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# **Review of the 1977-78 British Columbia Herring Fishery and Spawn Abundance**

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January 1980

## **Canadian Industry Report of Fisheries and Aquatic Sciences No. 112**



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La page couverture porte le nom de l'établissement auteur où l'on peut se procurer les rapports sous couverture cartonnée.

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REVIEW OF THE 1977-78 BRITISH COLUMBIA  
HERRING FISHERY AND SPAWN ABUNDANCE

by

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ABSTRACT

Webb, L. A. 1979. Review of the 1977-78 British Columbia herring fishery and spawn abundance. Can. Ind. Rep. Fish. Aquat. Sci. 112: 43 p.

The 1977-78 roe herring fishery took 70,000 tons with a landed value of \$56 million. The food fishery took another 22,000 tons with \$3.3 million. Spawn deposition was 20.6 million standard square yards, well above the 8-year average of 12.3 million.

Key words: Pacific herring, fishery, catch, spawn.

RÉSUMÉ

WEBB, L. A. 1979. Review of the 1977-78 British Columbia herring fishery and spawn abundance. Can. Ind. Rep. Fish. Aquat. Sci. 112: 43 p.

En 1977-1978, les prises de hareng oeuvé ont totalisé 70,000 tonnes, ce qui représente une valeur au débarquement de 56 millions de dollars. Pour ce qui est des captures destinées à l'utilisation du poisson lui-même, elles se sont montées à 22,000 tonnes, soit une valeur de 3 millions de dollars. Les dépôts d'oeufs couvraient 20,6 millions de verges carrées normales, dépassant donc de loin la moyenne des 8 dernières années, établie à 12,3 millions.

Mots clés: hareng du Pacifique, pêche, prise, fraye.



## INTRODUCTION

Prior to the 1977-78 fishing season, fishing managers proposed catch limits for each major herring stock. The proposals were then reviewed by representatives from the fishing industry before establishment of final management guidelines. In advance of each major roe fishery, when the fish are near the spawning grounds, test fishing is carried out to verify stock size, and age compositions and acoustic biomass estimates are made by Patrol and chartered vessels. Catch limits may be adjusted on the basis of this pre-fishery data. After it appears safe to proceed with proposed fishing patterns, it is then necessary to determine when the herring roe will be mature enough to meet market demands. Ideally, at least ten percent of the total catch weight should be roe of sufficient quality to satisfy markets. Once these requirements are met, the fishery is opened. It is the Fishery Officer's job to ensure that stocks are not overexploited.

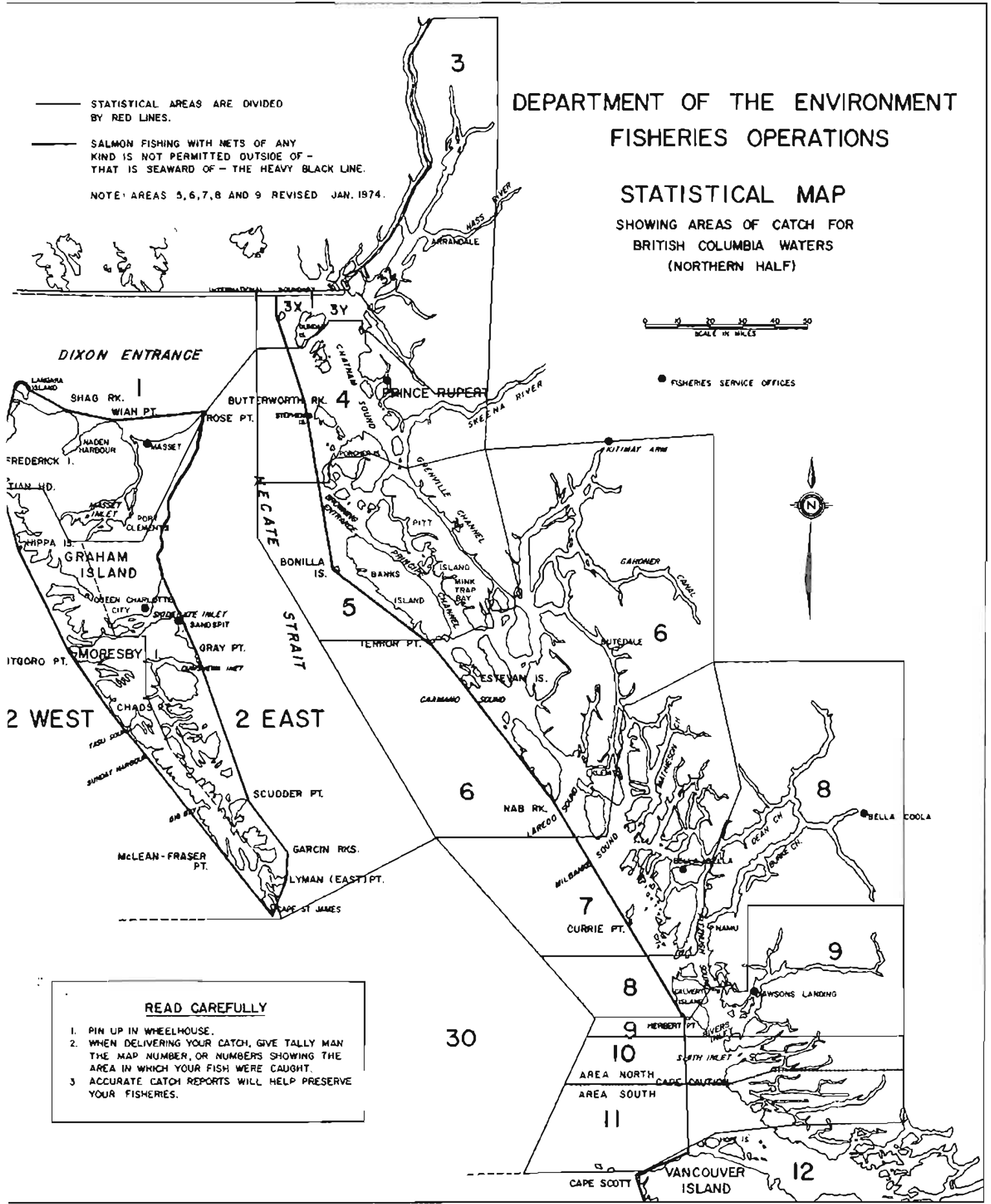
This report outlines the pre-fishery catch limits, hailed estimates and landed catch tonnages along with opening dates and times for each fishery. The report also tables all herring spawn depositions recorded in 1978 and summarizes depositions by statistical area (Figs. 1 and 2) from 1970 to 1977.

