY INLET	408	90	2	27	29	5	0	100	91	
25	253	ESPERANZA INLET	26	90	2	25	29	5	0	100	92	
25	253	ESPERANZA INLET	54	90	2	24	29	5	0	100	94	
25	252	FRIENDLY COVE	69	90	3	2	29	5	0	100	88	
25	252	MAQUINNA POINT	72	90	2	28	29	5	0	100	93	
25	253	NUCHATLITZ INLET	27	90	2	25	1	4	0	100	94	
25	253	ROSA ISLAND	29	90	2	26	29	5	0	100	96	
25	253	ROSA ISLAND	61	90	2	28	29	5	0	100	80	
26	261	KYUQUOT CHANNEL	94	90	3	4	29	5	0	100	65	
27	273	FORWARD INLET	104	90	2	27	29	5	0	100	91	
27	273	FORWARD INLET	181	90	2	24	29	5	0	100	95	
27	273	HUNT ISLETS	102	90	2	24	29	5	0	100	92	
27	272	KLASKISH INLET	83	90	3	1	29	5	0	100	93	
27	272	KLASKISH INLET	98	90	3	1	29	5	0	100	92	
27	272	KLASKISH INLET	101	90	3	4	29	5	0	100	93	
27	272	KLASKISH INLET	106	90	2	24	29	5	0	100	94	
27	273	MATHEWS ISLAND	99	90	2	27	29	5	0	100	92	
27	273	MATHEWS ISLAND	100	90	3	6	29	5	0	100	89	
27	272	MCDOUGAL ISLAND	84	90	2	26	29	5	0	100	95	

Table 7. Trawl research sample summaries by section

SECTION: 219 - OFFSHORE AREA 21  
 SAMPLE NUMBERS: 10  
 SOURCE: RESEARCH - OFFSHORE  
 GEAR: HERRING TRAWL  
 DATE: AUG 20/89

SPECIMENS AT EACH AGE:

	0+	1+	2+	3+	4+	AGE 5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	0	4	1	6	1	0	2	0	0	86	100
% AT AGE	0.00	0.00	28.57	7.14	42.86	7.14	0.00	14.29	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	180.50	197.00	208.17	214.00	0.00	222.50	0.00	0.00	179.78	182.88
- STD. DEV.	0.00	0.00	5.80	0.00	7.91	0.00	0.00	23.33	0.00	0.00	23.09	23.63
WEIGHT - MEAN(gm)	0.00	0.00	89.25	118.00	148.00	147.00	0.00	173.00	0.00	0.00	94.21	99.58
- STD. DEV.	0.00	0.00	9.78	0.00	27.87	0.00	0.00	57.98	0.00	0.00	41.14	42.85
												21

HJORT MATURITY STAGES:

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	3	45	52	0	0	0	0	0	0
% AT STAGE	3.00	45.00	52.00	0.00	0.00	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	51	0	0	51		23	51	26	100
%	100.00	0.00	0.00	100.00		23.00	51.00	26.00	100.00
% SAMPLE WEIGHT	0.98	0.00	0.00	0.98					
					MEAN WEIGHT	102.91	119.76	57.04	99.58
					% SAMP. WT.	23.77	61.34	14.89	100.00

Table 7 (cont'd) Trawl research sample summaries by section

SECTION: 239 - OFFSHORE AREA 23

SAMPLE NUMBERS: 11, 6, 2, 4

SOURCE: RESEARCH - OFFSHORE

GEAR: HERRING TRAWL

DATE: AUG 17/89 - AUG 21/89

SPECIMENS AT EACH AGE:

	0+	1+	2+	3+	4+	AGE	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	72	32	21	126		27	34	6	1	1	80	400
% AT AGE	0.00	22.50	10.00	6.56	39.38		8.44	10.63	1.88	0.31	0.31	0.00	100.00
LENGTH - MEAN(mm)	0.00	137.58	181.91	199.90	209.18		217.93	223.18	228.17	232.00	240.00	177.35	189.46
- STD. DEV.	0.00	6.94	7.14	10.21	7.81		7.23	10.23	10.50	0.00	0.00	37.69	34.13
WEIGHT - MEAN(gm)	0.00	36.72	89.31	121.81	142.47		159.52	174.03	191.50	177.00	210.00	95.79	113.58
- STD. DEV.	0.00	5.98	12.09	21.86	19.07		15.65	16.26	32.12	0.00	0.00	57.89	53.78

HJORT MATURITY STAGES:

	1	2	3	4	MATURITY STAGE	5	6	7	8	UNKNOWN
NO. AT STAGE	16	235	140	0		0	0	0	0	9
% AT STAGE	4.00	58.75	35.00	0.00		0.00	0.00	0.00	0.00	2.25

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL	SEX RATIO:	MALE	FEMALE	IMMATURE	TOTAL
NO.	183	0	0	183		126	183	91	400
%	100.00	0.00	0.00	100.00		31.50	45.75	22.75	100.00
% SAMPLE WEIGHT	1.13	0.00	0.00	1.13		123.42	120.38	86.31	113.58
					MEAN WEIGHT	123.42	120.38	86.31	113.58
					% SAMP. WT.	34.23	48.49	17.29	100.00

Table 8 Seine research sample summaries by section

SECTION: 142 - BAYNES SOUND  
 SAMPLE NUMBERS: 377,399,393  
 SOURCE: RESEARCH - INSHORE  
 GEAR: HERRING SEINE  
 DATE: MAR 7/90 - MAR 18/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	5	110	46	89	12	8	0	1	0	29	300
% AT AGE	0.00	1.85	40.59	16.97	32.84	4.43	2.95	0.00	0.37	0.00	0.00	100.00

LENGTH - MEAN(mm)	0.00	171.00	188.90	198.52	209.79	215.42	223.38	0.00	228.00	0.00	198.41	199.30
- STD. DEV.	0.00	5.70	10.35	11.97	9.89	9.68	8.67	0.00	0.00	0.00	17.02	15.39
WEIGHT - MEAN(gm)	0.00	63.00	89.65	108.28	127.30	143.42	164.38	0.00	144.00	0.00	114.97	110.01
- STD. DEV.	0.00	3.67	19.20	25.13	23.66	30.07	37.46	0.00	0.00	0.00	38.54	31.76

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	13	151	67	69	0	0
% AT STAGE	0.00	0.00	0.00	4.33	50.33	22.33	23.00	0.00	0.00

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	4	111	28	143	NO.	157	143	0	300
%	2.80	77.62	19.58	100.00	%	52.33	47.67	0.00	100.00
% SAMPLE WEIGHT	0.60	22.60	0.16	23.36	MEAN WEIGHT	101.25	119.62	0.00	110.01
					% SAMP. WT.	48.17	51.83	0.00	100.00

Table 8 (cont'd) Seine research sample summaries by section

SECTION: 172 - NANOOSE BAY  
 SAMPLE NUMBERS: 3, 7  
 SOURCE: RESEARCH - INSHORE  
 GEAR: HERRING SEINE  
 DATE: NOV 29/89 - DEC 12/89

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	25	117	16	20	5	0	0	0	0	17	200
% AT AGE	0.00	13.66	63.93	8.74	10.93	2.73	0.00	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	168.56	184.89	194.81	204.70	214.40	0.00	0.00	0.00	0.00	187.06	186.54
- STD. DEV.	0.00	11.21	10.16	11.09	10.19	6.58	0.00	0.00	0.00	0.00	21.32	15.24
WEIGHT - MEAN(gm)	0.00	70.88	92.77	112.81	129.35	154.40	0.00	0.00	0.00	0.00	99.12	97.38
- STD. DEV.	0.00	15.75	16.19	22.36	22.94	22.70	0.00	0.00	0.00	0.00	37.28	26.41

24

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	4	21	168	5	0	0	0	2
% AT STAGE	0.00	2.00	10.50	84.00	2.50	0.00	0.00	0.00	1.00

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	110	0	0	110	NO.	87	110	3	200
%	100.00	0.00	0.00	100.00	%	43.50	55.00	1.50	100.00
% SAMPLE WEIGHT	6.51	0.00	0.00	6.51	MEAN WEIGHT	95.24	100.26	53.33	97.38
					% SAMP. WT.	42.55	56.63	0.82	100.00

Table 8 (cont'd) Seine research sample summaries by section

SECTION: 173 - YELLOW POINT

SAMPLE NUMBERS: 383

SOURCE: RESEARCH - INSHORE

GEAR: HERRING SEINE

DATE: JAN 23/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	92	1	0	0	0	0	0	0	0	0	7	100
% AT AGE	98.92	1.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	97.96	132.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	103.14	98.66
- STD. DEV.	7.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.91	9.23
WEIGHT - MEAN(gm)	10.22	25.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.43	10.52
- STD. DEV.	1.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.16	3.16

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	76	18	1	0	0	0	0	0	5	
% AT STAGE	76.00	18.00	1.00	0.00	0.00	0.00	0.00	0.00	5.00	

## ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL		SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
NO.	0	0	0	0	NO.		1	0	99	100	
%	0.00	0.00	0.00	0.00	%		1.00	0.00	99.00	100.00	
% SAMPLE WEIGHT	0.00	0.00	0.00	0.00	MEAN WEIGHT		25.00	0.00	10.37	10.52	
					% SAMP. WT.		2.38	0.00	97.62	100.00	

Table 9 Seine commercial food sample summaries by section

SECTION: 132 - DEEPWATER BAY  
 SAMPLE NUMBERS: 21, 22  
 SOURCE: FOOD FISHERY  
 GEAR: HERRING SEINE  
 DATE: DEC 5/89

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	10	132	17	26	0	1	0	0	0	14	200
% AT AGE	0.00	5.38	70.97	9.14	13.98	0.00	0.54	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	147.40	170.53	181.06	190.73	0.00	220.00	0.00	0.00	0.00	175.29	173.48
- STD. DEV.	0.00	7.47	8.88	8.09	8.54	0.00	0.00	0.00	0.00	0.00	11.01	13.10
WEIGHT - MEAN(gm)	0.00	39.90	69.33	87.88	101.04	0.00	190.00	0.00	0.00	0.00	73.00	74.42
- STD. DEV.	0.00	5.76	12.49	14.63	19.16	0.00	0.00	0.00	0.00	0.00	17.45	20.97

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## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	38	62	97	0	0	0	0	3	
% AT STAGE	0.00	19.00	31.00	48.50	0.00	0.00	0.00	0.00	1.50	

## ROE MATURITY (FEMALE):

	SEX RATIO:									
	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL	
NO.	72	0	0	72		102	72	26	200	
%	100.00	0.00	0.00	100.00		51.00	36.00	13.00	100.00	
% SAMPLE WEIGHT	4.96	0.00	0.00	4.96		MEAN WEIGHT	79.97	74.42	52.62	74.42
						% SAMP. WT.	54.81	36.00	9.19	100.00

Table 9 (cont'd) Seine commercial food sample summaries by section

SECTION: 173 - YELLOW POINT

SAMPLE NUMBERS: 14, 5, 8, 9, 13, 12, 1

SOURCE: FOOD FISHERY

GEAR: HERRING SEINE

DATE: NOV 7/89 - DEC 12/89

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	27	294	85	123	16	18	0	0	0	136	699
% AT AGE	0.00	4.80	52.22	15.10	21.85	2.84	3.20	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	158.59	183.98	194.35	206.20	214.31	213.28	0.00	0.00	0.00	183.70	189.57
- STD. DEV.	0.00	12.69	11.27	11.76	10.08	6.33	11.35	0.00	0.00	0.00	21.19	17.94
WEIGHT - MEAN(gm)	0.00	63.52	96.23	117.12	140.93	165.56	153.61	0.00	0.00	0.00	100.38	109.25
- STD. DEV.	0.00	14.29	17.83	21.36	22.10	17.13	22.71	0.00	0.00	0.00	35.89	32.01

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	6	189	460	43	0	0	0	1
% AT STAGE	0.00	0.86	27.04	65.81	6.15	0.00	0.00	0.00	0.14

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	282	2	0	284	NO.	410	284	5	699
%	99.30	0.70	0.00	100.00	%	58.66	40.63	0.72	100.00
% SAMPLE WEIGHT	6.10	0.00	0.00	6.10	MEAN WEIGHT	106.75	113.67	62.40	109.25
					% SAMP. WT.	57.32	42.28	0.41	100.00

Table 10 Seine roe fishery sample summaries by section

SECTION: 2 - PORT LOUIS  
 SAMPLE NUMBERS: 309,302,347,295,322,335,319,304  
 SOURCE: ROE FISHERY  
 GEAR: HERRING SEINE  
 DATE: MAR 18/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	2	14	15	581	91	4	1	6	8	75	797
% AT AGE	0.00	0.28	1.94	2.08	80.47	12.60	0.55	0.14	0.83	1.11	0.00	100.00
LENGTH - MEAN(mm)	0.00	175.50	188.57	212.60	221.44	228.46	238.25	236.00	242.50	248.13	217.76	221.57
- STD. DEV.	0.00	13.44	7.50	9.77	9.19	7.89	10.01	0.00	8.17	8.43	16.48	11.96
WEIGHT - MEAN(gm)	0.00	57.00	90.57	140.80	166.09	184.40	192.00	246.00	208.17	226.00	154.13	166.12
- STD. DEV.	0.00	4.24	11.68	28.39	25.56	26.27	19.15	0.00	28.94	24.04	35.52	30.90

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## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	0	0	27	589	175	6	0	0	
% AT STAGE	0.00	0.00	0.00	3.39	73.90	21.96	0.75	0.00	0.00	

## ROE MATURITY (FEMALE):

	SEX RATIO:									
	IMMATURE	MATURE	SPENT	TOTAL			MALE	FEMALE	IMMATURE	TOTAL
NO.	15	399	0	414			383	414	0	797
%	3.62	96.38	0.00	100.00			48.06	51.94	0.00	100.00
% SAMPLE WEIGHT	0.67	29.01	0.00	29.67			155.43	176.01	0.00	166.12
					MEAN WEIGHT					
					% SAMP. WT.		44.96	55.04	0.00	100.00

Table 10 (cont'd) Seine roe fishery sample summaries by section

SECTION: 6 - LOUSCOONE INLET

SAMPLE NUMBERS: 247,397,306,250,296,315,153,330,303,300,  
224,370

SOURCE: ROE FISHERY

GEAR: HERRING SEINE

DATE: MAR 26/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	0	98	55	920	25	2	7	2	2	89	1200
% AT AGE	0.00	0.00	8.82	4.95	82.81	2.25	0.18	0.63	0.18	0.18	0.00	100.00

LENGTH - MEAN(mm)	0.00	0.00	193.81	207.47	213.67	220.96	233.00	235.00	231.50	248.50	211.66	212.01
- STD. DEV.	0.00	0.00	8.63	9.12	9.48	13.31	2.83	15.94	19.09	3.54	14.79	11.76

WEIGHT - MEAN(gm)	0.00	0.00	103.77	126.27	143.90	165.68	179.50	191.43	207.50	238.00	140.36	140.61
- STD. DEV.	0.00	0.00	14.75	19.98	21.19	28.23	38.89	33.33	20.51	2.83	31.09	25.63

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	13	1050	133	4	0	0
% AT STAGE	0.00	0.00	0.00	1.08	87.50	11.08	0.33	0.00	0.00

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	5	713	2	720	NO.	480	720	0	1200
%	0.69	99.03	0.28	100.00	%	40.00	60.00	0.00	100.00
% SAMPLE WEIGHT	0.13	27.84	0.01	27.98	MEAN WEIGHT	131.92	146.40	0.00	140.61

% SAMP. WT.	37.53	62.47	0.00	100.00
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Table 10 (cont'd) Seine roe fishery sample summaries by section

SECTION: 52 - KITKATLA INLET  
 SAMPLE NUMBERS: 316,328,310,291,317,389,314,289,313,287,  
 305

SOURCE: ROE FISHERY  
 GEAR: HERRING SEINE  
 DATE: APR 3/90 - APR 4/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	7	183	207	261	191	47	41	26	5	132	1100
% AT AGE	0.00	0.72	18.90	21.38	26.96	19.73	4.86	4.24	2.69	0.52	0.00	100.00
LENGTH - MEAN(mm)	0.00	162.00	184.74	194.49	201.47	209.61	215.09	224.51	227.00	236.60	200.60	200.63
- STD. DEV.	0.00	4.40	7.09	8.46	8.76	9.42	8.85	9.08	9.97	11.78	18.02	15.12
WEIGHT - MEAN(gm)	0.00	51.00	90.42	106.92	121.49	138.61	152.04	166.78	178.08	198.20	121.21	120.75
- STD. DEV.	0.00	7.53	11.50	15.56	18.69	20.76	19.42	24.88	26.26	31.85	35.04	30.50

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	0	0	16	827	255	2	0	0	
% AT STAGE	0.00	0.00	0.00	1.45	75.18	23.18	0.18	0.00	0.00	

## ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL		SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
	NO.					NO.		565	535	0	1100
%	2.06	97.94	0.00	100.00		%		51.36	48.64	0.00	100.00
% SAMPLE WEIGHT	0.41	27.87	0.00	28.28		MEAN WEIGHT		114.47	127.39	0.00	120.75
						% SAMP. WT.		48.69	51.31	0.00	100.00

Table 10 (cont'd) Seine roe fishery sample summaries by section

SECTION: 72 - POWELL ANCHORAGE

SAMPLE NUMBERS: 320, 227, 409, 294, 229, 331, 301, 402, 400, 248, 292, 256, 151, 311, 169, 299, 251, 333, 156, 290,  
230, 325, 329, 149

SOURCE: ROE FISHERY

GEAR: HERRING SEINE

DATE: MAR 19/90 - MAR 24/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	16	120	103	1560	118	82	52	18	18	313	2400
% AT AGE	0.00	0.77	5.75	4.94	74.75	5.65	3.93	2.49	0.86	0.86	0.00	100.00
LENGTH - MEAN(mm)	0.00	163.56	177.97	191.21	201.56	211.33	221.61	228.23	234.50	238.00	196.06	201.23
- STD. DEV.	0.00	7.64	11.41	11.91	12.82	12.36	12.58	9.76	13.69	6.42	24.54	17.68
WEIGHT - MEAN(gm)	0.00	59.69	81.93	106.13	127.55	150.80	174.85	192.71	205.17	213.22	123.49	128.77
- STD. DEV.	0.00	11.37	18.39	21.49	28.11	28.81	31.54	26.11	41.20	22.24	48.52	37.57

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	1	0	0	37	1864	489	8	0	1
% AT STAGE	0.04	0.00	0.00	1.54	77.67	20.38	0.33	0.00	0.04

