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Summary of British Columbia Herring Biological Sampling Data for the 1997-98 Season

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ABSTRACT

Hamer, L., and P. Midgley. 1999. Summary of British Columbia herring biological sampling data for the 1997-98 season. Can. Data Rep. Fish. Aquat. Sci. 1047: 109 p.

Age compositions and the average length and weight at age, the sex ratio, and the maturity states of herring samples combined by geographical area, time period, gear type, and source are tabulated for the 1997-98 season. Tables are given for two geographical groupings: statistical areas and herring sections.

Key words: herring samples, age composition, geographical groupings.

RÉSUMÉ

Hamer, L., and P. Midgley. 1999. Summary of British Columbia herring biological sampling data for the 1997-98 season. Can. Data Rep. Fish. Aquat. Sci. 1047: 109 p.

Ce rapport présente la répartition par âge, la taille moyenne et le poids en fonction de l'âge, la proportion par sexe et l'état de maturité de l'harengs échantillonnés en 1997-1998, par région géographique, période de l'année, genre d'engin de pêche et provenance. Les tableaux sont divisés en deux regroupements géographiques : zones statistiques et sections d'harengs.

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



INTRODUCTION

Biological samples of herring are collected and processed annually for length, weight, sex, maturity, age, gonad weight, and gonad length. This information is used in stock assessments, and for determining stock characteristics. Additionally, it is useful to fishery managers located along the coast of British Columbia. The information presented here is for the 1997-98 herring season which extends from July 1, 1997 to June 30, 1998. This report summarizes biological characteristics by different gear and source types, as well as different levels of geographic aggregation. The smallest level of aggregation is by herring section (Figs. 1 - 6), which is a subdivision of Statistical Area. Stock assessments are conducted at a region level of geographic aggregation (Fig. 7).

Biological characteristics of individual fish collected annually since the 1950-51 season are maintained on computer files. These files provide a 48-year series of data accessible for analyses and modelling.

METHODS

The two main sources of biological samples are the roe herring test fishing program and roe herring fisheries. While a major objective of the test fishing program is to provide support for fisheries management, a secondary objective is to collect biological samples throughout the geographic range of herring spawning aggregations. Test fishing operations are conducted to ensure that the vessels are available before and during the main spawning run in each area. Roe herring fisheries are the main source of commercial samples. Fisheries for roe herring are sampled with the goal of collecting 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 accurately represents biological characteristics of the entire catch in time and gear distribution, for each gear type.

Additional commercial samples are collected from the fall food and bait fisheries, which are currently very small both in quota and in numbers of vessels eligible to participate (e.g. 14 vessels in the fall 1997 fishery). Consequently, each vessel participating in this fishery is expected to provide a biological sample from their catch.

As well as commercial and test fishing samples, small numbers of research samples are collected by Department of Fisheries and Oceans (DFO) vessels, and occasionally by chartered commercial vessels throughout the year. Samples with source code "4" (other) are collected from various sources that do not fit into the categories described above.

In most instances 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). Data codes are presented in Table 1.

Gonad maturities are classified according to a modified Hjort maturity scale (Table 2). 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 biological sample information from each sample is entered directly into a computer as the fish are processed, using a data entry program. The data are subsequently 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 are determined, and values outside of a range of 3 standard deviations from the mean are deleted.

AGE DETERMINATION

Age determination is based on the number of annuli on the scales. Herring ages are reported using the "year of life" convention. That is, fish in their first

year are designated as age "0+". Herring "birthdays" are considered to be at spawning, and not on January 1, as is the convention for many other fish species.

A revised system of aging 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 aging system, the option of two possible ages was used when it was difficult to positively determine the age. At present there is no optimal procedure for incorporating these data into age composition estimates, so they continue to be treated as unageable. Therefore, the age compositions in this report are based only on fish for which a single age was assigned.

RESULTS

BIOLOGICAL SAMPLING AND AGE COMPOSITIONS

In the 1997/98 season 226 test fishing samples, 104 roe fishery samples, 36 "other" samples, 20 food and bait fishery samples, and 14 research samples were processed, bringing the total number for the season to 400 (Table 3). Fourteen seine vessels, seven gillnet vessels and one management platform were chartered to help manage the 1998 roe herring fisheries through hydro-acoustic surveys, test fishing, and spawn surveys. Details on the distribution of effort, and number of samples collected by chartered vessels are provided in Table 4. Roe fishery samples were collected from seine fisheries in areas 2, 7, 14, and 23, and from gillnet fisheries in areas 4, 7, 14, 17, 23 and 25 (Table 6). The Nuu-chah-nulth Tribal Council (NTC) collected 17 samples using a hand purse seine net, as part of a study designed to compare the characteristics of these samples with those of regular seine caught test fishing samples. Test fishing vessels collected 18 samples from spawn on kelp ponds, on an opportunistic basis. Food and bait fishery samples were taken from area 17. Research samples were collected by the R/V W.E.Ricker during a herring year-class strength and production survey off the west coast of Vancouver Island. The R/V W.E.Ricker, while conducting a groundfish research cruise, provided incidental herring catch samples from areas 14 through 17, and 29.

Age compositions for samples from the test fishery, and the seine and gillnet roe fisheries are summarized by section in Table 5.

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

Codes for sample data	Table 1
Maturity stages for Pacific herring	Table 2
Listing of samples processed	Table 3
Charter vessel information	Table 4
1998 age compositions	Table 5
Roe herring fishery summaries	Table 6
Data summaries	Tables 7 - 14.

The data summaries include various groupings of samples by geographical areas, gear types, 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

The Fish Ageing Unit at the Pacific Biological Station determined the ages. J.O.Thomas and Associates Ltd. collected the roe fishery samples, and Tideview Services processed all samples.

REFERENCES

- Bowers, A.B., and F.G.T. Holliday. 1961. Historical changes in the gonad associated with the reproductive cycle of the herring (Clupea harengus L.). Mar. Res. Scot. 5: 16 p.
- Hamer, L. 1989. Procedures for collecting and processing British Columbia herring samples. Can. Manuscr. Rep. Fish. Aquat. Sci. 2030: 27 p.

Table 1. Codes for British Columbia herring sampling data.

<u>A. Gear</u>		<u>B. Source</u>	
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	Test Fishery
59	Herring trawl	6	Food Fishery
01	Other	7	Reduction Fishery

<u>C. Preservation</u>		<u>D. Sex</u>	
0	Frozen	1	Male
1	Fresh	2	Female
2	Salted	3	Unknown
3	Other		
4	Brined		

Table 2. 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,	Usually late fall and winter, but may extend to as late as March. (Slightly earlier in males than

Table 2 (cont'd)

Stage	State of Maturity	Gonad appearance	Description	Timing
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.
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 3. Biological sampling information by statistical area, herring section, and location for the 1997 - 98 season.

Area	Sect	Location	Sample Number	Year	Month	Day	Gear	Source	Pres	No. of Fish	
										Sampled	Aged
17	173	NORTHUMBERLAND CHANNEL	001	97	12	10	29	6	0	100	90
17	173	PYLADES CHANNEL	002	97	11	25	29	6	0	100	95
17	173	PYLADES CHANNEL	003	97	11	24	29	6	0	100	89
17	173	PORLIER PASS	004	97	11	24	29	6	0	100	34
17	173	DE COURCY ISLAND	005	97	12	10	29	6	0	100	86
17	172	RAINBOW CHANNEL	006	97	12	11	29	6	0	100	93
17	173	NORTHUMBERLAND CHANNEL	007	97	12	09	29	6	0	100	92
17	173	DE COURCY ISLAND	008	97	12	06	59	6	0	100	92
17	173	STUART CHANNEL	009	97	11	17	29	6	0	100	96
17	173	NORTHUMBERLAND CHANNEL	010	97	12	09	29	6	0	100	95
17	173	STUART CHANNEL	011	97	11	16	29	6	0	100	90
17	173	STUART CHANNEL	012	97	11	17	29	6	0	100	98
17	173	PYLADES CHANNEL	013	97	11	25	29	6	0	100	98
17	173	STUART CHANNEL	014	97	12	01	59	6	0	100	96
17	173	PYLADES CHANNEL	015	97	12	01	29	6	0	100	96
17	173	PYLADES CHANNEL	016	97	12	01	59	6	0	100	89
17	173	PYLADES CHANNEL	017	97	11	26	29	6	0	85	74
17	173	PYLADES CHANNEL	018	97	11	24	29	6	0	100	96
21	219	SWIFTSURE BANK	019	97	08	03	59	3	0	100	49
23	239	FORTY MILE BANK	020	97	08	04	59	3	0	100	86
21	219	SWIFTSURE BANK	021	97	08	03	59	3	0	100	34
23	239	FORTY MILE BANK	022	97	08	04	59	3	0	100	85
23	239	BARKLEY CANYON	023	97	08	05	59	3	0	100	95
23	239	FORTY MILE BANK	024	97	08	06	59	3	0	100	88
23	239	LA PEROUSE BANK	025	97	08	06	59	3	0	100	88
14	142	SANDY ISLAND	001	98	03	07	29	5	0	100	96
14	142	SANDY ISLAND	002	98	03	01	29	5	0	100	96
17	173	DE COURCY ISLAND	003	98	02	26	29	5	0	100	99
17	172	WINCHELSEA ISLANDS	004	98	03	01	29	5	0	100	99
14	142	COMOX BAR	005	98	02	27	29	5	0	100	99
14	142	COMOX BAR	006	98	03	07	29	5	0	100	96
14	142	SANDY ISLAND	007	98	02	27	29	5	0	100	95
17	173	STUART CHANNEL	008	98	03	13	29	5	0	100	89
17	173	GABRIOLA PASSAGE	009	98	03	16	29	5	0	100	97
14	142	DEEP BAY	010	98	03	09	29	5	0	100	96
17	172	ICARUS POINT	011	98	03	03	29	5	0	100	91
14	142	COMOX BAR	012	98	03	04	29	5	0	100	95
17	172	MAUDE ISLAND	013	98	03	04	29	5	0	100	95
14	142	SEAL ISLETS	014	98	03	07	29	5	0	100	95
17	173	HARMAC	015	98	03	17	29	5	0	100	96
17	173	PYLADES CHANNEL	016	98	03	15	29	5	0	100	93
14	142	COMOX BAR	017	98	02	28	29	5	0	100	97
23	232	SPILLING ISLET	018	98	03	11	29	5	0	100	88
27	273	FORWARD INLET	019	98	03	13	29	5	0	100	97
27	273	FORWARD INLET	020	98	03	09	29	5	0	100	97
14	142	PHIPPS POINT	021	98	03	02	29	5	0	100	94
14	142	NORRIS ROCKS	022	98	03	07	29	5	0	100	97
14	142	NORRIS ROCKS	023	98	03	01	29	5	0	100	96
14	142	SHINGLE SPIT	024	98	03	05	29	5	0	100	95
14	142	LAMBERT CHANNEL	025	98	03	08	29	5	0	100	95
14	142	BAYNES SOUND	026	98	03	09	29	5	0	100	95
14	142	PHIPPS POINT	027	98	03	07	29	5	0	100	95
14	142	DOWNES POINT	028	98	03	04	29	5	0	100	95
17	172	ICARUS POINT	029	98	02	26	29	5	0	100	97
14	142	TRIBUNE BAY	030	98	03	03	29	5	0	100	94
17	173	STUART CHANNEL	031	98	03	15	29	5	0	100	96
14	142	BAYNES SOUND	032	98	03	11	29	5	0	100	97
14	142	NORRIS ROCKS	033	98	03	03	29	5	0	100	94

Table 3. Biological sampling information by statistical area, herring section, and location for the 1997 - 98 season.

Area	Sect	Location	Sample Number	Year	Month	Day	Gear	Source	Pres	No. of Fish	
										Sampled	Aged
14	143	QUALICUM BEACH	034	98	03	05	29	5	0	100	96
14	142	NORRIS ROCKS	035	98	03	06	29	5	0	100	95
14	142	KOMAS BLUFF	036	98	03	10	29	5	0	100	92
25	253	NUCHATLITZ INLET	037	98	03	08	19	0	0	100	69
14	142	NORRIS ROCKS	038	98	02	27	29	5	0	100	98
17	173	STUART CHANNEL	039	98	03	16	29	5	0	100	94
23	232	STOPPER ISLANDS	040	98	03	09	29	0	0	100	96
25	253	NUCHATLITZ INLET	041	98	03	07	19	0	0	100	53
14	142	KOMAS BLUFF	042	98	03	01	29	5	0	100	97
14	142	NORRIS ROCKS	043	98	03	02	29	5	0	100	98
17	173	BOAT HARBOUR	044	98	02	26	29	5	0	100	96
14	142	HENRY BAY	045	98	03	08	29	5	0	100	99
14	142	COLLISHAW POINT	046	98	03	04	29	5	0	100	95
14	142	DENMAN ISLAND (WEST)	047	98	03	08	29	5	0	100	97
14	142	FLORA ISLET	048	98	03	03	29	5	0	100	98
14	142	UNION POINT	049	98	03	08	29	5	0	100	90
17	173	DE COURCY ISLAND	050	98	02	27	29	5	0	100	96
14	142	UNION POINT	051	98	03	08	29	5	0	100	94
17	173	PYLADES CHANNEL	052	98	02	24	29	5	0	100	95
14	142	UNION POINT	053	98	03	08	29	5	0	100	96
17	173	HALL ISLAND	054	98	02	27	29	5	0	100	93
17	172	MAUDE ISLAND	055	98	03	01	29	5	0	100	74
17	172	SNAKE ISLAND	056	98	02	27	29	5	0	100	93
14	142	UNION POINT	057	98	03	08	29	5	0	100	94
14	142	SHINGLE SPIT	058	98	03	07	29	5	0	100	96
14	142	DENMAN ISLAND (WEST)	059	98	03	06	29	5	0	100	98
17	173	STUART CHANNEL	060	98	03	14	29	5	0	100	92
14	142	NORRIS ROCKS	061	98	02	24	29	5	0	100	96
14	142	COMOX BAR	062	98	03	06	29	5	0	100	97
14	142	FLORA ISLET	063	98	03	03	29	5	0	100	94
14	142	COMOX BAR	064	98	03	05	29	5	0	100	71
14	142	SEAL ISLETS	065	98	03	06	29	5	0	100	98
17	173	SHINGLE POINT	066	98	02	26	29	5	0	100	94
17	173	PYLADES CHANNEL	067	98	03	14	29	5	0	100	96
27	273	FORWARD INLET	068	98	03	04	29	5	0	100	94
24	243	SYDNEY INLET	069	98	03	03	29	5	0	100	96
24	242	LECLAIRE POINT	070	98	02	26	29	5	0	100	96
07	072	SPILLER INLET	071	98	03	18	29	5	0	100	96
07	077	EAST HIGGINS PASS	072	98	03	20	29	5	0	100	81
07	072	SPILLER INLET	073	98	03	19	29	5	0	100	94
17	172	ENTRANCE ISLAND	074	98	03	20	59	2	0	100	98
10	102	WAKAS POINT	075	98	03	02	29	5	0	100	97
07	078	ELLERSLIE BAY	076	98	03	16	29	5	0	100	97
07	072	SPILLER INLET	077	98	03	15	29	5	0	100	99
07	077	EAST HIGGINS PASS	078	98	03	19	29	5	0	100	98
06	067	KITASU BAY	079	98	03	05	29	5	0	100	97
07	074	RAYMOND PASS	080	98	03	14	29	5	0	100	97
07	072	DON PENINSULA	081	98	03	16	29	5	0	100	98
07	072	DON PENINSULA	082	98	03	15	29	5	0	100	97
07	077	EAST HIGGINS PASS	083	98	03	20	29	5	0	100	96
24	243	STARLING POINT	084	98	03	15	29	5	0	100	95
24	243	YOUNG BAY	085	98	03	17	29	5	0	100	99
07	072	SPILLER CHANNEL	086	98	03	14	29	5	0	100	95
06	067	MARVIN ISLANDS	087	98	03	08	29	5	0	100	98
07	077	EAST HIGGINS PASS	088	98	03	12	29	5	0	100	98
07	072	SPILLER CHANNEL	089	98	03	16	29	5	0	100	97
06	067	KITASU BAY	090	98	03	10	29	5	0	100	97
07	074	STRYKER BAY	091	98	03	11	29	5	0	100	95

Table 3. Biological sampling information by statistical area, herring section, and location for the 1997 - 98 season.

Area	Sect	Location	Sample Number	Year	Month	Day	Gear	Source	Pres	No. of Fish	
										Sampled	Aged
07	074	BODDY PASSAGE/NARROWS	092	98	03	09	29	5	0	100	99
07	072	SPILLER INLET	093	98	03	18	29	5	0	100	97
07	074	DUNDIVAN INLET	094	98	03	04	29	5	0	100	98
07	077	EAST HIGGINS PASS	095	98	03	06	29	5	0	100	100
07	074	BODDY PASSAGE/NARROWS	096	98	03	19	29	5	0	100	99
07	072	MOSQUITO BAY	097	98	03	15	29	5	0	100	97
06	067	WILBY POINT	098	98	03	09	29	5	0	100	91
08	085	KWAKSHUA CHANNEL	099	98	03	07	29	5	0	100	98
07	074	CLARIE ISLAND	100	98	03	18	29	5	0	100	96
07	072	BERRY INLET	101	98	03	10	29	5	0	100	96
07	072	SPILLER CHANNEL	102	98	03	11	29	5	0	100	96
15	152	MALASPINA INLET	103	98	03	25	59	2	0	100	85
06	067	MEYERS PASSAGE	104	98	03	19	29	5	0	100	98
17	172	ENTRANCE ISLAND	105	98	03	20	59	2	0	100	93
05	052	KITKATLA CREEK	106	98	03	18	29	5	0	100	99
17	172	ENTRANCE ISLAND	107	98	03	20	59	2	0	63	60
29	293	BOUNDARY BAY	108	98	03	17	59	2	0	100	55
14	143	QUALICUM BEACH	109	98	03	21	59	2	0	37	33
16	161	SABINE CHANNEL	110	98	03	21	59	2	0	67	23
02	023	CONGLOMERATE POINT	111	98	04	02	29	5	0	100	76
05	052	VISCOUNT POINT	112	98	03	21	29	5	0	100	98
00	003	RENNELL SOUND	113	98	03	10	29	5	0	100	96
00	002	PORT LOUIS	114	98	03	23	29	5	0	100	90
23	232	RICHARD ROCK	115	98	03	12	29	5	0	100	98
00	002	PORT LOUIS	116	98	03	19	29	5	0	100	91
00	003	SHIELDS BAY	117	98	03	20	29	5	0	100	81
00	002	PORT LOUIS	118	98	03	24	29	5	0	100	91
23	232	CHROW ISLANDS	119	98	03	13	29	5	0	100	96
07	077	EAST HIGGINS PASS	120	98	03	20	29	5	0	100	98
07	076	SPIDER ANCHORAGE	121	98	03	24	29	4	0	100	98
07	072	WATCH ISLAND	122	98	03	14	29	5	0	100	97
07	072	MOSQUITO BAY	123	98	03	07	29	5	0	100	99
05	052	VISCOUNT POINT	124	98	03	15	29	5	0	100	99
07	072	SPILLER LAGOON	125	98	03	13	29	5	0	100	97
07	078	NEEKAS INLET	126	98	03	15	29	5	0	100	97
02	021	SECTION COVE	127	98	03	31	29	4	0	100	98
00	005	INSKIP CHANNEL	128	98	03	28	29	5	0	100	95
05	052	VISCOUNT POINT	129	98	03	18	29	5	0	100	96
07	078	NEEKAS INLET	130	98	03	15	29	5	0	100	97
04	043	HUNT INLET	131	98	03	24	29	5	0	100	94
04	042	PEARL HARBOUR	132	98	03	16	29	5	0	100	94
04	042	PEARL HARBOUR	133	98	03	17	29	5	0	100	96
02	024	LAGOON INLET	134	98	03	15	29	5	0	100	98
02	024	SELWYN INLET	135	98	03	16	29	5	0	100	99
02	025	HUSTON INLET	136	98	03	08	29	5	0	100	99
02	024	DARWIN SOUND	137	98	03	20	29	5	0	100	96
04	042	FINLAYSON ISLAND WEST	138	98	03	11	29	5	0	100	95
04	042	FINLAYSON ISLAND WEST	139	98	03	12	29	5	0	100	89
04	043	HUNT INLET	140	98	03	24	29	5	0	100	98
24	243	SYDNEY INLET	141	98	03	02	29	5	0	100	93
00	002	PORT LOUIS	142	98	03	25	29	5	0	100	96
00	002	PORT LOUIS	143	98	03	25	29	5	0	100	97
02	021	HUXLEY ISLAND	144	98	03	08	29	5	0	100	100
07	077	EAST HIGGINS PASS	145	98	03	23	19	0	0	74	62
24	243	SYDNEY INLET	146	98	03	07	29	5	0	100	99
04	042	DUNCAN BAY	147	98	03	26	29	5	0	100	91
18	181	SATELLITE CHANNEL	148	98	02	25	29	5	0	100	95
24	243	STARLING POINT	149	98	03	09	29	5	0	100	98

Table 3. Biological sampling information by statistical area, herring section, and location for the 1997 - 98 season.

Area	Sect	Location	Sample Number	Year	Month	Day	Gear	Source	Pres	No. of Fish	
										Sampled	Aged
14	142	CHROME ISLAND	150	98	03	06	29	5	0	100	93
02	025	HUSTON INLET	151	98	03	11	29	4	0	100	96
04	042	SOUTH ISLAND	152	98	03	16	29	5	0	100	96
02	021	BURNABY STRAIT	153	98	03	13	29	5	0	100	99
02	025	HUSTON INLET	154	98	03	06	29	5	0	100	97
02	021	SKAAT HARBOUR	155	98	03	17	29	5	0	100	98
03	033	PORT SIMPSON	156	98	03	17	29	5	0	100	98
23	232	ST. INES ISLAND	157	98	03	11	29	5	0	100	95
02	021	WANDERER ISLAND	158	98	03	11	29	5	0	100	92
02	021	BURNABY STRAIT	159	98	03	17	29	5	0	100	97
04	042	FINLAYSON ISLAND WEST	160	98	03	15	29	5	0	100	98
07	077	EAST HIGGINS PASS	161	98	03	21	29	5	0	100	99
04	042	PEARL HARBOUR	162	98	03	19	29	5	0	100	98
05	052	ABSALOM ISLAND	163	98	03	17	29	5	0	100	98
05	052	GURD INLET	164	98	03	26	29	5	0	100	96
07	078	KYNOCH INLET	165	98	03	27	29	5	0	100	91
04	042	BIG BAY	166	98	03	20	29	5	0	100	99
04	042	SWALLOW ISLAND	167	98	03	17	29	5	0	100	97
07	072	SHINGLE ROCK	168	98	03	12	29	5	0	100	99
07	074	CLARIE ISLAND	169	98	03	11	29	5	0	100	99
03	033	MASKELYNE ISLAND	170	98	03	14	29	5	0	100	98
23	232	STOPPER ISLANDS	171	98	03	11	29	5	0	100	96
00	003	CLAPP BASIN	172	98	03	17	29	5	0	100	89
00	005	INSKIP CHANNEL	173	98	03	16	29	5	0	99	85
23	232	RICHARD ROCK	174	98	03	11	29	5	0	100	99
23	232	SECHART CHANNEL	175	98	03	05	29	5	0	100	96
23	232	AMPHITRITE POINT	176	98	03	02	29	5	0	100	96
00	006	SKINDASKUN ISLAND	177	98	03	05	29	4	0	100	96
23	232	NEWCUMBE CHANNEL	178	98	03	09	29	5	0	100	92
00	002	PORT LOUIS	179	98	03	09	29	5	0	100	96
23	232	DAVID ISLAND	180	98	03	02	29	5	0	100	95
14	142	LONGBEAK POINT	181	98	02	23	29	5	0	100	96
23	232	SPILLING ISLET	182	98	03	11	29	5	0	100	69
24	243	STARLING POINT	183	98	03	01	29	5	0	100	94
25	253	ROSA HARBOUR	184	98	02	24	29	5	0	100	99
17	173	STUART CHANNEL	185	98	03	04	29	5	0	100	92
24	243	SYDNEY INLET	186	98	03	08	29	5	0	100	96
14	142	HORNBY ISLAND	187	98	02	24	29	5	0	100	96
13	132	DEEPWATER BAY	188	98	02	24	29	5	0	100	98
23	232	SPILLING ISLET	189	98	03	09	29	5	0	100	99
17	173	GABRIOLA PASSAGE	190	98	03	16	29	5	0	100	92
14	142	NORRIS ROCKS	191	98	02	21	29	5	0	100	98
14	142	LONGBEAK POINT	192	98	02	26	29	5	0	100	96
15	152	TWIN ISLANDS	193	98	02	26	29	5	0	100	97
14	142	SHIP POINT	194	98	03	09	29	5	0	100	99
24	243	SYDNEY INLET	195	98	02	23	29	5	0	100	91
00	003	SEAL INLET	196	98	03	27	29	5	0	100	96
25	253	ROSA HARBOUR	197	98	03	04	29	5	0	100	97
25	253	ROSA HARBOUR	198	98	03	03	29	4	0	100	94
25	253	ROSA HARBOUR	199	98	03	03	29	4	0	100	94
25	253	ROSA HARBOUR	200	98	03	01	29	5	0	100	95
25	253	ROSA ISLAND	201	98	02	26	29	5	0	100	95
14	142	LONGBEAK POINT	202	98	03	05	29	5	0	100	95
23	232	CABBAGE ROCKS +	203	98	03	06	29	5	0	100	98
23	232	ST. INES ISLAND	204	98	03	08	29	5	0	100	98
23	232	STOPPER ISLANDS	205	98	03	04	29	5	0	100	98
23	232	STOPPER ISLANDS	206	98	03	08	29	5	0	100	94
15	152	SAVARY ISLAND	207	98	02	27	29	5	0	100	96

Table 3. Biological sampling information by statistical area, herring section, and location for the 1997 - 98 season.