## SURVEY METHODS

The data base for the fishery portion of this report is extracted from Fishery Officers' daily radio-telephone reports to Field Operations Headquarters in Vancouver. The reports contain pre-fishery test data, fishing gear counts, opening and closure times, catch estimates or hailed figures, and weather reports. The official landed catch figures are compiled from fishing company sales slips, obtained by the Economics and Special Industry Services Directorate. Since sales slip catches are reported primarily by statistical area and not by actual fishing location or Management Unit (geographically "close" fishing and spawning locations), the narrative on various fisheries may use both "hailed" and "landed" catch data.

In the section "The amount of herring spawn deposited in 1978", all data are taken from annual field reports as submitted by District Officers to Vancouver Headquarters where they are computer processed. The data are recorded by officers who measure the length and width of each deposition. Since most spawnings occur in the intertidal and upper subtidal zone, the deeper extent of depositions has to be ascertained by dragging a hook apparatus to determine if herring eggs are on deep water vegetation such as algae. By plotting such deep drag sample sites on large-scale charts, estimates of deposition width are determined.

Figure 1 Northern Statistical Areas





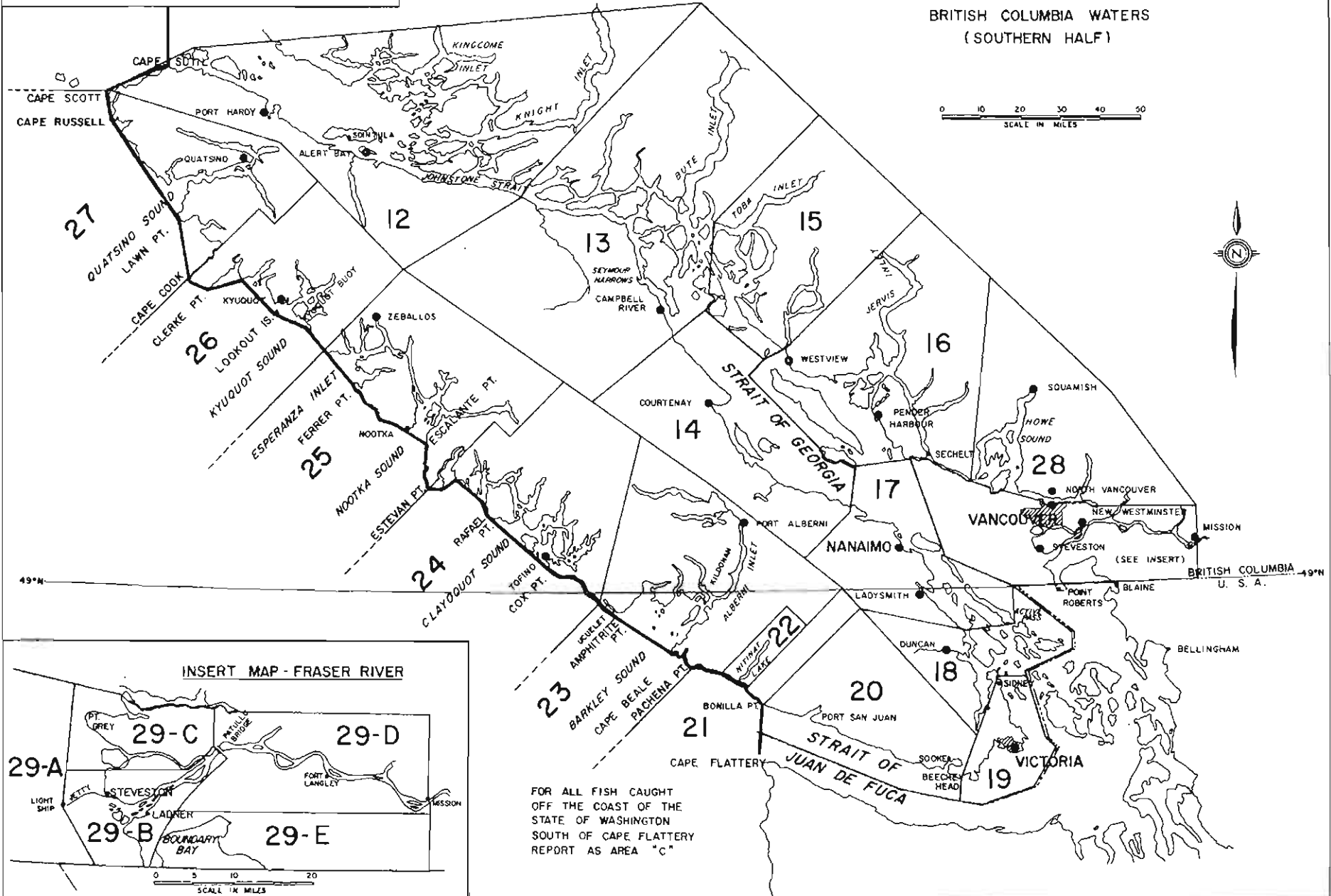
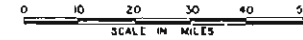
**READ CAREFULLY**

1. PIN UP IN WHEELHOUSE
2. WHEN DELIVERING YOUR CATCH, GIVE TALLY MAN THE MAP NUMBER, OR NUMBERS SHOWING THE AREA IN WHICH YOUR FISH WERE CAUGHT
3. ACCURATE CATCH REPORTS WILL HELP PRESERVE YOUR FISHERIES
4. FOR COMPLETE DETAILS, CONSULT BRITISH COLUMBIA FISHERIES REGULATIONS.