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	30	1256	1	1287	NO.	1112	1287	1	2400
%	2.33	97.59	0.08	100.00	%	46.33	53.63	0.04	100.00
% SAMPLE WEIGHT	0.40	29.52	0.00	29.92	MEAN WEIGHT	120.36	136.10	27.00	128.77
					% SAMP. WT.	43.31	56.68	0.01	100.00

Table 10 (cont'd) Seine roe fishery sample summaries by section

SECTION: 232 - MACOAH PASS  
 SAMPLE NUMBERS: 212, 235, 172, 171, 232, 254, 160, 253, 221, 159,  
 231, 210, 394, 225, 211, 368, 358  
 SOURCE: ROE FISHERY  
 GEAR: HERRING SEINE  
 DATE: MAR 11/90 - MAR 12/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	5	362	170	674	64	89	27	7	1	297	1696
% AT AGE	0.00	0.36	25.88	12.15	48.18	4.57	6.36	1.93	0.50	0.07	0.00	100.00
LENGTH - MEAN(mm)	0.00	160.80	188.72	202.52	212.87	219.88	226.72	230.70	239.71	243.00	206.33	206.78
- STD. DEV.	0.00	4.27	8.44	8.64	8.66	11.82	11.09	5.94	8.81	0.00	18.03	15.99
WEIGHT - MEAN(gm)	0.00	58.40	100.55	130.43	154.30	172.63	186.74	198.11	224.29	223.00	138.41	140.79
- STD. DEV.	0.00	5.18	15.20	20.04	21.65	25.46	26.45	16.92	19.11	0.00	38.25	35.80

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	1	0	69	1208	412	6	0	0	
% AT STAGE	0.00	0.06	0.00	4.07	71.23	24.29	0.35	0.00	0.00	

## ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL		SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
	NO.					NO.		840	856	0	1696
%	3.62	96.03	0.35	100.00		%		49.53	50.47	0.00	100.00
% SAMPLE WEIGHT	0.56	29.33	0.01	29.91		MEAN WEIGHT		132.78	148.65	0.00	140.79
						% SAMP. WT.		46.71	53.29	0.00	100.00

Table 11 Gillnet roe fishery sample summaries by section

SECTION: 21 - JUAN PEREZ SOUND  
 SAMPLE NUMBERS: 332, 323, 298, 324, 354, 334, 297  
 SOURCE: ROE FISHERY  
 GEAR: GILLNET  
 DATE: APR 8/90

SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	0	2	36	189	44	37	74	37	14	267	700
% AT AGE	0.00	0.00	0.46	8.31	43.65	10.16	8.55	17.09	8.55	3.23	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	189.50	205.75	210.89	219.75	226.62	228.95	234.03	237.64	216.01	217.57
- STD. DEV.	0.00	0.00	16.26	7.75	8.61	10.15	8.14	9.91	7.78	13.13	11.49	12.78
WEIGHT - MEAN(gm)	0.00	0.00	101.50	130.03	137.14	152.91	159.78	170.49	175.19	178.14	145.00	148.22
- STD. DEV.	0.00	0.00	43.13	10.93	15.65	19.19	18.22	23.18	17.24	26.40	21.27	23.42

HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	0	0	3	552	127	18	0	0	
% AT STAGE	0.00	0.00	0.00	0.43	78.86	18.14	2.57	0.00	0.00	

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL		SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
	NO.	%	%	%		NO.	%	NO.	%	NO.	%
NO.	1	351	9	361		NO.		339	361	0	700
%	0.28	97.23	2.49	100.00		%		48.43	51.57	0.00	100.00
% SAMPLE WEIGHT	0.00	27.63	0.04	27.68		MEAN WEIGHT		146.85	149.50	0.00	148.22
						% SAMP. WT.		47.98	52.02	0.00	100.00

Table 11 (cont'd) Gill net roe fishery sample summaries by section

SECTION: 42 - AREA 4 NORTH  
 SAMPLE NUMBERS: 327,318,312,336,308,307,321  
 SOURCE: ROE FISHERY  
 GEAR: GILLNET  
 DATE: MAR 28/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	0	0	34	116	231	56	63	33	11	156	700
% AT AGE	0.00	0.00	0.00	6.25	21.32	42.46	10.29	11.58	6.07	2.02	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	0.00	205.41	208.86	212.72	219.66	224.03	223.88	230.73	215.13	214.65
- STD. DEV.	0.00	0.00	0.00	6.96	7.24	7.98	8.66	9.49	8.58	8.97	9.52	9.98
WEIGHT - MEAN(gm)	0.00	0.00	0.00	127.15	136.47	142.83	156.68	165.11	165.70	181.45	144.86	146.27
- STD. DEV.	0.00	0.00	0.00	10.10	14.24	16.14	16.81	21.56	23.63	20.45	16.42	19.87

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	0	0	5	554	119	22	0	0	
% AT STAGE	0.00	0.00	0.00	0.71	79.14	17.00	3.14	0.00	0.00	

## ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL		SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
	NO.					NO.		344	356	0	700
%	0.28	97.47	2.25	100.00		%		49.14	50.86	0.00	100.00
% SAMPLE WEIGHT	0.08	26.84	0.03	26.94		MEAN WEIGHT		143.58	148.86	0.00	146.27
						% SAMP. WT.		48.24	51.76	0.00	100.00

Table 11 (cont'd) Gill net roe fishery sample summaries by section

SECTION: 67 - LAREDO SOUND

SAMPLE NUMBERS: 218,344,326,293,356,199

SOURCE: ROE FISHERY

GEAR: GILLNET

DATE: MAR 28/90 - MAR 29/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	0	0	5	330	76	21	23	5	3	137	600
% AT AGE	0.00	0.00	0.00	1.08	71.27	16.41	4.54	4.97	1.08	0.65	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	0.00	206.00	208.25	213.87	219.71	222.96	228.40	224.67	210.88	210.76
- STD. DEV.	0.00	0.00	0.00	7.31	8.13	9.32	8.68	9.33	7.99	5.51	10.03	9.69
WEIGHT - MEAN(gm)	0.00	0.00	0.00	135.80	136.60	144.53	156.57	160.04	156.80	158.00	143.70	141.09
- STD. DEV.	0.00	0.00	0.00	10.18	15.94	18.48	17.28	24.99	26.22	13.45	20.29	18.83

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	12	486	90	10	1	1
% AT STAGE	0.00	0.00	0.00	2.00	81.00	15.00	1.67	0.17	0.17

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	1	345	6	352	NO.	248	352	0	600
%	0.28	98.01	1.70	100.00	%	41.33	58.67	0.00	100.00
% SAMPLE WEIGHT	0.07	28.06	0.03	28.16	MEAN WEIGHT	135.84	144.79	0.00	141.09
					% SAMP. WT.	39.80	60.20	0.00	100.00

Table 11 (cont'd) Gill net roe fishery sample summaries by section

SECTION: 74 - THOMPSON BAY  
 SAMPLE NUMBERS: 226,216,223,173,288,228  
 SOURCE: ROE FISHERY  
 GEAR: GILLNET  
 DATE: MAR 28/90 - MAR 29/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	0	0	5	221	67	32	43	4	12	216	600
% AT AGE	0.00	0.00	0.00	1.30	57.55	17.45	8.33	11.20	1.04	3.13	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	0.00	204.80	213.76	220.21	224.94	225.65	232.50	235.33	215.61	217.07
- STD. DEV.	0.00	0.00	0.00	8.47	8.39	7.94	7.26	9.76	4.65	13.05	9.99	10.30
WEIGHT - MEAN(gm)	0.00	0.00	0.00	136.40	153.13	165.27	176.63	179.21	192.75	170.00	158.12	159.86
- STD. DEV.	0.00	0.00	0.00	13.32	18.75	20.93	19.18	21.58	32.04	30.07	21.39	22.21

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	0	0	2	498	50	50	0	0	
% AT STAGE	0.00	0.00	0.00	0.33	83.00	8.33	8.33	0.00	0.00	

## ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL		SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
	NO.					NO.		228	372	0	600
%	0.27	90.59	9.14	100.00		%		38.00	62.00	0.00	100.00
% SAMPLE WEIGHT	0.07	26.58	0.19	26.85		MEAN WEIGHT		154.24	163.31	0.00	159.86
						% SAMP. WT.		36.66	63.34	0.00	100.00

Table 11 (cont'd) Gill net roe fishery sample summaries by section

SECTION: 142 - BAYNES SOUND  
 SAMPLE NUMBERS: 167, 219, 202, 233, 222, 214  
 SOURCE: ROE FISHERY  
 GEAR: GILLNET  
 DATE: MAR 14/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	0	29	48	251	58	54	8	1	0	151	600
% AT AGE	0.00	0.00	6.46	10.69	55.90	12.92	12.03	1.78	0.22	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	197.38	206.63	212.06	216.98	217.78	220.63	230.00	0.00	210.34	211.62
- STD. DEV.	0.00	0.00	6.44	7.79	8.06	7.99	9.49	4.57	0.00	0.00	9.81	9.62
WEIGHT - MEAN(gm)	0.00	0.00	114.59	124.60	137.71	146.33	141.24	153.25	157.00	0.00	135.34	136.34
- STD. DEV.	0.00	0.00	9.36	14.72	17.60	20.47	19.96	16.58	0.00	0.00	20.61	19.66

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	0	0	6	457	70	67	0	0	
% AT STAGE	0.00	0.00	0.00	1.00	76.17	11.67	11.17	0.00	0.00	

## ROE MATURITY (FEMALE):

	SEX RATIO:								
	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	1	323	23	347	NO.	253	347	0	600
%	0.29	93.08	6.63	100.00	%	42.17	57.83	0.00	100.00
% SAMPLE WEIGHT	0.06	24.81	0.13	25.00	MEAN WEIGHT	131.89	139.59	0.00	136.34
					% SAMP. WT.	40.79	59.21	0.00	100.00

Table 11 (cont'd) Gill net roe fishery sample summaries by section

SECTION: 143 - QUALICUM  
 SAMPLE NUMBERS: 236,152,217,165,147,200  
 SOURCE: ROE FISHERY  
 GEAR: GILLNET  
 DATE: MAR 22/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	0	21	52	251	53	44	7	1	1	170	600
% AT AGE	0.00	0.00	4.88	12.09	58.37	12.33	10.23	1.63	0.23	0.23	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	197.90	210.23	215.17	218.92	222.32	224.57	228.00	243.00	213.62	214.73
- STD. DEV.	0.00	0.00	6.34	8.09	7.33	8.00	8.92	12.54	0.00	0.00	7.73	8.94
WEIGHT - MEAN(gm)	0.00	0.00	117.38	136.77	143.36	152.28	157.70	164.29	179.00	201.00	144.54	144.45
- STD. DEV.	0.00	0.00	12.21	13.41	17.05	19.78	21.50	30.41	0.00	0.00	17.12	19.03

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## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	0	0	2	442	144	12	0	0	
% AT STAGE	0.00	0.00	0.00	0.33	73.67	24.00	2.00	0.00	0.00	

## ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL		SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
	NO.	%	%	%	%	NO.	%	NO.	%	NO.	%
NO.	0	310	4	314		NO.		286	314	0	600
%	0.00	98.73	1.27	100.00		%		47.67	52.33	0.00	100.00
% SAMPLE WEIGHT	0.00	28.99	0.03	29.02		MEAN WEIGHT		143.17	145.62	0.00	144.45
						% SAMP. WT.		47.24	52.76	0.00	100.00

Table 11 (cont'd) Gill net roe fishery sample summaries by section

SECTION: 173 - YELLOW POINT

SAMPLE NUMBERS: 255,155,154,198,150,148,170

SOURCE: ROE FISHERY

GEAR: GILLNET

DATE: MAR 22/90 - MAR 23/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	0	65	60	269	56	35	5	2	0	208	700
% AT AGE	0.00	0.00	13.21	12.20	54.67	11.38	7.11	1.02	0.41	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	200.68	208.77	215.10	222.04	221.83	225.40	221.50	0.00	212.41	213.40
- STD. DEV.	0.00	0.00	5.49	7.45	7.78	8.01	7.86	7.13	12.02	0.00	10.15	9.95
WEIGHT - MEAN(gm)	0.00	0.00	118.66	134.20	145.39	162.88	157.63	168.00	162.50	0.00	140.39	142.68
- STD. DEV.	0.00	0.00	10.27	16.50	17.50	19.72	20.87	17.61	17.68	0.00	21.26	21.25

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	1	550	136	13	0	0
% AT STAGE	0.00	0.00	0.00	0.14	78.57	19.43	1.86	0.00	0.00

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	0	371	7	378	NO.	322	378	0	700
%	0.00	98.15	1.85	100.00	%	46.00	54.00	0.00	100.00
% SAMPLE WEIGHT	0.00	29.54	0.02	29.56	MEAN WEIGHT	140.08	144.90	0.00	142.68
					% SAMP. WT.	45.16	54.84	0.00	100.00

Table 11 (cont'd) Gill net roe fishery sample summaries by section

SECTION: 245 - VARGAS ISLAND

SAMPLE NUMBERS: 252,220,234,162,197,249

SOURCE: ROE FISHERY

GEAR: GILLNET

DATE: MAR 21/90

SPECIMENS AT EACH AGE:

AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	0	6	35	307	37	46	11	3	0	155	600
% AT AGE	0.00	0.00	1.35	7.87	68.99	8.31	10.34	2.47	0.67	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	202.00	208.06	216.73	219.73	225.54	233.27	232.67	0.00	215.05	216.89
- STD. DEV.	0.00	0.00	5.10	6.47	7.13	7.66	7.76	7.60	6.43	0.00	9.43	8.99
WEIGHT - MEAN(gm)	0.00	0.00	119.67	136.77	154.70	155.41	173.54	185.36	156.33	0.00	149.50	154.02
- STD. DEV.	0.00	0.00	10.19	12.73	16.85	19.49	19.56	16.75	6.35	0.00	20.25	19.98

HJORT MATURITY STAGES:

MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	3	418	159	20	0	0
% AT STAGE	0.00	0.00	0.00	0.50	69.67	26.50	3.33	0.00	0.00

ROE MATURITY (FEMALE):

SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	1	285	11	297	NO.	303	297	0	600
%	0.34	95.96	3.70	100.00	%	50.50	49.50	0.00	100.00
% SAMPLE WEIGHT	0.12	28.69	0.04	28.86	MEAN WEIGHT	149.42	158.71	0.00	154.02
					% SAMP. WT.	48.99	51.01	0.00	100.00

Table 12 Pre-fishery charter sample summaries by area

AREA: 2W - WEST COAST Q.C.I.  
 SAMPLE NUMBERS: 117, 161, 136, 129, 116, 109, 373, 107, 121, 128, 135, 374, 108, 131, 366, 357, 134, 113, 276, 396,  
 272, 274, 360, 132, 375, 130, 119, 126, 133, 191, 110, 362, 371  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 1/90 - APR 5/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	6	183	103	2271	351	10	9	10	15	209	3167
% AT AGE	0.00	0.20	6.19	3.48	76.77	11.87	0.34	0.30	0.34	0.51	0.00	100.00
LENGTH - MEAN(mm)	0.00	165.00	191.44	208.01	215.28	226.04	230.20	236.89	238.60	239.73	217.96	215.24
- STD. DEV.	0.00	8.92	8.33	9.58	9.83	9.45	9.34	13.08	10.29	12.78	15.64	12.78
WEIGHT - MEAN(gm)	0.00	62.00	101.75	130.51	155.34	186.81	189.40	198.89	208.60	224.60	156.67	155.56
- STD. DEV.	0.00	7.97	14.97	21.65	26.48	27.18	26.21	37.11	28.47	31.19	36.74	32.66

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	3	2	449	2272	437	0	0	4	
% AT STAGE	0.00	0.09	0.06	14.18	71.74	13.80	0.00	0.00	0.13	

## ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL		SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
	NO.	%	%	%		NO.	%	1427	1736	4	3167
NO.	326	1410	0	1736		NO.	%	1427	1736	4	3167
%	18.78	81.22	0.00	100.00		%		45.06	54.82	0.13	100.00
% SAMPLE WEIGHT	4.10	23.05	0.00	27.15		MEAN WEIGHT		148.37	161.58	106.00	155.56
						% SAMP. WT.		42.98	56.94	0.09	100.00

Table 12 (cont'd) Pre-fishery charter sample summaries by area

AREA: 2E - EAST COAST Q.C.I.