Area	Sect	Location	Sample Number	Year	Month	Day	Gear	Source	Pres	No. of Fish	
										Sampled	Aged
14	142	COMOX BAR	208	98	03	06	29	5	0	100	94
23	232	FORBES ISLAND	209	98	03	03	29	5	0	100	98
25	253	ROSA HARBOUR	210	98	03	05	29	5	0	100	94
07	078	NEEKAS INLET	211	98	03	08	29	5	0	100	99
23	232	CABBAGE ROCKS +	212	98	03	02	29	5	0	100	96
00	002	PORT LOUIS	213	98	03	13	29	5	0	100	96
07	077	EAST HIGGINS PASS	214	98	03	20	29	5	0	100	95
05	052	SERPENTINE INLET	215	98	03	21	29	5	0	100	96
07	077	EAST HIGGINS PASS	216	98	03	21	29	5	0	100	96
05	052	KITKATLA INLET	217	98	03	13	29	5	0	100	93
07	077	EAST HIGGINS PASS	218	98	03	20	29	5	0	100	96
07	077	EAST HIGGINS PASS	219	98	03	21	29	5	0	100	92
23	232	CHROW ISLANDS	220	98	03	04	29	5	0	100	89
23	232	FOOD ISLETS	221	98	02	22	29	5	0	100	91
23	232	CHROW ISLANDS	222	98	02	26	29	5	0	100	100
23	232	CHROW ISLANDS	223	98	02	24	29	5	0	100	92
23	232	CHROW ISLANDS	224	98	03	01	29	5	0	100	99
23	232	FOOD ISLETS	225	98	03	06	29	5	0	100	99
23	232	CHROW ISLANDS	226	98	03	03	29	5	0	100	97
25	253	ROSA HARBOUR	227	98	02	26	29	4	0	100	95
14	142	DENMAN POINT	228	98	03	07	29	5	0	100	97
25	253	ROSA HARBOUR	229	98	03	01	29	5	0	100	98
14	142	SANDY ISLAND	230	98	03	03	29	5	0	100	100
23	232	CHROW ISLANDS	231	98	02	19	29	5	0	100	99
23	232	FORBES ISLAND	232	98	02	27	29	5	0	100	96
07	074	NORMAN MORRISON BAY	233	98	03	10	29	5	0	100	96
17	173	PYLADES CHANNEL	234	98	01	04	29	1	0	100	68
25	253	ROSA HARBOUR	235	98	02	25	29	4	0	100	96
17	173	PYLADES CHANNEL	236	98	01	05	29	6	0	100	93
02	025	HUSTON INLET	237	98	03	07	29	4	0	100	97
02	021	BURNABY STRAIT	238	98	03	11	29	5	0	100	97
07	078	NEEKAS INLET	239	98	03	12	29	5	0	100	98
07	072	TANKEEAH RIVER	240	98	03	13	29	5	0	100	99
14	142	COMOX BAR	241	98	03	08	29	5	0	100	99
14	142	TRALEE POINT	242	98	03	05	29	5	0	100	95
07	077	EAST HIGGINS PASS	243	98	03	20	29	5	0	100	93
06	067	HASTINGS ISLAND/LAGOON	244	98	03	06	29	5	0	100	97
07	078	JAMES BAY	245	98	03	25	29	5	0	100	87
08	085	KWAKSHUA CHANNEL	246	98	03	03	29	5	0	100	98
08	085	KWAKSHUA CHANNEL	247	98	03	03	29	5	0	100	95
07	077	EAST HIGGINS PASS	248	98	03	20	29	5	0	100	86
00	002	PORT LOUIS	249	98	03	08	1	4	0	12	12
23	232	HERMIT ISLET	250	98	03	09	29	0	0	100	64
23	232	FORBES ISLAND	251	98	03	09	29	0	0	100	95
23	232	TOQUART BAY	252	98	03	09	29	0	0	100	96
23	232	ST. INES ISLAND	253	98	03	09	29	0	0	100	91
17	172	NECK POINT	254	98	03	18	19	0	0	100	90
17	172	NEWCASTLE CHANNEL	255	98	03	18	19	0	0	100	93
23	232	STOPPER ISLANDS	256	98	03	09	29	0	0	100	93
14	142	BAYNES SOUND	257	98	03	08	29	0	0	100	82
14	142	LAMBERT CHANNEL	258	98	03	12	19	0	0	100	89
14	142	KOMAS BLUFF	259	98	03	12	19	0	0	100	87
17	172	HAMMOND BAY	260	98	03	18	19	0	0	100	90
14	142	DEEP BAY	261	98	03	08	29	0	0	100	78
14	142	DENMAN ISLAND (WEST)	262	98	03	08	29	0	0	100	95
14	143	QUALICUM BEACH	263	98	03	12	19	0	0	100	86
14	142	SHIP POINT	264	98	03	09	29	0	0	100	90
14	142	TRIBUNE BAY	265	98	03	12	19	0	0	100	91

Table 3. Biological sampling information by statistical area, herring section, and location for the 1997 - 98 season.

Area	Sect	Location	Sample Number	Year	Month	Day	Gear	Source	Pres	No. of Fish	
										Sampled	Aged
17	172	HAMMOND BAY	266	98	03	18	19	0	0	100	90
14	142	SHIP POINT	267	98	03	09	29	0	0	100	89
14	143	MAPLEGUARD PT.	268	98	03	12	19	0	0	100	72
23	232	OTTAWAY ISLET	269	98	03	09	29	0	0	100	87
14	142	KOMAS BLUFF	270	98	03	13	19	0	0	100	82
14	142	DENMAN POINT	271	98	03	08	29	0	0	100	96
23	232	CABBAGE ROCKS +	272	98	03	17	19	0	0	99	79
23	232	CABBAGE ROCKS +	273	98	03	17	19	0	0	100	80
02	021	SKAAT HARBOUR	274	98	03	16	29	0	0	100	97
02	025	HUSTON INLET	275	98	03	14	29	0	0	100	97
23	232	CABBAGE ROCKS +	276	98	03	17	19	0	0	87	73
02	021	SKAAT HARBOUR	277	98	03	17	29	0	0	100	99
02	025	JEDWAY BAY	278	98	03	16	29	0	0	100	87
02	025	HUSTON INLET	279	98	03	14	29	0	0	100	86
23	232	CABBAGE ROCKS +	280	98	03	17	19	0	0	100	86
23	232	CABBAGE ROCKS +	281	98	03	18	19	0	0	76	64
25	253	NUCHATLITZ INLET	282	98	03	09	19	0	0	100	94
25	253	ESPERANZA INLET	283	98	03	11	19	0	0	100	88
25	253	ESPERANZA INLET	284	98	03	09	19	0	0	100	56
23	232	CABBAGE ROCKS +	285	98	03	17	19	0	0	100	83
04	042	DUNCAN BAY	286	98	03	22	19	0	0	100	92
02	025	HUSTON INLET	287	98	03	14	29	0	0	100	91
23	232	CABBAGE ROCKS +	288	98	03	17	19	0	0	100	74
04	042	DUNCAN BAY	289	98	03	23	19	0	0	100	89
04	042	SWAMP ISLAND	290	98	03	23	19	0	0	100	91
02	025	SKINCUTTLE INLET	291	98	03	25	29	0	0	100	52
02	021	ALDER ISLAND	292	98	03	15	29	0	0	100	94
04	042	BIG BAY	293	98	03	21	19	0	0	100	90
04	042	SLIPPERY ROCK	294	98	03	21	19	0	0	100	87
02	025	SKINCUTTLE INLET	295	98	03	15	29	0	0	100	96
02	025	HUSTON INLET	296	98	03	14	29	0	0	100	99
04	042	DUNCAN BAY	297	98	03	23	19	0	0	100	96
04	042	DUNCAN BAY	298	98	03	21	19	0	0	100	92
04	042	DUNCAN BAY	299	98	03	22	19	0	0	100	92
02	021	SECTION COVE	300	98	03	16	29	0	0	100	93
04	042	PEARL HARBOUR	301	98	03	23	19	0	0	100	84
14	142	DEEP BAY	302	98	03	08	29	0	0	100	82
23	232	STOPPER ISLANDS	303	98	03	09	29	0	0	100	84
17	172	HAMMOND BAY	304	98	03	18	19	0	0	100	85
02	025	SKINCUTTLE INLET	305	98	03	15	29	0	0	100	94
14	142	DENMAN POINT	306	98	03	08	29	0	0	100	88
04	042	DUNCAN BAY	307	98	03	21	19	0	0	100	91
04	042	DUNCAN BAY	308	98	03	21	19	0	0	100	89
14	142	DENMAN ISLAND	309	98	03	08	29	0	0	100	88
02	025	HARRIET HARBOUR	310	98	03	14	29	0	0	100	88
04	042	SLIPPERY ROCK	311	98	03	22	19	0	0	100	89
14	143	QUALICUM BEACH	312	98	03	14	19	0	0	100	90
14	142	TRIBUNE BAY	313	98	03	12	19	0	0	100	91
23	232	DAVID ISLAND	314	98	03	09	29	0	0	100	90
14	142	SHIP POINT	315	98	03	09	29	0	0	100	86
23	232	MACOAH PASSAGE	316	98	03	09	29	0	0	100	83
14	142	KOMAS BLUFF	317	98	03	13	19	0	0	85	79
14	143	FRENCH CREEK	318	98	03	14	19	0	0	100	92
17	172	DEPARTURE BAY	319	98	03	18	19	0	0	100	91
14	142	BAYNES SOUND	320	98	03	08	29	0	0	100	39
23	232	ST. INES ISLAND	321	98	03	09	29	0	0	100	88
02	025	JEDWAY	322	98	03	14	29	0	0	100	84
27	273	WINTER HARBOUR	323	98	03	23	1	4	0	100	96

Table 3. Biological sampling information by statistical area, herring section, and location for the 1997 - 98 season.

Area	Sect	Location	Sample Number	Year	Month	Day	Gear	Source	Pres	No. of Fish	
										Sampled	Aged
07	077	EAST HIGGINS PASS	324	98	03	24	19	0	0	100	81
27	273	WINTER HARBOUR	325	98	03	23	1	4	0	100	98
07	077	EAST HIGGINS PASS	326	98	03	23	19	0	0	100	85
07	072	IVORY ISLAND	327	98	03	21	29	0	0	100	89
07	072	POWELL ANCHORAGE	328	98	03	20	19	0	0	100	88
27	273	WINTER HARBOUR	329	98	03	23	1	4	0	100	97
27	273	WINTER HARBOUR	330	98	03	23	1	4	0	100	99
27	273	WINTER HARBOUR	331	98	03	23	1	4	0	100	96
07	077	EAST HIGGINS PASS	332	98	03	24	19	0	0	100	77
07	072	CAMERON POINT	333	98	03	20	19	0	0	100	87
07	072	POWELL ANCHORAGE	334	98	03	21	19	0	0	100	82
07	072	CECILIA ISLAND	335	98	03	26	19	0	0	100	88
07	077	EAST HIGGINS PASS	336	98	03	25	19	0	0	100	73
07	077	EAST HIGGINS PASS	337	98	03	24	19	0	0	100	58
07	078	NEEKAS INLET	338	98	03	17	29	0	0	100	89
07	078	NEEKAS INLET	339	98	03	16	29	0	0	100	96
07	072	POWELL ANCHORAGE	340	98	03	20	19	0	0	100	77
07	078	NEEKAS INLET	341	98	03	16	29	0	0	100	90
07	072	CAMERON POINT	342	98	03	20	19	0	0	100	84
07	072	SPILLER INLET	343	98	03	18	29	0	0	100	92
07	078	NEEKAS INLET	344	98	03	16	29	0	0	100	94
07	078	NEEKAS INLET	345	98	03	16	29	0	0	100	91
23	232	MACOAH PASSAGE	346	98	03	16	21	4	0	100	99
07	072	SPILLER CHANNEL	347	98	03	16	29	0	0	100	89
07	078	SPILLER CHANNEL HEAD	348	98	03	17	29	0	0	100	94
07	072	SPILLER INLET	349	98	03	16	29	0	0	100	93
07	078	NEEKAS INLET	350	98	03	16	29	0	0	100	87
07	072	SPILLER INLET	351	98	03	17	29	0	0	100	98
07	072	TANKEEAH RIVER	352	98	03	16	29	0	0	100	90
07	072	SPILLER INLET	353	98	03	17	29	0	0	100	95
07	072	SPILLER CHANNEL	354	98	03	16	29	0	0	100	90
07	072	SPILLER INLET	355	98	03	17	29	0	0	100	90
23	232	MACOAH PASSAGE	356	98	03	17	21	4	0	100	95
23	232	ST. INES ISLAND	357	98	03	17	21	4	0	100	92
23	232	TWO RIVERS +	358	98	03	07	21	4	0	100	94
23	232	ST. INES ISLAND	359	98	03	17	21	4	0	100	94
23	232	MAGGIE RIVER	360	98	03	16	21	4	0	100	96
23	232	MACOAH PASSAGE	361	98	03	17	21	4	0	100	96
23	232	FORBES ISLAND	362	98	03	17	21	4	0	100	96
23	232	ST. INES ISLAND	363	98	03	17	21	4	0	100	91
23	232	CABBAGE ROCKS +	364	98	03	16	21	4	0	100	97
23	232	TWO RIVERS +	365	98	03	07	21	4	0	100	94
23	232	ST. INES ISLAND	366	98	03	17	21	4	0	100	92
23	232	FORBES ISLAND	367	98	03	17	21	4	0	100	99
23	232	CABBAGE ROCKS +	368	98	03	16	21	4	0	100	89
23	232	MAGGIE RIVER	369	98	03	17	21	4	0	100	95
23	232	MACOAH PASSAGE	370	98	03	16	21	4	0	100	99
23	232	CABBAGE ROCKS +	371	98	03	16	21	4	0	100	93
04	042	DUNCAN BAY	372	98	05	23	29	4	0	100	92
04	042	TUGWELL ISLAND	373	98	05	26	29	4	0	100	91
04	042	HODGSON REEF	374	98	05	24	29	4	0	100	91
04	042	DUNCAN BAY	375	98	05	23	29	4	0	100	90

Table 4. 1998 Test fishing vessels, areas and dates of operation, number of sets made, and number of samples processed

REGION	VESSEL	STAT AREAS	DATES	# SETS MADE	# SAMPLES PROCESSED
QCI	Christav Ocean Venture	2E 2E, 2W	Mar 05 - Apr 18	20	11
			Mar 05 - Apr 03	35	14
QCI TOTAL				55	25
PRINCE RUPERT DISTRICT	Pachena No. 1 Northern Oasis* Viking Pride	5 4 3, 4, 5	Mar 10 - Apr 04	8	7
			Mar 19 - Apr 22	-	0
			Mar 09 - Apr 03	13	14 ¹
PRD TOTAL				21	21
CENTRAL COAST	Prodigy Kynoc Ocean Explorer Pacific Discovery Teri Christina*	6, 7, 8 6, 7, 8, 10 7 7 7	Mar 07 - Apr 01	15	17 ¹
			Mar 02 - Mar 27	27	28 ¹
			Mar 17 - Apr 15	19	0
			Mar 15 - Mar 29	8	9 ¹
			Mar 07 - Apr 15	-	0
CENT TOTAL				69	54
ST. OF GEORGIA	Ansare II* Angela Lynn Ocean Marauder Pacific Viking Snowdrift** Pacific Discovery Endurance*	14 13, 14, 15, 17 14, 17, 18 14, 17 14 14 14	Mar 02 - Apr 05	-	0
			Feb 20 - Mar 17	25	11
			Feb 24 - Mar 21	31	30
			Feb 26 - Mar 23	25	18
			Feb 24 - Mar 14	-	0
			Feb 24 - Mar 10	22	20
			Feb 28 - Apr 18	-	0
ST. OF GEORGIA TOTAL				103	79
W COAST VANCOUVER ISLAND	Nimpkish Producer Queens Reach Ocean Horizon Royal Viking Midnight Isle* Cape Palmerston*	27 23, 25 23 23, 24 23 25	Feb 28 - Mar 13	5	4
			Feb 24 - Mar 30	16	7
			Feb 20 - Mar 17	31	23
			Feb 23 - Mar 29	12	13 ¹
			Mar 05 - Mar 19	-	0
			Feb 28 - Mar 18	8	0
WCVI TOTAL				72	47
TOTAL				320	226

- * - Gillnet test and spawn assessment - no samples collected
- ** - Management platform - no samples collected

¹ Vessels where there are more samples processed than sets made, represent SOK samples collected and/or multiple samples collected while pumping payment fish

Table 5. Percent at age for 1998 seine roe samples, gillnet roe samples, and test fishing samples.

SECTION	SOURCE	GEAR	PERCENT AT AGE										NUMBER AGED
			0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	
2 PORT LOUIS	5	29	0	25	27	23	17	4	1	3	0	0	657
3 RENNELL SOUND	5	29	0	23	33	17	27	1	0	0	0	0	362
5 ENGLEFIELD BAY	5	29	0	4	60	31	4	1	1	0	0	0	180
21 JUAN PEREZ SOUND	0	29	0	0	46	31	15	4	0	1	2	1	383
21 JUAN PEREZ SOUND	5	29	0	1	54	25	11	2	1	4	2	0	583
23 CUMSHEWA INLET	5	29	100	0	0	0	0	0	0	0	0	0	96
24 SELWYN INLET	5	29	0	1	43	31	19	3	2	1	0	0	293
25 SKINCUTTLE INLET	0	29	0	0	57	30	9	3	0	0	1	1	874
25 SKINCUTTLE INLET	5	29	0	0	66	21	9	2	1	1	1	0	196
33 PORT SIMPSON	5	29	0	1	27	20	44	6	2	1	1	0	196
42 AREA 4 NORTH	0	19	0	0	1	3	43	21	10	11	7	5	1082
42 AREA 4 NORTH	5	29	0	0	25	19	46	5	2	1	1	0	953
43 AREA 4 SOUTH	5	29	0	0	42	27	23	4	2	1	2	0	192
52 KITKATLA INLET	5	29	0	0	42	25	25	3	1	2	1	0	775
67 KITASU BAY	5	29	0	0	40	46	6	2	1	2	2	0	578
72 POWELL ANCHORAGE	0	19	0	0	1	9	9	8	20	18	25	10	595
72 POWELL ANCHORAGE	0	29	0	0	25	44	14	4	4	4	3	2	737
72 POWELL ANCHORAGE	5	29	0	1	33	41	7	2	5	5	5	1	1553
74 THOMPSON BAY	5	29	0	1	40	40	7	3	2	3	3	1	779
77 MILBANKE SOUND	0	19	0	0	1	21	20	10	15	13	16	5	436
77 MILBANKE SOUND	5	29	0	0	45	43	8	1	2	1	1	0	1227
78 DON PENINSULA	0	29	0	0	27	46	12	3	3	2	4	2	641
78 DON PENINSULA	5	29	0	2	39	37	8	3	3	3	3	1	666
85 KWAKSHUA CHANNEL	5	29	0	1	42	46	7	2	1	1	0	0	291
102 TAKUSH HARBOUR	5	29	0	2	22	41	20	6	7	1	1	0	97
132 DEEPWATER BAY	5	29	0	5	65	20	5	4	0	0	0	0	98
142 BAYNES SOUND	0	19	0	0	2	26	28	16	19	7	2	1	519
142 BAYNES SOUND	0	29	0	1	41	36	14	4	2	1	0	0	913
142 BAYNES SOUND	5	29	0	3	48	31	12	3	2	1	0	0	4963
143 QUALICUM	0	19	0	0	4	34	33	13	11	4	2	0	340
143 QUALICUM	5	29	0	3	35	31	22	1	3	2	2	0	96
152 POWELL RIVER	5	29	0	4	76	17	3	2	0	0	0	0	193
172 NANOOSE BAY	0	19	0	0	5	37	33	11	11	1	2	0	539
172 NANOOSE BAY	5	29	0	9	45	30	11	2	2	1	0	0	549
173 YELLOW POINT	5	29	0	7	47	30	11	2	2	1	0	0	1510
181 SWANSON CHANNEL	5	29	0	0	26	42	25	4	0	1	1	0	95
232 MACOAH PASS	0	19	0	0	1	42	10	11	13	12	6	4	539
232 MACOAH PASS	0	29	0	1	18	66	6	3	4	2	1	0	967
232 MACOAH PASS	5	29	0	2	22	61	6	3	2	2	1	0	2563
242 HESQUIAT HARBOUR	5	29	0	0	17	66	6	3	3	4	1	0	96
243 SYDNEY INLET	5	29	0	4	24	55	8	2	4	2	1	0	861
253 ESPERANZA INLET	0	19	0	0	0	33	12	8	30	12	4	1	360
253 ESPERANZA INLET	5	29	0	2	25	55	5	4	6	2	1	0	578
273 FORWARD INLET	5	29	0	1	39	49	5	0	3	2	1	0	288

Table 6. 1998 Roe herring fishery / catch information.