- STATISTICAL AREAS ARE DIVIDED BY RED LINES
- SALMON FISHING WITH NETS OF ANY KIND IS NOT PERMITTED OUTSIDE OF - THAT IS SEAWARD OF - THE HEAVY BLACK LINE.
- FISHERIES SERVICES OFFICES

DEPARTMENT OF THE ENVIRONMENT  
FISHERIES SERVICE

STATISTICAL MAP  
SHOWING AREAS OF CATCH FOR  
BRITISH COLUMBIA WATERS  
(SOUTHERN HALF)



FOR ALL FISH CAUGHT OFF THE COAST OF THE STATE OF WASHINGTON SOUTH OF CAPE FLATTERY REPORT AS AREA "C"

The "Miles of Spawn" index, used from the 1930's to 1976 has been under review for several years. Because deposition widths were not included in calculations (unless depositions were over 100 yards wide) and the intensity weighting system was inadequate (light spawnings were overweighted and heavy spawnings underweighted), the "Miles of Spawn" index is now replaced by "Square Yards at a Standard Intensity of Medium".

The method used to calculate Square Yards at a Standard Intensity of Medium is: Multiply the area by the weighting factor (Table 1) i.e., a deposition of 600 yards X 15 yards at medium-heavy intensity would be  $600 \times 15 \times 1.40 = 12.60 \text{ KSY}^2$  ( $1\text{KSY}^2=1,000 \text{ yd}^2$  at medium intensity).

#### THE 1977-78 B.C. FOOD & BAIT FISHERY

The 1977-78 herring food and bait fishery was considerably larger than previous years. A total of 21,597 tons was landed (Table 2) at various ports throughout B.C. with a total landed value of \$3.3 million. This was a marked increase over the 1976-77 season when only 7,000 tons were landed for a total value of \$875,000.

Of the 21,597 tons landed, 90% were processed as whole frozen herring, 6% were frozen for bait and the remaining 4% were processed in a variety of ways (salted, fillets, smoked, fresh).

A total of 135 seines and 26 trawls participated in the fishery with the seines accounting for 84% and trawls 16% of the catch.

Size requirements for food herring remained similar to previous years, with herring over 20 cm standard length being preferred.

As in past years, the most productive area was the Lower East Coast Sub-district (Areas 17, 18, and 19) where 10,652 tons (49% of total landings) were caught. The catch limit for this sub-district was reached before Christmas, with catches coming mainly from Trincomali and Swanson Channels.

The next largest fishery occurred in the Middle East Coast Sub-district (Areas 13, 14, 15, and 16) where 4,086 tons (19% of total landings) were caught mainly in Deepwater Bay and Granite Bay. During the early part of the fishery, most of the fish taken were smaller than the required 20 cm and it wasn't until the middle of December that larger fish were taken. All fish from this sub-district were taken before the Christmas closure.

The Northern Sub-district (Areas 3, 4, and 5) accounted for 3,642 tons (17% of total landings), which was considerably more than the 827 tons taken in 1976-77. The majority of the fish were caught off Bonilla Island in Area 5.

The Lower and Upper West Coast sub-districts (Areas 21, 23, 24, 25, 26, and 27) accounted for 2,887 tons (9% of total landings). Fishing took place on Swiftsure bank (Area 21), in Mayne Bay (Area 23), Esperanza Inlet (Area 25) and in the vicinity of Forward Harbour (Area 27).

#### THE 1978 BRITISH COLUMBIA ROE HERRING FISHERY

In early February, prior to the roe fishery, guidelines to fishermen and processors explained licence entry requirements, proposed fishing patterns and catch limits for each sub-district. The following table outlines the proposed catch division by gear and limits prior to the 1978 roe fishery.

	Seine	Gillnet	Total
Queen Charlotte Islands	12,000	3,000	15,000
North Coast	6,000	3,000	9,000
Central Coast	6,000	10,000	16,000
Sub Total	24,000 (60%)	16,000 (40%)	40,000
West Coast Vancouver Island	20,000	10,000	30,000
Gulf of Georgia	5,200	6,800	12,000
Johnstone Strait		250	250
Sub Total	25,200 (60%)	17,050 (40%)	42,250
Totals	49,200 (60%)	33,050 (40%)	82,250

Industry was cautioned that these catch predictions could be altered to provide required spawn escapements, roe production and to facilitate the coastwide gear split.

The 1978 fishery took place from February 26, 1978 to March 30, 1978 and fishermen landed approximately 70,000 tons worth about \$56 million dollars. This compares to landings of 80,872 tons worth \$29 million dollars in 1977, 86,835 tons worth \$22 million dollars in 1976 and 58,728 tons worth \$12.5 million dollars in 1975 (Table 4).

The following is a résumé of the fishery by herring sub-district.

QUEEN CHARLOTTE ISLANDS (AREAS 1 AND 2)

Area 1

The waters of Naden Harbour opened to roe herring fishing at 1400 hours, February 26, 1978. A small gillnet fishery took place involving 16 skiffs. The total gillnet haul amounted to 129 tons at about 11% roe yield. The area closed to gillnet fishing March 7th due to low abundance of herring stocks in the area. This was the first year since the inception of the roe herring fishery in 1972 that Area 1 supported a commercial operation.

Area 2E

On Monday, March 20th, Skincuttle Inlet opened to both gillnets and seines. After two brief openings on the 20th and the 21st of March, 120 seines hauled 8,799 tons of herring at 12 to 16% roe yield. The 80 gillnetters which operated in Skincuttle Inlet caught 2,272 tons of herring at 12 to 16% roe yield prior to the season closure at 1600 hours, March 24th.

Area 2W

Louscoone Inlet, inside a line from Tuga Point to Etches Point, opened to gillnet fishing on Tuesday, March 14th and closed on Saturday, March 18th. Thirty-three gillnetters caught 650 tons of herring at 14 to 16% roe yield.