SAMPLE NUMBERS: 260, 407, 264, 265, 267, 259, 275, 284, 194, 182, 273, 271, 187, 257, 266, 258, 188, 270, 372, 261,  
279, 363, 268, 364, 285, 263, 114, 262, 115

SOURCE: PRE-FISHERY CHARTER

GEAR: HERRING SEINE

DATE: MAR 6/90 - APR 4/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	8	230	787	1159	144	88	181	82	29	190	2898
% AT AGE	0.00	0.30	8.49	29.06	42.80	5.32	3.25	6.68	3.03	1.07	0.00	100.00
LENGTH - MEAN(mm)	0.00	169.25	186.01	198.60	206.54	215.69	223.27	231.46	234.34	237.97	213.72	206.74
- STD. DEV.	0.00	6.04	7.72	7.51	8.85	9.47	10.53	8.76	10.64	9.95	17.65	15.15
WEIGHT - MEAN(gm)	0.00	66.63	91.92	114.10	130.24	146.15	165.89	183.75	191.56	193.90	145.19	131.20
- STD. DEV.	0.00	10.41	13.20	15.11	18.99	24.19	27.11	24.38	28.01	29.32	37.12	31.90

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## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	2	3	6	611	1820	453	2	0	1
% AT STAGE	0.07	0.10	0.21	21.08	62.80	15.63	0.07	0.00	0.03

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL	NO.	%	MALE	FEMALE	IMMATURE	TOTAL
NO.	374	1035	0	1409			1485	1409	4	2898
%	26.54	73.46	0.00	100.00			51.24	48.62	0.14	100.00
% SAMPLE WEIGHT	5.44	20.98	0.00	26.42			123.21	139.69	109.50	131.20
					MEAN WEIGHT					
					% SAMP. WT.		48.12	51.77	0.12	100.00

Table 12 (cont'd) Pre-fishery charter sample summaries by area

AREA: 3 - NASS  
 SAMPLE NUMBERS: 406,341,351,183,338,190,178  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 14/90 - MAR 26/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	9	70	184	152	170	37	19	17	7	35	700
% AT AGE	0.00	1.35	10.53	27.67	22.86	25.56	5.56	2.86	2.56	1.05	0.00	100.00
LENGTH - MEAN(mm)	0.00	145.22	178.31	193.28	202.16	208.26	212.35	218.00	219.53	232.14	201.23	199.84
- STD. DEV.	0.00	7.34	10.96	8.48	7.99	7.80	8.25	8.27	11.02	9.37	23.42	15.73
WEIGHT - MEAN(gm)	0.00	39.11	81.11	105.23	123.18	135.17	150.68	157.37	164.88	187.57	121.57	120.05
- STD. DEV.	0.00	8.45	15.41	15.17	15.73	14.82	18.08	15.03	20.00	34.65	38.08	28.94

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## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	6	4	2	253	368	66	1	0	0
% AT STAGE	0.86	0.57	0.29	36.14	52.57	9.43	0.14	0.00	0.00

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	197	141	1	339	NO.	351	339	10	700
%	58.11	41.59	0.29	100.00	%	50.14	48.43	1.43	100.00
% SAMPLE WEIGHT	14.66	10.76	0.00	25.42	MEAN WEIGHT	117.33	125.06	45.50	120.05
					% SAMP. WT.	49.01	50.45	0.54	100.00

Table 12 (cont'd) Pre-fishery charter sample summaries by area

AREA: 4 - SKEENA  
 SAMPLE NUMBERS: 177, 203, 185, 179, 195, 186, 192, 189, 184, 207  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 21/90 - MAR 30/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	2	155	232	254	215	31	31	20	1	59	1000
% AT AGE	0.00	0.21	16.47	24.65	26.99	22.85	3.29	3.29	2.13	0.11	0.00	100.00
LENGTH - MEAN(mm)	0.00	177.00	184.17	194.37	203.48	209.85	216.94	224.10	227.30	244.00	208.71	201.57
- STD. DEV.	0.00	7.07	8.30	7.19	8.56	9.14	8.66	10.81	9.23	0.00	16.91	14.15
WEIGHT - MEAN(gm)	0.00	80.50	89.30	107.53	124.21	138.04	152.97	166.58	182.05	184.00	132.10	121.71
- STD. DEV.	0.00	19.09	13.85	13.48	17.42	19.33	18.27	21.89	32.15	0.00	30.45	27.83

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	0	4	144	717	134	1	0	0	
% AT STAGE	0.00	0.00	0.40	14.40	71.70	13.40	0.10	0.00	0.00	

## ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL		SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
	NO.	NO.	NO.	NO.	%	NO.	%	NO.	NO.	NO.	NO.
NO.	96	405	0	501		NO.		499	501	0	1000
%	19.16	80.84	0.00	100.00		%		49.90	50.10	0.00	100.00
% SAMPLE WEIGHT	4.69	22.23	0.00	26.92		MEAN WEIGHT		115.62	127.77	0.00	121.71
						% SAMP. WT.		47.40	52.60	0.00	100.00

Table 12 (cont'd) Pre-fishery charter sample summaries by area

AREA: 5 - GRENVILLE-PRINCIPE  
 SAMPLE NUMBERS: 353, 193, 414, 286, 206, 215, 380, 385, 381, 209, 422, 348, 269, 355, 345, 390, 213, 337, 343, 403,  
 278, 379, 340, 405, 180, 339, 378  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 19/90 - APR 6/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	15	512	520	764	464	88	77	46	8	205	2699
% AT AGE	0.00	0.60	20.53	20.85	30.63	18.60	3.53	3.09	1.84	0.32	0.00	100.00
LENGTH - MEAN(mm)	0.00	158.73	182.49	194.00	199.96	208.15	214.14	221.51	225.70	230.75	203.93	198.58
- STD. DEV.	0.00	7.47	8.67	8.46	9.01	9.39	8.38	11.52	10.04	6.71	18.03	14.76
WEIGHT - MEAN(gm)	0.00	52.80	89.41	109.10	121.52	138.45	153.06	166.42	176.98	192.00	130.25	119.69
- STD. DEV.	0.00	7.64	12.99	15.45	17.71	19.17	20.44	23.70	24.74	21.55	32.59	28.49

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	1	1	439	1999	252	7	0	0
% AT STAGE	0.00	0.04	0.04	16.27	74.06	9.34	0.26	0.00	0.00

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	284	1099	3	1386	NO.	1313	1386	0	2699
%	20.49	79.29	0.22	100.00	%	48.65	51.35	0.00	100.00
% SAMPLE WEIGHT	4.56	22.52	0.00	27.09	MEAN WEIGHT	112.35	126.65	0.00	119.69
					% SAMP. WT.	45.66	54.34	0.00	100.00

Table 12 (cont'd) Pre-fishery charter sample summaries by area

AREA: 6 - BUTEDALE  
 SAMPLE NUMBERS: 241, 350, 382, 401, 238, 283, 388, 349, 242, 157,  
 420, 352, 239, 398, 342, 243, 237  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 3/90 - MAR 26/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	14	78	72	1208	135	37	35	8	11	102	1700
% AT AGE	0.00	0.88	4.88	4.51	75.59	8.45	2.32	2.19	0.50	0.69	0.00	100.00
LENGTH - MEAN(mm)	0.00	166.00	182.17	191.25	199.50	208.34	216.19	217.43	218.25	226.55	196.79	199.62
- STD. DEV.	0.00	6.46	10.08	9.75	10.25	9.52	11.23	11.67	10.19	11.51	18.52	13.01
WEIGHT - MEAN(gm)	0.00	62.79	89.85	104.68	122.12	142.56	160.62	155.71	159.38	166.00	118.25	122.79
- STD. DEV.	0.00	9.87	14.79	18.19	21.45	23.80	26.72	32.16	22.72	31.07	32.82	26.49

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	1	1	396	1130	170	1	0	1
% AT STAGE	0.00	0.06	0.06	23.29	66.47	10.00	0.06	0.00	0.06

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	206	641	1	848	NO.	850	848	2	1700
%	24.29	75.59	0.12	100.00	%	50.00	49.88	0.12	100.00
% SAMPLE WEIGHT	5.59	22.44	0.00	28.03	MEAN WEIGHT	115.60	130.10	83.00	122.79
					% SAMP. WT.	47.07	52.85	0.08	100.00

Table 12 (cont'd) Pre-fishery charter sample summaries by area

AREA: 7 - BELLA BELLA  
 SAMPLE NUMBERS: 158, 142, 140, 346, 145, 424, 418, 174, 282, 166, 367, 138, 176, 365, 277, 146, 419, 137, 144, 428,  
 423, 369, 139, 164, 143, 281, 392, 426, 280  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 1/90 - MAR 25/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	85	141	130	1797	218	108	95	21	23	253	2871
% AT AGE	0.00	3.25	5.39	4.97	68.64	8.33	4.13	3.63	0.80	0.88	0.00	100.00
LENGTH - MEAN(mm)	0.00	152.84	177.82	192.27	202.39	212.34	221.39	222.89	225.10	233.57	197.26	201.37
- STD. DEV.	0.00	10.57	12.76	11.56	12.62	11.11	12.52	11.14	13.27	13.13	26.58	18.86
WEIGHT - MEAN(gm)	0.00	46.16	83.00	108.85	129.85	151.27	174.70	183.60	185.71	203.96	127.58	130.02
- STD. DEV.	0.00	12.00	20.45	22.51	28.08	28.51	31.72	31.26	34.81	34.08	53.78	39.39

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	7	44	21	857	1727	212	1	1	1	
% AT STAGE	0.24	1.53	0.73	29.85	60.15	7.38	0.03	0.03	0.03	

## ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL		SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
	NO.	%	%	%	NO.	%	NO.	%	%	%	%
NO.	669	826	2	1497			1354	1497	20	2871	
%	44.69	55.18	0.13	100.00			47.16	52.14	0.70	100.00	
% SAMPLE WEIGHT	10.37	16.46	0.02	26.84			121.57	138.73	49.25	130.02	
					MEAN WEIGHT		44.10	55.64	0.26	100.00	
					% SAMP. WT.						

Table 12 (cont'd) Pre-fishery charter sample summaries by area

AREA: 8 - BELLA COOLA  
SAMPLE NUMBERS: 204,416,208,175,141  
SOURCE: PRE-FISHERY CHARTER  
GEAR: HERRING SEINE  
DATE: MAR 3/90 - MAR 15/90

SPECIMENS AT EACH AGE:

AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	5	59	29	298	30	30	15	3	0	31	500
% AT AGE	0.00	1.07	12.58	6.18	63.54	6.40	6.40	3.20	0.64	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	167.60	174.95	185.07	195.97	203.60	209.90	212.47	216.33	0.00	189.68	194.09
- STD. DEV.	0.00	11.46	10.41	12.53	11.26	13.40	13.78	11.00	6.11	0.00	22.33	15.65
WEIGHT - MEAN(gm)	0.00	60.60	75.78	92.48	111.03	123.40	136.83	150.73	149.00	0.00	101.55	108.41
- STD. DEV.	0.00	21.58	14.34	18.72	22.13	23.27	33.61	29.71	2.00	0.00	44.50	29.60

## HJORT Maturity Stages:

#### MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	5	8	224	242	21	0	0	0
% AT STAGE	0.00	1.00	1.60	44.80	48.40	4.20	0.00	0.00	0.00

#### ROE Maturity (Female):

### SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	134	103	0	237	NO.	260	237	3	500
%	56.54	43.46	0.00	100.00	%	52.00	47.40	0.60	100.00
% SAMPLE WEIGHT	12.85	10.76	0.00	23.60	MEAN WEIGHT	104.90	112.82	64.00	108.41
					% SAMP. WT.	50.32	49.33	0.35	100.00

Table 12 (cont'd) Pre-fishery charter sample summaries by area

AREA: 9 - RIVERS INLET  
 SAMPLE NUMBERS: 201  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 14/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	2	8	2	52	6	2	0	0	0	28	100
% AT AGE	0.00	2.78	11.11	2.78	72.22	8.33	2.78	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	149.50	164.13	174.00	178.08	181.00	191.00	0.00	0.00	0.00	159.21	171.46
- STD. DEV.	0.00	3.54	9.92	1.41	11.37	5.51	2.83	0.00	0.00	0.00	6.47	13.40
WEIGHT - MEAN(gm)	0.00	38.50	61.25	75.50	87.48	91.50	115.50	0.00	0.00	0.00	60.18	77.32
- STD. DEV.	0.00	2.12	14.37	4.95	22.25	12.79	13.44	0.00	0.00	0.00	13.52	23.67

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	2	0	61	34	3	0	0	0	
% AT STAGE	0.00	2.00	0.00	61.00	34.00	3.00	0.00	0.00	0.00	

## ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL			SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
	NO.	%	%	%			NO.	%	NO.	%	%	%
NO.	24	24	0	48			NO.		50	48	2	100
%	50.00	50.00	0.00	100.00			%		50.00	48.00	2.00	100.00
% SAMPLE WEIGHT	11.71	15.99	0.00	27.70			MEAN WEIGHT		71.66	84.83	38.50	77.32
							% SAMP. WT.		46.34	52.66	1.00	100.00

Table 12 (cont'd) Pre-fishery charter sample summaries by area

AREA: 10 - SMITH INLET

SAMPLE NUMBERS: 196

SOURCE: PRE-FISHERY CHARTER

GEAR: HERRING SEINE

DATE: MAR 12/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	1	15	7	58	6	2	1	0	0	10	100
% AT AGE	0.00	1.11	16.67	7.78	64.44	6.67	2.22	1.11	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	167.00	171.27	179.57	184.83	195.33	214.00	203.00	0.00	0.00	176.90	182.85
- STD. DEV.	0.00	0.00	11.63	8.04	11.50	11.74	4.24	0.00	0.00	0.00	24.42	14.94
WEIGHT - MEAN(gm)	0.00	63.00	76.07	84.71	97.47	117.83	157.00	123.00	0.00	0.00	91.60	95.10
- STD. DEV.	0.00	0.00	21.35	9.03	21.94	23.13	14.14	0.00	0.00	0.00	46.40	27.66

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## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	1	0	80	19	0	0	0	0
% AT STAGE	0.00	1.00	0.00	80.00	19.00	0.00	0.00	0.00	0.00

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	51	5	0	56	NO.	44	56	0	100
%	91.07	8.93	0.00	100.00	%	44.00	56.00	0.00	100.00
% SAMPLE WEIGHT	21.05	3.06	0.00	24.11	MEAN WEIGHT	94.45	95.61	0.00	95.10
					% SAMP. WT.	43.70	56.30	0.00	100.00

Table 12 (cont'd) Pre-fishery charter sample summaries by area

AREA: 12 - ALERT BAY  
 SAMPLE NUMBERS: 246,205  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 7/90 - MAR 10/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	46	54	13	49	11	3	0	0	0	24	200
% AT AGE	0.00	26.14	30.68	7.39	27.84	6.25	1.70	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	137.04	159.63	177.08	192.04	206.73	210.00	0.00	0.00	0.00	162.79	167.24
- STD. DEV.	0.00	13.83	16.36	22.74	22.00	14.53	15.52	0.00	0.00	0.00	25.36	29.16
WEIGHT - MEAN(gm)	0.00	31.87	54.89	80.00	104.43	123.36	133.33	0.00	0.00	0.00	63.38	69.32
- STD. DEV.	0.00	10.60	15.51	29.97	33.44	27.78	24.03	0.00	0.00	0.00	33.83	38.85

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## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	9	32	56	97	5	0	0	0	1	
% AT STAGE	4.50	16.00	28.00	48.50	2.50	0.00	0.00	0.00	0.50	

## ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL		SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
	NO.	%	%	%		NO.	%	NO.	%	NO.	%
NO.	99	0	0	99		NO.		84	99	17	200
%	100.00	0.00	0.00	100.00		%		42.00	49.50	8.50	100.00
% SAMPLE WEIGHT	12.63	0.00	0.00	12.63		MEAN WEIGHT		70.82	74.27	33.12	69.32
						% SAMP. WT.		42.91	53.03	4.06	100.00

Table 12 (cont'd) Pre-fishery charter sample summaries by area

AREA: 13 - QUATHIASKI  
 SAMPLE NUMBERS: 245, 45, 240, 244  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: FEB 24/90 - MAR 5/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	109	65	162	13	19	1	0	0	0	0	31	400
% AT AGE	29.54	17.62	43.90	3.52	5.15	0.27	0.00	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	96.78	149.94	171.51	186.46	193.58	205.00	0.00	0.00	0.00	0.00	144.68	147.18
- STD. DEV.	6.92	9.79	9.82	9.92	16.00	0.00	0.00	0.00	0.00	0.00	37.56	35.85
WEIGHT - MEAN(gm)	9.83	38.46	64.00	86.08	98.84	132.00	0.00	0.00	0.00	0.00	43.16	46.02
- STD. DEV.	2.26	8.99	14.17	15.86	30.64	0.00	0.00	0.00	0.00	0.00	30.70	30.31

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## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	139	74	11	142	30	0	2	0	2	
% AT STAGE	34.75	18.50	2.75	35.50	7.50	0.00	0.50	0.00	0.50	

## ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL		SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
	NO.	%	%	%		NO.	%	NO.	%	NO.	%
NO.	114	5	1	120		NO.		121	120	159	400
%	95.00	4.17	0.83	100.00		%		30.25	30.00	39.75	100.00
% SAMPLE WEIGHT	11.08	1.24	0.01	12.34		MEAN WEIGHT		62.59	66.54	17.92	46.02
						% SAMP. WT.		41.14	43.38	15.48	100.00

Table 12 (cont'd) Pre-fishery charter sample summaries by area

AREA: 14 - COMOX

SAMPLE NUMBERS: 425, 2, 57, 13, 55, 6, 17, 52, 7, 8, 1, 20, 9, 10, 4, 51, 16, 3, 41, 56,  
58, 411

SOURCE: PRE-FISHERY CHARTER

GEAR: HERRING SEINE

DATE: FEB 20/90 - MAR 18/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	116	1011	271	487	78	37	10	2	0	188	2200
% AT AGE	0.00	5.77	50.25	13.47	24.20	3.88	1.84	0.50	0.10	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	165.94	185.34	196.83	207.28	217.05	219.59	227.60	218.50	0.00	192.86	193.15
- STD. DEV.	0.00	11.28	10.25	10.77	10.60	8.07	10.20	11.06	16.26	0.00	18.35	16.68
WEIGHT - MEAN(gm)	0.00	59.53	84.10	105.27	127.71	143.17	154.59	169.60	141.00	0.00	101.33	100.26
- STD. DEV.	0.00	12.47	17.72	22.83	26.54	24.53	29.79	29.34	53.74	0.00	34.23	32.07

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	11	22	369	1181	274	318	0	25
% AT STAGE	0.00	0.50	1.00	16.77	53.68	12.45	14.45	0.00	1.14

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	270	730	142	1142	NO.	1026	1142	31	2199
%	23.64	63.92	12.43	100.00	%	46.66	51.93	1.41	100.00
% SAMPLE WEIGHT	4.66	16.96	0.19	21.81	MEAN WEIGHT	95.02	106.14	58.61	100.28
					% SAMP. WT.	44.21	54.97	0.82	100.00

Table 12 (cont'd) Pre-fishery charter sample summaries by area

AREA: 15 - WESTVIEW  
 SAMPLE NUMBERS: 427, 23, 38, 37, 5,391,415,386, 32  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: FEB 21/90 - MAR 5/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	23	491	112	170	19	16	5	0	0	64	900
% AT AGE	0.00	2.75	58.73	13.40	20.33	2.27	1.91	0.60	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	159.17	178.05	190.69	196.17	206.47	211.75	208.60	0.00	0.00	185.80	184.48
- STD. DEV.	0.00	10.12	9.44	8.86	10.63	9.85	6.62	11.35	0.00	0.00	16.48	14.18
WEIGHT - MEAN(gm)	0.00	55.04	72.76	92.47	102.46	124.37	142.31	135.20	0.00	0.00	86.80	84.04
- STD. DEV.	0.00	9.99	13.60	14.95	19.54	19.50	20.00	24.17	0.00	0.00	25.17	23.19

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	19	25	634	210	12	0	0	0	
% AT STAGE	0.00	2.11	2.78	70.44	23.33	1.33	0.00	0.00	0.00	

## ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL			SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
	NO.	91	0	466			NO.		428	466	6	900
%	80.47	19.53	0.00	100.00			%		47.56	51.78	0.67	100.00
% SAMPLE WEIGHT	14.16	4.96	0.00	19.12			MEAN WEIGHT		82.15	86.00	66.33	84.04
							% SAMP. WT.		46.49	52.99	0.53	100.00