AREA	LICENCES	QUOTA	CATCH	% TOTAL CATCH	FISHERY	DURATION (Hours)
WCVI - SN B**	74	5286	5377	16%	Open 1100 to 1757 Mon. Mar. 9 in 23-9 & 23-10	6.9
WCVI - GN B**	176	1835	1309	4%	Open 0700 Tues. Mar. 17 to 1700 Wed. Mar. 18 in 23-9, 23-10, 23-11	34.0
WCVI - GN E**	48	515	331	1%	Open 0600 to 1900 Sat. Mar. 7 in 25-13	
					Open 0600 Sun. Mar. 8 to 1200 Wed. Mar. 11 in 25-13	
					Open 2120 to 2230 Wed. Mar. 18 in 24-2 & 24-3	92.2
GULF - SN**	59	5788	6259	18%	Open 1136 to 2110 Sun. Mar. 8 in Ptn 14-8, Ptn 14-11, 14-15, Ptn 14-14	
					Open 0844 to 1725 Mon. Mar. 9 14-8, Ptn 14-11, 14-15, Ptn 14-14	18.3
GULF - GN*	271	7697	7343	22%	Open 1200 to 1900 Thurs. Mar. 12 in 14-1 to 14-13, 14-15	
					Open 0800 Fri. Mar. 13 to 1400 Sat. Mar. 14 in 14-1 to 14-13, 14-15	
					Open 1500 to 2300 Wed. Mar. 18 in 17-3 to -6, -10, -12, -13, -15 to -18, & -21	45.0
C. COAST - SN**	93	7401	7919	23%	Open 0800 to 2100 Mon. Mar. 16 in 7-13 & 7-14	
					Open 0800 to 2300 Tues. Mar. 17 in 7-13 & 7-14	
					Open 0630 to 2115 Wed. Mar. 18 in 7-14	42.8
C. COAST - GN**	56	500	498	1%	Open 1000 to 1900 Fri. Mar. 20 in Ptn 7-9 and Ptn. 7-12	
					Open 0700 Sat. Mar. 21 to 1200 Mon. Mar. 23 in Ptn. 7-9 and Ptn. 7-12	
					Open 1700 Sun. Mar. 22 to 1200 Mon. Mar. 23 in Ptn. 7-13	
					Open 0700 Mon. Mar. 23 to 1500 Fri. Mar. 27 in Ptn. 7-3	185.0
N. COAST - GN*	218	5797	3501	10%	Open 1000 Sat. Mar. 21 to 1030 Mon. Mar. 23 in 3-2, 3-4, 3-5, 4-5, 4-7, 4-8, 4-9 & Ptns of 4-6 and 4-14	
						48.5
QCI - SN**	13	1500	1512	4%	Open 0600 to 2000 Sat Mar. 14 in 2-15	
					Open 0630 Sun. Mar. 15 to 0750 Mar. 16 in 2-15	
					Open 1600 Sun. Mar. 15 to 0810 Tues. Mar. 17 in Ptn 2-12 & 2-13	
					Open 0800 to 1300 Wed. Mar. 25 in 2-14 & 2-15	84.5
TOTAL - SN	239	19975	21067	62%		Seine Total
TOTAL - GN	769	16344	12982	38%		Gillnet Total
TOTAL	1008	36319	34049	100%		Total

**Pools - Catches are validated landings in tons

*Double licenced - Catches are halfs in tons

WCVI - E = ESPERANZA

WCVI - B = BARKLEY

Table 7. Trawl research sample summaries by section

SECTION: 143 - QUALICUM
 SAMPLE NUMBERS: 109,
 SOURCE: RESEARCH - INSHORE
 GEAR: HERRING TRAWL
 DATE: MAR 21/98

SPECIMENS AT EACH AGE:
 =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	4	17	5	2	4	0	0	1	0	4	37
% AT AGE	0.00	12.12	51.52	15.15	6.06	12.12	0.00	0.00	3.03	0.00	0.00	100.00
LENGTH - MEAN (mm)	0.00	152.75	161.53	181.20	198.50	198.75	0.00	0.00	218.00	0.00	169.00	171.59
- STD. DEV.	0.00	8.50	9.80	18.29	3.54	7.14	0.00	0.00	0.00	0.00	11.17	19.59
WEIGHT - MEAN (gm)	0.00	41.00	49.59	66.80	83.00	86.50	0.00	0.00	118.00	0.00	55.00	59.22
- STD. DEV.	0.00	8.29	7.88	15.02	2.83	8.27	0.00	0.00	0.00	0.00	8.12	19.25

HJORT MATURITY STAGES:
 =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	0	0	2	14	21	0
% AT STAGE	0.00	0.00	0.00	0.00	0.00	5.41	37.84	56.76	0.00

ROE MATURITY (FEMALE):
 =====

	IMMATURE	MATURE	SPENT	TOTAL	MALE	FEMALE	IMMATURE	TOTAL
NO.	0	1	21	22	15	22	0	37
%	0.00	4.55	95.45	100.00	40.54	59.46	0.00	100.00
% SAMPLE WEIGHT	0.00	0.81	0.00	0.81	55.53	61.73	0.00	59.22
					38.02	61.98	0.00	100.00

SEX RATIO:
 =====

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

SECTION: 152 - POWELL RIVER
 SAMPLE NUMBERS: 103,
 SOURCE: RESEARCH - INSHORE
 GEAR: HERRING TRAWL
 DATE: MAR 25/98

SPECIMENS AT EACH AGE: =====	AGE										TOTAL	
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+		
NO. AT AGE	0	22	42	15	5	1	0	0	0	0	0	15
% AT AGE	0.00	25.88	49.41	17.65	5.88	1.18	0.00	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN (mm)	0.00	148.27	166.69	182.93	191.40	192.00	0.00	0.00	0.00	0.00	0.00	147.53
- STD. DEV.	0.00	10.89	13.22	13.95	15.39	0.00	0.00	0.00	0.00	0.00	0.00	22.47
WEIGHT - MEAN (gm)	0.00	41.18	53.07	67.60	82.00	74.00	0.00	0.00	0.00	0.00	0.00	39.47
- STD. DEV.	0.00	9.55	10.92	14.73	16.58	0.00	0.00	0.00	0.00	0.00	0.00	13.57

HJORT MATURITY STAGES:
 =====

NO. AT STAGE % AT STAGE	MATURITY STAGE							
	1	2	3	4	5	6	7	8
1	13	1	1	0	1	0	1	83
1.00	13.00	1.00	1.00	0.00	1.00	0.00	1.00	83.00

ROE MATURITY (FEMALE):
 =====

NO. % % SAMPLE WEIGHT	IMMATURE		MATURE		SPENT		TOTAL		SEX RATIO: =====	
	NO.	%	NO.	%	NO.	%	NO.	%	MALE	FEMALE
9	15.25	0.00	1	1.69	49	83.05	59	100.00	36	59
			0.00	0.00	0.00	0.00	0.00	0.00	36.00	59.00
									51.89	54.56
									35.75	61.61
									2.64	100.00

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

SECTION: 161 - SABINE CHANNEL
 SAMPLE NUMBERS: 110,
 SOURCE: RESEARCH - INSHORE
 GEAR: HERRING TRAWL
 DATE: MAR 21/98

SPECIMENS AT EACH AGE:
 =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	3	1	9	7	2	0	1	0	0	0	44	67
% AT AGE	13.04	4.35	39.13	30.43	8.70	0.00	4.35	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN (mm)	112.00	156.00	157.22	190.00	186.50	0.00	212.00	0.00	0.00	0.00	104.61	125.75
- STD. DEV.	7.21	0.00	11.79	13.55	14.85	0.00	0.00	0.00	0.00	0.00	21.59	38.21
WEIGHT - MEAN (gm)	15.33	43.00	45.00	72.00	73.50	0.00	100.00	0.00	0.00	0.00	14.91	28.37
- STD. DEV.	2.08	0.00	9.11	10.92	16.26	0.00	0.00	0.00	0.00	0.00	11.82	25.04

HJORT MATURITY STAGES:
 =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	6	36	0	0	0	2	14	9	0
% AT STAGE	8.96	53.73	0.00	0.00	0.00	2.99	20.90	13.43	0.00

ROE MATURITY (FEMALE):
 =====

	IMMATURE	MATURE	SPENT	TOTAL	MALE	FEMALE	IMMATURE	TOTAL
NO.	0	1	11	12	13	12	42	67
%	0.00	8.33	91.67	100.00	19.40	17.91	62.69	100.00
% SAMPLE WEIGHT	0.00	1.80	0.00	1.80	57.15	55.67	11.67	28.37
% SAMP. WT.					39.08	35.14	25.78	100.00

SEX RATIO:
 === =====

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

SECTION: 172 - NANOOSE BAY
 SAMPLE NUMBERS: 105,107, 74,
 SOURCE: RESEARCH - INSHORE
 GEAR: HERRING TRAWL
 DATE: MAR 20/98

SPECIMENS AT EACH AGE: =====	AGE										TOTAL	
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+		UNKNOWN
NO. AT AGE	0	9	103	103	26	4	4	1	1	0	12	263
% AT AGE	0.00	3.59	41.04	41.04	10.36	1.59	1.59	0.40	0.40	0.00	0.00	100.00
LENGTH - MEAN (mm)	0.00	159.33	178.27	191.57	200.04	208.50	218.25	223.00	218.00	0.00	179.58	186.43
- STD. DEV.	0.00	10.61	12.27	10.26	9.78	10.79	5.56	0.00	0.00	0.00	19.71	15.63
WEIGHT - MEAN (gm)	0.00	40.89	60.73	73.98	83.35	98.25	107.50	123.00	108.00	0.00	64.08	69.33
- STD. DEV.	0.00	7.77	12.26	11.62	10.57	20.45	12.77	0.00	0.00	0.00	17.07	16.74

HJORT MATURITY STAGES:
 =====

NO. AT STAGE	MATURITY STAGE							
	1	2	3	4	5	6	7	8
0	0	0	1	0	4	9	128	121
% AT STAGE	0.00	0.00	0.38	0.00	1.52	3.42	48.67	46.01

ROE MATURITY (FEMALE):
 =====

NO.	SEX RATIO:		TOTAL
	IMMATURE	MATURE	
0	8	127	135
%	5.93	94.07	100.00
% SAMPLE WEIGHT	0.87	0.00	0.87
MEAN WEIGHT	68.52	70.09	69.33
% SAMP. WT.	48.11	51.89	100.00

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

SECTION: 219 - OFFSHORE AREA 21
 SAMPLE NUMBERS: 21, 19,
 SOURCE: RESEARCH - OFFSHORE
 GEAR: HERRING TRAWL
 DATE: AUG 3/97

SPECIMENS AT EACH AGE:
 =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	7	36	28	6	0	5	0	1	0	117	200
% AT AGE	0.00	8.43	43.37	33.73	7.23	0.00	6.02	0.00	1.20	0.00	0.00	100.00
LENGTH - MEAN (mm)	0.00	135.43	157.72	184.25	188.83	0.00	206.00	0.00	239.00	0.00	169.62	170.16
- STD. DEV.	0.00	5.71	12.23	12.32	8.38	0.00	16.93	0.00	0.00	0.00	27.51	25.72
WEIGHT - MEAN (gm)	0.00	38.14	61.89	104.00	108.50	0.00	134.20	0.00	200.00	0.00	84.05	83.82
- STD. DEV.	0.00	7.80	15.32	18.13	19.92	0.00	26.90	0.00	0.00	0.00	40.66	37.99

HJORT MATURITY STAGES:
 =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	5	179	15	0	0	0	0	0	1
% AT STAGE	2.50	89.50	7.50	0.00	0.00	0.00	0.00	0.00	0.50

ROE MATURITY (FEMALE):
 =====

	IMMATURE	MATURE	SPENT	TOTAL	MALE	FEMALE	IMMATURE	TOTAL
NO.	97	0	1	98	75	98	27	200
%	98.98	0.00	1.02	100.00	37.50	49.00	13.50	100.00
% SAMPLE WEIGHT	0.00	0.00	0.00	0.00	86.16	82.57	81.81	83.82
					38.55	48.27	13.18	100.00

SEX RATIO:
 === =====

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

SECTION: 239 - OFFSHORE AREA 23
 SAMPLE NUMBERS: 23, 25, 24, 22, 20,
 SOURCE: RESEARCH - OFFSHORE
 GEAR: HERRING TRAWL
 DATE: AUG 4/97 - AUG 6/97

SPECIMENS AT EACH AGE: =====	AGE										TOTAL	
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+		
NO. AT AGE	0	0	81	235	53	8	30	19	15	1	58	500
% AT AGE	0.00	0.00	18.33	53.17	11.99	1.81	6.79	4.30	3.39	0.23	0.00	100.00
LENGTH - MEAN (mm)	0.00	0.00	178.48	190.03	201.32	208.50	219.77	228.89	235.13	232.00	191.29	194.50
- STD. DEV.	0.00	0.00	7.51	10.49	11.01	11.75	10.45	7.08	8.61	0.00	16.44	17.68
WEIGHT - MEAN (gm)	0.00	0.00	76.68	95.61	113.68	124.25	145.50	164.79	180.07	172.00	95.19	103.18
- STD. DEV.	0.00	0.00	10.10	15.80	19.23	13.99	20.52	18.91	20.98	0.00	26.66	30.20

HJORT MATURITY STAGES:
 =====

NO. AT STAGE % AT STAGE	MATURITY STAGE							
	1	2	3	4	5	6	7	8
6	413	80	0	0	0	0	0	0
1.20	82.60	16.00	0.00	0.00	0.00	0.00	0.00	0.20

ROE MATURITY (FEMALE):
 =====

NO. % % SAMPLE WEIGHT	IMMATURE			MATURE			SPENT			TOTAL		
	NO.	%	MEAN WEIGHT	NO.	%	MEAN WEIGHT	NO.	%	MEAN WEIGHT	NO.	%	MEAN WEIGHT
233	100.00	0.00	104.61	0	0.00	104.61	0	0.00	104.61	233	100.00	103.18
500	100.00	0.00	93.16	0	0.00	93.16	0	0.00	93.16	500	100.00	103.18
500	100.00	0.00	5.60	31	6.20	5.60	233	46.55	5.60	266.66	53.17	5.60

SEX RATIO:
 =====

NO. %	MALE			FEMALE			IMMATURE			TOTAL		
	NO.	%	MEAN WEIGHT	NO.	%	MEAN WEIGHT	NO.	%	MEAN WEIGHT	NO.	%	MEAN WEIGHT
236	47.20	104.61	103.06	233	46.60	93.16	31	6.20	5.60	500	100.00	103.18
500	100.00	104.61	93.16	500	100.00	93.16	500	100.00	93.16	500	100.00	93.16

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

SECTION: 293 - BOUNDARY BAY
 SAMPLE NUMBERS: 108,
 SOURCE: RESEARCH - INSHORE
 GEAR: HERRING TRAWL
 DATE: MAR 17/98

SPECIMENS AT EACH AGE:
 =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	1	20	22	8	1	0	2	1	0	0	45	100
% AT AGE	1.82	36.36	40.00	14.55	1.82	0.00	3.64	1.82	0.00	0.00	0.00	100.00
LENGTH - MEAN (mm)	116.00	145.45	162.59	192.25	196.00	0.00	208.50	211.00	0.00	0.00	109.16	138.76
- STD. DEV.	0.00	11.08	10.43	9.21	0.00	0.00	0.71	0.00	0.00	0.00	38.74	40.91
WEIGHT - MEAN (gm)	15.00	37.35	48.59	78.00	93.00	0.00	109.00	109.00	0.00	0.00	19.93	37.72
- STD. DEV.	0.00	10.56	9.58	12.95	0.00	0.00	22.63	0.00	0.00	0.00	21.88	27.60

HJORT MATURITY STAGES:
 =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	31	21	0	0	0	12	33	3	0
% AT STAGE	31.00	21.00	0.00	0.00	0.00	12.00	33.00	3.00	0.00

ROE MATURITY (FEMALE):
 =====

	IMMATURE	MATURE	SPENT	TOTAL	MALE	FEMALE	IMMATURE	TOTAL
NO.	0	10	14	24	23	24	53	100
%	0.00	41.67	58.33	100.00	23.00	24.00	53.00	100.00
% SAMPLE WEIGHT	0.00	4.91	0.00	4.91	57.65	60.21	18.89	37.72
					35.15	38.31	26.54	100.00

SEX RATIO:
 =====

Table 8. (cont'd) Food and bait fishery sample summaries by section.

SECTION: 173 - YELLOW POINT
 SAMPLE NUMBERS: 7, 12, 5, 11, 18, 4, 17, 3, 10, 2,
 15, 236, 234, 9, 1, 13,
 SOURCE: FOOD FISHERY
 BAIT FISHERY
 GEAR: HERRING SEINE
 DATE: NOV 16/97 - JAN 5/98

SPECIMENS AT EACH AGE: =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	60	646	560	96	19	7	2	0	0	195	1585
% AT AGE	0.00	4.32	46.47	40.29	6.91	1.37	0.50	0.14	0.00	0.00	0.00	100.00
LENGTH - MEAN (mm)	0.00	157.05	176.76	189.01	198.35	202.63	208.43	223.00	0.00	0.00	145.58	178.32
- STD. DEV.	0.00	14.62	11.48	10.09	9.07	12.41	10.69	9.90	0.00	0.00	47.43	24.67
WEIGHT - MEAN (gm)	0.00	53.23	77.26	95.52	111.65	114.32	128.29	152.00	0.00	0.00	55.04	82.91
- STD. DEV.	0.00	16.01	15.14	16.10	14.47	20.01	14.37	11.31	0.00	0.00	39.44	26.04

HJORT MATURITY STAGES: =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	62	17	807	688	11	0	0	0	0
% AT STAGE	3.91	1.07	50.91	43.41	0.69	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE): =====

	IMMATURE	MATURE	SPENT	TOTAL	MALE	FEMALE	IMMATURE	TOTAL
NO.	675	5	0	680	834	680	71	1585
%	99.26	0.74	0.00	100.00	52.62	42.90	4.48	100.00
% SAMPLE WEIGHT	2.23	0.02	0.00	2.25	83.29	90.06	10.01	82.91
					% SAMP. WT.	46.60	0.54	100.00

SEX RATIO: =====

Table 9. Seine roe fishery sample summaries by section

SECTION: 21 - JUAN PEREZ SOUND
 SAMPLE NUMBERS: 292,277,300,274,
 SOURCE: ROE FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 15/98 - MAR 17/98

SPECIMENS AT EACH AGE: =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	1	177	117	59	17	1	3	6	2	17	400
% AT AGE	0.00	0.26	46.21	30.55	15.40	4.44	0.26	0.78	1.57	0.52	0.00	100.00
LENGTH - MEAN (mm)	0.00	165.00	178.52	180.35	201.08	204.59	195.00	217.33	224.33	223.00	184.82	184.97
- STD. DEV.	0.00	0.00	10.22	12.17	9.70	7.53	0.00	20.03	9.63	4.24	21.38	15.68
WEIGHT - MEAN (gm)	0.00	60.00	76.51	81.21	109.24	121.94	98.00	131.33	155.17	141.50	82.76	86.84
- STD. DEV.	0.00	0.00	13.37	16.14	16.28	18.77	0.00	20.40	20.26	9.19	25.62	22.96

HJORT MATURITY STAGES: =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	2	327	67	4	0	0
% AT STAGE	0.00	0.00	0.00	0.50	81.75	16.75	1.00	0.00	0.00

ROE MATURITY (FEMALE): =====

	IMMATURE	MATURE	SPENT	TOTAL	MALE	FEMALE	IMMATURE	TOTAL
NO.	1	191	1	193	207	193	0	400
%	0.52	98.96	0.52	100.00	51.75	48.25	0.00	100.00
% SAMPLE WEIGHT	0.11	26.69	0.00	26.80	83.25	90.68	0.00	86.84
					49.61	50.39	0.00	100.00

SEX RATIO: =====

NO. %

MEAN WEIGHT

% SAMP. WT.

Table 9. (cont'd) Seine roe fishery sample summaries by section

SECTION: 25 - SKINCUTTLE INLET
 SAMPLE NUMBERS: 287,279,296,278,305,295,322,310,291,275,
 SOURCE: ROE FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 14/98 - MAR 25/98

	AGE										TOTAL	
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+		UNKNOWN
NO. AT AGE	0	1	494	259	80	24	3	3	5	5	126	1000
% AT AGE	0.00	0.11	56.52	29.63	9.15	2.75	0.34	0.34	0.57	0.57	0.00	100.00
LENGTH - MEAN (mm)	0.00	168.00	180.22	181.95	193.86	202.08	207.33	218.67	219.80	220.20	176.75	182.43
- STD. DEV.	0.00	0.00	7.39	9.59	10.03	11.90	7.77	3.21	8.14	8.61	10.96	11.15
WEIGHT - MEAN (gm)	0.00	55.00	81.87	84.08	105.47	116.17	121.00	150.00	141.40	155.40	79.93	85.87
- STD. DEV.	0.00	0.00	12.03	14.74	19.03	22.11	24.02	15.72	12.62	27.18	16.89	18.20

HJORT MATURITY STAGES:
 =====

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	9	479	462	44	6	0
% AT STAGE	0.00	0.00	0.00	0.90	47.90	46.20	4.40	0.60	0.00

ROE MATURITY (FEMALE):
 =====

	SEX RATIO:			SEX RATIO:		
	IMMATURE	MATURE	TOTAL	MALE	FEMALE	TOTAL
NO.	8	558	589	411	589	1000
%	1.36	94.74	100.00	41.10	58.90	100.00
% SAMPLE WEIGHT	0.27	24.71	25.01	80.45	89.66	85.87
				% SAMP. WT.		
				38.50	61.50	100.00

Table 9. (cont'd) Seine roe fishery sample summaries by section

SECTION: 72 - POWELL ANCHORAGE
 SAMPLE NUMBERS: 353,347,354,351,352,355,343,349,
 SOURCE: ROE FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 16/98 - MAR 18/98

SPECIMENS AT EACH AGE: =====	AGE										TOTAL	
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+		UNKNOWN
NO. AT AGE	0	2	187	325	104	27	33	27	20	12	63	800
% AT AGE	0.00	0.27	25.37	44.10	14.11	3.66	4.48	3.66	2.71	1.63	0.00	100.00
LENGTH - MEAN (mm)	0.00	156.00	174.55	182.79	191.44	199.19	210.94	216.30	219.20	219.83	178.22	185.88
- STD. DEV.	0.00	1.41	10.88	12.09	10.99	10.80	9.28	11.96	12.01	11.45	19.52	17.39
WEIGHT - MEAN (gm)	0.00	61.00	72.89	87.37	101.69	113.41	137.88	148.19	155.65	154.50	82.79	93.15
- STD. DEV.	0.00	7.07	14.63	20.17	19.34	18.46	19.47	26.15	31.19	31.75	28.63	29.93

HJORT MATURITY STAGES:
 =====

NO. AT STAGE % AT STAGE	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
0	0	0	0	6	482	293	19	0	0
0.00	0.00	0.00	0.00	0.75	60.25	36.63	2.38	0.00	0.00

ROE MATURITY (FEMALE):
 =====

NO. % % SAMPLE WEIGHT	IMMATURE			MATURE			SPENT			TOTAL			SEX RATIO: =====		
	NO.	%	WT.	NO.	%	WT.	NO.	%	WT.	NO.	%	WT.	MALE	FEMALE	TOTAL
6	1.46	0.22	27.59	398	97.07	27.59	6	1.46	0.00	410	100.00	27.81	390	410	800
													48.75	51.25	100.00
													87.19	98.81	93.15
													45.63	54.37	100.00

Table 9. (cont'd) Seine roe fishery sample summaries by section

SECTION: 78 - DON PENINSULA
 SAMPLE NUMBERS: 339,341,348,345,350,338,344,
 SOURCE: ROE FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 16/98 - MAR 17/98

SPECIMENS AT EACH AGE:		AGE										TOTAL	
=====		0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE		0	0	176	297	75	22	22	14	24	11	59	700
% AT AGE		0.00	0.00	27.46	46.33	11.70	3.43	3.43	2.18	3.74	1.72	0.00	100.00
LENGTH - MEAN (mm)		0.00	0.00	172.97	183.36	189.21	199.18	210.59	214.86	220.13	219.73	183.10	185.17
- STD. DEV.		0.00	0.00	11.47	13.04	11.82	12.36	10.41	9.92	10.20	9.91	20.54	17.76
WEIGHT - MEAN (gm)		0.00	0.00	73.69	90.00	99.67	115.36	139.09	150.36	157.42	159.45	90.54	93.93
- STD. DEV.		0.00	0.00	15.80	20.55	19.04	23.06	22.89	29.58	23.34	21.32	33.03	30.09

HOJORT MATURITY STAGES:		MATURITY STAGE								
=====		1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE		0	1	1	4	329	342	20	3	0
% AT STAGE		0.00	0.14	0.14	0.57	47.00	48.86	2.86	0.43	0.00

ROE MATURITY (FEMALE):		SEX RATIO:	
=====		=====	
	IMMATURE	MATURE	TOTAL
NO.	2	333	341
%	0.59	97.65	100.00
% SAMPLE WEIGHT	0.09	27.62	27.71
		SPENT	TOTAL
		6	341
		1.76	100.00
		0.00	27.71
		MALE	FEMALE
		357	341
		51.00	48.71
		88.02	100.44
		47.79	52.09
		0.12	100.00

Table 9. (cont'd) Seine roe fishery sample summaries by section

SECTION: 232 - MACOAH PASS
 SAMPLE NUMBERS: 251,256,253,252,321,269,314,316,250, 40,
 303,
 SOURCE: ROE FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 9/98

SPECIMENS AT EACH AGE:
 =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	11	171	638	61	26	36	18	5	1	133	1100
% AT AGE	0.00	1.14	17.68	65.98	6.31	2.69	3.72	1.86	0.52	0.10	0.00	100.00
LENGTH - MEAN (mm)	0.00	162.73	182.08	195.64	202.49	206.54	220.47	225.61	239.40	204.00	192.45	194.96
- STD. DEV.	0.00	13.83	9.50	10.03	9.61	10.57	6.83	8.07	5.27	0.00	14.72	14.13
WEIGHT - MEAN (gm)	0.00	59.82	83.12	104.65	113.28	118.00	140.64	153.44	169.40	119.00	101.72	103.58
- STD. DEV.	0.00	14.15	15.49	18.35	16.41	21.16	17.03	11.98	14.94	0.00	25.35	23.44

HJORT MATURITY STAGES:
 =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	20	675	362	43	0	0
% AT STAGE	0.00	0.00	0.00	1.82	61.36	32.91	3.91	0.00	0.00

ROE MATURITY (FEMALE):
 =====

	IMMATURE	MATURE	SPENT	TOTAL	SEX RATIO: =====	MALE	FEMALE	IMMATURE	TOTAL
NO.	11	518	3	532	NO.	568	532	0	1100
%	2.07	97.37	0.56	100.00	%	51.64	48.36	0.00	100.00
% SAMPLE WEIGHT	0.30	27.63	0.00	27.93	MEAN WEIGHT	97.75	109.80	0.00	103.58
					% SAMP. WT.	48.73	51.27	0.00	100.00