The waters inside a line drawn from Louscoone Point to Ninstant Point opened to seine fishing on Friday, March 17th and closed until further notice on Saturday, March 18th; 80 seiners caught 2,235 tons at 12 to 14% roe yield. During the early stages of the fishery in Louscoone Inlet, poor weather was a controlling factor.

A short (10 hour) fishery occurred in Inskip Channel on Tuesday, March 28th during which 11 seiners caught 840 tons with a roe yield ranging from 10 to 14%. Flamingo Inlet was not opened this year.

NORTH COAST (AREAS 3, 4, AND 5)

Areas 3 and 4

On Thursday, March 30th the waters southerly of Maskelyne Point and northerly of Tree Bluff Point opened to both gear types. The ensuing fishery for the seiners was very short (5 hours), during which time the 150 seiners caught 1,600 tons of herring at 9 to 13% roe recovery. The seine fleet had another brief opening shortly after (2 hours on March 31st), but nothing was harvested.

The gillnet fishery closed on Friday, March 31st with 200 gillnetters catching 1,700 tons at 10 to 13% roe yield.

#### Area 5

On Thursday, March 30th the waters of Dries Inlet (Kitkatla) opened to both gear types. After a brief 1 hour and 25 minute fishery, Dries Inlet was closed to seines with 54 seiners hailing 475 tons with the roe yield ranging from 10 to 13.5%. Gillnetting closed on March 31st with 150 gillnetters catching 1,500 tons of herring at 10 to 13.5% roe yield.

The Northern Herring Sub-District fishery was disappointing in that the fish did not show on the grounds in the expected quantity and were of mixed maturity. As a result, only half the expected catch was taken.

#### UPPER CENTRAL (AREA 6)

#### Area 6

On Wednesday, March 22nd, Kitasu Bay opened and closed to seine fishing. During a 7 hour period, 6 to 11 seiners harvested 580 tons of herring at 14 to 15% roe yield. On Thursday, March 23rd, Area 6 opened to gillnet fishing and closed on Saturday, March 25th. A harvest of 2,042 tons was taken by 150 gillnetters at 14 to 15% roe yield.

#### LOWER CENTRAL (AREAS 7, 8, 9, AND 10)

#### Area 7

On Sunday, March 5th that portion of Area 7 northerly of the northern tip of Goose Island opened to gillnet fishing; during the week a maximum of 120 gillnetters operated, hailing a total of 250 tons with the roe yield ranging from 10 to 14%.

In the following week, the fishing area was reduced to southerly of Idol Point and northerly of the north tip of Goose Island. The hailed catch for Area 7 rose to 974 tons with a roe yield ranging from 9 to 13%.

In the third week of the fishery, all of Area 7 opened to roe herring gillnet fishing. On March 20th, all the waters of the Central Herring Sub-District closed until further notice to gillnet fishing with the hailed catch tallied at 2,487 tons; about 550 gillnetters were in the area at the time of this closure.

On March 22nd, there was a 2 hour opening in the Thompson Bay/Houghton Island area where 40 seiners hailed 2,500 tons. Gillnets fished in Area 7 once again from March 23rd to March 25th. The total gillnet catch for this period was 5,554 tons.

A seine fishery was permitted in Kildidt Sound on March 29th at 1255 hours and closed at 1625 hours during which time the fleet of 70 seines harvested 2,686 tons with the maturity ranging from 9.7 to 11.5%.

The final haul figures for Area 7 were gillnets 8,040 tons and seines 5,176 tons.

#### Area 8

Opened to gillnets on March 19th in Kwakshua Channel only and closed on March 20th - with no recorded catches.

#### Area 9

All of Area 9 opened to gillnet fishing on March 19th and closed on March 20th. There were 4 gillnetters reported in the area but no catches were recorded.

#### Area 10

No fisheries.

### UPPER EAST COAST (AREA 11 AND 12)

#### Area 11

No fisheries.

#### Area 12

The fishing in Area 12 was very slow and as a result there were a number of openings and closures in the two locations fished.

Gillnets were permitted to fish on March 15th in Wakeman Sound and on March 19th in Knight Inlet.

Seines were permitted to fish on March 20th to March 22nd with several closures occurring during this period in Wakeman Sound.

Finally, on Friday, April 7th, Area 12 was closed for the balance of the season to both gear types. Gillnets harvested 115 tons and seines harvested 525 tons. The fishing fleet was very small with 5 to 10 gillnetters and approximately 13 seiners. The roe yields ranged from 7 to 10% from all fisheries.

MIDDLE EAST COAST (AREAS 13, 14, 15, AND 16)

Area 13

No fisheries.

Area 14

The Denman/Hornby Island and the Qualicum Beach portions of the area were opened to gillnets only on Monday, March 6th. Northwest Bay opened to gillnets on Tuesday, March 7th. Sampling prior to opening in the Strait of Georgia indicated large fish with small gonad development. The roe yield of gillnet caught fish was not expected to reach 11% overall. All of Area 14 closed to gillnet fishing on Tuesday, March 14th. A total hailed catch of 1,699 tons was taken by a fleet of approximately 214 gillnetters.

Area 15

No fisheries (small tonnages landed for spawn on kelp operations - Table 4).

Area 16

No fisheries (small tonnages landed for spawn on kelp operations - Table 4).

LOWER EAST COAST (AREAS 17, 18, AND 19)

Area 17

The Nanoose Bay location opened on March 9th to gillnets only, and Nanoose Harbour westerly of the Blunden Point-Wallis Point line was opened to seines. At the time, there was an estimated 20,000 to 30,000 tons of herring in the area between Maude Island and Nanoose Bay. After a series of short openings and closures, the area was closed to seines on Saturday, March 11th. The openings occurred as follows:

- Opened midnight Thursday, March 9th to 0800 Saturday, March 11th with 3,500 tons taken by 40 to 50 seiners.
- Opened at 1145 to 1200 Saturday, March 11th with 500 tons taken.
- Opened at 1615 to 1545 Saturday, March 11th with 1000 tons taken.