Table 12 (cont'd) Pre-fishery charter sample summaries by area

AREA: 17 - NANAIMO  
 SAMPLE NUMBERS: 12, 46,417, 22, 39,395,404, 95,122, 44, 123, 18, 53, 19, 11, 60, 43, 82,421, 59,  
 15,120, 33,387, 14, 96, 88  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: FEB 23/90 - MAR 21/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	260	1456	205	388	69	42	8	1	1	269	2699
% AT AGE	0.00	10.70	59.92	8.44	15.97	2.84	1.73	0.33	0.04	0.04	0.00	100.00
LENGTH - MEAN(mm)	0.00	165.83	185.37	196.98	210.05	216.17	221.60	219.75	219.00	244.00	190.83	189.95
- STD. DEV.	0.00	8.55	10.44	10.98	9.92	8.13	8.65	8.50	0.00	0.00	19.31	17.19
WEIGHT - MEAN(gm)	0.00	61.19	89.95	111.32	138.76	153.06	164.55	166.13	155.00	226.00	103.88	100.28
- STD. DEV.	0.00	10.45	17.33	22.97	24.52	22.39	24.27	19.99	0.00	0.00	36.40	32.20

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	1	5	1	443	1899	266	83	1	0	
% AT STAGE	0.04	0.19	0.04	16.41	70.36	9.86	3.08	0.04	0.00	

## ROE MATURITY (FEMALE):

						SEX RATIO:					
	IMMATURE	MATURE	SPENT	TOTAL		NO.	%	MALE	FEMALE	IMMATURE	TOTAL
NO.	297	1002	32	1331		1364	1331	4	1331	2699	
%	22.31	75.28	2.40	100.00		50.54	49.31	0.15	49.31	100.00	
% SAMPLE WEIGHT	4.27	20.56	0.04	24.88		MEAN WEIGHT		96.05	104.76	54.75	100.28
						% SAMP. WT.		48.40	51.52	0.08	100.00

Table 12 (cont'd) Pre-fishery charter sample summaries by area

AREA: 18 - COWICHAN  
 SAMPLE NUMBERS: 36,410  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: FEB 25/90 - FEB 26/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	32	130	7	8	3	2	0	0	0	18	200
% AT AGE	0.00	17.58	71.43	3.85	4.40	1.65	1.10	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	167.38	182.52	193.29	210.25	217.33	223.50	0.00	0.00	0.00	183.89	182.64
- STD. DEV.	0.00	8.25	9.87	12.01	8.45	10.07	9.19	0.00	0.00	0.00	16.22	14.55
WEIGHT - MEAN(gm)	0.00	63.72	85.89	94.00	136.88	145.00	160.00	0.00	0.00	0.00	90.67	86.72
- STD. DEV.	0.00	11.59	16.10	22.11	16.69	19.52	19.80	0.00	0.00	0.00	26.36	23.95

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	1	8	5	149	37	0	0	0	0	
% AT STAGE	0.50	4.00	2.50	74.50	18.50	0.00	0.00	0.00	0.00	

## ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL		SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
	NO.	%	%	%		NO.	%	NO.	%	NO.	%
NO.	96	4	0	100		NO.		96	100	1	197
%	96.00	4.00	0.00	100.00		%		48.73	50.76	0.51	100.00
% SAMPLE WEIGHT	18.43	0.96	0.00	19.39		MEAN WEIGHT		84.55	89.74	49.00	87.01
						% SAMP. WT.		47.36	52.36	0.29	100.00

Table 12 (cont'd) Pre-fishery charter sample summaries by area

AREA: 23 - BARKLEY SOUND  
 SAMPLE NUMBERS: 412, 73, 65, 76, 80, 67, 48, 77, 68, 21, 40, 25, 35, 28, 70, 50, 31, 34, 75, 63,  
 24, 71, 78, 49, 47, 30, 74, 62  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: FEB 20/90 - MAR 20/90

SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	12	719	298	1252	130	148	39	3	0	199	2800
% AT AGE	0.00	0.46	27.64	11.46	48.14	5.00	5.69	1.50	0.12	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	166.00	190.38	204.11	214.17	222.31	227.25	231.00	243.00	0.00	212.31	207.99
- STD. DEV.	0.00	9.01	8.04	8.71	8.20	9.57	8.65	8.27	6.24	0.00	16.65	15.13
WEIGHT - MEAN(gm)	0.00	66.00	100.94	128.05	151.21	168.30	181.88	190.23	187.33	0.00	148.34	138.26
- STD. DEV.	0.00	12.15	14.85	19.30	20.04	24.88	24.28	21.43	71.39	0.00	36.90	33.13

HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	2	2	586	1979	225	6	0	0	
% AT STAGE	0.00	0.07	0.07	20.93	70.68	8.04	0.21	0.00	0.00	

ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL		SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
	NO.	%	%	%		NO.	%	NO.	%	NO.	%
NO.	405	920	3	1328		NO.		1468	1328	4	2800
%	30.50	69.28	0.23	100.00		%		52.43	47.43	0.14	100.00
% SAMPLE WEIGHT	6.52	20.38	0.00	26.90		MEAN WEIGHT		132.14	145.11	111.50	138.26
						% SAMP. WT.		50.11	49.78	0.12	100.00

Table 12 (cont'd) Pre-fishery charter sample summaries by area

AREA: 24 - CLAYOQUOT SOUND  
 SAMPLE NUMBERS: 66, 81, 413, 127, 42, 90, 89, 79, 64, 408, 125, 97, 111, 118, 103, 163, 87, 384, 105, 168,  
 86, 85, 124, 112, 376  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: FEB 22/90 - MAR 17/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	13	625	312	1095	87	124	30	3	4	191	2484
% AT AGE	0.00	0.57	27.26	13.61	47.75	3.79	5.41	1.31	0.13	0.17	0.00	100.00
LENGTH - MEAN(mm)	0.00	163.31	188.97	203.14	213.49	223.46	227.73	230.23	242.33	231.25	208.93	206.73
- STD. DEV.	0.00	10.05	8.23	8.70	8.81	8.93	9.03	7.82	8.96	0.96	17.30	15.62
WEIGHT - MEAN(gm)	0.00	60.54	100.96	130.17	154.38	173.63	188.29	194.43	219.33	186.50	142.99	139.51
- STD. DEV.	0.00	9.24	15.81	19.58	23.10	24.05	25.14	25.34	43.66	22.11	38.09	35.24

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	4	3	195	2060	173	45	2	2
% AT STAGE	0.00	0.16	0.12	7.85	82.93	6.96	1.81	0.08	0.08

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL			MALE	FEMALE	IMMATURE	TOTAL
NO.	113	1125	21	1259			1222	1259	3	2484
%	8.98	89.36	1.67	100.00			49.19	50.68	0.12	100.00
% SAMPLE WEIGHT	1.92	27.35	0.02	29.29			129.96	148.81	129.00	139.51
					MEAN WEIGHT		45.83	54.06	0.11	100.00
					% SAMP. WT.					

Table 12 (cont'd) Pre-fishery charter sample summaries by area

AREA: 25 - NOOTKA SOUND  
 SAMPLE NUMBERS: 54, 29, 61, 72, 26, 69  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: FEB 24/90 - MAR 2/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	3	154	68	212	26	45	29	3	1	57	598
% AT AGE	0.00	0.55	28.47	12.57	39.19	4.81	8.32	5.36	0.55	0.18	0.00	100.00
LENGTH - MEAN(mm)	0.00	158.00	189.83	203.78	218.77	225.08	233.44	234.41	233.00	242.00	206.39	210.37
- STD. DEV.	0.00	2.65	9.38	9.06	9.72	8.73	7.91	7.73	10.44	0.00	21.63	18.87
WEIGHT - MEAN(gm)	0.00	58.33	101.36	129.82	170.01	184.92	210.60	217.66	215.67	211.00	145.74	151.20
- STD. DEV.	0.00	5.03	17.95	20.30	28.35	25.85	27.05	31.40	49.24	0.00	52.78	47.25

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## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	42	488	67	0	0	1
% AT STAGE	0.00	0.00	0.00	7.02	81.61	11.20	0.00	0.00	0.17

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL			MALE	FEMALE	IMMATURE	TOTAL
NO.	33	291	0	324			273	324	1	598
%	10.19	89.81	0.00	100.00			45.65	54.18	0.17	100.00
% SAMPLE WEIGHT	1.42	27.47	0.00	28.89			140.93	159.99	106.00	151.20
					MEAN WEIGHT					
					% SAMP. WT.					
							42.55	57.33	0.12	100.00

Table 12 (cont'd) Pre-fishery charter sample summaries by area

AREA: 26 - KYUQUOT SOUND  
 SAMPLE NUMBERS: 94  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 4/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	33	32	0	0	0	0	0	0	0	0	35	100
% AT AGE	50.77	49.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	101.18	148.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	106.57	118.13
- STD. DEV.	8.41	7.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.98	25.09
WEIGHT - MEAN(gm)	11.91	40.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.94	22.56
- STD. DEV.	3.34	8.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.06	15.32

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## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	53	26	0	7	0	0	0	0	14	
% AT STAGE	53.00	26.00	0.00	7.00	0.00	0.00	0.00	0.00	14.00	

## ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL	SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
					NO.	%				
NO.	11	0	0	11			10	11	79	100
%	100.00	0.00	0.00	100.00			10.00	11.00	79.00	100.00
% SAMPLE WEIGHT	4.64	0.00	0.00	4.64			40.30	45.09	17.18	22.56
					MEAN WEIGHT		17.86	21.99	60.15	100.00
					% SAMP. WT.					

Table 12 (cont'd) Pre-fishery charter sample summaries by area

AREA: 27 - QUATSINO SOUND

SAMPLE NUMBERS: 104, 98, 181, 106, 99, 102, 84, 83, 101, 100

SOURCE: PRE-FISHERY CHARTER

GEAR: HERRING SEINE

DATE: FEB 24/90 - MAR 6/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	17	209	132	367	54	66	72	6	2	74	999
% AT AGE	0.00	1.84	22.59	14.27	39.68	5.84	7.14	7.78	0.65	0.22	0.00	100.00
LENGTH - MEAN(mm)	0.00	164.41	187.71	204.03	217.34	226.57	233.15	235.14	236.83	237.50	210.84	210.98
- STD. DEV.	0.00	10.27	9.25	10.63	10.58	8.61	7.46	8.48	10.13	0.71	22.59	19.77
WEIGHT - MEAN(gm)	0.00	62.82	101.38	137.97	170.49	196.87	216.24	226.44	241.67	234.50	157.64	157.99
- STD. DEV.	0.00	13.69	16.59	26.77	30.10	27.17	27.63	24.42	34.20	33.23	55.60	49.85

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	1	0	176	705	117	0	0	0
% AT STAGE	0.00	0.10	0.00	17.62	70.57	11.71	0.00	0.00	0.00

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	135	404	0	539	NO.	460	539	0	999
%	25.05	74.95	0.00	100.00	%	46.05	53.95	0.00	100.00
% SAMPLE WEIGHT	4.82	23.60	0.00	28.42	MEAN WEIGHT	147.32	167.09	0.00	157.99
					% SAMP. WT.	42.94	57.06	0.00	100.00

Table 13 Pre-fishery charter sample summaries by section

SECTION: 2 - PORT LOUIS  
 SAMPLE NUMBERS: 161,129,121,130  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 2/90 - MAR 17/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	0	6	12	309	39	1	1	2	2	28	400
% AT AGE	0.00	0.00	1.61	3.23	83.06	10.48	0.27	0.27	0.54	0.54	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	190.83	215.25	219.01	228.00	222.00	247.00	230.50	237.50	222.57	219.83
- STD. DEV.	0.00	0.00	9.87	9.33	9.69	7.64	0.00	0.00	0.71	9.19	13.74	10.93
WEIGHT - MEAN(gm)	0.00	0.00	100.33	143.83	163.28	188.59	160.00	227.00	183.50	228.00	169.00	165.20
- STD. DEV.	0.00	0.00	21.44	23.55	23.72	25.47	0.00	0.00	20.51	18.38	34.42	27.65

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	0	0	90	280	30	0	0	0	
% AT STAGE	0.00	0.00	0.00	22.50	70.00	7.50	0.00	0.00	0.00	

## ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL		SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
	NO.				NO.		%				
NO.	79	136	0	215				185	215	0	400
%	36.74	63.26	0.00	100.00				46.25	53.75	0.00	100.00
% SAMPLE WEIGHT	8.18	18.10	0.00	26.29				158.97	170.56	0.00	165.20
					MEAN WEIGHT			44.51	55.49	0.00	100.00
					% SAMP. WT.						

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 3 - RENNELL SOUND  
 SAMPLE NUMBERS: 126,362,371,135,374,108,373,116,131,366,  
 357,134,396,360,375  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 1/90 - MAR 22/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	3	12	13	932	273	6	2	6	10	110	1367
% AT AGE	0.00	0.24	0.95	1.03	74.14	21.72	0.48	0.16	0.48	0.80	0.00	100.00
LENGTH - MEAN(mm)	0.00	166.67	188.25	214.69	217.07	225.92	231.67	244.00	238.67	243.90	218.55	218.97
- STD. DEV.	0.00	12.58	6.57	10.53	9.64	9.37	10.80	24.04	11.79	9.85	15.10	11.70
WEIGHT - MEAN(gm)	0.00	59.33	92.75	140.92	164.74	188.22	196.83	240.00	213.67	232.20	159.65	168.89
- STD. DEV.	0.00	6.11	15.19	26.02	27.88	26.68	27.58	43.84	31.31	32.37	37.79	32.17

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	3	2	196	913	249	0	0	4
% AT STAGE	0.00	0.22	0.15	14.34	66.79	18.22	0.00	0.00	0.29

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	144	600	0	744	NO.	619	744	4	1367
%	19.35	80.65	0.00	100.00	%	45.28	54.43	0.29	100.00
% SAMPLE WEIGHT	4.18	23.66	0.00	27.85	MEAN WEIGHT	159.08	177.39	106.00	168.89
					% SAMP. WT.	42.65	57.16	0.18	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 5 - ENGLEFIELD BAY

SAMPLE NUMBERS: 276

SOURCE: PRE-FISHERY CHARTER

GEAR: HERRING SEINE

DATE: APR 5/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	0	4	2	77	9	0	1	0	1	6	100
% AT AGE	0.00	0.00	4.26	2.13	81.91	9.57	0.00	1.06	0.00	1.06	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	187.25	211.00	210.01	218.11	0.00	232.00	0.00	237.00	216.00	210.70
- STD. DEV.	0.00	0.00	7.09	15.56	7.69	10.14	0.00	0.00	0.00	0.00	0.00	10.77
WEIGHT - MEAN(gm)	0.00	0.00	102.25	135.00	136.94	159.89	0.00	199.00	0.00	173.00	149.33	139.30
- STD. DEV.	0.00	0.00	19.31	33.94	18.43	29.14	0.00	0.00	0.00	0.00	42.87	24.44

%

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	3	88	9	0	0	0
% AT STAGE	0.00	0.00	0.00	3.00	88.00	9.00	0.00	0.00	0.00

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	0	49	0	49	NO.	51	49	0	100
%	0.00	100.00	0.00	100.00	%	51.00	49.00	0.00	100.00
% SAMPLE WEIGHT	0.00	27.11	0.00	27.11	MEAN WEIGHT	135.80	142.94	0.00	139.30
					% SAMP. WT.	49.72	50.28	0.00	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 6 - LOUSCOONE INLET  
 SAMPLE NUMBERS: 113, 272, 109, 136, 117, 107, 128, 132, 274, 110,  
 133, 191, 119  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 7/90 - MAR 28/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	3	161	76	953	30	3	5	2	2	65	1300
% AT AGE	0.00	0.24	13.04	6.15	77.17	2.43	0.24	0.40	0.16	0.16	0.00	100.00
LENGTH - MEAN(mm)	0.00	163.33	191.81	205.64	212.74	226.90	230.00	233.00	246.50	222.50	215.14	210.25
- STD. DEV.	0.00	5.69	8.40	8.31	9.36	11.11	7.81	11.05	0.71	23.33	16.77	12.66
WEIGHT - MEAN(gm)	0.00	64.67	102.46	126.51	145.05	179.73	184.33	176.80	218.50	209.00	146.97	139.83
- STD. DEV.	0.00	10.02	14.52	19.20	21.53	29.25	23.50	24.91	19.09	9.90	33.60	27.34

## HJORT MATURITY STAGES:

	MATURITY STAGE								UNKNOWN	
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	0	0	160	991	149	0	0	0	
% AT STAGE	0.00	0.00	0.00	12.31	76.23	11.46	0.00	0.00	0.00	

## ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL		SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
	NO.	%	%	%		NO.	%	NO.	%	NO.	%
NO.	103	625	0	728		NO.		572	728	0	1300
%	14.15	85.85	0.00	100.00		%		44.00	56.00	0.00	100.00
% SAMPLE WEIGHT	2.83	23.75	0.00	26.58		MEAN WEIGHT		134.48	144.04	0.00	139.83
						% SAMP. WT.		42.32	57.68	0.00	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 21 - JUAN PEREZ SOUND  
 SAMPLE NUMBERS: 284, 265, 259, 275, 182, 257, 260, 407, 266, 114,  
 263, 115, 279, 285  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 6/90 - MAR 31/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	3	137	421	474	83	42	87	45	13	94	1399
% AT AGE	0.00	0.23	10.50	32.26	36.32	6.36	3.22	6.67	3.45	1.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	169.67	186.69	198.66	206.39	214.63	223.12	230.53	233.31	236.00	213.72	206.18
- STD. DEV.	0.00	8.08	7.81	7.26	8.73	9.47	8.94	8.52	9.96	8.63	18.07	15.09
WEIGHT - MEAN(gm)	0.00	64.33	89.66	111.57	126.70	141.58	160.31	178.25	184.78	184.23	140.88	126.84
- STD. DEV.	0.00	12.90	11.69	14.67	17.78	23.92	26.32	22.79	25.69	26.32	37.31	31.11

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	1	2	6	549	684	155	1	0	1	
% AT STAGE	0.07	0.14	0.43	39.24	48.89	11.08	0.07	0.00	0.07	

## ROE MATURITY (FEMALE):

						SEX RATIO:						
	IMMATURE	MATURE	SPENT	TOTAL		NO.	%	MALE	FEMALE	IMMATURE	TOTAL	
NO.	332	349	0	681		715	681	3	681	3	1399	
%	48.75	51.25	0.00	100.00		51.11	48.68	0.21	48.68	0.21	100.00	
% SAMPLE WEIGHT	10.29	14.87	0.00	25.16		MEAN WEIGHT	119.27	134.89	101.67	126.84		
						% SAMP. WT.	48.06	51.77	0.17	51.77	0.17	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 23 - CUMSHEWA INLET  
 SAMPLE NUMBERS: 270  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: APR 3/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	0	8	50	8	7	13	8	0	1	5	100
% AT AGE	0.00	0.00	8.42	52.63	8.42	7.37	13.68	8.42	0.00	1.05	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	189.38	200.48	207.50	219.00	226.31	230.00	0.00	232.00	221.80	208.55
- STD. DEV.	0.00	0.00	3.46	7.72	10.84	12.17	9.26	5.13	0.00	0.00	10.76	15.10
WEIGHT - MEAN(gm)	0.00	0.00	97.75	120.82	138.50	157.14	179.08	179.13	0.00	167.00	168.00	137.99
- STD. DEV.	0.00	0.00	8.71	17.99	26.70	29.50	32.94	18.98	0.00	0.00	24.85	34.19