Table 10. Gillnet roe fishery sample summaries by section

SECTION: 42 - AREA 4 NORTH
 SAMPLE NUMBERS: 290,301,311,298,299,293,286,307,294,308,
 297,289,
 SOURCE: ROE FISHERY
 GEAR: GILLNET
 DATE: MAR 21/98 - MAR 23/98

SPECIMENS AT EACH AGE: =====	AGE										TOTAL	
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+		
NO. AT AGE	0	0	7	33	466	222	107	122	76	49	118	1200
% AT AGE	0.00	0.00	0.65	3.05	43.07	20.52	9.89	11.28	7.02	4.53	0.00	100.00
LENGTH - MEAN(mm)	0.00	0.00	197.14	198.30	203.04	205.56	210.38	213.50	216.61	218.88	207.67	207.02
- STD. DEV.	0.00	0.00	9.44	10.53	7.84	7.49	8.03	8.03	10.67	7.76	9.71	9.73
WEIGHT - MEAN(gm)	0.00	0.00	118.14	114.00	122.24	125.83	132.03	137.84	140.59	147.67	128.25	127.90
- STD. DEV.	0.00	0.00	11.25	17.46	13.73	15.00	13.28	17.08	23.95	15.19	16.31	17.22

HJORT MATURITY STAGES: =====	MATURITY STAGE							
	1	2	3	4	5	6	7	8
NO. AT STAGE	0	0	0	1	693	488	16	2
% AT STAGE	0.00	0.00	0.00	0.08	57.75	40.67	1.33	0.17
								UNKNOWN

ROE MATURITY (FEMALE): =====	IMMATURE			MATURE			SPENT			TOTAL			SEX RATIO: =====		
	NO.	%	WEIGHT	NO.	%	WEIGHT	NO.	%	WEIGHT	NO.	%	WEIGHT	MALE	FEMALE	TOTAL
	1	0.14	28.27	715	98.76	28.27	8	1.10	0.04	724	100.00	28.35	476	724	1200
	0.03	0.03	28.27	28.27	28.27	28.27	1.10	1.10	0.04	100.00	100.00	28.35	39.67	60.33	100.00
													125.47	129.51	127.90
													38.91	61.09	100.00

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

SECTION: 77 - MILBANKE SOUND
 SAMPLE NUMBERS: 336,324,337,326,145,332,
 SOURCE: ROE FISHERY
 GEAR: GILLNET
 DATE: MAR 23/98 - MAR 25/98

SPECIMENS AT EACH AGE: =====	AGE											TOTAL
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	
NO. AT AGE	0	0	3	93	87	43	65	56	68	21	138	574
% AT AGE	0.00	0.00	0.69	21.33	19.95	9.86	14.91	12.84	15.60	4.82	0.00	100.00
LENGTH - MEAN (mm)	0.00	0.00	181.67	199.32	202.45	207.19	213.08	214.70	219.18	222.33	208.70	208.80
- STD. DEV.	0.00	0.00	8.50	7.67	7.95	8.45	8.20	8.86	9.54	12.02	10.07	11.37
WEIGHT - MEAN (gm)	0.00	0.00	84.00	121.61	123.98	131.21	139.18	141.71	153.65	158.62	134.11	134.60
- STD. DEV.	0.00	0.00	16.52	11.11	13.29	15.27	16.88	17.59	21.76	29.08	17.47	20.35

HJORT MATURITY STAGES: =====	MATURITY STAGE							
	1	2	3	4	5	6	7	8
NO. AT STAGE	0	0	0	2	368	193	11	0
% AT STAGE	0.00	0.00	0.00	0.35	64.11	33.62	1.92	0.00

ROE MATURITY (FEMALE): =====	SEX RATIO: =====			
	IMMATURE	MATURE	SPENT	TOTAL
NO.	1	389	1	391
%	0.26	99.49	0.26	100.00
% SAMPLE WEIGHT	0.11	29.11	0.00	29.21
			MALE	FEMALE
			IMMATURE	TOTAL
			183	391
			31.88	68.12
		MEAN WEIGHT	131.86	135.88
		% SAMP. WT.	31.23	68.77
			0.00	100.00
			0.00	134.60

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

SECTION: 142 - BAYNES SOUND
 SAMPLE NUMBERS: 270,258,259,317,265,313,
 SOURCE: ROE FISHERY
 GEAR: GILLNET
 DATE: MAR 12/98 - MAR 13/98

SPECIMENS AT EACH AGE:		AGE										TOTAL	
=====		0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE		0	0	8	136	147	81	97	37	8	5	66	585
% AT AGE		0.00	0.00	1.54	26.20	28.32	15.61	18.69	7.13	1.54	0.96	0.00	100.00
LENGTH - MEAN(mm)		0.00	0.00	196.38	204.86	209.89	212.83	217.52	221.81	224.00	221.20	209.38	211.19
- STD. DEV.		0.00	0.00	14.12	6.45	7.03	7.88	8.29	8.68	10.42	8.47	7.90	9.39
WEIGHT - MEAN(gm)		0.00	0.00	107.88	121.69	128.46	133.59	137.82	144.95	143.13	141.00	128.06	130.17
- STD. DEV.		0.00	0.00	19.90	10.31	11.34	12.69	13.39	13.20	17.44	19.01	12.40	14.15

HJORT MATURITY STAGES:		MATURITY STAGE								
=====		1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE		0	0	0	2	355	221	6	1	0
% AT STAGE		0.00	0.00	0.00	0.34	60.68	37.78	1.03	0.17	0.00

ROE MATURITY (FEMALE):		IMMATURE				MATURE				SPENT		TOTAL		SEX RATIO:		MALE		FEMALE		IMMATURE		TOTAL		
=====		=====				=====				=====		=====		=====		=====		=====		=====		=====		
NO.		0	356	2	358	0	356	2	358	NO.	227	358	0	585	MALE	38.80	61.20	0.00	100.00	FEMALE	130.11	130.21	0.00	130.17
%		0.00	99.44	0.56	100.00	0.00	99.44	0.56	100.00	%	38.80	61.20	0.00	100.00	% SAMP. WT.	38.78	61.22	0.00	100.00	% SAMP. WT.	130.11	130.21	0.00	130.17
% SAMPLE WEIGHT		0.00	26.67	0.00	26.67	0.00	26.67	0.00	26.67	MEAN WEIGHT	130.11	130.21	0.00	130.17	% SAMP. WT.	38.78	61.22	0.00	100.00	% SAMP. WT.	130.11	130.21	0.00	130.17

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

SECTION: 172 - NANOOSE BAY
 SAMPLE NUMBERS: 319,254,260,255,266,304,
 SOURCE: ROE FISHERY
 GEAR: GILLNET
 DATE: MAR 18/98

SPECIMENS AT EACH AGE: =====	AGE										TOTAL	
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+		UNKNOWN
NO. AT AGE	0	0	25	197	179	61	58	8	10	1	61	600
% AT AGE	0.00	0.00	4.64	36.55	33.21	11.32	10.76	1.48	1.86	0.19	0.00	100.00
LENGTH - MEAN (mm)	0.00	0.00	196.84	202.11	206.57	210.26	215.74	230.25	221.70	221.00	207.44	206.64
- STD. DEV.	0.00	0.00	6.59	7.14	8.61	7.71	7.75	4.13	5.79	0.00	11.12	9.86
WEIGHT - MEAN (gm)	0.00	0.00	109.48	115.61	122.54	125.49	131.76	147.88	143.70	128.00	122.74	121.63
- STD. DEV.	0.00	0.00	8.39	10.64	13.06	10.39	13.81	10.49	10.57	0.00	13.37	13.70

HJORT MATURITY STAGES: =====	MATURITY STAGE							
	1	2	3	4	5	6	7	8
NO. AT STAGE	0	0	0	3	429	146	22	0
% AT STAGE	0.00	0.00	0.00	0.50	71.50	24.33	3.67	0.00

ROE MATURITY (FEMALE): =====	IMMATURE				MATURE				SPENT		TOTAL		SEX RATIO: =====			
	NO.	%	MEAN WEIGHT	% SAMP. WT.	NO.	%	MEAN WEIGHT	% SAMP. WT.	NO.	%	MEAN WEIGHT	% SAMP. WT.	MALE	FEMALE	IMMATURE	TOTAL
NO.	0	0.00	342	0.87	3	0.87	345	0.87	3	0.87	345	0.87	255	345	0	600
%	0.00	99.13	27.09	0.00	0.87	100.00	27.09	0.00	0.87	100.00	27.09	0.00	42.50	57.50	0.00	100.00
% SAMPLE WEIGHT	0.00	27.09	0.00	0.00	0.00	27.09	0.00	0.00	0.00	27.09	0.00	0.00	120.75	122.28	0.00	121.63
													42.19	57.81	0.00	100.00

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

SECTION: 253 - ESPERANZA INLET
 SAMPLE NUMBERS: 37,283,284,282, 41,
 SOURCE: ROE FISHERY
 GEAR: GILLNET
 DATE: MAR 7/98 - MAR 11/98

SPECIMENS AT EACH AGE: =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	0	0	117	43	29	109	44	16	2	140	500
% AT AGE	0.00	0.00	0.00	32.50	11.94	8.06	30.28	12.22	4.44	0.56	0.00	100.00
LENGTH - MEAN (mm)	0.00	0.00	0.00	206.40	213.12	218.17	217.66	221.30	224.75	230.00	212.16	213.72
- STD. DEV.	0.00	0.00	0.00	7.15	6.96	6.11	7.97	6.59	6.33	2.83	9.91	9.60
WEIGHT - MEAN (gm)	0.00	0.00	0.00	131.30	139.47	137.55	139.61	148.52	144.00	152.50	138.50	138.20
- STD. DEV.	0.00	0.00	0.00	11.39	10.48	15.45	14.39	15.58	7.66	21.92	15.24	14.46

HJORT MATURITY STAGES: =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	2	410	72	15	1	0
% AT STAGE	0.00	0.00	0.00	0.40	82.00	14.40	3.00	0.20	0.00

ROE MATURITY (FEMALE): =====

	IMMATURE	MATURE	SPENT	TOTAL	SEX RATIO:	MALE	FEMALE	IMMATURE	TOTAL
NO.	1	327	9	337	NO.	163	337	0	500
%	0.30	97.03	2.67	100.00	%	32.60	67.40	0.00	100.00
% SAMPLE WEIGHT	0.10	26.65	0.00	26.75	MEAN WEIGHT	137.59	138.50	0.00	138.20
					% SAMP. WT.	32.46	67.54	0.00	100.00

Table 11. Spawn on kelp seine sample summaries by section

SECTION: 6 - LOUSCOONE INLET
 SAMPLE NUMBERS: 177,
 SOURCE: OTHER
 GEAR: HERRING SEINE
 DATE: MAR 5/98

SPECIMENS AT EACH AGE: =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	2	60	26	6	0	0	0	2	0	4	100
% AT AGE	0.00	2.08	62.50	27.08	6.25	0.00	0.00	0.00	2.08	0.00	0.00	100.00
LENGTH - MEAN (mm)	0.00	161.50	184.13	196.88	202.00	0.00	0.00	0.00	239.00	0.00	189.75	189.39
- STD. DEV.	0.00	0.71	8.14	12.22	12.51	0.00	0.00	0.00	11.31	0.00	14.43	14.12
WEIGHT - MEAN (gm)	0.00	61.00	91.77	118.58	135.00	0.00	0.00	0.00	215.00	0.00	99.50	103.49
- STD. DEV.	0.00	0.00	14.99	26.01	32.65	0.00	0.00	0.00	21.21	0.00	28.73	29.66

HJORT MATURITY STAGES: =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	2	90	4	4	0	0
% AT STAGE	0.00	0.00	0.00	2.00	90.00	4.00	4.00	0.00	0.00

ROE MATURITY (FEMALE): =====

	IMMATURE	MATURE	SPENT	TOTAL	SEX RATIO: =====	MALE	FEMALE	IMMATURE	TOTAL
NO.	1	48	2	51	NO.	49	51	0	100
%	1.96	94.12	3.92	100.00	%	49.00	51.00	0.00	100.00
% SAMPLE WEIGHT	0.26	26.35	0.00	26.61	MEAN WEIGHT	92.86	113.71	0.00	103.49
					% SAMP. WT.	43.97	56.03	0.00	100.00

Table 11. (cont'd) Spawn on kelp seine sample summaries by section

SECTION: 21 - JUAN PEREZ SOUND
 SAMPLE NUMBERS: 127,
 SOURCE: OTHER
 GEAR: HERRING SEINE
 DATE: MAR 31/98

	AGE										TOTAL	
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+		
NO. AT AGE	0	0	58	28	8	1	0	1	2	0	2	100
% AT AGE	0.00	0.00	59.18	28.57	8.16	1.02	0.00	1.02	2.04	0.00	0.00	100.00
LENGTH - MEAN (mm)	0.00	0.00	175.02	179.89	196.88	211.00	0.00	223.00	226.00	0.00	172.50	179.94
- STD. DEV.	0.00	0.00	7.15	10.84	5.28	0.00	0.00	0.00	1.41	0.00	9.19	13.20
WEIGHT - MEAN (gm)	0.00	0.00	65.34	72.54	98.13	133.00	0.00	143.00	118.50	0.00	64.50	72.48
- STD. DEV.	0.00	0.00	11.42	14.72	16.14	0.00	0.00	0.00	6.36	0.00	9.19	19.19

SPECIMENS AT EACH AGE:
 =====

HJORT MATURITY STAGES:
 =====

	MATURITY STAGE							
	1	2	3	4	5	6	7	8
NO. AT STAGE	0	0	0	0	50	17	33	0
% AT STAGE	0.00	0.00	0.00	0.00	50.00	17.00	33.00	0.00

ROE MATURITY (FEMALE):
 =====

SEX RATIO:
 ===

	IMMATURE		MATURE		SPENT		TOTAL		SEX RATIO		TOTAL	
	NO.	%	NO.	%	NO.	%	NO.	%	MALE	FEMALE	IMMATURE	TOTAL
NO.	0	0.00	36	67.92	17	32.08	53	100.00	47	53	0	100
%	0.00	0.00	67.92	19.07	32.08	0.00	100.00	19.07	47.00	53.00	0.00	100.00
% SAMPLE WEIGHT	0.00	0.00	19.07	0.00	0.00	0.00	19.07	68.51	68.51	76.00	0.00	72.48
									44.43	55.57	0.00	100.00

Table 11. (cont'd) Spawn on kelp seine sample summaries by section

SECTION: 25 - SKINCUTTLE INLET
 SAMPLE NUMBERS: 151,237,
 SOURCE: OTHER
 GEAR: HERRING SEINE
 DATE: MAR 7/98 - MAR 11/98

SPECIMENS AT EACH AGE: =====	AGE										TOTAL	
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+		UNKNOWN
NO. AT AGE	0	1	111	48	25	4	2	1	1	0	7	200
% AT AGE	0.00	0.52	57.51	24.87	12.95	2.07	1.04	0.52	0.52	0.00	0.00	100.00
LENGTH - MEAN(mm)	0.00	166.00	181.56	182.02	201.28	205.75	202.50	220.00	223.00	0.00	184.86	185.26
- STD. DEV.	0.00	0.00	7.59	8.72	10.18	13.50	10.61	0.00	0.00	0.00	8.03	11.68
WEIGHT - MEAN(gm)	0.00	58.00	84.12	84.08	112.96	116.25	133.00	155.00	138.00	0.00	84.14	89.34
- STD. DEV.	0.00	0.00	13.77	14.26	17.63	19.62	16.97	0.00	0.00	0.00	15.78	19.24

HJORT MATURITY STAGES: =====	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	29	153	17	1	0	0
% AT STAGE	0.00	0.00	0.00	14.50	76.50	8.50	0.50	0.00	0.00

ROE MATURITY (FEMALE): =====	SEX RATIO: =====							
	IMMATURE	MATURE	SPENT	TOTAL	MALE	FEMALE	IMMATURE	TOTAL
NO.	10	105	1	116	84	116	0	200
%	8.62	90.52	0.86	100.00	42.00	58.00	0.00	100.00
% SAMPLE WEIGHT	1.83	23.10	0.00	24.93	81.87	94.75	0.00	89.34
					% SAMP. WT.	61.51	0.00	100.00

Table 11. (cont'd) Spawn on kelp seine sample summaries by section

SECTION: 42 - AREA 4 NORTH
 SAMPLE NUMBERS: 372,373,375,374,
 SOURCE: OTHER
 GEAR: HERRING SEINE
 DATE: MAY 23/98 - MAY 26/98

SPECIMENS AT EACH AGE: =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	0	0	51	85	101	38	48	27	14	36	400
% AT AGE	0.00	0.00	0.00	14.01	23.35	27.75	10.44	13.19	7.42	3.85	0.00	100.00
LENGTH - MEAN (mm)	0.00	0.00	0.00	177.14	198.21	202.40	208.37	219.44	227.96	233.57	199.28	203.43
- STD. DEV.	0.00	0.00	0.00	11.27	14.19	14.31	14.92	13.89	12.22	14.54	21.20	20.27
WEIGHT - MEAN (gm)	0.00	0.00	0.00	73.84	110.00	117.70	131.37	148.35	164.37	173.50	113.56	120.18
- STD. DEV.	0.00	0.00	0.00	19.14	30.10	35.95	35.61	44.65	41.24	54.81	38.41	43.50

HJORT MATURITY STAGES: =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	0	149	49	202	0	0
% AT STAGE	0.00	0.00	0.00	0.00	37.25	12.25	50.50	0.00	0.00

ROE MATURITY (FEMALE): =====

	IMMATURE	MATURE	SPENT	TOTAL	SEX RATIO: =====	MALE	FEMALE	IMMATURE	TOTAL
NO.	0	138	72	210	NO.	187	210	3	400
%	0.00	65.71	34.29	100.00	%	46.75	52.50	0.75	100.00
% SAMPLE WEIGHT	0.00	20.56	0.06	20.62	MEAN WEIGHT	110.70	128.68	116.00	120.18
					% SAMP. WT.	43.06	56.21	0.72	100.00

Table 11. (cont'd) Spawn on kelp seine sample summaries by section

SECTION: 76 - KILDIDT SOUND
 SAMPLE NUMBERS: 121,
 SOURCE: OTHER
 GEAR: HERRING SEINE
 DATE: MAR 24/98

SPECIMENS AT EACH AGE:	AGE										TOTAL	
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+		UNKNOWN
NO. AT AGE	0	0	41	49	5	1	0	1	0	1	2	100
% AT AGE	0.00	0.00	41.84	50.00	5.10	1.02	0.00	1.02	0.00	1.02	0.00	100.00
LENGTH - MEAN (mm)	0.00	0.00	174.39	178.65	190.80	204.00	0.00	200.00	0.00	218.00	166.50	178.13
- STD. DEV.	0.00	0.00	11.84	12.60	11.48	0.00	0.00	0.00	0.00	0.00	13.44	13.61
WEIGHT - MEAN (gm)	0.00	0.00	73.37	77.47	96.60	116.00	0.00	92.00	0.00	139.00	67.50	77.69
- STD. DEV.	0.00	0.00	14.32	15.92	21.14	0.00	0.00	0.00	0.00	0.00	19.09	17.62

HJORT MATURITY STAGES:

NO. AT STAGE	MATURITY STAGE							
	1	2	3	4	5	6	7	8
0	0	0	0	10	79	11	0	0
% AT STAGE	0.00	0.00	0.00	10.00	79.00	11.00	0.00	0.00

ROE MATURITY (FEMALE):

NO.	IMMATURE		MATURE		SPENT		TOTAL		SEX RATIO:		TOTAL
	NO.	%	NO.	%	NO.	%	NO.	%	MALE	FEMALE	
1	1	50	0	51	0	51	0	100	49	51	100
%	1.96	98.04	0.00	100.00	0.00	100.00	0.00	100.00	49.00	51.00	100.00
% SAMPLE WEIGHT	0.37	24.96	0.00	25.33	0.00	25.33	0.00	25.33	76.86	78.49	77.69
									48.47	51.53	100.00

Table 11. (cont'd) Spawn on kelp seine sample summaries by section

SECTION: 253 - ESPERANZA INLET
 SAMPLE NUMBERS: 235,198,227,199,
 SOURCE: OTHER
 GEAR: HERRING SEINE
 DATE: FEB 25/98 - MAR 3/98

SPECIMENS AT EACH AGE:
 =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	5	121	185	20	10	19	15	3	1	21	400
% AT AGE	0.00	1.32	31.93	48.81	5.28	2.64	5.01	3.96	0.79	0.26	0.00	100.00
LENGTH - MEAN (mm)	0.00	170.00	177.03	191.95	199.10	211.40	217.00	224.33	221.00	219.00	187.86	190.48
- STD. DEV.	0.00	1.58	9.13	10.96	10.86	8.44	9.22	8.62	8.66	0.00	22.56	16.79
WEIGHT - MEAN (gm)	0.00	67.80	77.97	100.93	112.25	134.70	138.11	148.47	142.33	141.00	94.10	98.58
- STD. DEV.	0.00	6.53	13.87	19.41	18.93	10.53	19.71	24.40	15.89	0.00	36.00	27.01

HJORT MATURITY STAGES:
 =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	1	2	1	53	269	66	8	0	0
% AT STAGE	0.25	0.50	0.25	13.25	67.25	16.50	2.00	0.00	0.00

ROE MATURITY (FEMALE):
 =====

	IMMATURE	MATURE	SPENT	TOTAL	MALE	FEMALE	IMMATURE	TOTAL
NO.	35	173	2	210	188	210	2	400
%	16.67	82.38	0.95	100.00	47.00	52.50	0.50	100.00
% SAMPLE WEIGHT	2.67	22.43	0.04	25.14	94.21	102.68	78.50	98.58
MEAN WEIGHT					44.92	54.68	0.40	100.00
% SAMP. WT.								