The total seine hailed catch was 5,050 tons and the fleet size was 40 to 50 seiners. The roe yield was approximately 14.5%. The gillnet fishery was completed on Tuesday, March 14th with the gillnet hailed catch totalling 5,024 tons. Some 320 gillnetters worked in the area and had 13% roe yield .

#### Area 18

The Ganges/Long Harbour area opened to roe herring fishing by means of gillnets Sunday, February 26th. At the time of the opening, there were approximately 254 gillnetters in the area. In the first week of fishing there was a total of 630 tons hailed at about 10% roe yield. In the following week the gillnet catches totalled 956 tons, at 10 to 11% roe yield, with a catch of 11 tons of spawned out fish occurring Sunday night, March 5th. Spawning in the area appeared light and the area closed at 1800 hours on Monday, March 6th until further notice and closed March 14th for the balance of the season. Final hailed figures for Area 18 was 1,039 tons of gillnet caught fish. No seine openings were permitted in this area due to low abundance.

#### Area 19

No fisheries.

### LOWER WEST COAST VANCOUVER ISLAND (AREAS 23 AND 24)

#### Area 23

On Wednesday, March 8th, Barkley Sound opened to gillnet fishing with the inside inlets closed to fishing. The area closed to gillnet fishing on Friday, March 10th with a total gillnet hailed catch of 6,067 tons with a 12% roe yield. About 225 gillnetters participated in the fishery. Commencing at 1000 hours on Friday, March 10th, a seine fleet of 200 vessels began fishing operations in Barkley Sound. All of Barkley Sound was closed shortly thereafter due to a high proportion of low roe yield fish in the catches. The area re-opened to seine fishing but only northerly and westerly of a line drawn from Lyall Point to Hankin Point and 215° seaward from Hankin Point. At 1400 hours on the same day, Barkley Sound closed by regulation to all roe herring fishing for the weekend. Despite an intensive sounding program to re-locate the stocks over the following three weeks, they were not found. Barkley Sound did not open again during the 1978 roe herring season. The seine catch totalled 3,100 tons, far short of the anticipated harvest.

#### Area 24

On Sunday, March 5th, Area 24 opened to gillnet fishing with 235 gillnetters in the area and roe yields averaging 10%, despite reports of small gonads. During the first few days of this fishery, weather hampered



the fishing operation and most boats were weather-bound. Area 24 was closed to the gillnet operation on March 10th with the catch by an estimated 200 gillnetters totalling 5,100 tons and roe yields ranging from 12 to 14%.

On March 8th, a limited area in the southern portion of Area 24 was opened to a seine fishery (Bedwell Sound, Tofino Inlet, Maurus Channel and Father Charles Channel). This fishery ended March 9th with a harvest of 2,180 tons with 11 to 12% roe yields.

#### UPPER WEST COAST VANCOUVER ISLAND (AREAS 25, 26, AND 27)

##### Area 25

Area 25 northerly of Ferrer Point opened to roe herring fishing by means of gillnets on March 5th when the maturity tests yielded 10%. It was noted that small gonads were apparent in the test sets. Weather again became a controlling factor. The area closed to gillnet fishing on March 15th after a total hailed catch of 3,423 tons had been taken by approximately 160 gillnetters. The roe yield ranged from 11.5 to 14%. Area 25 south of Ferrer Point (Nootka Sound) opened to seines on March 13th and closed to this gear the following day. The opening lasted 14 hours during which time 920 tons were taken with a low recovery of about 7.5%.

##### Area 26

Area 26 opened to gillnet fishing on March 5th and closed March 15th. No skiffs were reported in the area and no landings were recorded. There was no seine fishery in the area.

##### Area 27

A total of 60 tons of herring was caught between Tuesday, March 14th and Friday, March 31st in the Klaskish, Klaskino and Winter Harbour locations by a very small fleet of skiffs manned mostly by local fishermen. Roe yields as estimated by fishermen were satisfactory. This area was not opened to seines during the 1978 season.

Due to difficulty in reaching expected catch levels in Barkley Sound, Clayoquot Sound and in the Prince Rupert fishing areas, the coast-wide catch and anticipated gear split were not reached.

#### THE AMOUNT OF HERRING SPAWN DEPOSITED IN 1977

In 1978, a total of 20,649,000 Standard Square Yards (Table 5) of herring spawn was deposited on British Columbia beaches. This amount represents the largest total deposition since 1970. However, while most

sub-districts had average or better depositions the Northern (363,100 Standard Square Yards) and Upper East Coast sub-districts (146,600 Standard Square Yards) had relatively poor spawnings.

Area 16, in the Middle East Coast Sub-district, has shown an almost continuous decline in spawn deposition since 1970, but the neighbouring Area 15 has increased sufficiently to maintain a good level in the sub-district.

Spawn deposition in Area 23 dropped to levels near that of the early 1970's while Area 27 had a dramatic increase from less than 1 million Standard Square Yards annually to 2,596,600 Standard Square Yards in 1978.

The location, date and size of individual spawnings in 1978 is recorded in Table 6.

#### SUMMARY

1. In the 1977-78 herring season, approximately 22,000 tons of herring were landed for food purposes. That fishery was worth about \$3.3 million landed value to the fishermen. This represents a 3-fold increase in both tons and value over the previous season.

2. The Lower East Coast sub-district provided half of the food catch while most of the remainder came from the Middle East Coast (19%), Northern (17%), and Lower and Upper West Coast (9%) sub-districts.

3. In 1978, roe landings of approximately 70,000 tons were worth about \$56 million to the fishermen. This compares with 81,000 tons worth \$29 million in 1977.

4. Seines took 41% of the roe catch, (down from 58% in 1977) while gillnets took the remainder.

5. Most of the decline in roe catch from the 1977 level resulted from failure of the large Barkley Sound run to appear on the spawning grounds in its usual numbers.

6. A major decline in the Middle East Coast catch was balanced by a comparable increase in the Lower East Coast catch.

7. The Lower West Coast again provided the largest proportion (26%) of the roe catch but this proportion was down from 1977 (43%). Other major catches were taken in the Lower Central (19%) Queen Charlotte Islands (18%), Lower East Coast (13%) and Northern (10%) sub-districts.