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	0	0	0	80	20	0	0	0	
% AT STAGE	0.00	0.00	0.00	0.00	80.00	20.00	0.00	0.00	0.00	

## ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL		SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
	NO.	%	%	%		NO.	%	NO.	%	NO.	%
NO.	0	44	0	44		NO.		56	44	0	100
%	0.00	100.00	0.00	100.00		%		56.00	44.00	0.00	100.00
% SAMPLE WEIGHT	0.00	28.14	0.00	28.14		MEAN WEIGHT		128.64	149.89	0.00	137.99
						% SAMP. WT.		52.21	47.79	0.00	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 24 - LASKEEK BAY

SAMPLE NUMBERS: 258,273

SOURCE: PRE-FISHERY CHARTER

GEAR: HERRING SEINE

DATE: APR 1/90 - APR 4/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	2	38	62	57	12	6	11	1	0	11	200
% AT AGE	0.00	1.06	20.11	32.80	30.16	6.35	3.17	5.82	0.53	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	169.50	183.03	193.29	203.84	214.50	212.83	232.09	221.00	0.00	206.36	198.96
- STD. DEV.	0.00	10.61	8.82	7.78	11.33	10.77	10.82	12.00	0.00	0.00	18.93	16.27
WEIGHT - MEAN(gm)	0.00	72.50	97.39	114.95	134.98	148.75	150.50	183.45	162.00	0.00	146.91	125.75
- STD. DEV.	0.00	13.44	17.30	12.73	23.26	19.43	22.58	25.45	0.00	0.00	38.08	30.10

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## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	1	189	10	0	0	0
% AT STAGE	0.00	0.00	0.00	0.50	94.50	5.00	0.00	0.00	0.00

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	0	97	0	97	NO.	103	97	0	200
%	0.00	100.00	0.00	100.00	%	51.50	48.50	0.00	100.00
% SAMPLE WEIGHT	0.00	28.37	0.00	28.37	MEAN WEIGHT	117.67	134.34	0.00	125.75
					% SAMP. WT.	48.19	51.81	0.00	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 25 - SKINCUTTLE INLET  
 SAMPLE NUMBERS: 271,187,194,267,264,188,372,261,363,268,  
 364,262  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 8/90 - MAR 29/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	3	47	254	620	42	27	75	36	15	80	1199
% AT AGE	0.00	0.27	4.20	22.70	55.41	3.75	2.41	6.70	3.22	1.34	0.00	100.00
LENGTH - MEAN(mm)	0.00	168.67	185.89	199.43	206.89	217.60	224.37	232.61	236.00	240.07	214.23	208.54
- STD. DEV.	0.00	2.31	6.42	7.26	8.66	8.50	12.33	8.80	11.30	11.11	17.25	14.56
WEIGHT - MEAN(gm)	0.00	65.00	93.09	116.76	132.40	152.62	171.63	190.65	200.86	204.07	148.60	136.64
- STD. DEV.	0.00	8.72	12.77	14.94	18.94	23.65	23.26	25.19	28.50	29.61	37.09	32.00

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	1	1	0	61	867	268	1	0	0	
% AT STAGE	0.08	0.08	0.00	5.09	72.31	22.35	0.08	0.00	0.00	

## ROE MATURITY (FEMALE):

	SEX RATIO:									
	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL	
NO.	42	545	0	587		611	587	1	1199	
%	7.16	92.84	0.00	100.00		50.96	48.96	0.08	100.00	
% SAMPLE WEIGHT	1.46	25.89	0.00	27.35		MEAN WEIGHT	128.25	145.38	133.00	136.64
						% SAMP. WT.	47.83	52.09	0.08	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 33 - PORT SIMPSON  
 SAMPLE NUMBERS: 406,341,351,183,190,178,338  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 14/90 - MAR 26/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	9	70	184	152	170	37	19	17	7	35	700
% AT AGE	0.00	1.35	10.53	27.67	22.86	25.56	5.56	2.86	2.56	1.05	0.00	100.00
LENGTH - MEAN(mm)	0.00	145.22	178.31	193.28	202.16	208.26	212.35	218.00	219.53	232.14	201.23	199.84
- STD. DEV.	0.00	7.34	10.96	8.48	7.99	7.80	8.25	8.27	11.02	9.37	23.42	15.72
WEIGHT - MEAN(gm)	0.00	39.11	81.11	105.23	123.18	135.17	150.68	157.37	164.88	187.57	121.57	120.05
- STD. DEV.	0.00	8.45	15.41	15.17	15.73	14.82	18.08	15.03	20.00	34.65	38.08	28.94

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	6	4	2	253	368	66	1	0	0
% AT STAGE	0.86	0.57	0.29	36.14	52.57	9.43	0.14	0.00	0.00

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	197	141	1	339	NO.	351	339	10	700
%	58.11	41.59	0.29	100.00	%	50.14	48.43	1.43	100.00
% SAMPLE WEIGHT	14.66	10.76	0.00	25.42	MEAN WEIGHT	117.33	125.06	45.50	120.05
					% SAMP. WT.	49.01	50.45	0.54	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 42 - AREA 4 NORTH  
 SAMPLE NUMBERS: 185,177,203,179,192,186,189,184  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 21/90 - MAR 27/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	1	105	193	197	185	29	27	15	1	47	800
% AT AGE	0.00	0.13	13.94	25.63	26.16	24.57	3.85	3.59	1.99	0.13	0.00	100.00
LENGTH - MEAN(mm)	0.00	182.00	184.17	194.59	203.98	209.45	217.10	223.74	224.47	244.00	210.62	202.32
- STD. DEV.	0.00	0.00	8.60	7.28	8.49	8.92	8.82	10.03	8.46	0.00	16.31	13.81
WEIGHT - MEAN(gm)	0.00	94.00	89.08	108.01	125.09	137.17	152.17	164.37	174.87	184.00	135.11	122.90
- STD. DEV.	0.00	0.00	14.53	13.69	17.06	19.05	18.56	21.08	29.08	0.00	29.69	26.95

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	0	4	138	526	131	1	0	0	
% AT STAGE	0.00	0.00	0.50	17.25	65.75	16.38	0.13	0.00	0.00	

## ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL		SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
	NO.	%	%	%		NO.	%	NO.	%	NO.	%
NO.	91	303	0	394		NO.		406	394	0	800
%	23.10	76.90	0.00	100.00		%		50.75	49.25	0.00	100.00
% SAMPLE WEIGHT	5.56	21.48	0.00	27.03		MEAN WEIGHT		116.48	129.52	0.00	122.90
						% SAMP. WT.		48.10	51.90	0.00	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 43 - AREA 4 SOUTH

SAMPLE NUMBERS: 207,195

SOURCE: PRE-FISHERY CHARTER

GEAR: HERRING SEINE

DATE: MAR 29/90 - MAR 30/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	1	50	39	57	30	2	4	5	0	12	200
% AT AGE	0.00	0.53	26.60	20.74	30.32	15.96	1.06	2.13	2.66	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	172.00	184.16	193.26	201.75	212.30	214.50	226.50	235.80	0.00	201.25	198.57
- STD. DEV.	0.00	0.00	7.71	6.72	8.65	10.24	7.78	16.94	5.81	0.00	17.88	15.12
WEIGHT - MEAN(gm)	0.00	67.00	89.78	105.18	121.19	143.43	164.50	181.50	203.60	0.00	120.33	116.93
- STD. DEV.	0.00	0.00	12.42	12.26	18.43	20.44	9.19	24.47	34.30	0.00	31.86	30.73

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## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	6	191	3	0	0	0
% AT STAGE	0.00	0.00	0.00	3.00	95.50	1.50	0.00	0.00	0.00

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	5	102	0	107	NO.	93	107	0	200
%	4.67	95.33	0.00	100.00	%	46.50	53.50	0.00	100.00
% SAMPLE WEIGHT	1.29	25.19	0.00	26.48	MEAN WEIGHT	111.86	121.34	0.00	116.93
					% SAMP. WT.	44.48	55.52	0.00	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 52 - KITKATLA INLET  
 SAMPLE NUMBERS: 215, 380, 385, 353, 193, 414, 286, 206, 381, 209, 422, 337, 343, 403, 278, 379, 340, 405, 180, 339,  
 378, 348, 269, 355, 345, 390, 213  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 19/90 - APR 6/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	15	512	520	764	464	88	77	46	8	205	2699
% AT AGE	0.00	0.60	20.53	20.85	30.63	18.60	3.53	3.09	1.84	0.32	0.00	100.00
LENGTH - MEAN(mm)	0.00	158.73	182.49	194.00	199.96	208.15	214.14	221.51	225.70	230.75	203.93	198.58
- STD. DEV.	0.00	7.47	8.67	8.46	9.01	9.39	8.38	11.52	10.04	6.71	18.03	14.76
WEIGHT - MEAN(gm)	0.00	52.80	89.41	109.10	121.52	138.45	153.06	166.42	176.98	192.00	130.25	119.69
- STD. DEV.	0.00	7.64	12.99	15.45	17.71	19.17	20.44	23.70	24.74	21.55	32.59	28.49

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	1	1	439	1999	252	7	0	0	
% AT STAGE	0.00	0.04	0.04	16.27	74.06	9.34	0.26	0.00	0.00	

## ROE MATURITY (FEMALE):

					SEX RATIO:								
	IMMATURE	MATURE	SPENT	TOTAL					MALE	FEMALE	IMMATURE	TOTAL	
NO.	284	1099	3	1386					1313	1386	0	2699	
%	20.49	79.29	0.22	100.00					48.65	51.35	0.00	100.00	
% SAMPLE WEIGHT	4.56	22.52	0.00	27.09					MEAN WEIGHT	112.35	126.65	0.00	119.69
									% SAMP. WT.	45.66	54.34	0.00	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 67 - LAREDO SOUND  
 SAMPLE NUMBERS: 382,401,238,241,350,283,388,349,398,342,  
 243,237,242,157,420,352,239  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 3/90 - MAR 26/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	14	78	72	1208	135	37	35	8	11	102	1700
% AT AGE	0.00	0.88	4.88	4.51	75.59	8.45	2.32	2.19	0.50	0.69	0.00	100.00
LENGTH - MEAN(mm)	0.00	166.00	182.17	191.25	199.50	208.34	216.19	217.43	218.25	226.55	196.79	199.62
- STD. DEV.	0.00	6.46	10.08	9.75	10.25	9.52	11.23	11.67	10.19	11.51	18.52	13.01
WEIGHT - MEAN(gm)	0.00	62.79	89.85	104.68	122.12	142.56	160.62	155.71	159.38	166.00	118.25	122.79
- STD. DEV.	0.00	9.87	14.79	18.19	21.45	23.80	26.72	32.16	22.72	31.07	32.82	26.49

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	1	1	396	1130	170	1	0	1	
% AT STAGE	0.00	0.06	0.06	23.29	66.47	10.00	0.06	0.00	0.06	

## ROE MATURITY (FEMALE):

	SEX RATIO:					MALE	FEMALE	IMMATURE	TOTAL	
	IMMATURE	MATURE	SPENT	TOTAL						
NO.	206	641	1	848		NO.	850	848	2	1700
%	24.29	75.59	0.12	100.00		%	50.00	49.88	0.12	100.00
% SAMPLE WEIGHT	5.59	22.44	0.00	28.03		MEAN WEIGHT	115.60	130.10	83.00	122.79
						% SAMP. WT.	47.07	52.85	0.08	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 72 - POWELL ANCHORAGE  
 SAMPLE NUMBERS: 424,174,282,158,367,138,143,281,392,176,  
 365,419,137,144,428,369  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 2/90 - MAR 25/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	16	61	74	1026	125	51	56	11	14	138	1572
% AT AGE	0.00	1.12	4.25	5.16	71.55	8.72	3.56	3.91	0.77	0.98	0.00	100.00
LENGTH - MEAN(mm)	0.00	155.63	179.07	191.12	200.97	211.59	218.92	220.32	225.91	232.64	193.26	201.09
- STD. DEV.	0.00	11.35	13.76	12.13	12.93	10.96	14.47	11.30	16.86	13.95	27.71	17.63
WEIGHT - MEAN(gm)	0.00	51.44	85.16	107.80	128.88	150.81	170.86	179.59	185.91	201.43	122.59	130.81
- STD. DEV.	0.00	11.98	20.45	23.68	28.35	27.99	34.46	31.78	40.23	37.80	55.47	37.50

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	1	4	0	259	1134	174	0	0	0
% AT STAGE	0.06	0.25	0.00	16.48	72.14	11.07	0.00	0.00	0.00

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	180	626	0	806	NO.	762	806	4	1572
%	22.33	77.67	0.00	100.00	%	48.47	51.27	0.25	100.00
% SAMPLE WEIGHT	5.02	23.10	0.00	28.12	MEAN WEIGHT	122.91	138.75	33.75	130.81
					% SAMP. WT.	45.55	54.39	0.07	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 73 - BELLA BELLA  
 SAMPLE NUMBERS: 426,280  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 2/90 - MAR 12/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	55	23	3	84	11	7	2	1	0	14	200
% AT AGE	0.00	29.57	12.37	1.61	45.16	5.91	3.76	1.08	0.54	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	150.53	169.13	187.33	205.10	220.36	224.14	229.50	221.00	0.00	180.07	185.76
- STD. DEV.	0.00	10.43	13.30	30.07	12.34	8.25	12.80	4.95	0.00	0.00	33.82	29.72
WEIGHT - MEAN(gm)	0.00	42.40	65.61	106.00	127.64	164.27	173.57	186.50	177.00	0.00	94.36	98.87
- STD. DEV.	0.00	10.00	21.20	46.12	29.19	22.31	39.25	14.85	0.00	0.00	58.94	51.52

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	6	34	17	111	30	1	0	0	1	
% AT STAGE	3.00	17.00	8.50	55.50	15.00	0.50	0.00	0.00	0.50	

## ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL		SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
	NO.	%				NO.	%	89	99	12	200
%	97.98	2.02	0.00	100.00		%	44.50	49.50	6.00	100.00	
% SAMPLE WEIGHT	21.61	0.67	0.00	22.29		MEAN WEIGHT	90.29	112.86	47.08	98.87	
						% SAMP. WT.	40.64	56.50	2.86	100.00	

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 74 - THOMPSON BAY  
 SAMPLE NUMBERS: 164, 423, 139, 146, 142, 166, 418, 145, 140  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 1/90 - MAR 20/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	11	52	46	535	71	46	36	9	8	85	899
% AT AGE	0.00	1.35	6.39	5.65	65.72	8.72	5.65	4.42	1.11	0.98	0.00	100.00

LENGTH - MEAN(mm)	0.00	158.45	180.00	195.09	206.83	213.48	224.26	226.64	224.56	238.63	207.26	206.80
- STD. DEV.	0.00	7.92	10.03	9.35	11.36	10.94	9.47	10.18	9.03	6.39	21.77	16.59

WEIGHT - MEAN(gm)	0.00	56.00	88.79	113.00	138.60	155.15	182.52	190.28	186.44	215.38	145.36	140.82
- STD. DEV.	0.00	14.73	16.53	19.68	25.93	28.08	25.42	30.76	31.57	19.69	48.05	36.86

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## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	5	2	406	454	31	1	0	0	
% AT STAGE	0.00	0.56	0.22	45.16	50.50	3.45	0.11	0.00	0.00	

## ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL		SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
	NO.				NO.	%		MALE	FEMALE	IMMATURE	TOTAL
NO.	314	185	1	500				396	500	3	899
%	62.80	37.00	0.20	100.00				44.05	55.62	0.33	100.00
% SAMPLE WEIGHT	15.41	10.53	0.01	25.95				131.56	148.71	49.67	140.82
					MEAN WEIGHT			41.15	58.73	0.12	100.00
					% SAMP. WT.						