SEX RATIO:
 === =====

Table 11. (cont'd) Spawn on kelp seine sample summaries by section

SECTION: 273 - FORWARD INLET
 SAMPLE NUMBERS: 325,329,331,330,323,
 SOURCE: OTHER
 GEAR: OTHER
 DATE: MAR 23/98

SPECIMENS AT EACH AGE: =====	AGE										TOTAL	
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+		UNKNOWN
NO. AT AGE	0	6	152	258	37	4	13	11	4	1	14	500
% AT AGE	0.00	1.23	31.28	53.09	7.61	0.82	2.67	2.26	0.82	0.21	0.00	100.00
LENGTH - MEAN (mm)	0.00	142.67	174.41	186.90	194.41	205.25	216.00	213.27	220.50	218.00	176.93	184.66
- STD. DEV.	0.00	9.65	9.76	9.43	9.97	11.79	7.12	10.06	10.34	0.00	16.21	14.78
WEIGHT - MEAN (gm)	0.00	42.00	67.93	84.79	98.84	115.50	123.77	120.36	137.50	114.00	70.36	82.31
- STD. DEV.	0.00	12.71	13.64	17.24	19.57	25.04	14.53	14.87	9.43	0.00	17.50	21.96

HJORT MATURITY STAGES: =====	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	4	185	95	212	4	0
% AT STAGE	0.00	0.00	0.00	0.80	37.00	19.00	42.40	0.80	0.00

ROE MATURITY (FEMALE): =====	SEX RATIO: =====				SEX RATIO: =====			
	IMMATURE	MATURE	SPENT	TOTAL	MALE	FEMALE	IMMATURE	TOTAL
NO.	0	170	85	255	245	255	0	500
%	0.00	66.67	33.33	100.00	49.00	51.00	0.00	100.00
% SAMPLE WEIGHT	0.00	19.27	0.08	19.35	78.79	85.69	0.00	82.31
					46.90	53.10	0.00	100.00

Table 12. Test fishing sample summaries by section

SECTION: 2 - PORT LOUIS
 SAMPLE NUMBERS: 213,143,142,118,179,114,116,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 9/98 - MAR 25/98

SPECIMENS AT EACH AGE: =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	163	180	154	109	26	6	17	2	0	43	700
% AT AGE	0.00	24.81	27.40	23.44	16.59	3.96	0.91	2.59	0.30	0.00	0.00	100.00
LENGTH - MEAN (mm)	0.00	166.83	184.84	203.30	215.27	219.04	219.17	232.24	225.00	0.00	186.00	192.35
- STD. DEV.	0.00	8.58	14.20	12.98	9.66	10.11	10.68	10.32	9.90	0.00	26.78	22.85
WEIGHT - MEAN (gm)	0.00	68.09	98.18	135.69	161.46	175.50	174.50	197.88	194.00	0.00	104.72	115.90
- STD. DEV.	0.00	11.54	25.29	28.02	22.76	24.04	21.93	23.16	25.46	0.00	51.93	44.95

HJORT MATURITY STAGES: =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	3	0	27	396	270	3	0	1
% AT STAGE	0.00	0.43	0.00	3.86	56.57	38.57	0.43	0.00	0.14

ROE MATURITY (FEMALE): =====

	IMMATURE	MATURE	SPENT	TOTAL	SEX RATIO:	MALE	FEMALE	IMMATURE	TOTAL
NO.	21	297	1	319	NO.	378	319	3	700
%	6.58	93.10	0.31	100.00	%	54.00	45.57	0.43	100.00
% SAMPLE WEIGHT	1.12	26.86	0.00	27.98	MEAN WEIGHT	109.05	124.55	58.67	115.90
					% SAMP. WT.	50.81	48.97	0.22	100.00

Table 12. (cont'd) Test fishing sample summaries by section

SECTION: 3 - RENNELL SOUND
 SAMPLE NUMBERS: 117,196,172,113,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 10/98 - MAR 27/98

SPECIMENS AT EACH AGE:		AGE										TOTAL	
=====		0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE		0	82	119	60	96	4	0	1	0	0	38	400
% AT AGE		0.00	22.65	32.87	16.57	26.52	1.10	0.00	0.28	0.00	0.00	0.00	100.00
LENGTH - MEAN (mm)		0.00	168.71	193.29	203.27	219.92	219.00	0.00	230.00	0.00	0.00	179.76	195.20
- STD. DEV.		0.00	8.53	12.66	16.34	9.94	5.03	0.00	0.00	0.00	0.00	19.04	22.19
WEIGHT - MEAN (gm)		0.00	71.62	114.35	135.03	175.92	169.50	0.00	199.00	0.00	0.00	89.21	121.85
- STD. DEV.		0.00	12.62	23.16	34.42	26.84	16.82	0.00	0.00	0.00	0.00	36.68	45.48

HJORT MATURITY STAGES:		MATURITY STAGE								
=====		1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE		0	0	0	4	277	119	0	0	0
% AT STAGE		0.00	0.00	0.00	1.00	69.25	29.75	0.00	0.00	0.00

ROE MATURITY (FEMALE):		IMMATURE				MATURE				SPENT		TOTAL	SEX RATIO:		TOTAL	
=====		=====				=====				=====			MALE	FEMALE	IMMATURE	TOTAL
NO.		1	223	0	224	0	0	0	0	0	0	0	176	224	0	400
%		0.45	99.55	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.00	56.00	0.00	100.00
% SAMPLE WEIGHT		0.09	28.06	0.00	28.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112.53	129.16	0.00	121.85
													40.64	59.36	0.00	100.00

Table 12. (cont'd) Test fishing sample summaries by section

SECTION: 5 - ENGLEFIELD BAY
 SAMPLE NUMBERS: 173,128,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 16/98 - MAR 28/98

SPECIMENS AT EACH AGE:
 =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	7	108	55	7	2	1	0	0	0	19	199
% AT AGE	0.00	3.89	60.00	30.56	3.89	1.11	0.56	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN (mm)	0.00	172.43	186.49	195.35	204.86	222.50	215.00	0.00	0.00	0.00	182.11	189.18
- STD. DEV.	0.00	9.64	9.43	12.43	14.37	0.71	0.00	0.00	0.00	0.00	14.41	13.06
WEIGHT - MEAN (gm)	0.00	65.43	104.82	120.04	152.43	170.00	153.00	0.00	0.00	0.00	96.74	109.44
- STD. DEV.	0.00	8.48	17.35	25.20	35.78	14.14	0.00	0.00	0.00	0.00	23.15	25.79

HJORT MATURITY STAGES:
 =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	3	131	65	0	0	0
% AT STAGE	0.00	0.00	0.00	1.51	65.83	32.66	0.00	0.00	0.00

ROE MATURITY (FEMALE):
 =====

	IMMATURE	MATURE	SPENT	TOTAL	SEX RATIO: =====	MALE	FEMALE	IMMATURE	TOTAL
NO.	2	90	0	92	NO.	107	92	0	199
%	2.17	97.83	0.00	100.00	%	53.77	46.23	0.00	100.00
% SAMPLE WEIGHT	0.35	27.62	0.00	27.97	MEAN WEIGHT	99.97	120.46	0.00	109.44
					% SAMP. WT.	49.12	50.88	0.00	100.00

Table 12. (cont'd) Test fishing sample summaries by section

SECTION: 21 - JUAN PEREZ SOUND
 SAMPLE NUMBERS: 159,155,158,238,144,153,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 8/98 - MAR 17/98

SPECIMENS AT EACH AGE: =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	3	314	148	64	14	5	22	11	2	17	600
% AT AGE	0.00	0.51	53.86	25.39	10.98	2.40	0.86	3.77	1.89	0.34	0.00	100.00
LENGTH - MEAN(mm)	0.00	161.00	176.69	181.75	197.50	201.57	212.40	217.36	217.82	225.50	179.82	183.45
- STD. DEV.	0.00	4.00	8.38	10.99	9.02	9.09	10.41	8.07	7.19	0.71	20.67	15.01
WEIGHT - MEAN(gm)	0.00	59.67	77.05	84.11	106.42	115.93	126.20	135.50	142.27	138.50	81.00	86.81
- STD. DEV.	0.00	11.72	13.01	16.00	17.16	18.36	11.56	20.58	12.75	3.54	31.30	22.75

HJORT MATURITY STAGES: =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	13	362	215	10	0	0
% AT STAGE	0.00	0.00	0.00	2.17	60.33	35.83	1.67	0.00	0.00

ROE MATURITY (FEMALE): =====

	IMMATURE	MATURE	SPENT	TOTAL	MALE	FEMALE	IMMATURE	TOTAL
NO.	12	273	3	288	312	288	0	600
%	4.17	94.79	1.04	100.00	52.00	48.00	0.00	100.00
% SAMPLE WEIGHT	0.80	25.52	0.00	26.31	84.21	89.62	0.00	86.81
					50.44	49.56	0.00	100.00

SEX RATIO:
 =====

Table 12. (cont'd) Test fishing sample summaries by section

SECTION: 23 - CUMSHEWA INLET
 SAMPLE NUMBERS: 111,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: APR 2/98

SPECIMENS AT EACH AGE: =====	AGE										TOTAL		
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+			
NO. AT AGE	76	0	0	0	0	0	0	0	0	0	0	24	100
% AT AGE	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN (mm)	101.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.79	101.53
- STD. DEV.	6.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.52	6.15
WEIGHT - MEAN (gm)	14.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.50	13.96
- STD. DEV.	2.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.46

HJORT MATURITY STAGES: =====	MATURITY STAGE							
	1	2	3	4	5	6	7	8
NO. AT STAGE	100	0	0	0	0	0	0	0
% AT STAGE	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE): =====	SEX RATIO: =====			TOTAL
	IMMATURE	MATURE	SPENT	
NO.	0	0	0	0
%	0.00	0.00	0.00	0.00
% SAMPLE WEIGHT	0.00	0.00	0.00	0.00
			MEAN WEIGHT	
			13.96	13.96
		% SAMP. WT.	100.00	100.00

Table 12. (cont'd) Test fishing sample summaries by section

SECTION: 24 - SELWYN INLET
 SAMPLE NUMBERS: 135,134,137,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 15/98 - MAR 20/98

SPECIMENS AT EACH AGE:		AGE										TOTAL	
=====		0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE		0	2	127	91	55	9	6	2	1	0	7	300
% AT AGE		0.00	0.68	43.34	31.06	18.77	3.07	2.05	0.68	0.34	0.00	0.00	100.00
LENGTH - MEAN (mm)		0.00	169.00	176.82	176.86	196.04	206.11	217.00	220.50	232.00	0.00	178.57	182.50
- STD. DEV.		0.00	2.83	10.19	9.18	8.01	10.98	8.58	7.78	0.00	0.00	13.51	14.36
WEIGHT - MEAN (gm)		0.00	73.50	79.39	79.53	111.60	126.00	153.50	163.50	172.00	0.00	86.57	89.22
- STD. DEV.		0.00	13.44	15.58	13.50	18.54	19.52	16.88	9.19	0.00	0.00	20.34	24.30

HJORT MATURITY STAGES:

=====		MATURITY STAGE								UNKNOWN
=====		1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE		0	0	0	13	181	105	1	0	0
% AT STAGE		0.00	0.00	0.00	4.33	60.33	35.00	0.33	0.00	0.00

ROE MATURITY (FEMALE):

=====		IMMATURE			MATURE			SPENT TOTAL		SEX RATIO:		MALE		FEMALE		IMMATURE		TOTAL	
=====		NO.		%		MEAN WEIGHT		% SAMP. WT.		=====		NO.		%		MEAN WEIGHT		% SAMP. WT.	
NO.		5	140	0	145							155	145	0	300				
%		3.45	96.55	0.00	100.00							51.67	48.33	0.00	100.00				
% SAMPLE WEIGHT		0.72	26.21	0.00	26.93							85.59	93.10	0.00	89.22				
												49.56	50.44	0.00	100.00				

Table 12. (cont'd) Test fishing sample summaries by section

SECTION: 25 - SKINCUTTLE INLET
 SAMPLE NUMBERS: 154,136,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 6/98 - MAR 8/98

SPECIMENS AT EACH AGE:
 =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	0	129	41	18	4	1	1	2	0	4	200
% AT AGE	0.00	0.00	65.82	20.92	9.18	2.04	0.51	0.51	1.02	0.00	0.00	100.00
LENGTH - MEAN (mm)	0.00	0.00	182.88	184.20	202.22	213.50	226.00	235.00	222.50	0.00	184.50	186.40
- STD. DEV.	0.00	0.00	6.73	8.87	7.99	4.43	0.00	0.00	9.19	0.00	10.34	11.49
WEIGHT - MEAN (gm)	0.00	0.00	85.98	88.93	116.78	142.50	169.00	160.00	127.00	0.00	90.25	91.77
- STD. DEV.	0.00	0.00	12.08	15.59	16.69	8.96	0.00	0.00	7.07	0.00	13.05	19.19

HJORT MATURITY STAGES:
 =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	7	135	56	1	1	0
% AT STAGE	0.00	0.00	0.00	3.50	67.50	28.00	0.50	0.50	0.00

ROE MATURITY (FEMALE):
 =====

	IMMATURE	MATURE	SPENT	TOTAL	MALE	FEMALE	IMMATURE	TOTAL
NO.	5	103	1	109	91	109	0	200
%	4.59	94.50	0.92	100.00	45.50	54.50	0.00	100.00
% SAMPLE WEIGHT	0.77	24.12	0.00	24.89	87.64	95.22	0.00	91.77
					43.45	56.55	0.00	100.00

SEX RATIO:
 =====

Table 12. (cont'd) Test fishing sample summaries by section

SECTION: 33 - PORT SIMPSON
 SAMPLE NUMBERS: 156,170,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 14/98 - MAR 17/98

SPECIMENS AT EACH AGE: =====	AGE										TOTAL	
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+		UNKNOWN
NO. AT AGE	0	1	53	39	86	12	3	1	1	0	4	200
% AT AGE	0.00	0.51	27.04	19.90	43.88	6.12	1.53	0.51	0.51	0.00	0.00	100.00
LENGTH - MEAN (mm)	0.00	154.00	166.40	177.54	185.07	193.92	208.00	222.00	208.00	0.00	181.75	179.60
- STD. DEV.	0.00	0.00	10.97	10.60	9.82	11.10	12.17	0.00	0.00	0.00	8.81	14.31
WEIGHT - MEAN (gm)	0.00	44.00	59.21	74.26	85.80	101.42	112.00	136.00	117.00	0.00	81.25	77.94
- STD. DEV.	0.00	0.00	13.92	15.99	16.26	18.58	19.29	0.00	0.00	0.00	11.15	21.01

HJORT MATURITY STAGES:
 =====

NO. AT STAGE % AT STAGE	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
0	0	1	0	73	88	38	0	0	0
0.00	0.50	0.00	0.00	36.50	44.00	19.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):
 =====

NO. % % SAMPLE WEIGHT	IMMATURE			MATURE			SPENT			TOTAL			SEX RATIO: =====			
	NO.	%	WT.	NO.	%	WT.	NO.	%	WT.	NO.	%	WT.	MALE	FEMALE	IMMATURE	TOTAL
66	55.00	12.56	54	45.00	11.46	0	0.00	0.00	0.00	120	100.00	24.03	80	60.00	0	200
MEAN WEIGHT	73.16	81.13	0.00	77.94	81.13	0.00	0.00	0.00	0.00	77.94	81.13	0.00	37.55	62.45	0.00	100.00
% SAMP. WT.	37.55	62.45	0.00	0.00	62.45	0.00	0.00	0.00	0.00	62.45	62.45	0.00	37.55	62.45	0.00	100.00

Table 12. (cont'd) Test fishing sample summaries by section

SECTION: 42 - AREA 4 NORTH
 SAMPLE NUMBERS: 162,132,139,167,138,160,166,133,147,152,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 11/98 - MAR 26/98

SPECIMENS AT EACH AGE: =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	2	242	181	443	49	16	7	12	1	47	1000
% AT AGE	0.00	0.21	25.39	18.99	46.48	5.14	1.68	0.73	1.26	0.10	0.00	100.00
LENGTH - MEAN (mm)	0.00	150.50	166.14	177.36	185.57	190.96	199.94	211.00	218.92	228.00	170.74	179.73
- STD. DEV.	0.00	7.78	12.33	10.90	10.62	10.23	11.07	17.55	5.74	0.00	20.35	15.59
WEIGHT - MEAN (gm)	0.00	41.50	62.08	76.56	89.42	95.67	109.00	131.29	143.08	171.00	71.47	81.18
- STD. DEV.	0.00	4.95	15.36	15.42	18.16	18.00	18.78	40.50	27.12	0.00	26.21	23.25

HJORT MATURITY STAGES: =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	3	1	245	591	138	21	1	0
% AT STAGE	0.00	0.30	0.10	24.50	59.10	13.80	2.10	0.10	0.00

ROE MATURITY (FEMALE): =====

	IMMATURE	MATURE	SPENT	TOTAL	MALE	FEMALE	IMMATURE	TOTAL
NO.	138	326	8	472	527	472	1	1000
%	29.24	69.07	1.69	100.00	52.70	47.20	0.10	100.00
% SAMPLE WEIGHT	6.18	18.72	0.01	24.90	76.18	86.88	20.00	81.18
					49.46	50.52	0.02	100.00

SEX RATIO: =====
 NO. 527 472 1 1000
 % 52.70 47.20 0.10 100.00
 MEAN WEIGHT 76.18 86.88 20.00 81.18
 % SAMP. WT. 49.46 50.52 0.02 100.00

Table 12. (cont'd) Test fishing sample summaries by section

SECTION: 43 - AREA 4 SOUTH
 SAMPLE NUMBERS: 140,131,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 24/98

SPECIMENS AT EACH AGE: =====	AGE										TOTAL	
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+		UNKNOWN
NO. AT AGE	0	0	81	51	44	7	3	2	4	0	8	200
% AT AGE	0.00	0.00	42.19	26.56	22.92	3.65	1.56	1.04	2.08	0.00	0.00	100.00
LENGTH - MEAN (mm)	0.00	0.00	168.64	178.39	187.98	191.43	214.00	199.50	214.50	0.00	173.25	178.27
- STD. DEV.	0.00	0.00	11.22	10.40	10.80	14.94	4.36	2.12	8.74	0.00	26.34	15.85
WEIGHT - MEAN (gm)	0.00	0.00	64.81	76.76	95.43	101.57	140.00	113.00	143.75	0.00	68.13	79.21
- STD. DEV.	0.00	0.00	15.06	16.43	17.63	25.27	19.47	5.66	19.02	0.00	29.33	24.55

HJORT MATURITY STAGES: =====	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	18	108	74	0	0	0
% AT STAGE	0.00	0.00	0.00	9.00	54.00	37.00	0.00	0.00	0.00

ROE MATURITY (FEMALE): =====	INMATURE				MATURE				SPENT				TOTAL				SEX RATIO: =====			
	NO.	%	MEAN WEIGHT	% SAMP. WT.	NO.	%	MEAN WEIGHT	% SAMP. WT.	NO.	%	MEAN WEIGHT	% SAMP. WT.	MALE	FEMALE	IMMATURE	TOTAL	MALE	FEMALE	IMMATURE	TOTAL
NO.	11				90				0				99	101	0	200	49.50	50.50	0.00	100.00
%	10.89				89.11				0.00	100.00			49.50	50.50	0.00	100.00	49.50	50.50	0.00	100.00
% SAMPLE WEIGHT	1.90				24.33				0.00	26.22			76.46	81.89	0.00	79.21	76.46	81.89	0.00	79.21
													47.79	52.21	0.00	100.00	47.79	52.21	0.00	100.00

Table 12. (cont'd) Test fishing sample summaries by section

SECTION: 52 - KITKATIA INLET
 SAMPLE NUMBERS: 217,129,163,112,124,106,164,215,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 13/98 - MAR 26/98

SPECIMENS AT EACH AGE: =====	AGE										TOTAL	
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+		UNKNOWN
NO. AT AGE	0	1	326	194	195	26	8	13	10	2	25	800
% AT AGE	0.00	0.13	42.06	25.03	25.16	3.35	1.03	1.68	1.29	0.26	0.00	100.00
LENGTH - MEAN (mm)	0.00	165.00	173.67	181.84	192.19	198.58	214.25	212.00	221.80	230.50	178.68	182.89
- STD. DEV.	0.00	0.00	10.82	10.62	9.52	10.89	11.03	9.90	5.85	9.19	14.97	14.96
WEIGHT - MEAN (gm)	0.00	52.00	72.55	84.93	101.53	113.62	139.00	132.08	153.90	143.00	81.68	87.04
- STD. DEV.	0.00	0.00	14.74	16.46	17.74	22.07	19.06	16.34	16.72	18.38	22.63	23.64

HJORT MATURITY STAGES:
 =====

NO. AT STAGE % AT STAGE	MATURITY STAGE							
	1	2	3	4	5	6	7	8
0	0	0	0	64	554	182	0	0
0.00	0.00	0.00	8.00	69.25	22.75	0.00	0.00	0.00

ROE MATURITY (FEMALE):
 =====

NO. % % SAMPLE WEIGHT	IMMATURE			MATURE			SPENT			TOTAL		
	NO.	%	MEAN WEIGHT	NO.	%	MEAN WEIGHT	NO.	%	MEAN WEIGHT	NO.	%	MEAN WEIGHT
36	8.89	2.02	369	91.11	23.79	0	0.00	0.00	0	0.00	0.00	405
800	100.00	25.82	395	49.38	83.06	405	50.63	90.91	0	0.00	0.00	800
87.04	100.00	23.64	47.12	52.88	87.04	52.88	87.04	87.04	0.00	0.00	0.00	100.00

Table 12. (cont'd) Test fishing sample summaries by section

SECTION: 67 - KITASU BAY
 SAMPLE NUMBERS: 90, 87, 104, 79, 98, 244,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 5/98 - MAR 19/98

SPECIMENS AT EACH AGE:
 =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	2	234	264	36	14	5	13	9	1	22	600
% AT AGE	0.00	0.35	40.48	45.67	6.23	2.42	0.87	2.25	1.56	0.17	0.00	100.00
LENGTH - MEAN (mm)	0.00	153.50	171.88	183.26	191.03	192.29	212.00	215.15	215.89	217.00	178.00	180.68
- STD. DEV.	0.00	16.26	11.15	11.78	11.18	14.99	7.18	9.48	6.60	0.00	17.44	15.35
WEIGHT - MEAN (gm)	0.00	48.50	72.41	89.73	101.28	101.21	129.20	141.77	145.56	183.00	80.45	85.91
- STD. DEV.	0.00	14.85	15.29	19.64	19.05	24.98	9.26	21.28	19.81	0.00	24.94	24.24

HJORT MATURITY STAGES:
 =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	1	2	66	324	202	4	1	0
% AT STAGE	0.00	0.17	0.33	11.00	54.00	33.67	0.67	0.17	0.00

ROE MATURITY (FEMALE):
 =====

	IMMATURE	MATURE	SPENT	TOTAL	MALE	FEMALE	IMMATURE	TOTAL
NO.	43	251	2	296	303	296	1	600
%	14.53	84.80	0.68	100.00	50.50	49.33	0.17	100.00
% SAMPLE WEIGHT	2.64	21.99	0.00	24.63	80.61	91.49	40.00	85.91
					47.39	52.54	0.08	100.00

SEX RATIO:
 =====

NO.	303	296	1	600
%	50.50	49.33	0.17	100.00
MEAN WEIGHT	80.61	91.49	40.00	85.91
% SAMP. WT.	47.39	52.54	0.08	100.00

Table 12. (cont'd) Test fishing sample summaries by section

SECTION: 72 - POWELL ANCHORAGE
 SAMPLE NUMBERS: 123, 71, 97, 101, 81, 125, 73, 93, 122, 86,
 240, 168, 89, 102, 82, 77,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 7/98 - MAR 19/98

SPECIMENS AT EACH AGE: =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	8	506	639	108	35	79	83	82	13	47	1600
% AT AGE	0.00	0.52	32.58	41.15	6.95	2.25	5.09	5.34	5.28	0.84	0.00	100.00
LENGTH - MEAN (mm)	0.00	146.88	174.42	184.83	192.90	205.69	213.68	215.61	218.16	223.15	182.30	187.32
- STD. DEV.	0.00	16.09	11.00	11.70	12.53	11.37	9.25	9.07	8.42	10.30	25.27	18.63
WEIGHT - MEAN (gm)	0.00	46.13	74.33	90.43	104.81	128.06	145.37	147.20	156.79	171.46	89.36	96.60
- STD. DEV.	0.00	15.42	15.11	19.35	23.44	24.73	21.44	25.43	24.05	27.81	38.12	33.16

HUORT MATURITY STAGES: =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	2	1	89	964	454	84	6	0
% AT STAGE	0.00	0.13	0.06	5.56	60.25	28.38	5.25	0.38	0.00

ROE MATURITY (FEMALE): =====

	IMMATURE	MATURE	SPENT	TOTAL	MALE	FEMALE	IMMATURE	TOTAL
NO.	47	735	30	812	788	812	0	1600
%	5.79	90.52	3.69	100.00	49.25	50.75	0.00	100.00
% SAMPLE WEIGHT	0.87	25.34	0.01	26.23	90.34	102.67	0.00	96.60
					46.06	53.94	0.00	100.00

SEX RATIO: =====

% SAMP. WT.