8. Spawn deposition in 1978 was 20.6 million standard square yards, up 21% from 1977 and well above the average for the preceding 8 years.

Table 1 Herring spawn intensity categories and weighting factors used to calculate square yards at a standard intensity of medium

	NO. EGGS PER LINEAL INCH OF EELGRASS OR JAPWEED	NO. EGGS PER SQUARE INCH OF KELP, ROCK- WEED OR SEA LETTUCE	NO. EGGS / SQUARE YARD	WEIGHTING FACTOR
1. Very light	1-25	1-50	41,914	.05
2. Very light-light			152,683	.20
3. Light	25-100	50-200	352,242	.40
4. Light-medium			556,187	.65
5. Medium	100-250	200-500	843,259	.00
6. Medium-heavy			1,184,776	1.40
7. Heavy	250-500	500-1000	1,579,407	1.90
8. Heavy-very heavy			2,026,052	2.40
9. Very heavy	500 up	1000 up	2,523,780	3.00

Table 2 British Columbia Food and Bait Landings (tons) by Gear for the 1977-78 Season.

Sub District	Trawl	Seine	Total
<i>Queen Charlottes</i>			
Area 1	-	<u>56</u>	<u>56</u>
Total	-	56	56
<i>Northern</i>			
Area 4	79	356	435
Area 5	<u>1,049</u>	<u>2,158</u>	<u>3,207</u>
Total	1,128	2,514	3,642
<i>Upper Central</i>			
Area 6	-	<u>63</u>	<u>63</u>
Total	-	63	63
<i>Upper East Coast</i>			
Area 12	-	<u>211</u>	<u>211</u>
Total	-	211	211
<i>Middle East Coast</i>			
Area 13	900	3,155	4,055
Area 14	-	2	2
Area 16	-	<u>29</u>	<u>29</u>
Total	900	3,186	4,086
<i>Lower East Coast</i>			
Area 17	343	5,567	5,910
Area 18	<u>986</u>	<u>3,755</u>	<u>4,742</u>
Total	1,330	9,322	10,652
<i>Lower West Coast</i>			
Area 21	61	-	61
Area 23	<u>72</u>	<u>1,813</u>	<u>1,885</u>
Total	133	1,813	1,946
<i>Upper West Coast</i>			
Area 25	-	859	859
Area 27	-	<u>82</u>	<u>82</u>
Total	-	941	941
<b>Grand Total</b>	<b>3,491</b>	<b>18,106</b>	<b>21,597</b>

Table 3 1978 roe herring fishery hailed tonnages, by gear.

<u>Area</u>	<u>Gillnet</u>	<u>Seine</u>	<u>Total</u>
1	129	-	129
2 East	2,272	8,779	11,051
2 West	650	3,035	3,685
3 & 4	1,700	1,600	3,300
5	1,100	473	1,573
6	2,042	580	2,622
7	8,041	5,176	13,217
12	115	525	640
14	1,699	-	1,699
17	5,024	5,050	10,074
18	1,039	-	1,039
23	6,067	3,100	9,167
24	5,100	2,180	7,280
25	3,423	920	4,343
27	<u>60</u>	<u>-</u>	<u>60</u>
TOTAL	<u>38,461</u>	<u>31,418</u>	<u>69,879</u>
PERCENTAGE	<u>55.0%</u>	<u>45.0%</u>	

Table 4 Herring roe fishery landings (in tons) from 1976-1978 by sub-district, statistical area and gear type

Sub-District	Area	TONS LANDED								
		1976			1977			1978		
		GN	SN	ALL	GN	SN	ALL	GN	SN	ALL
Queen Charlotte	1	18	--	18	--	--	---	131.8	--	131.8
	2	<u>1,979</u>	<u>13,698</u>	<u>15,677</u>	<u>1,674</u>	<u>12,505</u>	<u>14,179</u>	<u>2,116.9</u>	<u>10,506.9</u>	<u>12,623.8</u>
		1,997	13,698	15,695	1,674	12,505	14,179	2,248.7	10,506.9	12,755.6
Northern	3	67	1,362	1,429	298	3,562	3,860	1,227.7	1,054.4	2,282.1
	4	237	--	237	604	977	1,581	1,654.7	627.2	2,281.9
	5	<u>--</u>	<u>2,460</u>	<u>2,460</u>	<u>732</u>	<u>1,155</u>	<u>1,887</u>	<u>1,305.3</u>	<u>825.1</u>	<u>2,130.4</u>
		304	3,822	4,126	1,634	5,694	7,328	4,187.7	2,506.7	6,694.4
Upper Central	6	<u>1,185</u>	<u>875</u>	<u>2,060</u>	<u>809</u>	<u>64</u>	<u>873</u>	<u>1,927.6</u>	<u>561.9</u>	<u>2,489.5</u>
		1,185	875	2,060	809	64	873	1,927.6	561.9	2,489.5
Lower Central	7	5,618	5,580	11,198	6,807	4,230	11,037	8,276.2	4,931.2	13,207.4
	8	294	378	672	--	--	---	35.6	--	35.6
	9	308	--	308	42	--	42	--	--	---
	10	<u>110</u>	<u>5</u>	<u>115</u>	<u>4</u>	<u>--</u>	<u>4</u>	<u>--</u>	<u>--</u>	<u>---</u>
		6,330	5,963	12,293	6,853	4,230	11,083	8,311.8	4,931.2	13,243
Upper East Coast	11	3	--	3	--	--	---	--	--	---
	12	<u>446</u>	<u>1,314</u>	<u>1,760</u>	<u>68</u>	<u>--</u>	<u>68</u>	<u>94.5</u>	<u>556.2</u>	<u>650.7</u>
		449	1,314	1,763	68	--	68	94.5	556.2	650.7
Middle East Coast	13	--	166	166	--	--	---	--	--	---
	14	4,638	21	4,659	7,570	4,272	11,842	1,788.3	--	2,574.6
	15	65	--	65	--	--	---	--	--	5.9
	16	<u>1</u>	<u>--</u>	<u>1</u>	<u>--</u>	<u>--</u>	<u>---</u>	<u>--</u>	<u>--</u>	<u>1.7</u>
		4,704	187	4,891	7,570	4,272	11,842	1,788.3	--	2,582.2
Lower East Coast	17	2,258	--	2,258	120	--	120	5,253.3	3,878.6	8,338.0
	18	726	--	726	761	--	120	934.0	--	934.0
	19	--	--	--	--	--	--	--	--	---
	20	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>---</u>
		2,984	--	2,984	881	--	881	6,187.3	3,878.6	9,272.0

Table 4 Continued...