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 77 - MILBANKE SOUND  
 SAMPLE NUMBERS: 346,277  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 6/90 - MAR 10/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	3	5	7	152	11	4	1	0	1	16	200
% AT AGE	0.00	1.63	2.72	3.80	82.61	5.98	2.17	0.54	0.00	0.54	0.00	100.00
LENGTH - MEAN(mm)	0.00	159.67	179.80	188.00	194.85	205.45	215.00	219.00	0.00	206.00	193.75	194.78
- STD. DEV.	0.00	4.93	8.90	3.51	8.74	11.99	11.17	0.00	0.00	0.00	14.35	11.35
WEIGHT - MEAN(gm)	0.00	51.00	76.40	93.86	106.86	118.36	135.75	162.00	0.00	148.00	105.31	106.37
- STD. DEV.	0.00	2.65	10.36	6.96	16.23	20.59	10.34	0.00	0.00	0.00	31.12	20.58

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## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	1	2	81	109	6	0	1	0	
% AT STAGE	0.00	0.50	1.00	40.50	54.50	3.00	0.00	0.50	0.00	

## ROE MATURITY (FEMALE):

						SEX RATIO:					
	IMMATURE	MATURE	SPENT	TOTAL		NO.		MALE	FEMALE	IMMATURE	TOTAL
NO.	78	13	1	92		NO.		107	92	1	200
%	84.78	14.13	1.09	100.00		%		53.50	46.00	0.50	100.00
% SAMPLE WEIGHT	19.85	4.24	0.36	24.45		MEAN WEIGHT		101.09	112.18	136.00	106.37
						% SAMP. WT.		50.85	48.51	0.64	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 85 - KWAKSHUA CHANNEL  
 SAMPLE NUMBERS: 204,208,175,141,416  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 3/90 - MAR 15/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	5	59	29	298	30	30	15	3	0	31	500
% AT AGE	0.00	1.07	12.58	6.18	63.54	6.40	6.40	3.20	0.64	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	167.60	174.95	185.07	195.97	203.60	209.90	212.47	216.33	0.00	189.68	194.09
- STD. DEV.	0.00	11.46	10.41	12.53	11.26	13.40	13.78	11.00	6.11	0.00	22.33	15.65
WEIGHT - MEAN(gm)	0.00	60.60	75.78	92.48	111.03	123.40	136.83	150.73	149.00	0.00	101.55	108.41
- STD. DEV.	0.00	21.58	14.34	18.72	22.13	23.27	33.61	29.71	2.00	0.00	44.50	29.60

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## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	5	8	224	242	21	0	0	0	
% AT STAGE	0.00	1.00	1.60	44.80	48.40	4.20	0.00	0.00	0.00	

## ROE MATURITY (FEMALE):

						SEX RATIO:					
	IMMATURE	MATURE	SPENT	TOTAL		NO.		MALE	FEMALE	IMMATURE	TOTAL
NO.	134	103	0	237		NO.		260	237	3	500
%	56.54	43.46	0.00	100.00		%		52.00	47.40	0.60	100.00
% SAMPLE WEIGHT	12.85	10.76	0.00	23.60		MEAN WEIGHT		104.90	112.82	64.00	108.41
						% SAMP. WT.		50.32	49.33	0.35	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 93 - RIVERS INLET HEAD  
 SAMPLE NUMBERS: 201  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 14/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	2	8	2	52	6	2	0	0	0	28	100
% AT AGE	0.00	2.78	11.11	2.78	72.22	8.33	2.78	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	149.50	164.13	174.00	178.08	181.00	191.00	0.00	0.00	0.00	159.21	171.46
- STD. DEV.	0.00	3.54	9.92	1.41	11.37	5.51	2.83	0.00	0.00	0.00	6.47	13.40
WEIGHT - MEAN(gm)	0.00	38.50	61.25	75.50	87.48	91.50	115.50	0.00	0.00	0.00	60.18	77.32
- STD. DEV.	0.00	2.12	14.37	4.95	22.25	12.79	13.44	0.00	0.00	0.00	13.52	23.67

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	2	0	61	34	3	0	0	0
% AT STAGE	0.00	2.00	0.00	61.00	34.00	3.00	0.00	0.00	0.00

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	24	24	0	48	NO.	50	48	2	100
%	50.00	50.00	0.00	100.00	%	50.00	48.00	2.00	100.00
% SAMPLE WEIGHT	11.71	15.99	0.00	27.70	MEAN WEIGHT	71.66	84.83	38.50	77.32
					% SAMP. WT.	46.34	52.66	1.00	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 102 - TAKUSH HARBOUR

SAMPLE NUMBERS: 196

SOURCE: PRE-FISHERY CHARTER

GEAR: HERRING SEINE

DATE: MAR 12/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	1	15	7	58	6	2	1	0	0	10	100
% AT AGE	0.00	1.11	16.67	7.78	64.44	6.67	2.22	1.11	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	167.00	171.27	179.57	184.83	195.33	214.00	203.00	0.00	0.00	176.90	182.85
- STD. DEV.	0.00	0.00	11.63	8.04	11.50	11.74	4.24	0.00	0.00	0.00	24.42	14.94
WEIGHT - MEAN(gm)	0.00	63.00	76.07	84.71	97.47	117.83	157.00	123.00	0.00	0.00	91.60	95.10
- STD. DEV.	0.00	0.00	21.35	9.03	21.94	23.13	14.14	0.00	0.00	0.00	46.40	27.66

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	1	0	80	19	0	0	0	0
% AT STAGE	0.00	1.00	0.00	80.00	19.00	0.00	0.00	0.00	0.00

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	51	5	0	56	NO.	44	56	0	100
%	91.07	8.93	0.00	100.00	%	44.00	56.00	0.00	100.00
% SAMPLE WEIGHT	21.05	3.06	0.00	24.11	MEAN WEIGHT	94.45	95.61	0.00	95.10
					% SAMP. WT.	43.70	56.30	0.00	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

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SECTION: 125 - GILFORD ISLAND

SAMPLE NUMBERS: 246,205

SOURCE: PRE-FISHERY CHARTER

GEAR: HERRING SEINE

DATE: MAR 7/90 - MAR 10/90

## SPECIMENS AT EACH AGE:

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	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL

NO. AT AGE	0	46	54	13	49	11	3	0	0	0	24	200
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% AT AGE	0.00	26.14	30.68	7.39	27.84	6.25	1.70	0.00	0.00	0.00	0.00	100.00
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LENGTH - MEAN(mm)	0.00	137.04	159.63	177.08	192.04	206.73	210.00	0.00	0.00	0.00	162.79	167.24
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- STD. DEV.	0.00	13.83	16.36	22.74	22.00	14.53	15.52	0.00	0.00	0.00	25.36	29.16
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WEIGHT - MEAN(gm)	0.00	31.87	54.89	80.00	104.43	123.36	133.33	0.00	0.00	0.00	63.38	69.32
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- STD. DEV.	0.00	10.60	15.51	29.97	33.44	27.78	24.03	0.00	0.00	0.00	33.83	38.85
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## HJORT MATURITY STAGES:

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	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN

NO. AT STAGE	9	32	56	97	5	0	0	0	1
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% AT STAGE	4.50	16.00	28.00	48.50	2.50	0.00	0.00	0.00	0.50
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## ROE MATURITY (FEMALE):

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	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
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NO.	99	0	0	99	NO.	84	99	17	200
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%	100.00	0.00	0.00	100.00	%	42.00	49.50	8.50	100.00
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% SAMPLE WEIGHT	12.63	0.00	0.00	12.63	MEAN WEIGHT	70.82	74.27	33.12	69.32
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% SAMP. WT.	42.91	53.03	4.06	100.00
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Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 132 - DEEPWATER BAY  
 SAMPLE NUMBERS: 245, 45,244,240  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: FEB 24/90 - MAR 5/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	109	65	162	13	19	1	0	0	0	0	31	400
% AT AGE	29.54	17.62	43.90	3.52	5.15	0.27	0.00	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	96.78	149.94	171.51	186.46	193.58	205.00	0.00	0.00	0.00	0.00	144.68	147.18
- STD. DEV.	6.92	9.79	9.82	9.92	16.00	0.00	0.00	0.00	0.00	0.00	37.56	35.85
WEIGHT - MEAN(gm)	9.83	38.46	64.00	86.08	98.84	132.00	0.00	0.00	0.00	0.00	43.16	46.02
- STD. DEV.	2.26	8.99	14.17	15.86	30.64	0.00	0.00	0.00	0.00	0.00	30.70	30.31

## HJORT MATURITY STAGES:

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	139	74	11	142	30	0	2	0	2
% AT STAGE	34.75	18.50	2.75	35.50	7.50	0.00	0.50	0.00	0.50

## ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL		SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
NO.	114	5	1	120		NO.		121	120	159	400
%	95.00	4.17	0.83	100.00		%		30.25	30.00	39.75	100.00
% SAMPLE WEIGHT	11.08	1.24	0.01	12.34		MEAN WEIGHT		62.59	66.54	17.92	46.02
						% SAMP. WT.		41.14	43.38	15.48	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 142 - BAYNES SOUND  
 SAMPLE NUMBERS: 425, 2, 13, 55, 6, 17, 52, 7, 8, 1,  
 9, 10, 4, 51, 3, 41, 56, 411  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: FEB 20/90 - MAR 18/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	96	797	230	412	73	29	8	2	0	153	1800
% AT AGE	0.00	5.83	48.39	13.96	25.02	4.43	1.76	0.49	0.12	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	165.25	185.38	197.19	207.55	217.15	218.45	225.38	218.50	0.00	192.58	193.54
- STD. DEV.	0.00	11.52	10.46	10.75	10.35	8.14	10.32	11.33	16.26	0.00	18.84	16.92
WEIGHT - MEAN(gm)	0.00	58.29	83.31	106.10	128.46	144.52	149.97	164.38	141.00	0.00	100.33	100.65
- STD. DEV.	0.00	11.88	17.83	23.31	26.43	24.48	26.75	30.84	53.74	0.00	35.23	32.70

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	11	22	319	899	232	292	0	25	
% AT STAGE	0.00	0.61	1.22	17.72	49.94	12.89	16.22	0.00	1.39	

## ROE MATURITY (FEMALE):

	SEX RATIO:								
	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	239	571	124	934	NO.	834	934	31	1799
%	25.59	61.13	13.28	100.00	%	46.36	51.92	1.72	100.00
% SAMPLE WEIGHT	4.97	16.34	0.19	21.50	MEAN WEIGHT	95.94	106.31	58.61	100.68
					% SAMP. WT.	44.18	54.82	1.00	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 143 - QUALICUM															
SAMPLE NUMBERS: 58, 16, 20, 57															
SOURCE: PRE-FISHERY CHARTER															
GEAR: HERRING SEINE															
DATE: MAR 4/90 - MAR 12/90															
SPECIMENS AT EACH AGE:															
AGE															
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL			
NO. AT AGE	0	20	214	41	75	5	8	2	0	0	35	400			
% AT AGE	0.00	5.48	58.63	11.23	20.55	1.37	2.19	0.55	0.00	0.00	0.00	100.00			
LENGTH - MEAN(mm)	0.00	169.25	185.17	194.83	205.80	215.60	223.75	236.50	0.00	0.00	194.09	191.42			
- STD. DEV.	0.00	9.60	9.42	10.80	11.83	7.64	9.16	2.12	0.00	0.00	16.20	15.45			
WEIGHT - MEAN(gm)	0.00	65.45	87.03	100.61	123.57	123.40	171.38	190.50	0.00	0.00	105.69	98.49			
- STD. DEV.	0.00	13.80	17.04	19.57	26.95	16.59	35.94	0.71	0.00	0.00	29.54	29.02			
HJORT MATURITY STAGES:															
Maturity Stage															
	1	2	3	4	5	6	7	8	UNKNOWN						
NO. AT STAGE	0	0	0	50	282	42	26	0	0						
% AT STAGE	0.00	0.00	0.00	12.50	70.50	10.50	6.50	0.00	0.00						
ROE MATURITY (FEMALE):															
SEX RATIO:															
	IMMATURE	MATURE	SPENT	TOTAL						MALE	FEMALE	IMMATURE	TOTAL		
NO.	31	159	18	208						192	208	0	400		
%	14.90	76.44	8.65	100.00						48.00	52.00	0.00	100.00		
% SAMPLE WEIGHT	3.26	19.75	0.20	23.21						MEAN WEIGHT	91.02	105.38	0.00	98.49	
										% SAMP. WT.	44.36	55.64	0.00	100.00	

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 152 - POWELL RIVER  
 SAMPLE NUMBERS: 391, 415, 386, 32, 38, 37, 5, 23, 427  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: FEB 21/90 - MAR 5/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	23	491	112	170	19	16	5	0	0	64	900
% AT AGE	0.00	2.75	58.73	13.40	20.33	2.27	1.91	0.60	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	159.17	178.05	190.69	196.17	206.47	211.75	208.60	0.00	0.00	185.80	184.48
- STD. DEV.	0.00	10.12	9.44	8.86	10.63	9.85	6.62	11.35	0.00	0.00	16.48	14.18
WEIGHT - MEAN(gm)	0.00	55.04	72.76	92.47	102.46	124.37	142.31	135.20	0.00	0.00	86.80	84.04
- STD. DEV.	0.00	9.99	13.60	14.95	19.54	19.50	20.00	24.17	0.00	0.00	25.17	23.19

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## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	19	25	634	210	12	0	0	0	
% AT STAGE	0.00	2.11	2.78	70.44	23.33	1.33	0.00	0.00	0.00	

## ROE MATURITY (FEMALE):

	SEX RATIO:								
	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	375	91	0	466		428	466	6	900
%	80.47	19.53	0.00	100.00		47.56	51.78	0.67	100.00
% SAMPLE WEIGHT	14.16	4.96	0.00	19.12		82.15	86.00	66.33	84.04
					MEAN WEIGHT	82.15	86.00	66.33	84.04
					% SAMP. WT.	46.49	52.99	0.53	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 172 - NANOOSE BAY

SAMPLE NUMBERS: 44, 18, 53, 19, 43, 421, 417, 22, 39, 395

SOURCE: PRE-FISHERY CHARTER

GEAR: HERRING SEINE

DATE: FEB 23/90 - MAR 14/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	104	578	84	126	14	7	2	0	0	84	999
% AT AGE	0.00	11.37	63.17	9.18	13.77	1.53	0.77	0.22	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	166.10	185.07	194.85	206.84	214.50	222.71	216.50	0.00	0.00	187.36	187.60
- STD. DEV.	0.00	7.95	9.82	10.31	10.54	8.69	8.20	14.85	0.00	0.00	18.77	15.48
WEIGHT - MEAN(gm)	0.00	60.19	87.84	105.35	129.37	148.93	166.29	156.50	0.00	0.00	96.49	93.94
- STD. DEV.	0.00	9.94	15.82	19.57	24.52	22.92	28.18	27.58	0.00	0.00	32.87	27.59

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	1	3	0	248	624	79	43	1	0
% AT STAGE	0.10	0.30	0.00	24.82	62.46	7.91	4.30	0.10	0.00

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	156	301	16	473	NO.	522	473	4	999
%	32.98	63.64	3.38	100.00	%	52.25	47.35	0.40	100.00
% SAMPLE WEIGHT	5.89	17.02	0.07	22.98	MEAN WEIGHT	91.16	97.33	54.75	93.94
					% SAMP. WT.	50.71	49.06	0.23	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 173 - YELLOW POINT  
 SAMPLE NUMBERS: 404, 95, 12, 46, 82, 59, 15, 60, 11, 123,  
 122, 120, 33, 387, 14, 96, 88  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: FEB 23/90 - MAR 21/90

SPECIMENS AT EACH AGE:

AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	156	878	121	262	55	35	6	1	1	185	1700
% AT AGE	0.00	10.30	57.95	7.99	17.29	3.63	2.31	0.40	0.07	0.07	0.00	100.00
LENGTH - MEAN(mm)	0.00	165.66	185.56	198.46	211.60	216.60	221.37	220.83	219.00	244.00	192.41	191.33
- STD. DEV.	0.00	8.96	10.84	11.22	9.23	8.01	8.84	7.17	0.00	0.00	19.40	17.98
WEIGHT - MEAN(gm)	0.00	61.86	91.34	115.46	143.27	154.11	164.20	169.33	155.00	226.00	107.24	104.01
- STD. DEV.	0.00	10.76	18.13	24.29	23.25	22.35	23.86	18.92	0.00	0.00	37.51	34.08

HJORT MATURITY STAGES:

MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	2	1	195	1275	187	40	0	0
% AT STAGE	0.00	0.12	0.06	11.47	75.00	11.00	2.35	0.00	0.00

ROE MATURITY (FEMALE):

SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	141	701	16	858	NO.	842	858	0	1700
%	16.43	81.70	1.86	100.00	%	49.53	50.47	0.00	100.00
% SAMPLE WEIGHT	3.47	22.31	0.03	25.81	MEAN WEIGHT	99.07	108.85	0.00	104.01
					% SAMP. WT.	47.18	52.82	0.00	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 182 - PLUMPER SOUND

SAMPLE NUMBERS: 36,410

SOURCE: PRE-FISHERY CHARTER

GEAR: HERRING SEINE

DATE: FEB 25/90 - FEB 26/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	32	130	7	8	3	2	0	0	0	18	200
% AT AGE	0.00	17.58	71.43	3.85	4.40	1.65	1.10	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	167.38	182.52	193.29	210.25	217.33	223.50	0.00	0.00	0.00	183.89	182.64
- STD. DEV.	0.00	8.25	9.87	12.01	8.45	10.07	9.19	0.00	0.00	0.00	16.22	14.55
WEIGHT - MEAN(gm)	0.00	63.72	85.89	94.00	136.88	145.00	160.00	0.00	0.00	0.00	90.67	86.72
- STD. DEV.	0.00	11.59	16.10	22.11	16.69	19.52	19.80	0.00	0.00	0.00	26.36	23.95

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	1	8	5	149	37	0	0	0	0
% AT STAGE	0.50	4.00	2.50	74.50	18.50	0.00	0.00	0.00	0.00

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	96	4	0	100	NO.	96	100	1	197
%	96.00	4.00	0.00	100.00	%	48.73	50.76	0.51	100.00
% SAMPLE WEIGHT	18.43	0.96	0.00	19.39	MEAN WEIGHT	84.55	89.74	49.00	87.01
					% SAMP. WT.	47.36	52.36	0.29	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 231 - TREVOR CHANNEL  
 SAMPLE NUMBERS: 24  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: FEB 25/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	0	33	12	34	6	3	4	0	0	8	100
% AT AGE	0.00	0.00	35.87	13.04	36.96	6.52	3.26	4.35	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	189.82	201.50	214.97	227.50	229.33	235.00	0.00	0.00	207.50	206.44
- STD. DEV.	0.00	0.00	8.94	9.76	8.91	11.84	13.20	10.86	0.00	0.00	19.36	17.30
WEIGHT - MEAN(gm)	0.00	0.00	98.64	119.92	151.32	176.17	181.00	196.00	0.00	0.00	135.13	133.04
- STD. DEV.	0.00	0.00	15.57	18.05	23.44	32.31	36.66	17.38	0.00	0.00	36.67	36.81

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	0	0	14	83	2	1	0	0	
% AT STAGE	0.00	0.00	0.00	14.00	83.00	2.00	1.00	0.00	0.00	

## ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL		SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL
NO.	10	42	0	52		NO.		47	52	1	100
%	19.23	80.77	0.00	100.00		%		47.00	52.00	1.00	100.00
% SAMPLE WEIGHT	3.70	21.68	0.00	25.38		MEAN WEIGHT		123.11	142.83	91.00	133.04
						% SAMP. WT.		43.49	55.83	0.68	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 232 - MACOAH PASS  
 SAMPLE NUMBERS: 71, 70, 50, 31, 34, 75, 63, 25, 78, 49, 47, 30, 74, 62, 412, 73, 65, 76, 80, 48,  
 77, 68, 21, 40  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: FEB 20/90 - MAR 20/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	12	610	254	1090	109	127	27	3	0	168	2400
% AT AGE	0.00	0.54	27.33	11.38	48.84	4.88	5.69	1.21	0.13	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	166.00	190.40	204.21	214.28	222.59	227.31	230.19	243.00	0.00	212.25	208.04
- STD. DEV.	0.00	9.01	8.06	8.62	8.10	9.52	8.48	8.01	6.24	0.00	16.88	15.09
WEIGHT - MEAN(gm)	0.00	66.00	101.03	128.31	151.52	168.51	181.75	189.93	187.33	0.00	148.99	138.47
- STD. DEV.	0.00	12.15	14.89	19.55	19.90	25.53	24.36	22.76	71.39	0.00	37.50	33.12

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	2	1	488	1699	207	3	0	0
% AT STAGE	0.00	0.08	0.04	20.33	70.79	8.63	0.13	0.00	0.00

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	321	810	2	1133	NO.	1265	1133	2	2400
%	28.33	71.49	0.18	100.00	%	52.71	47.21	0.08	100.00
% SAMPLE WEIGHT	6.02	21.16	0.00	27.18	MEAN WEIGHT	132.33	145.36	127.00	138.47
					% SAMP. WT.	50.37	49.55	0.08	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 233 - IMPERIAL EAGLE CH.  
 SAMPLE NUMBERS: 67, 35, 28  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: FEB 23/90 - MAR 2/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	0	76	32	128	15	18	8	0	0	23	300
% AT AGE	0.00	0.00	27.44	11.55	46.21	5.42	6.50	2.89	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	190.47	204.25	212.98	218.20	226.44	231.75	0.00	0.00	214.43	208.03
- STD. DEV.	0.00	0.00	7.55	9.09	8.82	8.06	9.57	8.36	0.00	0.00	14.15	14.65
WEIGHT - MEAN(gm)	0.00	0.00	101.24	129.00	148.52	163.60	182.94	188.38	0.00	0.00	148.13	138.31
- STD. DEV.	0.00	0.00	14.33	17.51	20.20	15.81	23.30	20.42	0.00	0.00	32.97	31.92

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## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	0	1	84	197	16	2	0	0	
% AT STAGE	0.00	0.00	0.33	28.00	65.67	5.33	0.67	0.00	0.00	

## ROE MATURITY (FEMALE):

	IMMATURE	MATURE	SPENT	TOTAL	SEX RATIO:		MALE	FEMALE	IMMATURE	TOTAL	
					NO.	%					
NO.	74	68	1	143			156	143	1	300	
%	51.75	47.55	0.70	100.00			52.00	47.67	0.33	100.00	
% SAMPLE WEIGHT	11.51	13.74	0.00	25.25			133.35	143.98	101.00	138.31	
					MEAN WEIGHT			50.14	49.62	0.24	100.00
					% SAMP. WT.						