Table 12. (cont'd) Test fishing sample summaries by section

SECTION: 74 - THOMPSON BAY
 SAMPLE NUMBERS: 94, 96, 80, 100, 233, 92, 169, 91,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 4/98 - MAR 19/98

SPECIMENS AT EACH AGE: =====	AGE										TOTAL
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	
NO. AT AGE	0	5	312	314	58	21	19	20	22	8	800
% AT AGE	0.00	0.64	40.05	40.31	7.45	2.70	2.44	2.57	2.82	1.03	100.00
LENGTH - MEAN (mm)	0.00	153.20	172.87	184.90	193.03	203.05	212.79	220.00	219.45	220.38	183.83
- STD. DEV.	0.00	12.62	11.13	11.43	9.72	9.51	9.48	8.85	12.30	5.40	17.12
WEIGHT - MEAN (gm)	0.00	44.60	71.58	89.44	103.00	123.71	140.53	154.80	162.14	154.50	89.44
- STD. DEV.	0.00	13.96	15.71	18.59	18.43	19.73	24.00	26.79	28.02	15.37	29.53

HJORT MATURITY STAGES: =====	MATURITY STAGE							
	1	2	3	4	5	6	7	8
NO. AT STAGE	1	2	2	102	516	175	2	0
% AT STAGE	0.13	0.25	0.25	12.75	64.50	21.88	0.25	0.00

ROE MATURITY (FEMALE): =====	SEX RATIO: =====				TOTAL
	IMMATURE	MATURE	SPENT	MALE	
NO.	64	339	0	396	800
%	15.88	84.12	0.00	49.50	100.00
% SAMPLE WEIGHT	2.88	23.11	0.00	86.25	89.44
				% SAMP. WT.	100.00

Table 12. (cont'd) Test fishing sample summaries by section

SECTION: 77 - MILBANK SOUND
 SAMPLE NUMBERS: 243,216,120,219, 78,161,218, 72, 83, 95,
 248,214, 88,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 6/98 - MAR 21/98

SPECIMENS AT EACH AGE:		AGE										TOTAL	
		0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE		0	1	550	525	92	13	21	13	11	1	72	1299
% AT AGE		0.00	0.08	44.82	42.79	7.50	1.06	1.71	1.06	0.90	0.08	0.00	100.00
LENGTH - MEAN (mm)		0.00	157.00	171.70	179.95	188.26	199.54	204.33	210.23	206.82	225.00	173.50	177.83
- STD. DEV.		0.00	0.00	10.68	10.80	10.46	13.24	9.13	10.62	10.81	0.00	17.92	13.70
WEIGHT - MEAN (gm)		0.00	49.00	72.04	85.04	97.12	110.69	128.05	138.23	128.82	150.00	75.57	81.74
- STD. DEV.		0.00	0.00	14.56	17.14	19.60	21.17	25.22	23.58	20.92	0.00	24.47	21.26

HJORT MATURITY STAGES:		MATURITY STAGE								
		1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE		0	1	0	66	848	383	1	0	0
% AT STAGE		0.00	0.08	0.00	5.08	65.28	29.48	0.08	0.00	0.00

ROE MATURITY (FEMALE):		SEX RATIO:		SEX RATIO:	
		IMMATURE	MATURE	MALE	FEMALE
		TOTAL	SPENT	TOTAL	TOTAL
NO.		51	652	1	704
%		7.24	92.61	0.14	100.00
% SAMPLE WEIGHT		1.42	24.52	0.00	25.94
				MEAN WEIGHT	
				76.03	86.62
				42.53	57.43
				0.04	0.04
				44.00	81.74
				0.08	100.00
				54.20	100.00
				704	1299
				0.08	100.00

Table 12. (cont'd) Test fishing sample summaries by section

SECTION: 78 - DON PENINSULA
 SAMPLE NUMBERS: 126, 76, 130, 245, 165, 211, 239,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 8/98 - MAR 27/98

SPECIMENS AT EACH AGE: =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	14	263	245	56	17	21	23	23	4	34	700
% AT AGE	0.00	2.10	39.49	36.79	8.41	2.55	3.15	3.45	3.45	0.60	0.00	100.00
LENGTH - MEAN (mm)	0.00	140.43	164.95	178.72	187.14	199.35	212.86	214.26	218.04	227.50	152.94	176.47
- STD. DEV.	0.00	11.22	17.39	16.81	15.41	14.33	11.93	9.49	11.24	16.66	28.56	23.95
WEIGHT - MEAN (gm)	0.00	33.50	62.49	81.47	95.82	115.24	143.76	142.52	150.43	178.25	54.44	80.73
- STD. DEV.	0.00	9.00	21.59	23.89	24.07	25.32	25.22	23.41	28.42	29.18	37.26	35.72

HJORT MATURITY STAGES: =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	5	9	2	26	415	233	6	3	1
% AT STAGE	0.71	1.29	0.29	3.71	59.29	33.29	0.86	0.43	0.14

ROE MATURITY (FEMALE): =====

	IMMATURE	MATURE	SPENT	TOTAL	MALE	FEMALE	IMMATURE	TOTAL
NO.	20	299	3	322	369	322	9	700
%	6.21	92.86	0.93	100.00	52.71	46.00	1.29	100.00
% SAMPLE WEIGHT	0.96	24.96	0.00	25.91	76.91	86.53	30.00	80.73
					50.22	49.30	0.48	100.00

SEX RATIO: =====

MEAN WEIGHT

% SAMP. WT.

Table 12. (cont'd) Test fishing sample summaries by section

SECTION: 102 - TAKUSH HARBOUR
 SAMPLE NUMBERS: 75,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 2/98

SPECIMENS AT EACH AGE: =====	AGE										TOTAL	
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+		UNKNOWN
NO. AT AGE	0	2	21	40	19	6	7	1	1	0	3	100
% AT AGE	0.00	2.06	21.65	41.24	19.59	6.19	7.22	1.03	1.03	0.00	0.00	100.00
LENGTH - MEAN (mm)	0.00	146.00	170.95	169.75	164.26	181.17	183.57	192.00	192.00	0.00	168.67	170.55
- STD. DEV.	0.00	15.56	12.14	14.95	18.11	17.45	19.36	0.00	0.00	0.00	18.90	16.54
WEIGHT - MEAN (gm)	0.00	31.00	64.48	64.53	57.37	73.00	79.43	83.00	90.00	0.00	65.00	64.49
- STD. DEV.	0.00	8.49	15.04	16.96	21.33	23.86	21.93	0.00	0.00	0.00	22.07	19.31

HJORT MATURITY STAGES: =====	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	4	57	36	1	1	0	1
% AT STAGE	0.00	0.00	4.00	57.00	36.00	1.00	1.00	0.00	1.00

ROE MATURITY (FEMALE): =====	SEX RATIO: =====				TOTAL	
	IMMATURE	MATURE	SPENT	MALE FEMALE IMMATURE		
NO.	52	5	0	41	2	100
%	91.23	8.77	0.00	41.00	57.00	100.00
% SAMPLE WEIGHT	17.03	1.80	0.00	59.39	69.33	64.49
				37.76	61.28	100.00

Table 12. (cont'd) Test fishing sample summaries by section

SECTION: 132 - DEEPWATER BAY
 SAMPLE NUMBERS: 188,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: FEB 24/98

SPECIMENS AT EACH AGE: =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	5	64	20	5	4	0	0	0	0	2	100
% AT AGE	0.00	5.10	65.31	20.41	5.10	4.08	0.00	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN (mm)	0.00	145.40	171.97	177.05	184.80	194.75	0.00	0.00	0.00	0.00	178.50	173.34
- STD. DEV.	0.00	10.76	11.67	9.09	12.56	4.27	0.00	0.00	0.00	0.00	24.75	13.76
WEIGHT - MEAN (gm)	0.00	39.20	72.00	80.45	93.80	105.75	0.00	0.00	0.00	0.00	83.00	74.71
- STD. DEV.	0.00	11.95	15.82	15.07	21.98	13.67	0.00	0.00	0.00	0.00	29.70	19.40

HJORT MATURITY STAGES: =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	1	4	2	82	11	0	0	0	0
% AT STAGE	1.00	4.00	2.00	82.00	11.00	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE): =====

	IMMATURE	MATURE	SPENT	TOTAL	SEX RATIO:
NO.	51	4	0	55	NO.
%	92.73	7.27	0.00	100.00	%
% SAMPLE WEIGHT	16.45	1.97	0.00	18.42	MALE
					FEMALE
					IMMATURE
					TOTAL
					41
					55
					4
					4.00
					100.00
					76.29
					32.75
					74.71
					41.87
					56.38
					1.75
					100.00

Table 12. (cont'd) Test fishing sample summaries by section

SECTION: 142 - BAYNES SOUND
 SAMPLE NUMBERS: 181,242, 42, 23, 58, 62, 43, 24, 63, 5,
 51, 59, 32, 33, 6, 25, 17, 45, 7, 26,
 1, 10, 28, 57, 61,228, 14,208,187, 22,
 241,150, 47, 21,202, 38,192, 30, 49,194,
 48, 65, 12, 53, 64, 35, 27, 2,230, 46,
 191, 36,

SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: FEB 21/98 - MAR 11/98

SPECIMENS AT EACH AGE: =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	1	163	2381	1542	593	131	106	34	10	2	237	5200
% AT AGE	0.02	3.28	47.98	31.07	11.95	2.64	2.14	0.69	0.20	0.04	0.00	100.00
LENGTH - MEAN (mm)	80.00	157.94	176.02	191.61	200.57	207.27	214.92	220.35	223.90	230.00	185.07	185.26
- STD. DEV.	0.00	12.05	12.42	11.86	10.54	9.78	10.59	9.67	10.47	0.00	21.21	17.34
WEIGHT - MEAN (gm)	4.00	50.56	72.89	94.19	108.33	121.41	135.55	144.12	157.00	148.50	86.32	86.30
- STD. DEV.	0.00	11.31	16.05	17.96	17.54	21.64	20.03	18.88	33.67	3.54	28.30	24.98

HJORT MATURITY STAGES: =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	4	24	2	834	3533	768	24	10	1
% AT STAGE	0.08	0.46	0.04	16.04	67.94	14.77	0.46	0.19	0.02

ROE MATURITY (FEMALE): =====

	IMMATURE	MATURE	SPENT	TOTAL	SEX RATIO: =====	MALE	FEMALE	IMMATURE	TOTAL
NO.	479	2025	13	2517	NO.	2665	2517	18	5200
%	19.03	80.45	0.52	100.00	%	51.25	48.40	0.35	100.00
% SAMPLE WEIGHT	3.42	21.03	0.02	24.47	MEAN WEIGHT	82.78	90.35	42.61	86.30
					% SAMP. WT.	49.16	50.67	0.17	100.00

Table 12. (cont'd) Test fishing sample summaries by section

SECTION: 143 - QUALICUM
 SAMPLE NUMBERS: 34,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 5/98

SPECIMENS AT EACH AGE: =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	3	34	30	21	1	3	2	2	0	4	100
% AT AGE	0.00	3.13	35.42	31.25	21.88	1.04	3.13	2.08	2.08	0.00	0.00	100.00
LENGTH - MEAN (mm)	0.00	163.00	181.32	193.77	203.38	206.00	218.33	225.50	232.50	0.00	201.00	193.19
- STD. DEV.	0.00	7.55	8.57	9.72	8.57	0.00	15.28	19.09	2.12	0.00	14.28	16.02
WEIGHT - MEAN (gm)	0.00	59.67	79.00	95.53	112.76	128.00	143.33	143.50	170.00	0.00	109.00	97.20
- STD. DEV.	0.00	8.02	13.57	14.46	20.22	0.00	38.00	21.92	7.07	0.00	21.89	26.35

HJORT MATURITY STAGES: =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	5	69	26	0	0	0
% AT STAGE	0.00	0.00	0.00	5.00	69.00	26.00	0.00	0.00	0.00

ROE MATURITY (FEMALE): =====

	IMMATURE	MATURE	SPENT	TOTAL	MALE	FEMALE	IMMATURE	TOTAL
NO.	2	44	0	46	54	46	0	100
%	4.35	95.65	0.00	100.00	54.00	46.00	0.00	100.00
% SAMPLE WEIGHT	0.84	22.45	0.00	23.29	96.52	98.00	0.00	97.20
					53.62	46.38	0.00	100.00

SEX RATIO:
 === =====

Table 12. (cont'd) Test fishing sample summaries by section

SECTION: 172 - NANOOSE BAY
 SAMPLE NUMBERS: 13, 55, 4, 11, 56, 29,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: FEB 26/98 - MAR 4/98

SPECIMENS AT EACH AGE: =====	AGE										TOTAL	
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+		UNKNOWN
NO. AT AGE	0	50	249	164	58	11	13	4	0	0	51	600
% AT AGE	0.00	9.11	45.36	29.87	10.56	2.00	2.37	0.73	0.00	0.00	0.00	100.00
LENGTH - MEAN (mm)	0.00	161.48	175.45	193.98	202.50	219.45	215.77	228.50	0.00	0.00	180.82	184.46
- STD. DEV.	0.00	11.62	12.66	10.78	8.22	7.59	6.88	5.45	0.00	0.00	21.07	18.62
WEIGHT - MEAN (gm)	0.00	50.64	68.44	93.63	107.34	127.18	127.08	148.50	0.00	0.00	75.25	81.06
- STD. DEV.	0.00	11.15	16.31	17.41	14.24	16.87	10.65	21.93	0.00	0.00	24.94	25.60

HJORT MATURITY STAGES: =====	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	12	2	208	353	25	0	0	0
% AT STAGE	0.00	2.00	0.33	34.67	58.83	4.17	0.00	0.00	0.00

ROE MATURITY (FEMALE): =====	SEX RATIO: =====				TOTAL		
	IMMATURE	MATURE	SPENT	MALE		FEMALE	IMMATURE
NO.	121	119	0	357	240	3	600
%	50.42	49.58	0.00	59.50	40.00	0.50	100.00
% SAMPLE WEIGHT	9.56	11.18	0.00	78.77	84.95	43.67	81.06
				57.81	41.92	0.27	100.00

Table 12. (cont'd) Test fishing sample summaries by section

SECTION: 173 - YELLOW POINT
 SAMPLE NUMBERS: 185, 67, 60, 31, 15, 44, 52, 16, 9, 8,
 66, 190, 39, 50, 3, 54,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: FEB 24/98 - MAR 17/98

SPECIMENS AT EACH AGE: =====	AGE										TOTAL	
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+		UNKNOWN
NO. AT AGE	0	113	716	449	171	23	23	14	1	0	90	1600
% AT AGE	0.00	7.48	47.42	29.74	11.32	1.52	1.52	0.93	0.07	0.00	0.00	100.00
LENGTH - MEAN (mm)	0.00	157.86	173.97	191.12	202.74	205.26	216.35	220.93	219.00	0.00	178.66	182.48
- STD. DEV.	0.00	11.01	15.04	12.84	10.02	11.71	10.71	8.46	0.00	0.00	23.53	19.49
WEIGHT - MEAN (gm)	0.00	48.59	68.14	91.04	108.46	115.04	131.70	140.07	133.00	0.00	77.42	80.28
- STD. DEV.	0.00	11.06	18.24	19.76	17.89	21.51	21.56	17.79	0.00	0.00	32.26	26.78

HJORT MATURITY STAGES: =====	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	1	4	9	350	904	307	20	5	0
% AT STAGE	0.06	0.25	0.56	21.88	56.50	19.19	1.25	0.31	0.00

ROE MATURITY (FEMALE): =====	SEX RATIO: =====			SEX RATIO: =====			
	IMMATURE	MATURE	TOTAL	MALE	FEMALE	IMMATURE	TOTAL
NO.	175	484	669	930	669	1	1600
%	26.16	72.35	100.00	58.13	41.81	0.06	100.00
% SAMPLE WEIGHT	5.10	17.05	22.15	77.69	83.95	35.00	80.28
				56.25	43.72	0.03	100.00
				% SAMP. WT.			

Table 12. (cont'd) Test fishing sample summaries by section

SECTION: 242 - HESQUIAT HARBOUR
 SAMPLE NUMBERS: 70,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: FEB 26/98

SPECIMENS AT EACH AGE: =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	0	16	63	6	3	3	4	1	0	4	100
% AT AGE	0.00	0.00	16.67	65.63	6.25	3.13	3.13	4.17	1.04	0.00	0.00	100.00
LENGTH - MEAN (mm)	0.00	0.00	182.00	196.79	202.00	214.33	225.67	224.25	237.00	0.00	196.00	197.60
- STD. DEV.	0.00	0.00	10.88	9.23	10.04	12.01	6.03	1.71	0.00	0.00	4.32	14.09
WEIGHT - MEAN (gm)	0.00	0.00	83.19	109.41	111.00	130.00	155.67	151.25	194.00	0.00	103.75	109.61
- STD. DEV.	0.00	0.00	13.48	19.02	14.20	15.59	12.50	8.06	0.00	0.00	7.93	24.69

HJORT MATURITY STAGES: =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	3	53	44	0	0	0
% AT STAGE	0.00	0.00	0.00	3.00	53.00	44.00	0.00	0.00	0.00

ROE MATURITY (FEMALE): =====

	IMMATURE	MATURE	SPENT	TOTAL	MALE	FEMALE	IMMATURE	TOTAL
NO.	3	40	0	43	57	43	0	100
%	6.98	93.02	0.00	100.00	57.00	43.00	0.00	100.00
% SAMPLE WEIGHT	1.42	25.00	0.00	26.42	106.75	113.40	0.00	109.61
					55.52	44.48	0.00	100.00

SEX RATIO:
 === =====

NO.
 %
 MEAN WEIGHT
 % SAMP. WT.

Table 12. (cont'd) Test fishing sample summaries by section

SECTION: 243 - SYDNEY INLET
 SAMPLE NUMBERS: 186,146,149, 69,195,183, 85, 84,141,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: FEB 23/98 - MAR 17/98

SPECIMENS AT EACH AGE:		AGE										TOTAL	
=====		0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE		0	36	207	477	66	18	33	13	10	1	39	900
% AT AGE		0.00	4.18	24.04	55.40	7.67	2.09	3.83	1.51	1.16	0.12	0.00	100.00
LENGTH - MEAN (mm)		0.00	162.53	180.81	195.91	201.98	209.94	224.03	227.77	232.40	235.00	195.10	193.73
- STD. DEV.		0.00	9.73	8.79	10.59	10.05	10.45	8.08	9.03	9.74	0.00	21.74	16.55
WEIGHT - MEAN (gm)		0.00	57.75	81.32	105.11	114.85	127.39	145.27	160.69	167.90	168.00	106.74	102.02
- STD. DEV.		0.00	10.69	13.21	18.25	18.86	20.98	17.74	18.00	19.85	0.00	36.00	26.62

HJORT MATURITY STAGES:
 =====

		MATURITY STAGE								
		1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE		0	0	3	42	559	260	34	2	0
% AT STAGE		0.00	0.00	0.33	4.67	62.11	28.89	3.78	0.22	0.00

ROE MATURITY (FEMALE):
 =====

		IMMATURE			MATURE			SPENT		TOTAL		SEX RATIO:		MALE		FEMALE		IMMATURE		TOTAL	
		=====			=====			=====		=====		=====		=====		=====		=====		=====	
		NO.	%	%	NO.	%	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
MEAN WEIGHT		26	5.28	0.84	454	92.28	24.62	12	2.44	492	100.00	408	45.33	492	54.67	0	0.00	900	100.00	0	0.00
% SAMPLE WEIGHT		0.84	24.62	0.00	24.62	0.00	0.00	0.00	0.00	492	100.00	45.33	54.67	0.00	0.00	105.09	0.00	102.02	100.00	0.00	0.00
% SAMP. WT.		43.68	56.32	0.00	100.00	0.00	0.00	0.00	0.00	43.68	56.32	0.00	0.00	0.00	0.00	100.00	0.00	100.00	0.00	0.00	

Table 12. (cont'd) Test fishing sample summaries by section

SECTION: 273 - FORWARD INLET
 SAMPLE NUMBERS: 68, 19, 20,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 4/98 - MAR 13/98

SPECIMENS AT EACH AGE: =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	4	112	140	14	1	8	7	2	0	12	300
% AT AGE	0.00	1.39	38.89	48.61	4.86	0.35	2.78	2.43	0.69	0.00	0.00	100.00
LENGTH - MEAN (mm)	0.00	148.50	175.80	189.71	192.21	194.00	217.25	221.86	227.00	0.00	165.25	184.86
- STD. DEV.	0.00	6.35	9.74	10.23	12.84	0.00	5.70	12.54	9.90	0.00	17.73	16.03
WEIGHT - MEAN (gm)	0.00	43.50	75.06	97.24	99.29	124.00	132.75	153.00	149.00	0.00	62.58	89.64
- STD. DEV.	0.00	4.51	14.22	17.50	18.03	0.00	22.22	18.90	24.04	0.00	20.29	24.65

HJORT MATURITY STAGES: =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	8	210	80	2	0	0
% AT STAGE	0.00	0.00	0.00	2.67	70.00	26.67	0.67	0.00	0.00

ROE MATURITY (FEMALE): =====

	IMMATURE	MATURE	SPENT	TOTAL	SEX RATIO:	MALE	FEMALE	IMMATURE	TOTAL
NO.	8	158	1	167	NO.	133	167	0	300
%	4.79	94.61	0.60	100.00	%	44.33	55.67	0.00	100.00
% SAMPLE WEIGHT	0.76	25.15	0.00	25.91	MEAN WEIGHT	82.58	95.26	0.00	89.64
					% SAMP. WT.	40.84	59.16	0.00	100.00

Table 13. (cont'd) Test fishing sample summaries by statistical area

AREA: 2E - EAST COAST Q.C.I.
 SAMPLE NUMBERS: 111,135,144,136,153,238,137,134,154,158,
 159,155,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 6/98 - APR 2/98

SPECIMENS AT EACH AGE:
 =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	76	5	570	280	137	27	12	25	14	2	52	1200
% AT AGE	6.62	0.44	49.65	24.39	11.93	2.35	1.05	2.18	1.22	0.17	0.00	100.00
LENGTH - MEAN (mm)	101.76	164.20	178.12	180.52	197.53	204.85	215.83	218.32	219.50	225.50	143.54	176.88
- STD. DEV.	6.35	5.40	8.86	10.45	8.66	9.93	9.40	8.50	7.88	0.71	42.12	26.60
WEIGHT - MEAN (gm)	14.11	65.20	79.59	83.32	109.86	123.22	143.42	138.72	142.21	138.50	51.31	82.17
- STD. DEV.	2.58	13.08	13.87	15.43	17.91	19.58	20.69	21.30	15.26	3.54	40.30	29.90

HJORT MATURITY STAGES:
 =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	100	0	0	33	678	376	12	1	0
% AT STAGE	8.33	0.00	0.00	2.75	56.50	31.33	1.00	0.08	0.00

ROE MATURITY (FEMALE):
 =====

	IMMATURE	MATURE	SPENT	TOTAL	MALE	FEMALE	IMMATURE	TOTAL
NO.	22	516	4	542	558	542	100	1200
%	4.06	95.20	0.74	100.00	46.50	45.17	8.33	100.00
% SAMPLE WEIGHT	0.77	25.41	0.00	26.18	85.15	91.68	13.96	82.17
					48.19	50.39	1.42	100.00

SEX RATIO:
 =====

MEAN WEIGHT

% SAMP. WT.