Sub-District	Area	TONS LANDED								
		1976			1977			1978		
		GN	SN	ALL	GN	SN	ALL	GN	SN	ALL
Lower West Coast	21	--	--	---	--	--	---	--	--	---
	22	--	--	---	--	--	---	--	--	---
	23	9,789	8,886	18,675	3,246	12,307	15,553	7,094.7	3,684.0	10,778.7
	24	<u>5,736</u>	<u>12,528</u>	<u>18,264</u>	<u>7,522</u>	<u>7,480</u>	<u>15,002</u>	<u>5,655.3</u>	<u>1,576.1</u>	<u>7,231.4</u>
	15,525	21,414	36,939	10,768	19,787	30,555	12,750.0	5,260.1	18,010.1	
Upper West Coast	25	2,141	3,794	5,935	3,204	751	3,955	3,484.5	611.9	4,096.4
	26	63	--	63	108	--	108	33.6	--	33.6
	27	<u>86</u>	<u>--</u>	<u>86</u>	<u>--</u>	<u>--</u>	<u>---</u>	<u>82.8</u>	<u>--</u>	<u>82.8</u>
	2,290	3,794	6,084	3,312	751	4,063	3,600.9	611.9	4,212.8	
GRAND TOTAL ALL DISTRICTS		35,768	51,067	86,835	33,569	47,303	80,872	41,096.8	28,813.5	69,910.3

Source: Environment Canada, Economics and Special Industry Services Branch (contains some preliminary data from company sales slips).

TABLE 5

The amount of herring spawn (square yards X 1000 at a standard intensity of medium) deposited in the coastal waters of British Columbia from 1970 to 1978 by herring sub-district and statistical area

Area	Spawning Years								
	1970	1971	1972	1973	1974	1975	1976	1977	1978
<i>Queen Charlotte Islands</i>									
1	0.1	-	-	-	598.3	66.4	372.1	503.3	1286.5
2E	1745.2	1337.0	995.3	392.7	375.7	427.9	527.4	569.4	698.5
2W	96.2	137.0	220.6	272.4	332.4	390.6	319.3	148.0	103.2
	1841.5	1474.0	1215.9	665.1	1306.4	884.9	1218.8	1220.7	2088.2
<i>Northern</i>									
3	240.2	367.0	100.2	167.8	116.0	4.6	47.4	55.5	5.4
4	246.7	143.9	625.9	1167.7	106.0	753.1	1354.4	328.3	80.2
5	582.6	215.3	154.6	225.2	517.1	578.5	524.9	672.0	277.5
	1069.5	726.2	880.7	1560.7	739.1	1336.2	1926.7	1055.8	363.1
<i>Upper Central</i>									
6	1017.9	64.5	111.1	492.3	116.1	252.8	148.9	118.8	143.2
	1017.9	64.5	111.1	492.3	116.1	252.8	148.9	118.8	143.2
<i>Lower Central</i>									
7	350.6	145.8	100.0	560.6	332.8	492.2	572.0	843.8	431.6
8	330.2	274.2	251.2	337.0	204.1	298.7	369.7	256.0	108.4
9	445.1	75.4	43.5	344.8	85.2	207.7	81.2	94.4	59.7
10	65.4	155.3	18.2	34.5	21.3	20.8	19.5	7.2	45.4
	1191.3	650.7	412.9	1276.9	643.4	1019.4	1042.4	1201.4	645.1
<i>Upper East Coast</i>									
11	9.8	18.5	5.9	1.8	1.0	4.6	7.3	3.7	2.4
12	608.4	391.4	636.8	1286.5	1092.1	1594.9	749.4	536.2	144.2
	618.2	409.9	642.7	1288.3	1093.1	1599.5	756.7	539.9	146.6



Table 5 Continued...

Area	Spawning Years								
	1970	1971	1972	1973	1974	1975	1976	1977	1978
<i>Middle East Coast</i>									
13	87.5	216.8	184.9	47.7	104.5	262.3	103.2	85.6	78.6
14	-	1081.3	82.0	56.7	368.5	1746.4	3621.1	4678.9	9292.0
15	124.9	206.0	270.4	466.9	229.6	419.8	1049.8	1485.7	1058.8
16	<u>569.0</u>	<u>235.7</u>	<u>122.1</u>	<u>122.3</u>	<u>10.2</u>	<u>88.6</u>	<u>15.4</u>	<u>15.5</u>	<u>0.2</u>
	781.4	1739.8	659.4	693.6	712.8	2517.1	4789.5	6265.7	10429.6
<i>Lower East Coast</i>									
17	872.2	1326.3	257.2	1168.3	2895.5	1749.4	2397.7	1054.7	2123.0
18	389.2	295.3	250.5	226.5	422.6	948.0	49.8	71.1	166.2
19	-	-	0.2	-	0.4	-	-	-	-
20	<u>0.1</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
	1261.5	1621.6	507.9	1394.8	3318.5	2697.4	2447.5	1125.8	2289.2
<i>Lower West Coast</i>									
22	-	0.2	-	-	-	-	-	-	-
23	829.8	825.5	707.2	404.8	908.9	779.8	2411.6	3246.6	570.9
24	<u>341.8</u>	<u>1103.8</u>	<u>1578.0</u>	<u>77.0</u>	<u>1662.4</u>	<u>2317.8</u>	<u>2188.1</u>	<u>1350.3</u>	<u>1373.0</u>
	1171.6	1929.5	2285.2	481.8	2571.3	3097.6	4599.7	4596.9	1943.9
<i>Upper West Coast</i>									
25	263.8	346.2	1349.1	1586.7	604.3	1373.9	366.2	755.5	764.5
26	87.0	187.8	313.4	186.0	77.7	66.0	30.8	7.0	-
27	<u>74.2</u>	<u>16.8</u>	<u>16.3</u>	<u>83.3</u>	<u>-</u>	<u>299.7</u>	<u>31.4</u>	<u>48.9</u>	<u>1832.1</u>
	425.0	550.8	1678.8	1856.0	682.0	1739.6	428.4	811.4	2596.6
<i>Southern Mainland</i>									
28	2.6	60.1	-	-	12.0	-	-	-	-
29	<u>31.0</u>	<u>237.5</u>	<u>45.0</u>	<u>15.2</u>	<u>52.5</u>	<u>320.0</u>	<u>69.3</u>	<u>30.0</u>	<u>3.8</u>
	33.6	297.6	45.0	15.2	64.5	320.0	69.3	30.0	3.8
ALL SUB-DISTRICTS	9411.8	9464.5	8439.9	9724.8	11247.2	15464.5	17428.1	16966.5	20649.0