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 243 - SYDNEY INLET  
 SAMPLE NUMBERS: 64, 89, 79, 90, 66, 413, 42, 408, 125, 85,  
 112, 376, 103, 163, 87, 384, 105, 86  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: FEB 22/90 - MAR 17/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	10	461	237	773	58	91	25	2	1	138	1796
% AT AGE	0.00	0.60	27.80	14.29	46.62	3.50	5.49	1.51	0.12	0.06	0.00	100.00
LENGTH - MEAN(mm)	0.00	164.20	189.16	203.25	213.42	223.45	228.62	230.56	240.00	230.00	208.55	206.57
- STD. DEV.	0.00	11.44	8.41	8.93	8.84	9.31	8.57	8.47	11.31	0.00	18.08	15.76
WEIGHT - MEAN(gm)	0.00	61.30	100.82	131.12	154.48	174.07	191.60	197.48	205.50	214.00	142.25	139.37
- STD. DEV.	0.00	10.24	16.04	20.03	23.28	23.02	24.25	24.24	51.62	0.00	39.34	35.81

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	4	2	179	1450	122	36	2	1
% AT STAGE	0.00	0.22	0.11	9.97	80.73	6.79	2.00	0.11	0.06

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	108	808	18	934	NO.	859	934	3	1796
%	11.56	86.51	1.93	100.00	%	47.83	52.00	0.17	100.00
% SAMPLE WEIGHT	2.50	26.42	0.02	28.94	MEAN WEIGHT	129.51	148.46	129.00	139.37
					% SAMP. WT.	44.45	55.40	0.15	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 244 - MILLER CHANNEL  
 SAMPLE NUMBERS: 124, 97, 118, 127  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: MAR 8/90 - MAR 17/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	0	66	46	212	16	23	3	1	2	30	399
% AT AGE	0.00	0.00	17.89	12.47	57.45	4.34	6.23	0.81	0.27	0.54	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	189.74	203.39	214.97	225.88	225.91	229.33	247.00	231.50	209.83	210.41
- STD. DEV.	0.00	0.00	7.22	7.10	8.63	7.05	9.48	4.04	0.00	0.71	14.83	14.00
WEIGHT - MEAN(gm)	0.00	0.00	102.88	124.74	156.26	176.38	178.87	163.00	247.00	186.00	142.33	145.29
- STD. DEV.	0.00	0.00	14.23	17.01	22.18	27.67	25.15	23.52	0.00	2.83	33.90	32.09

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	0	1	7	370	16	5	0	0	
% AT STAGE	0.00	0.00	0.25	1.75	92.73	4.01	1.25	0.00	0.00	

## ROE MATURITY (FEMALE):

	SEX RATIO:													
	IMMATURE	MATURE	SPENT	TOTAL						MALE	FEMALE	IMMATURE	TOTAL	
NO.	2	192	2	196						203	196	0	399	
%	1.02	97.96	1.02	100.00						50.88	49.12	0.00	100.00	
% SAMPLE WEIGHT	0.19	30.27	0.02	30.49						MEAN WEIGHT	135.00	155.94	0.00	145.29
										% SAMP. WT.	47.28	52.72	0.00	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 245 - VARGAS ISLAND

SAMPLE NUMBERS: 81,111,168

SOURCE: PRE-FISHERY CHARTER

GEAR: HERRING SEINE

DATE: MAR 10/90 - MAR 14/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	3	98	29	110	13	10	2	0	1	23	289
% AT AGE	0.00	1.13	36.84	10.90	41.35	4.89	3.76	0.75	0.00	0.38	0.00	100.00

LENGTH - MEAN(mm)	0.00	160.33	187.60	201.79	211.18	220.54	223.80	227.50	0.00	232.00	210.04	202.67
- STD. DEV.	0.00	0.58	7.90	9.18	8.55	9.00	11.33	0.71	0.00	0.00	15.98	15.78

WEIGHT - MEAN(gm)	0.00	58.00	100.32	131.07	150.05	168.31	179.80	203.50	0.00	160.00	148.26	132.44
- STD. DEV.	0.00	5.29	15.77	18.87	23.20	25.06	28.20	7.78	0.00	0.00	36.69	34.61

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## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	9	240	35	4	0	1
% AT STAGE	0.00	0.00	0.00	3.11	83.04	12.11	1.38	0.00	0.35

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	3	125	1	129	NO.	160	129	0	289
%	2.33	96.90	0.78	100.00	%	55.36	44.64	0.00	100.00
% SAMPLE WEIGHT	0.40	29.53	0.02	29.95	MEAN WEIGHT	125.96	140.47	0.00	132.44
					% SAMP. WT.	52.66	47.34	0.00	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 252 - NOOTKA SOUND

SAMPLE NUMBERS: 69, 72

SOURCE: PRE-FISHERY CHARTER

GEAR: HERRING SEINE

DATE: FEB 28/90 - MAR 2/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	0	45	21	92	6	10	4	1	0	19	198
% AT AGE	0.00	0.00	25.14	11.73	51.40	3.35	5.59	2.23	0.56	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	191.89	202.33	218.28	228.00	234.40	236.00	226.00	0.00	213.00	211.59
- STD. DEV.	0.00	0.00	9.80	8.66	8.19	7.62	9.29	3.56	0.00	0.00	18.69	16.26
WEIGHT - MEAN(gm)	0.00	0.00	106.07	124.95	165.36	189.67	203.00	213.00	174.00	0.00	160.84	150.81
- STD. DEV.	0.00	0.00	20.79	21.72	25.04	21.48	30.06	13.52	0.00	0.00	49.02	40.15

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	0	155	43	0	0	0
% AT STAGE	0.00	0.00	0.00	0.00	78.28	21.72	0.00	0.00	0.00

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	0	110	0	110	NO.	88	110	0	198
%	0.00	100.00	0.00	100.00	%	44.44	55.56	0.00	100.00
% SAMPLE WEIGHT	0.00	30.84	0.00	30.84	MEAN WEIGHT	139.98	159.47	0.00	150.81
					% SAMP. WT.	41.25	58.75	0.00	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 253 - ESPERANZA INLET  
 SAMPLE NUMBERS: 26, 54, 29, 61  
 SOURCE: PRE-FISHERY CHARTER  
 GEAR: HERRING SEINE  
 DATE: FEB 24/90 - FEB 28/90

## SPECIMENS AT EACH AGE:

	AGE											
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	3	109	47	120	20	35	25	2	1	38	400
% AT AGE	0.00	0.83	30.11	12.98	33.15	5.52	9.67	6.91	0.55	0.28	0.00	100.00
LENGTH - MEAN(mm)	0.00	158.00	188.98	204.43	219.14	224.20	233.17	234.16	236.50	242.00	203.08	209.77
- STD. DEV.	0.00	2.65	9.10	9.25	10.76	9.03	7.60	8.22	12.02	0.00	22.46	20.03
WEIGHT - MEAN(gm)	0.00	58.33	99.41	132.00	173.57	183.50	212.77	218.40	236.50	211.00	138.18	151.39
- STD. DEV.	0.00	5.03	16.36	19.49	30.26	27.35	26.19	33.51	47.38	0.00	53.59	50.44

## HJORT MATURITY STAGES:

	MATURITY STAGE									
	1	2	3	4	5	6	7	8	UNKNOWN	
NO. AT STAGE	0	0	0	42	333	24	0	0	1	
% AT STAGE	0.00	0.00	0.00	10.50	83.25	6.00	0.00	0.00	0.25	

## ROE MATURITY (FEMALE):

	SEX RATIO:													
	IMMATURE	MATURE	SPENT	TOTAL						MALE	FEMALE	IMMATURE	TOTAL	
NO.	33	181	0	214						185	214	1	400	
%	15.42	84.58	0.00	100.00						46.25	53.50	0.25	100.00	
% SAMPLE WEIGHT	2.15	25.75	0.00	27.90						MEAN WEIGHT	141.38	160.25	106.00	151.39
										% SAMP. WT.	43.19	56.63	0.18	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 261 - OTHER AREA 26

SAMPLE NUMBERS: 94

SOURCE: PRE-FISHERY CHARTER

GEAR: HERRING SEINE

DATE: MAR 4/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	33	32	0	0	0	0	0	0	0	0	35	100
% AT AGE	50.77	49.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	101.18	148.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	106.57	118.13
- STD. DEV.	8.41	7.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.98	25.09
WEIGHT - MEAN(gm)	11.91	40.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.94	22.56
- STD. DEV.	3.34	8.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.06	15.32

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## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	53	26	0	7	0	0	0	0	14
% AT STAGE	53.00	26.00	0.00	7.00	0.00	0.00	0.00	0.00	14.00

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	11	0	0	11	NO.	10	11	79	100
%	100.00	0.00	0.00	100.00	%	10.00	11.00	79.00	100.00
% SAMPLE WEIGHT	4.64	0.00	0.00	4.64	MEAN WEIGHT	40.30	45.09	17.18	22.56
					% SAMP. WT.	17.86	21.99	60.15	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 272 - BROOKS BAY

SAMPLE NUMBERS: 98, 84, 83, 101, 106

SOURCE: PRE-FISHERY CHARTER

GEAR: HERRING SEINE

DATE: FEB 24/90 - MAR 4/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	5	65	57	194	36	46	55	6	2	33	499
% AT AGE	0.00	1.07	13.95	12.23	41.63	7.73	9.87	11.80	1.29	0.43	0.00	100.00
LENGTH - MEAN(mm)	0.00	162.40	192.45	209.33	220.96	228.08	234.50	236.04	236.83	237.50	223.94	219.21
- STD. DEV.	0.00	8.68	8.07	10.17	8.79	7.26	7.84	8.26	10.13	0.71	16.00	16.98
WEIGHT - MEAN(gm)	0.00	60.80	110.14	153.42	183.11	202.83	220.93	229.07	241.67	234.50	193.45	180.56
- STD. DEV.	0.00	10.71	14.83	26.15	26.39	21.40	27.25	23.50	34.20	33.23	48.45	45.74

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	29	408	62	0	0	0
% AT STAGE	0.00	0.00	0.00	5.81	81.76	12.42	0.00	0.00	0.00

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	23	265	0	288	NO.	211	288	0	499
%	7.99	92.01	0.00	100.00	%	42.28	57.72	0.00	100.00
% SAMPLE WEIGHT	1.62	27.72	0.00	29.33	MEAN WEIGHT	172.59	186.40	0.00	180.56
					% SAMP. WT.	40.42	59.58	0.00	100.00

Table 13 (cont'd) Pre-fishery charter sample summaries by section

SECTION: 273 - FORWARD INLET

SAMPLE NUMBERS: 181, 99, 102, 100, 104

SOURCE: PRE-FISHERY CHARTER

GEAR: HERRING SEINE

DATE: FEB 24/90 - MAR 6/90

## SPECIMENS AT EACH AGE:

## AGE

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	12	144	75	173	18	20	17	0	0	41	500
% AT AGE	0.00	2.61	31.37	16.34	37.69	3.92	4.36	3.70	0.00	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	165.25	185.58	200.00	213.27	223.56	230.05	232.24	0.00	0.00	200.29	202.77
- STD. DEV.	0.00	11.11	8.98	9.14	10.95	10.40	5.50	8.79	0.00	0.00	21.71	18.94
WEIGHT - MEAN(gm)	0.00	63.67	97.42	126.23	156.34	184.94	205.45	217.94	0.00	0.00	128.80	135.46
- STD. DEV.	0.00	15.10	15.86	20.67	27.66	33.64	26.02	26.08	0.00	0.00	43.06	43.18

100

## HJORT MATURITY STAGES:

## MATURITY STAGE

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	1	0	147	297	55	0	0	0
% AT STAGE	0.00	0.20	0.00	29.40	59.40	11.00	0.00	0.00	0.00

## ROE MATURITY (FEMALE):

## SEX RATIO:

	IMMATURE	MATURE	SPENT	TOTAL		MALE	FEMALE	IMMATURE	TOTAL
NO.	112	139	0	251	NO.	249	251	0	500
%	44.62	55.38	0.00	100.00	%	49.80	50.20	0.00	100.00
% SAMPLE WEIGHT	9.54	17.53	0.00	27.06	MEAN WEIGHT	125.90	144.94	0.00	135.46
					% SAMP. WT.	46.29	53.71	0.00	100.00

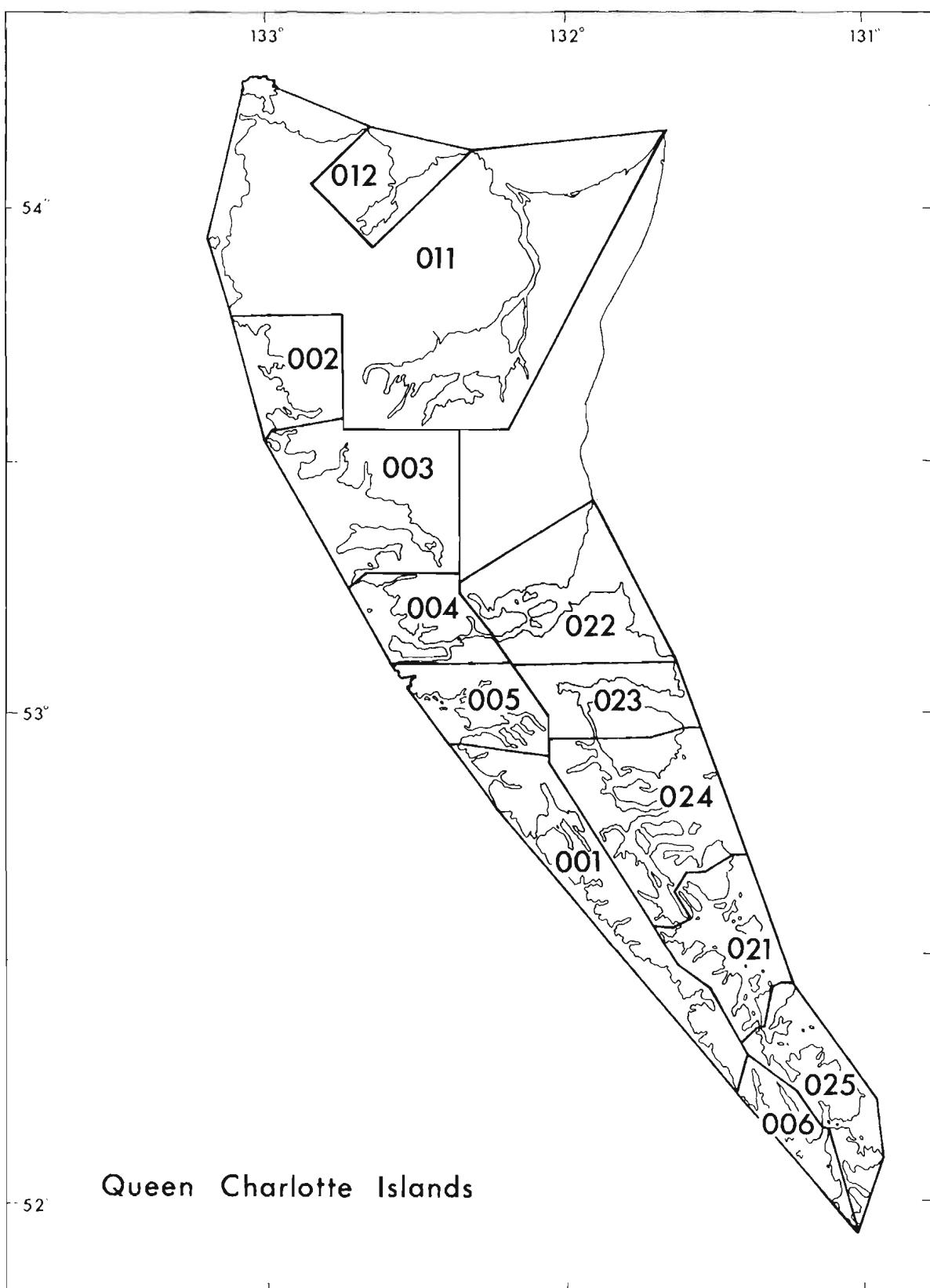


Fig. 1. Herring sections in the Queen Charlotte Islands region.