Table 13. (cont'd) Test fishing sample summaries by statistical area

AREA: 3 - NASS
 SAMPLE NUMBERS: 156,170,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 14/98 - MAR 17/98

SPECIMENS AT EACH AGE:	AGE										TOTAL	
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+		
NO. AT AGE	0	1	53	39	86	12	3	1	1	0	4	200
% AT AGE	0.00	0.51	27.04	19.90	43.88	6.12	1.53	0.51	0.51	0.00	0.00	100.00
LENGTH - MEAN (mm)	0.00	154.00	166.40	177.54	185.07	193.92	208.00	222.00	208.00	0.00	181.75	179.60
- STD. DEV.	0.00	0.00	10.97	10.60	9.82	11.10	12.17	0.00	0.00	0.00	8.81	14.31
WEIGHT - MEAN (gm)	0.00	44.00	59.21	74.26	85.80	101.42	112.00	136.00	117.00	0.00	81.25	77.94
- STD. DEV.	0.00	0.00	13.92	15.99	16.26	18.58	19.29	0.00	0.00	0.00	11.15	21.01

HJORT MATURITY STAGES:	MATURITY STAGE							
	1	2	3	4	5	6	7	8
NO. AT STAGE	0	1	0	73	88	38	0	0
% AT STAGE	0.00	0.50	0.00	36.50	44.00	19.00	0.00	0.00

ROE MATURITY (FEMALE):	SEX RATIO:				TOTAL	
	IMMATURE	MATURE	SPENT	MALE	FEMALE	TOTAL
NO.	66	54	0	80	120	200
%	55.00	45.00	0.00	40.00	60.00	100.00
% SAMPLE WEIGHT	12.56	11.46	0.00	73.16	81.13	77.94
				% SAMP. WT.	62.45	100.00

Table 13. (cont'd) Test fishing sample summaries by statistical area

AREA: 4 - SKEENA
 SAMPLE NUMBERS: 162,131,132,160,139,167,138,147,152,140,
 166,133,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 11/98 - MAR 26/98

SPECIMENS AT EACH AGE:	AGE										TOTAL	
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+		UNKNOWN
NO. AT AGE	0	2	323	232	487	56	19	9	16	1	55	1200
% AT AGE	0.00	0.17	28.21	20.26	42.53	4.89	1.66	0.79	1.40	0.09	0.00	100.00
LENGTH - MEAN (mm)	0.00	150.50	166.77	177.59	185.79	191.02	202.16	208.44	217.81	228.00	171.11	179.49
- STD. DEV.	0.00	7.78	12.09	10.78	10.65	10.76	11.49	16.04	6.59	0.00	21.06	15.64
WEIGHT - MEAN (gm)	0.00	41.50	62.76	76.60	89.97	96.41	113.89	127.22	143.25	171.00	70.98	80.85
- STD. DEV.	0.00	4.95	15.31	15.61	18.17	18.88	21.70	36.05	24.74	0.00	26.42	23.47

HOORT MATURITY STAGES:	MATURITY STAGE							
	1	2	3	4	5	6	7	8
NO. AT STAGE	0	3	1	263	699	212	21	1
% AT STAGE	0.00	0.25	0.08	21.92	58.25	17.67	1.75	0.08

ROE MATURITY (FEMALE):	SEX RATIO:			
	IMMATURE	MATURE	SPENT	TOTAL
NO.	149	416	8	573
%	26.00	72.60	1.40	100.00
% SAMPLE WEIGHT	5.46	19.66	0.01	25.13
	MEAN WEIGHT	76.23	86.00	20.00
	% SAMP. WT.	49.18	50.79	0.02
	MALE	626	573	1
	%	52.17	47.75	0.08
	IMMATURE	76.23	86.00	20.00
	%	76.23	86.00	20.00
	TOTAL	80.85	80.85	80.85
	%	80.85	80.85	80.85

Table 13. (cont'd) Test fishing sample summaries by statistical area

AREA: 5 - GRENVILLE-PRINCIPE
 SAMPLE NUMBERS: 124,112,164,106,215,129,163,217,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 13/98 - MAR 26/98

SPECIMENS AT EACH AGE:	AGE										TOTAL	
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+		UNKNOWN
NO. AT AGE	0	1	326	194	195	26	8	13	10	2	25	800
% AT AGE	0.00	0.13	42.06	25.03	25.16	3.35	1.03	1.68	1.29	0.26	0.00	100.00
LENGTH - MEAN (mm)	0.00	165.00	173.67	181.84	192.19	198.58	214.25	212.00	221.80	230.50	178.68	182.89
- STD. DEV.	0.00	0.00	10.82	10.62	9.52	10.89	11.03	9.90	5.85	9.19	14.97	14.96
WEIGHT - MEAN (gm)	0.00	52.00	72.55	84.93	101.53	113.62	139.00	132.08	153.90	143.00	81.68	87.04
- STD. DEV.	0.00	0.00	14.74	16.46	17.74	22.07	19.06	16.34	16.72	18.38	22.63	23.64

HJORT MATURITY STAGES:

	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	64	554	182	0	0	0
% AT STAGE	0.00	0.00	0.00	8.00	69.25	22.75	0.00	0.00	0.00

ROE MATURITY (FEMALE):

	SEX RATIO:			TOTAL
	IMMATURE	MATURE	SPENT	
NO.	36	369	0	405
%	8.89	91.11	0.00	100.00
% SAMPLE WEIGHT	2.02	23.79	0.00	25.82
	MEAN WEIGHT			87.04
	% SAMP. WT.			100.00
	83.06	90.91	0.00	87.04
	49.38	50.63	0.00	100.00
	47.12	52.88	0.00	100.00

Table 13. (cont'd) Test fishing sample summaries by statistical area

AREA: 6 - BUTEDALE
 SAMPLE NUMBERS: 244, 104, 79, 98, 90, 87,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 5/98 - MAR 19/98

SPECIMENS AT EACH AGE:
 =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	2	234	264	36	14	5	13	9	1	22	600
% AT AGE	0.00	0.35	40.48	45.67	6.23	2.42	0.87	2.25	1.56	0.17	0.00	100.00
LENGTH - MEAN (mm)	0.00	153.50	171.88	183.26	191.03	192.29	212.00	215.15	215.89	217.00	178.00	180.68
- STD. DEV.	0.00	16.26	11.15	11.78	11.18	14.99	7.18	9.48	6.60	0.00	17.44	15.35
WEIGHT - MEAN (gm)	0.00	48.50	72.41	89.73	101.28	101.21	129.20	141.77	145.56	183.00	80.45	85.91
- STD. DEV.	0.00	14.85	15.29	19.64	19.05	24.98	9.26	21.28	19.81	0.00	24.94	24.24

HJORT MATURITY STAGES:
 =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	1	2	66	324	202	4	1	0
% AT STAGE	0.00	0.17	0.33	11.00	54.00	33.67	0.67	0.17	0.00

ROE MATURITY (FEMALE):
 =====

	IMMATURE	MATURE	SPENT	TOTAL	MALE	FEMALE	IMMATURE	TOTAL
NO.	43	251	2	296	303	296	1	600
%	14.53	84.80	0.68	100.00	50.50	49.33	0.17	100.00
% SAMPLE WEIGHT	2.64	21.99	0.00	24.63	80.61	91.49	40.00	85.91
					47.39	52.54	0.08	100.00

SEX RATIO:
 =====

Table 13. (cont'd) Test fishing sample summaries by statistical area

AREA: 7 - BELLA BELLA
 SAMPLE NUMBERS: 233,101, 81,125, 73,161,122, 76,130, 93, 168, 80,100, 72,218, 86,240, 96, 83, 89, 95,248,126,214, 88,102, 82, 77, 94,219, 169,165,120, 97, 78, 92,245,243, 91,211, 239,123,216, 71,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 4/98 - MAR 27/98

	AGE										TOTAL	
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+		
NO. AT AGE	0	28	1631	1723	314	86	140	139	138	26	174	4399
% AT AGE	0.00	0.66	38.60	40.78	7.43	2.04	3.31	3.29	3.27	0.62	0.00	100.00
LENGTH - MEAN (mm)	0.00	145.14	171.68	182.49	190.54	202.86	212.04	215.52	217.44	223.04	172.80	182.15
- STD. DEV.	0.00	13.45	12.57	12.53	12.29	11.99	10.14	9.47	10.20	9.90	24.35	18.63
WEIGHT - MEAN (gm)	0.00	39.64	71.12	87.33	100.62	121.84	141.87	146.68	154.36	166.46	76.23	88.38
- STD. DEV.	0.00	13.01	16.72	19.57	21.86	23.76	23.50	25.26	26.31	25.13	33.31	30.68

HJORT MATURITY STAGES:
 =====

	MATURITY STAGE							
	1	2	3	4	5	6	7	8
NO. AT STAGE	6	14	5	283	2743	1245	93	9
% AT STAGE	0.14	0.32	0.11	6.43	62.36	28.30	2.11	0.20

ROE MATURITY (FEMALE):
 =====

	IMMATURE			MATURE			SPENT			TOTAL		
	NO.	%	MEAN WEIGHT	NO.	%	MEAN WEIGHT	NO.	%	MEAN WEIGHT	MALE	FEMALE	TOTAL
NO.	182	8.12	1.40	2025	90.36	24.65	34	1.52	0.01	2147	2241	4399
%	4.14	8.12	1.40	90.36	90.36	24.65	1.52	100.00	0.01	48.81	50.94	100.00
% SAMPLE WEIGHT	1.40	8.12	1.40	24.65	90.36	24.65	0.01	26.06	0.01	83.32	93.50	88.38
% SAMP. WT.	1.40	8.12	1.40	24.65	90.36	24.65	0.01	26.06	0.01	46.01	53.90	100.00

SEX RATIO:
 =====

Table 13. (cont'd) Test fishing sample summaries by statistical area

AREA: 8 - BELLA COOLA
 SAMPLE NUMBERS: 99,247,246,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 3/98 - MAR 7/98

SPECIMENS AT EACH AGE:	AGE										TOTAL	
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+		UNKNOWN
NO. AT AGE	0	2	123	135	19	5	2	4	1	0	9	300
% AT AGE	0.00	0.69	42.27	46.39	6.53	1.72	0.69	1.37	0.34	0.00	0.00	100.00
LENGTH - MEAN (mm)	0.00	146.50	170.93	179.92	192.53	198.80	202.00	215.75	178.00	0.00	168.00	177.38
- STD. DEV.	0.00	3.54	12.32	10.19	9.60	19.94	11.31	15.22	0.00	0.00	21.77	14.49
WEIGHT - MEAN (gm)	0.00	40.50	70.52	82.40	98.05	115.20	118.50	127.50	70.00	0.00	71.22	79.25
- STD. DEV.	0.00	9.19	16.00	16.39	15.72	34.24	9.19	25.90	0.00	0.00	26.22	20.37

HOJORT MATURITY STAGES:	MATURITY STAGE							
	1	2	3	4	5	6	7	8
NO. AT STAGE	0	1	3	60	171	64	1	0
% AT STAGE	0.00	0.33	1.00	20.00	57.00	21.33	0.33	0.00

ROE MATURITY (FEMALE):	SEX RATIO:				SEX RATIO:				
	IMMATURE	MATURE	SPENT	TOTAL	MALE	FEMALE	IMMATURE	TOTAL	
NO.	39	125	1	165	134	165	1	300	
%	23.64	75.76	0.61	100.00	44.67	55.00	0.33	100.00	
% SAMPLE WEIGHT	3.91	19.63	0.00	23.55	75.92	82.24	34.00	79.25	
					% SAMP. WT.	42.79	57.07	0.14	100.00

Table 13. (cont'd) Test fishing sample summaries by statistical area

AREA: 10 - SMITH INLET
 SAMPLE NUMBERS: 75,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 2/98

SPECIMENS AT EACH AGE:		AGE										TOTAL	
=====		0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE		0	2	21	40	19	6	7	1	1	0	3	100
% AT AGE		0.00	2.06	21.65	41.24	19.59	6.19	7.22	1.03	1.03	0.00	0.00	100.00
LENGTH - MEAN (mm)		0.00	146.00	170.95	169.75	164.26	181.17	183.57	192.00	192.00	0.00	168.67	170.55
- STD. DEV.		0.00	15.56	12.14	14.95	18.11	17.45	19.36	0.00	0.00	0.00	18.90	16.54
WEIGHT - MEAN (gm)		0.00	31.00	64.48	64.53	57.37	73.00	79.43	83.00	90.00	0.00	65.00	64.49
- STD. DEV.		0.00	8.49	15.04	16.96	21.33	23.86	21.93	0.00	0.00	0.00	22.07	19.31

HJORT MATURITY STAGES:		MATURITY STAGE								
=====		1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE		0	0	4	57	36	1	1	0	1
% AT STAGE		0.00	0.00	4.00	57.00	36.00	1.00	1.00	0.00	1.00

ROE MATURITY (FEMALE):		SEX RATIO:				SEX RATIO:	
=====		IMMATURE	MATURE	SPENT	TOTAL	MALE	FEMALE
NO.		52	5	0	57	41	57
%		91.23	8.77	0.00	100.00	41.00	57.00
% SAMPLE WEIGHT		17.03	1.80	0.00	18.83	59.39	69.33
						37.76	61.28
						0.96	100.00

Table 13. (cont'd) Test fishing sample summaries by statistical area

AREA: 13 - QUATHIASKI
 SAMPLE NUMBERS: 188,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: FEB 24/98

SPECIMENS AT EACH AGE:		AGE										TOTAL	
=====		0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	5	64	20	5	4	0	0	0	0	0	2	100
% AT AGE	0.00	5.10	65.31	20.41	5.10	4.08	0.00	0.00	0.00	0.00	0.00	0.00	100.00
LENGTH - MEAN (mm)	0.00	145.40	171.97	177.05	184.80	194.75	0.00	0.00	0.00	0.00	0.00	178.50	173.34
- STD. DEV.	0.00	10.76	11.67	9.09	12.56	4.27	0.00	0.00	0.00	0.00	0.00	24.75	13.76
WEIGHT - MEAN (gm)	0.00	39.20	72.00	80.45	93.80	105.75	0.00	0.00	0.00	0.00	0.00	83.00	74.71
- STD. DEV.	0.00	11.95	15.82	15.07	21.98	13.67	0.00	0.00	0.00	0.00	0.00	29.70	19.40

HOJORT MATURITY STAGES:		MATURITY STAGE								
=====		1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	1	4	2	82	11	0	0	0	0	0
% AT STAGE	1.00	4.00	2.00	82.00	11.00	0.00	0.00	0.00	0.00	0.00

ROE MATURITY (FEMALE):		IMMATURE				MATURE				SEX RATIO:			
=====		=====				=====				=====			
		TOTAL				SPENT				TOTAL			
		TOTAL				TOTAL				TOTAL			
NO.	51	4	0	55	41	55	4	100	41	55	4	100	
%	92.73	7.27	0.00	100.00	41.00	55.00	4.00	100.00	41.00	55.00	4.00	100.00	
% SAMPLE WEIGHT	16.45	1.97	0.00	18.42	76.29	76.58	32.75	74.71	76.29	76.58	32.75	74.71	
					% MALE	% FEMALE	% IMMATURE	% TOTAL	% MALE	% FEMALE	% IMMATURE	% TOTAL	
					41.87	56.38	1.75	100.00	41.87	56.38	1.75	100.00	

Table 13. (cont'd) Test fishing sample summaries by statistical area

AREA: 14 - COMOX
 SAMPLE NUMBERS: 181,242, 42, 23, 58, 62, 43, 24, 63, 5, 51, 59,
 32, 33, 6, 25, 34, 17, 45, 7, 26, 1, 10, 28,
 57, 61, 22,241,150,228, 14,208,187, 47, 21,202,
 38,192, 30, 49,194, 48, 65, 12, 53, 64, 35, 27,
 2, 46,191,230, 36,

SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: FEB 21/98 - MAR 11/98

SPECIMENS AT EACH AGE:		AGE										TOTAL	
=====		0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	1	166	2415	1572	614	132	109	36	12	2	241	5300	
% AT AGE	0.02	3.28	47.74	31.07	12.14	2.61	2.15	0.71	0.24	0.04	0.00	100.00	
LENGTH - MEAN (mm)	80.00	158.04	176.10	191.65	200.67	207.27	215.01	220.64	225.33	230.00	185.34	185.41	
- STD. DEV.	0.00	11.99	12.39	11.82	10.49	9.74	10.66	10.00	10.07	0.00	21.19	17.35	
WEIGHT - MEAN (gm)	4.00	50.73	72.98	94.21	108.48	121.46	135.76	144.08	159.17	148.50	86.69	86.51	
- STD. DEV.	0.00	11.30	16.03	17.90	17.64	21.56	20.46	18.71	30.95	3.54	28.32	25.05	

HJORT MATURITY STAGES:		MATURITY STAGE								
=====		1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	4	24	2	839	3602	794	10	1		
% AT STAGE	0.08	0.45	0.04	15.83	67.96	14.98	0.45	0.19	0.02	

ROE MATURITY (FEMALE):		SEX RATIO:				SEX RATIO:			
=====		IMMATURE	MATURE	SPENT	TOTAL	MALE	FEMALE	IMMATURE	TOTAL
NO.	481	2069	13	2563		2719	2563	18	5300
%	18.77	80.73	0.51	100.00		51.30	48.36	0.34	100.00
% SAMPLE WEIGHT	3.37	21.06	0.02	24.45		83.05	90.49	42.61	86.51
						49.25	50.58	0.17	100.00

Table 13. (cont'd) Test fishing sample summaries by statistical area

AREA: 23 - BARKLEY SOUND
 SAMPLE NUMBERS: 222,189,231,204,224,175,206,176,178,225,
 209,174,182,171,205,157, 18,223,212,226,
 232,220,115,221,119,180,203,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: FEB 19/98 - MAR 13/98

SPECIMENS AT EACH AGE:		AGE										TOTAL	
=====		0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE		0	61	563	1560	166	75	49	43	34	12	137	2700
% AT AGE		0.00	2.38	21.97	60.87	6.48	2.93	1.91	1.68	1.33	0.47	0.00	100.00
LENGTH - MEAN (mm)		0.00	163.98	178.74	194.76	200.46	213.01	222.02	223.28	228.94	227.25	196.41	193.19
- STD. DEV.		0.00	10.12	10.08	10.77	10.19	9.46	8.87	9.03	8.07	5.61	18.32	15.80
WEIGHT - MEAN (gm)		0.00	59.51	78.42	102.98	112.87	135.71	144.84	145.84	152.88	159.08	106.76	100.91
- STD. DEV.		0.00	12.20	14.81	18.66	18.73	19.57	16.30	17.74	17.27	18.67	27.59	25.35

HOOT MATURITY STAGES:		MATURITY STAGE							
=====		1	2	3	4	5	6	7	8
NO. AT STAGE		0	10	4	424	1571	642	43	6
% AT STAGE		0.00	0.37	0.15	15.70	58.19	23.78	1.59	0.22

ROE MATURITY (FEMALE):		IMMATURE				MATURE				SEX RATIO:	
=====		TOTAL				TOTAL				=====	
		NO.	%	MEAN WEIGHT	% SAMP. WT.	MALE	FEMALE	IMMATURE	TOTAL	MALE	FEMALE
NO.		260	1012	7	1279	1418	1279	3	2700	52.52	47.37
%		20.33	79.12	0.55	100.00	94.58	107.93	0.11	100.00	49.23	50.67
% SAMPLE WEIGHT		4.13	21.96	0.00	26.08	94.58	107.93	96.00	100.91	0.11	100.00

Table 13. (cont'd) Test fishing sample summaries by statistical area

AREA: 25 - NOOTKA SOUND
 SAMPLE NUMBERS: 201,229,210,184,197,200,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: FEB 24/98 - MAR 5/98

SPECIMENS AT EACH AGE: =====	AGE										TOTAL	
	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+		UNKNOWN
NO. AT AGE	0	10	146	316	28	23	36	11	7	1	22	600
% AT AGE	0.00	1.73	25.26	54.67	4.84	3.98	6.23	1.90	1.21	0.17	0.00	100.00
LENGTH - MEAN (mm)	0.00	159.80	179.21	195.54	200.96	214.96	219.03	219.36	220.71	219.00	195.05	194.13
- STD. DEV.	0.00	11.90	8.16	9.86	10.75	7.80	10.49	9.86	9.50	0.00	23.72	16.05
WEIGHT - MEAN (gm)	0.00	53.70	78.31	103.52	112.89	138.96	139.61	143.82	142.71	145.00	108.82	101.97
- STD. DEV.	0.00	10.83	13.28	18.07	20.04	16.15	21.33	15.20	23.81	0.00	34.28	26.41

HUORT MATURITY STAGES:
 =====

NO. AT STAGE % AT STAGE	MATURITY STAGE								
	1	2	3	4	5	6	7	8	UNKNOWN
0	1	0	0	31	328	229	10	1	0
0.00	0.17	0.00	5.17	54.67	38.17	1.67	0.17	0.00	0.00

ROE MATURITY (FEMALE):
 =====

NO. % % SAMPLE WEIGHT	IMMATURE		MATURE		SPENT	TOTAL	SEX RATIO: =====		TOTAL
	NO.	%	NO.	%			MALE	FEMALE	
23	7.74	1.22	274	92.26	0	297	302	297	1
					0.00	100.00	50.33	49.50	0.17
					0.00	25.85	97.75	106.12	147.00
							48.25	51.51	0.24
									100.00

Table 13. (cont'd) Test fishing sample summaries by statistical area

AREA: 27 - QUATSINO SOUND
 SAMPLE NUMBERS: 68, 19, 20,
 SOURCE: TEST FISHERY
 GEAR: HERRING SEINE
 DATE: MAR 4/98 - MAR 13/98

SPECIMENS AT EACH AGE: =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	4	112	140	14	1	8	7	2	0	12	300
% AT AGE	0.00	1.39	38.89	48.61	4.86	0.35	2.78	2.43	0.69	0.00	0.00	100.00
LENGTH - MEAN (mm)	0.00	148.50	175.80	189.71	192.21	194.00	217.25	221.86	227.00	0.00	165.25	184.86
- STD. DEV.	0.00	6.35	9.74	10.23	12.84	0.00	5.70	12.54	9.90	0.00	17.73	16.03
WEIGHT - MEAN (gm)	0.00	43.50	75.06	97.24	99.29	124.00	132.75	153.00	149.00	0.00	62.58	89.64
- STD. DEV.	0.00	4.51	14.22	17.50	18.03	0.00	22.22	18.90	24.04	0.00	20.29	24.65

HJORT MATURITY STAGES: =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	0	0	8	210	80	2	0	0
% AT STAGE	0.00	0.00	0.00	2.67	70.00	26.67	0.67	0.00	0.00

ROE MATURITY (FEMALE): =====

	IMMATURE	MATURE	SPENT	TOTAL	MALE	FEMALE	IMMATURE	TOTAL
NO.	8	158	1	167	133	167	0	300
%	4.79	94.61	0.60	100.00	44.33	55.67	0.00	100.00
% SAMPLE WEIGHT	0.76	25.15	0.00	25.91	82.58	95.26	0.00	89.64
					40.84	59.16	0.00	100.00

SEX RATIO: =====

NO.	133	167
%	44.33	55.67
MEAN WEIGHT	82.58	95.26
% SAMP. WT.	40.84	59.16

Table 14. NTC sample summaries by section

SECTION: 232 - MACOAH PASS
 SAMPLE NUMBERS: 346,366,356,367,371,370,362,368,357,363,
 364,369,358,365,359,361,360,
 SOURCE: OTHER
 GEAR: OTHER SEINE
 DATE: MAR 7/98 - MAR 17/98

SPECIMENS AT EACH AGE: =====

	0+	1+	2+	3+	4+	5+	6+	7+	8+	9+	UNKNOWN	TOTAL
NO. AT AGE	0	53	381	957	113	39	32	22	11	2	89	1699
% AT AGE	0.00	3.29	23.66	59.44	7.02	2.42	1.99	1.37	0.68	0.12	0.00	100.00
LENGTH - MEAN (mm)	0.00	166.11	177.70	193.71	200.04	207.46	216.78	223.50	227.55	229.50	191.63	190.97
- STD. DEV.	0.00	10.33	10.61	10.73	9.73	10.65	7.68	10.45	6.86	3.54	19.30	15.34
WEIGHT - MEAN (gm)	0.00	57.55	70.62	93.01	98.85	114.74	120.78	134.55	142.82	168.50	94.62	89.33
- STD. DEV.	0.00	10.94	14.05	17.68	16.95	20.69	15.52	21.58	14.88	28.99	29.59	22.82

HJORT MATURITY STAGES: =====

	1	2	3	4	5	6	7	8	UNKNOWN
NO. AT STAGE	0	1	0	0	294	617	753	34	0
% AT STAGE	0.00	0.06	0.00	0.00	17.30	36.32	44.32	2.00	0.00

ROE MATURITY (FEMALE): =====

	IMMATURE	MATURE	SPENT	TOTAL	MALE	FEMALE	IMMATURE	TOTAL
NO.	0	415	227	642	1057	642	0	1699
%	0.00	64.64	35.36	100.00	62.21	37.79	0.00	100.00
% SAMPLE WEIGHT	0.00	17.40	0.32	17.72	85.42	95.76	0.00	89.33
					% SAMP. WT.	40.51	0.00	100.00