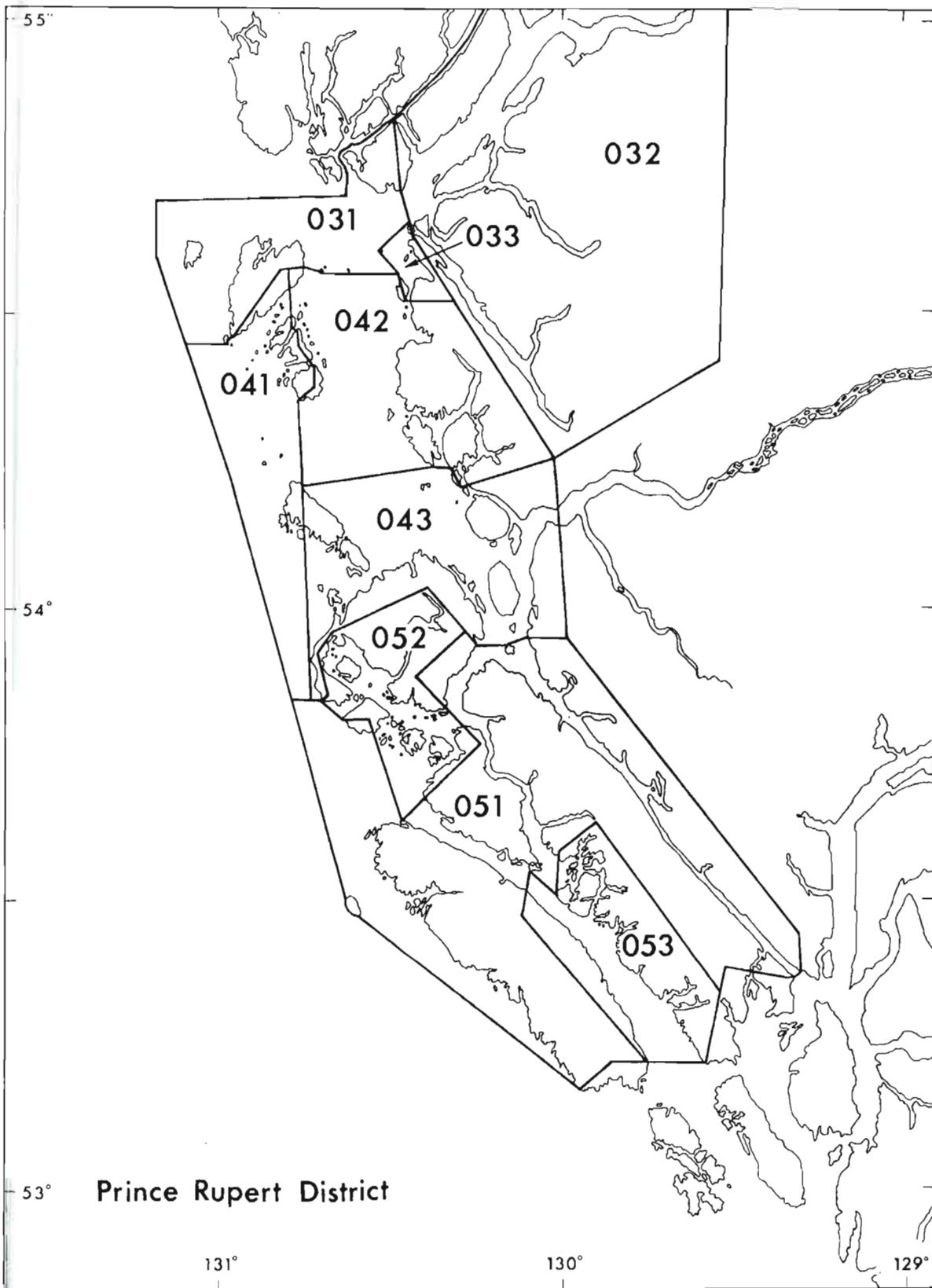


Fig. 2. Herring sections in the Prince Rupert District region.



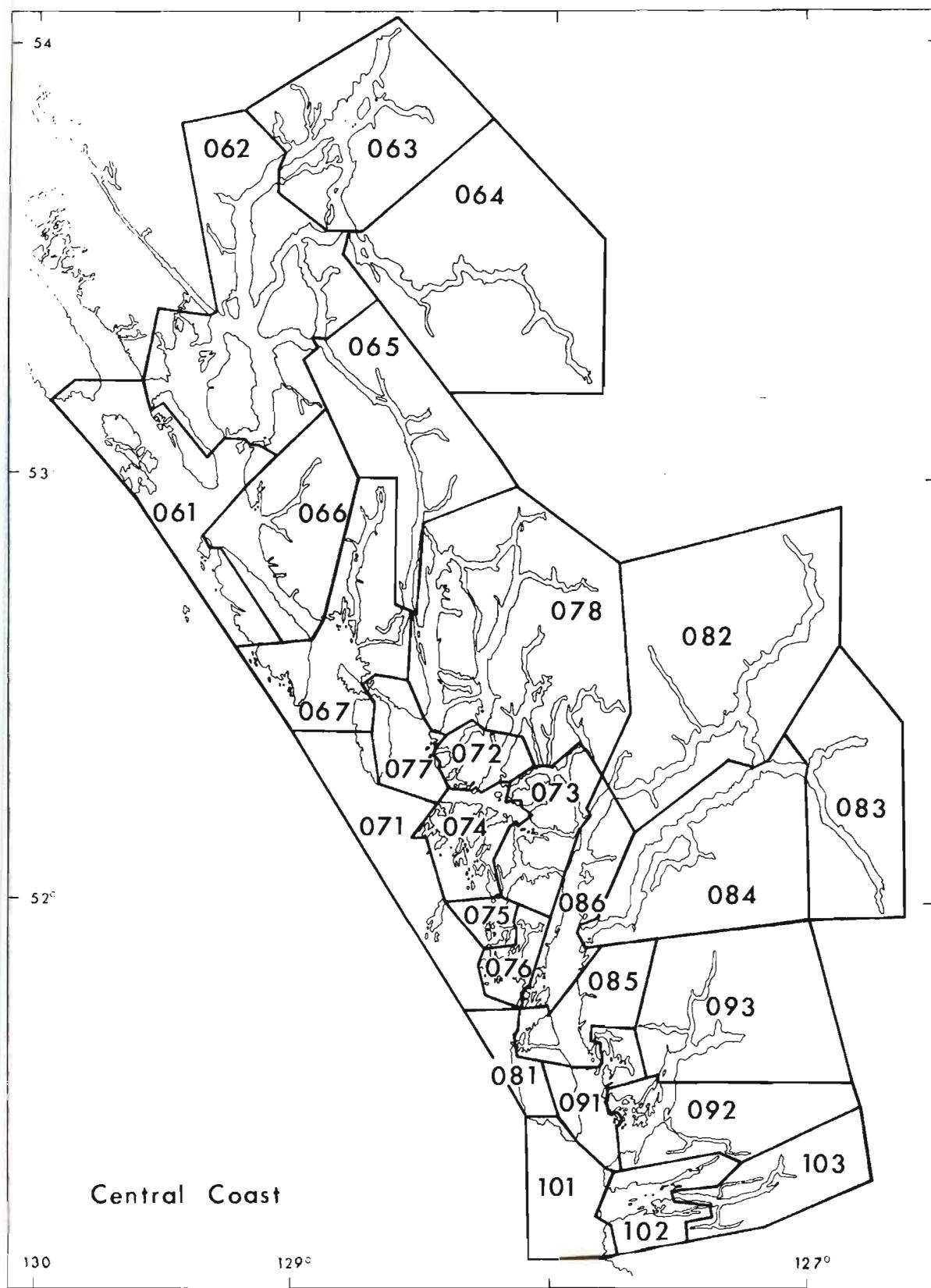


Fig. 3. Herring sections in the Central Coast region.



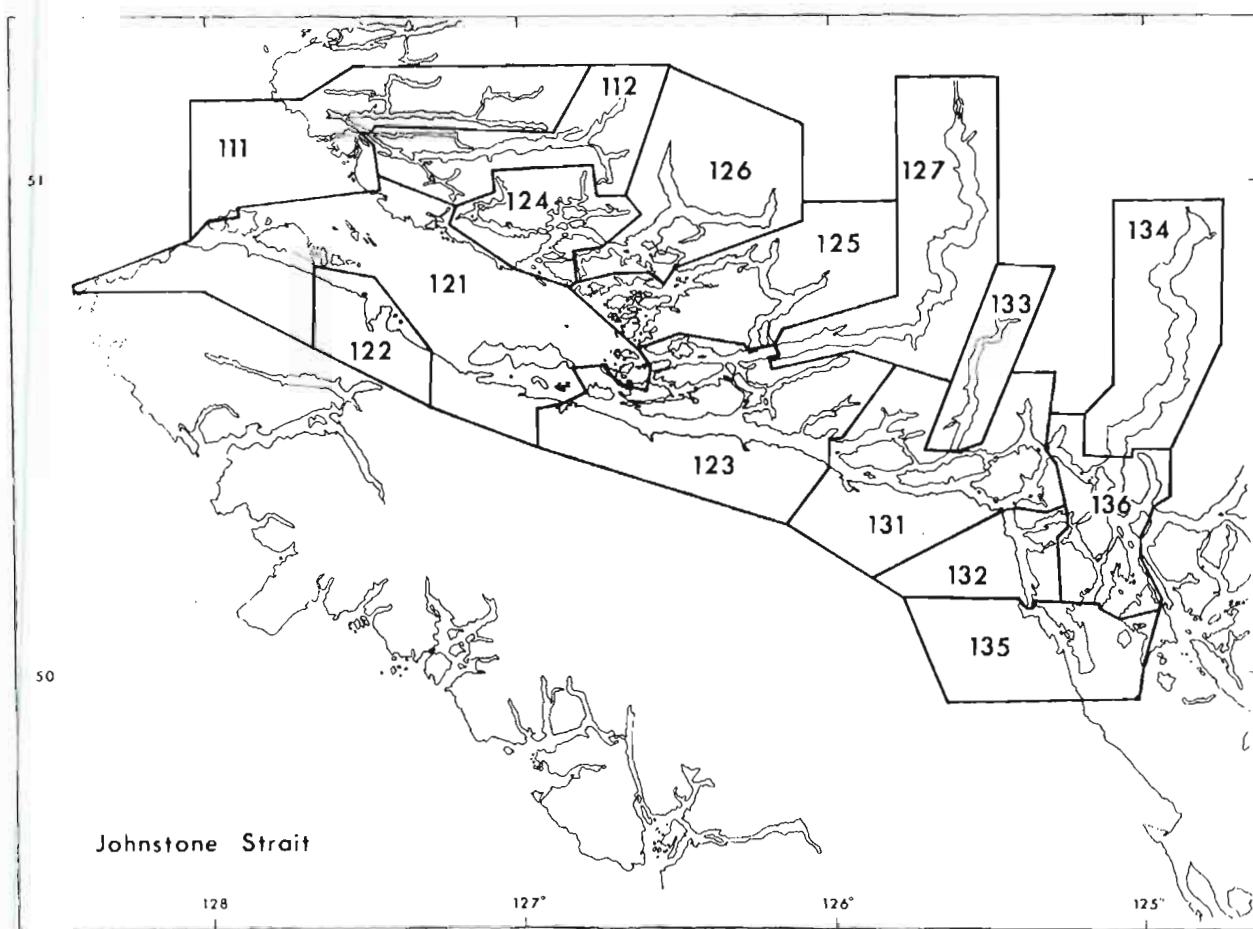


Fig. 4. Herring sections in the Johnstone Strait region.



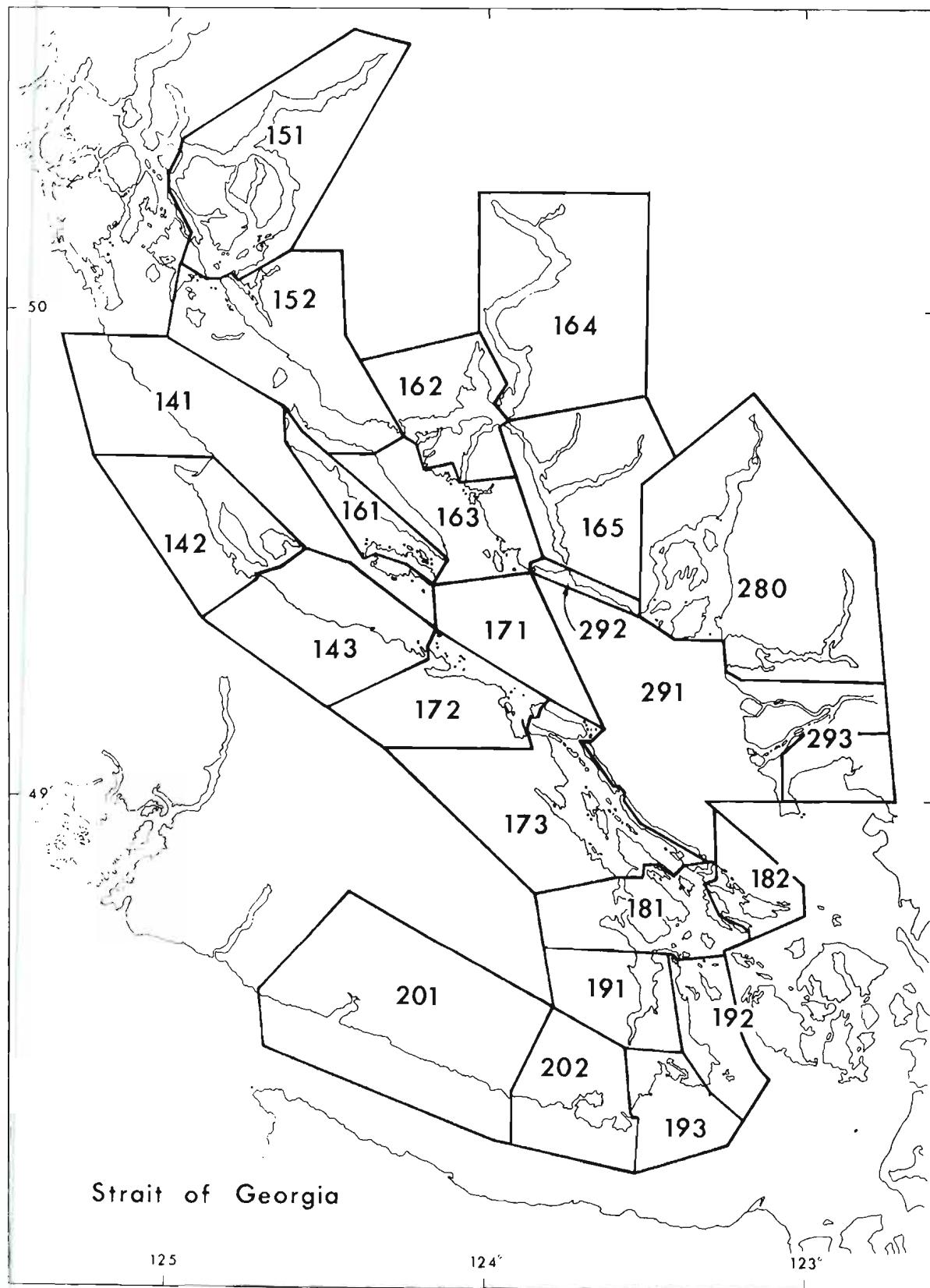


Fig. 5. Herring sections in the Strait of Georgia region.



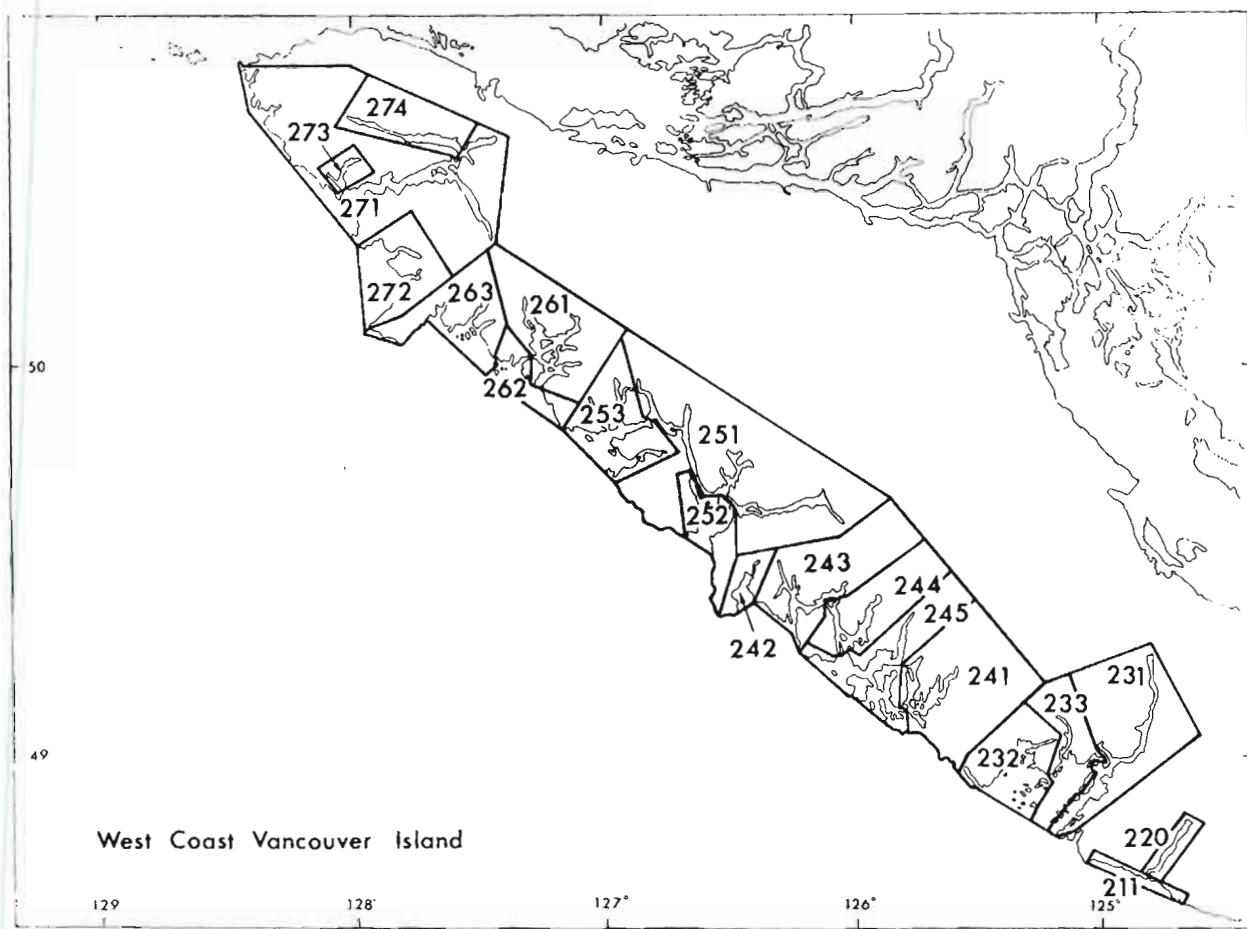


Fig. 6. Herring sections in the West Coast of Vancouver Island region.