SEX RATIO: =====

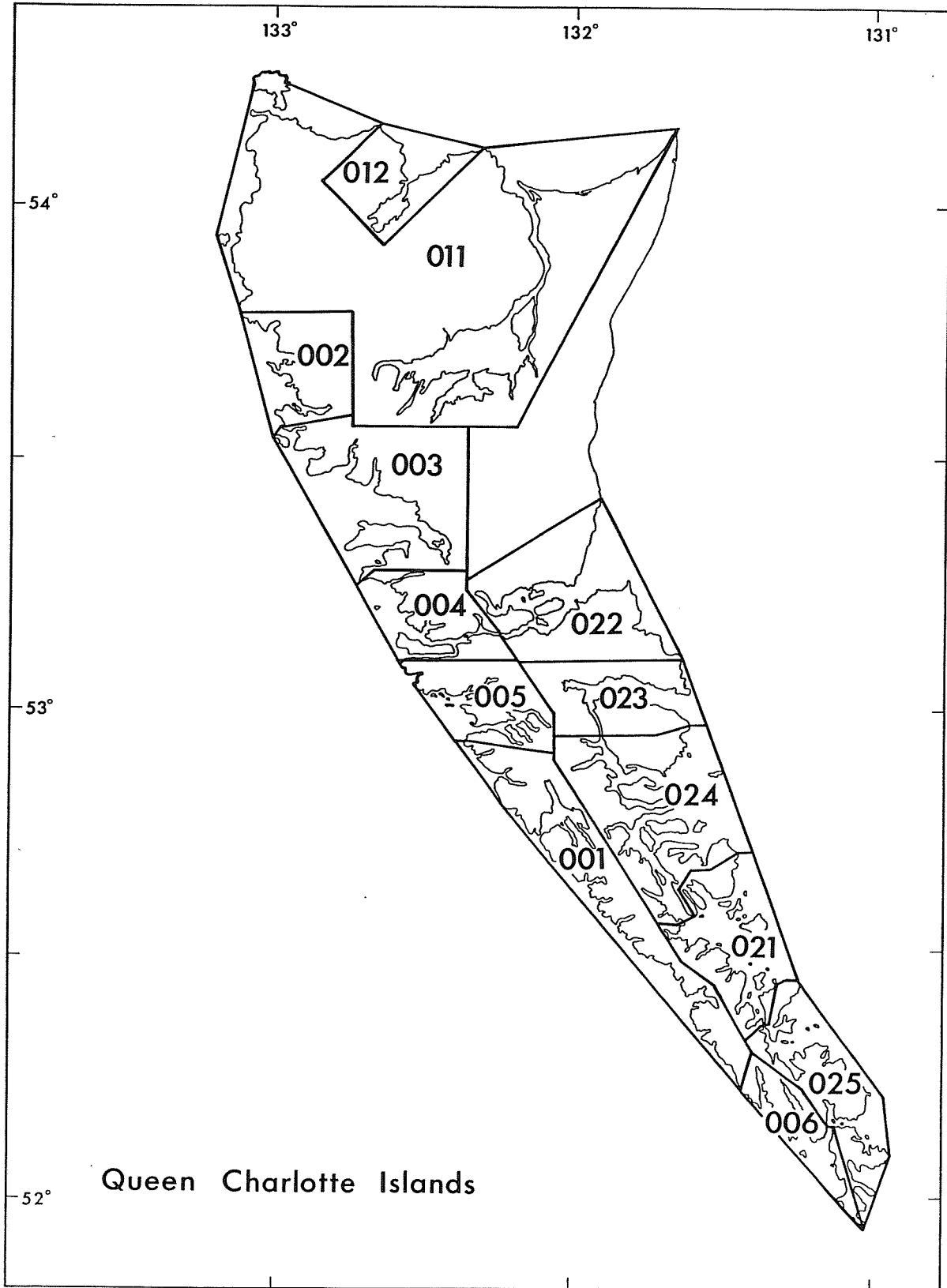


Fig. 1. Herring sections in the Queen Charlotte Islands region

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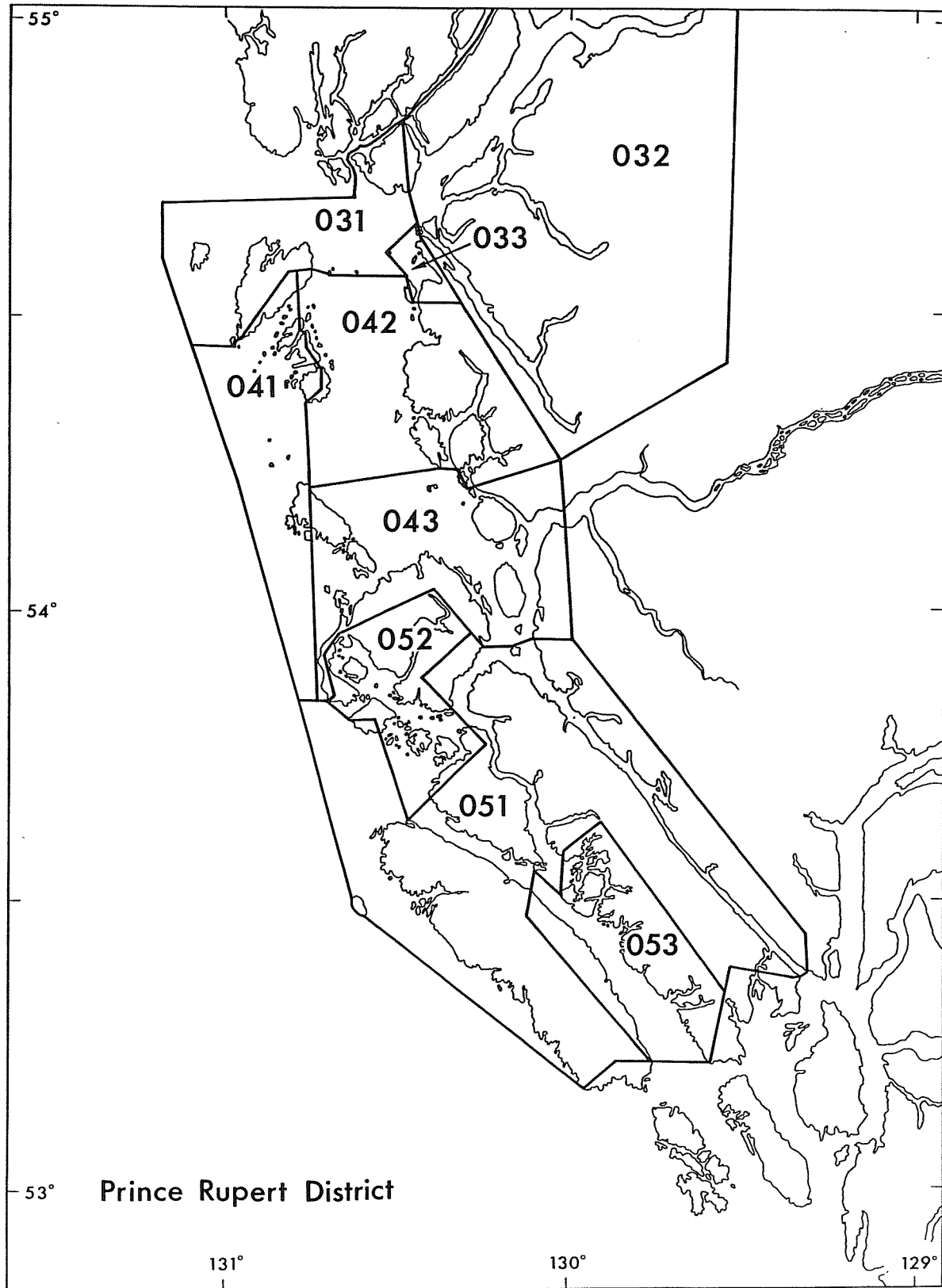


Fig. 2. Herring sections in the Prince Rupert District region

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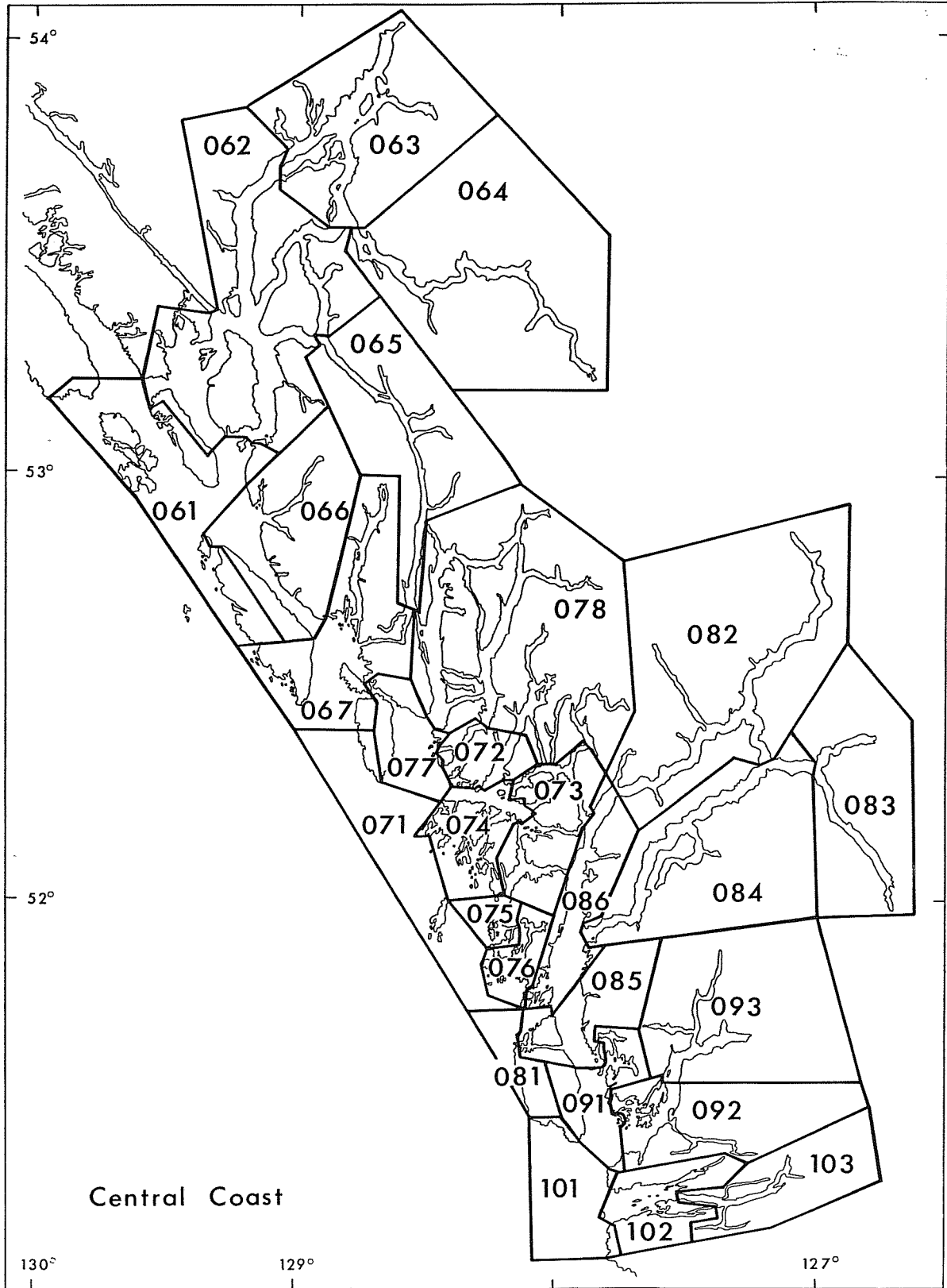


Fig. 3. Herring sections in the Central Coast region

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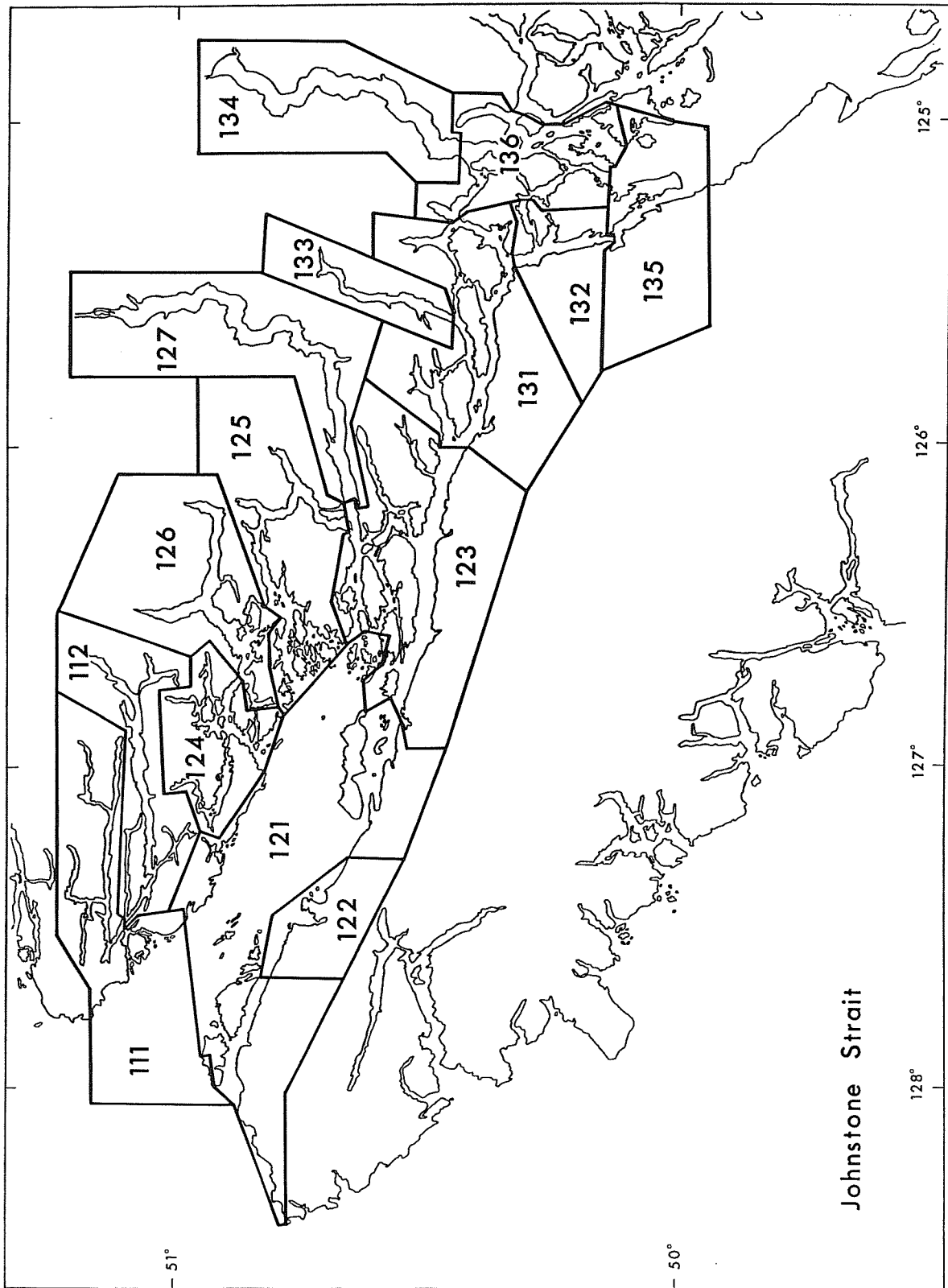


Fig. 4. Herring sections in the Johnstone Strait region

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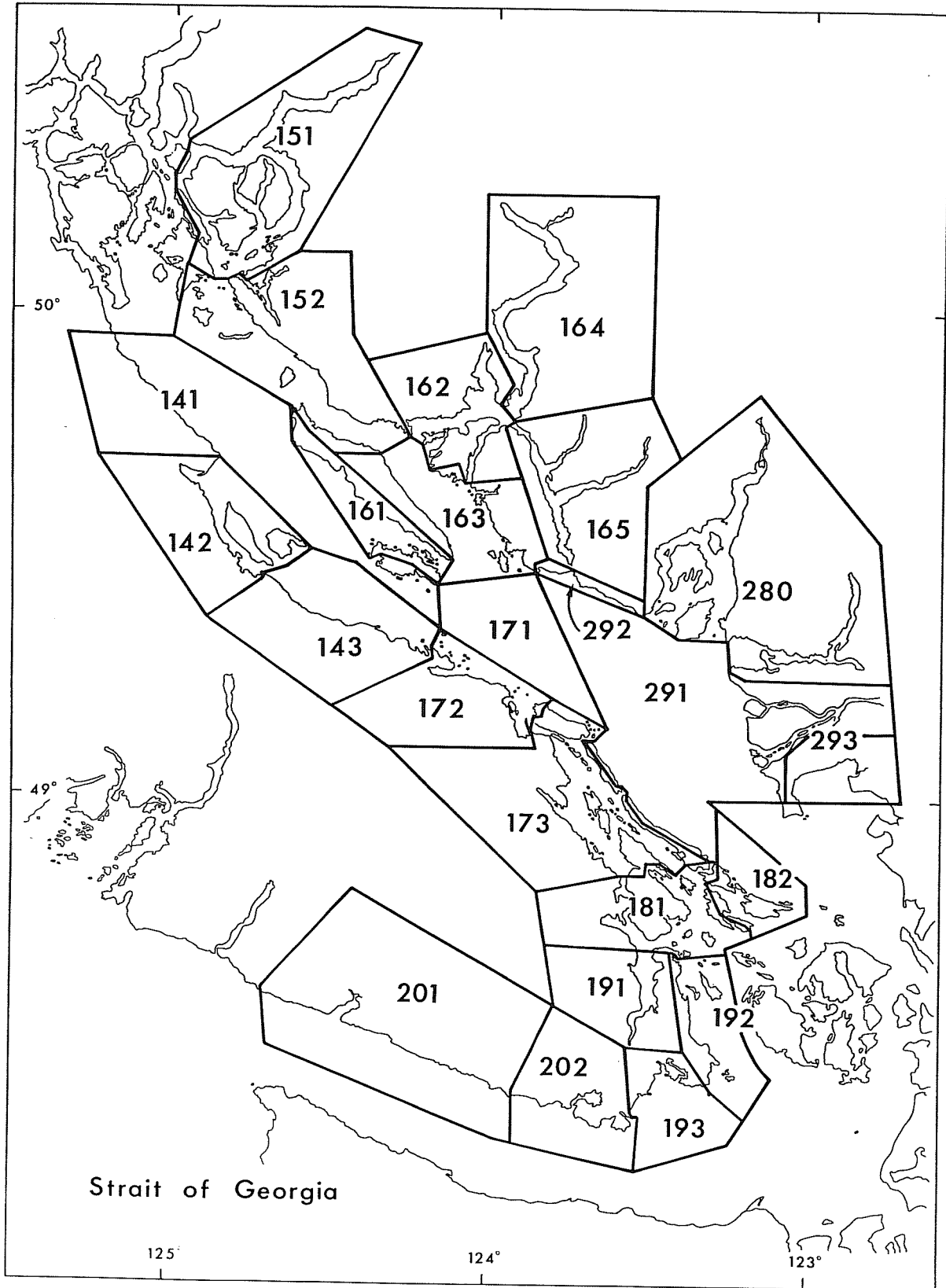


Fig. 5. Herring sections in the Strait of Georgia region

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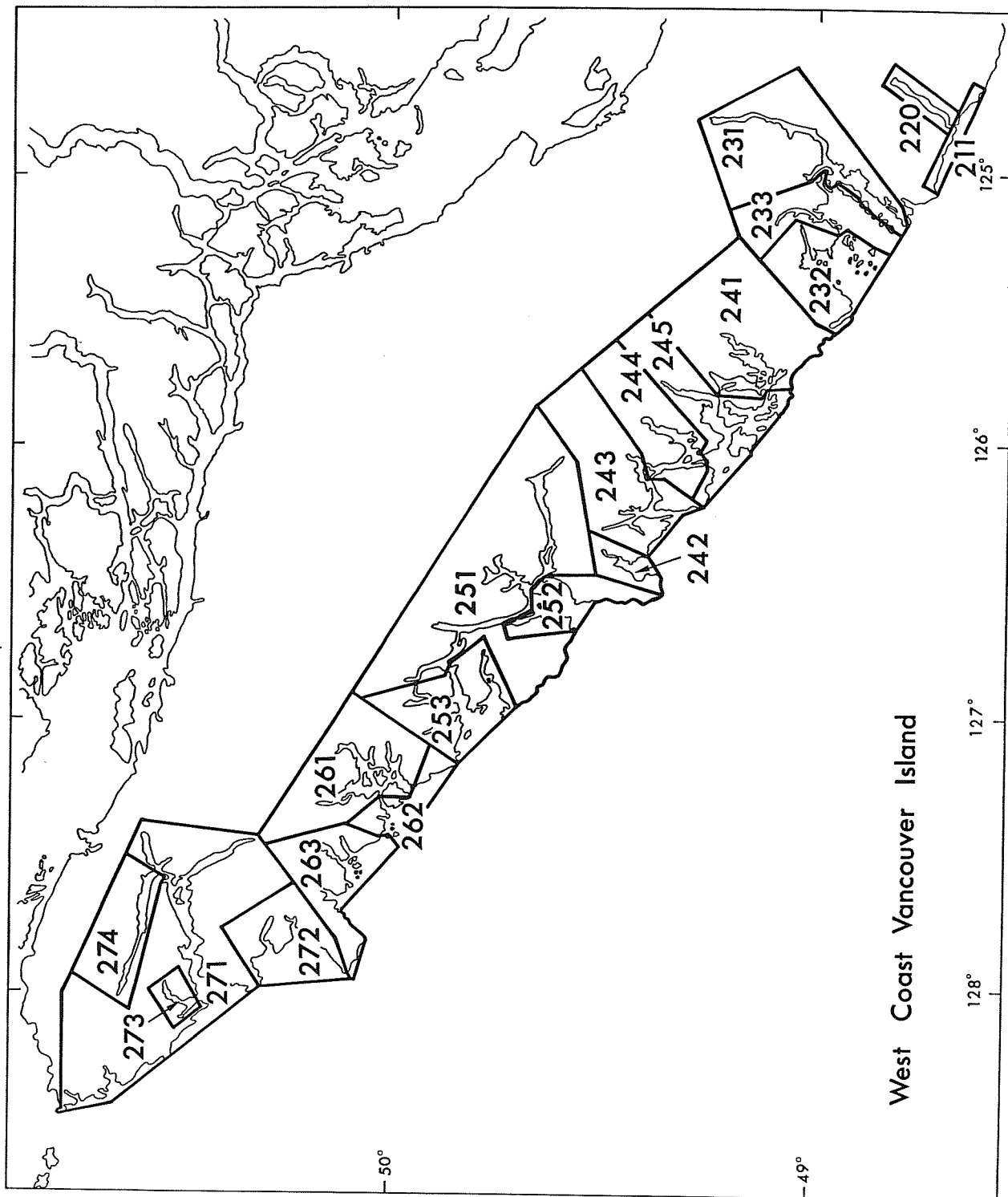


Fig. 6. Herring sections in the west coast of Vancouver Island region

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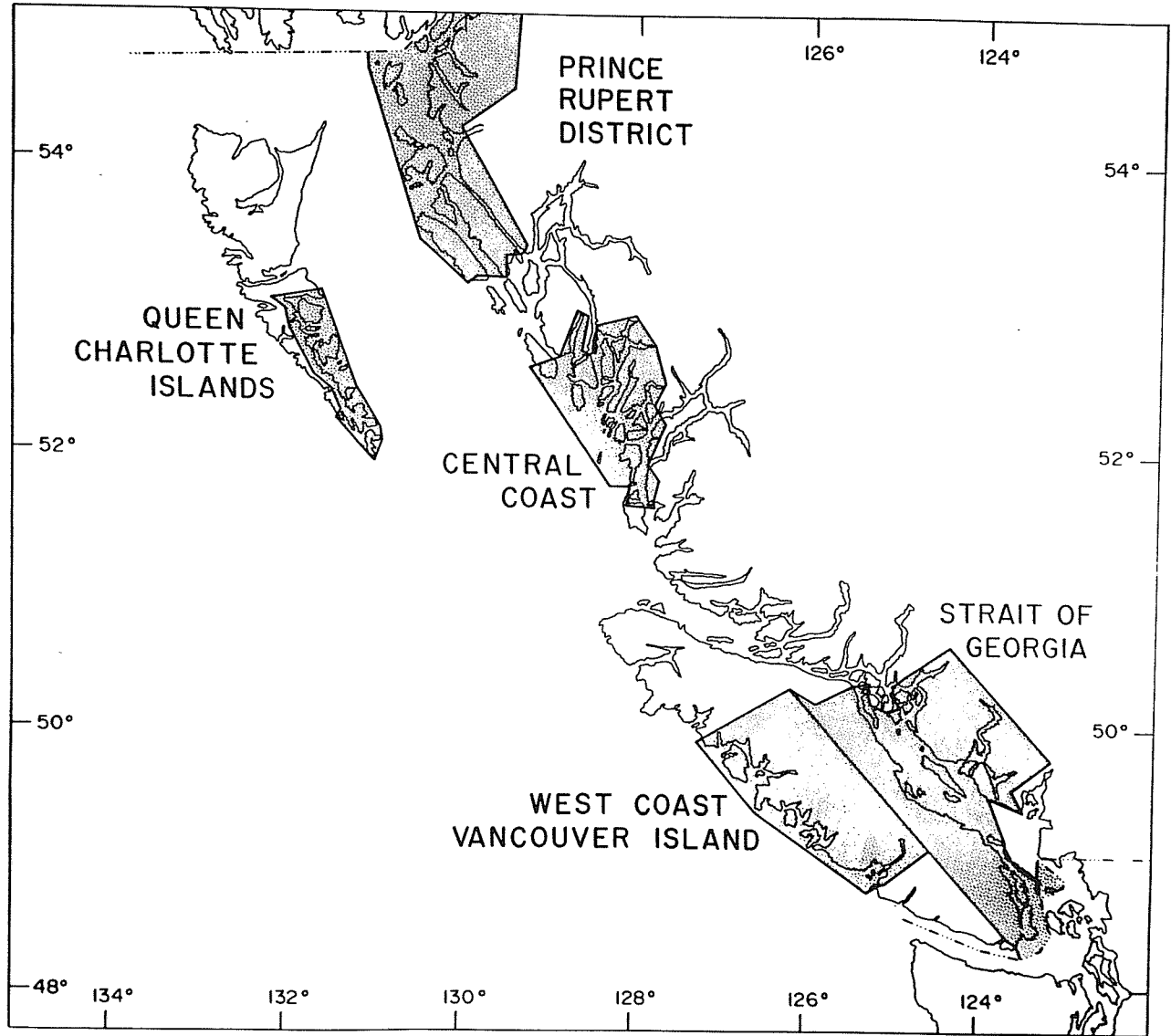


Fig. 7. Herring stock assessment regions in British Columbia