TABLE 6

HERRING SPAWN SUMMARY TABLE FOR 1978

SPAWNING GROUND	DATE SPAWNED START	END	LENGTH YDS.	WIDTH YDS.	INTEN- SITY	STD.SQ. YDS. (1000'S)
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AREA:1,NORTH COAST Q.C.I.

NADEN HARBOUR	02/01		300	10	3	1.20
NADEN HARBOUR	02/06		600	500	4	195.00
NADEN HARBOUR	02/06		900	500	4	292.50
NADEN HARBOUR	02/08		400	10	1	.20
NADEN HARBOUR	02/09		300	10	3	1.20
NADEN HARBOUR	02/09		1000	20	3	8.00
NADEN HARBOUR	02/09		300	30	1	.45
NADEN HARBOUR	02/09		750	50	4	24.37
NADEN HARBOUR	02/13		350	200	3	28.00
NADEN HARBOUR	02/13		1000	30	3	12.00
NADEN HARBOUR	02/15		1000	300	1	15.00
NADEN HARBOUR	02/15		400	30	1	.60
NADEN HARBOUR	02/15		700	30	1	1.05
NADEN HARBOUR	02/19		900	500	5	450.00
NADEN HARBOUR	03/13		700	300	3	84.00
NADEN HARBOUR	03/13		400	100	4	26.00
NADEN HARBOUR	03/14		260	65	3	0.76
NADEN HARBOUR	03/14		100	80	4	5.20
NADEN HARBOUR	03/14		750	150	3	45.00
NADEN HARBOUR	04/01		2000	900	1	90.00
AREA TOTAL			13110			1286.53

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

IMAGE POINT	04/17	04/20	2050	10	4	13.32
TORRENS ISLAND	04/22	04/23	1000	5	4	3.25
TORRENS ISLAND	04/26		175	5	3	.35
TREE ISLAND	04/27	04/28	650	8	7	9.88
ROONEY BAY	05/03		370	7	1	.13
IMAGE POINT	05/11		750	12	4	5.85
HAIDA POINT	05/09	05/11	1150	20	6	32.20
HAIDA POINT	05/09	05/11	200	10	7	3.80
TORRENS ISLAND	05/25		900	12	4	7.02
MAUDE ISLAND	06/06		180	15	4	1.75
TRANSIT ISLAND	06/03	06/04	750	10	4	4.87
ONWARD POINT	04/23	04/24	3800	10	1	1.90
HARRIET HARBOUR	03/30		2000	5	3	4.00
HARRIET HARBOUR	03/30		1500	20	3	12.00
KINGFISHER COVE	03/30		500	10	5	5.00
KINGFISHER COVE	03/30		400	100	5	40.00
BOLKUS ISLAND	04/18		400	15	4	3.90
KINGFISHER COVE	04/18		50	50	5	2.50

HERRING SPAWN SUMMARY TABLE FOR 1978

SPAWNING GROUND	DATE SPAWNED START	DATE SPAWNED END	LENGTH YDS.	WIDTH YDS.	INTEN- SITY	STD.SQ. YDS. (1000'S)
AREA: 2E, EAST COAST O.C.I. CONTINUED						
JEDWAY	03/24		600	20	7	22.80
JEDWAY	03/28		500	10	5	5.00
JEDWAY	04/15	04/18	4000	10	5	40.00
JEDWAY	04/15	04/18	2500	20	7	95.00
HUSTON INLET	03/23		50	10	3	.20
SLIM INLET	03/23		100	20	5	2.00
GEORGE BAY	03/27		100	20	5	2.00
SLIM INLET	04/16		300	100	5	30.00
SLIM INLET	04/16		1000	5	5	5.00
SLIM INLET	04/16		700	20	3	5.60
SLIM INLET	04/16		350	10	7	6.65
SLIM INLET	04/16		2250	10	4	14.62
BAG HARBOUR	03/29		1500	15	5	22.50
BAG HARBOUR	03/29		1000	10	3	4.00
ISLAND BAY	04/14		500	100	1	2.50
SECTION COVE	04/03		1500	10	3	6.00
SECTION COVE	04/21		1200	10	5	12.00
SKAAT HARBOUR	04/24		400	20	4	5.20
SCUDDER POINT	04/18		2600	15	4	25.35
ALDER ISLAND	04/18		800	10	7	15.20
ALDER ISLAND	04/18		1400	15	4	13.65
BURNABY ISLAND	04/18		100	10	3	.40
BURNABY ISLAND	04/18		300	20	5	6.00
BURNABY ISLAND	04/18		300	10	3	1.20
BURNABY ISLAND	04/18		700	5	3	1.40
BURNABY ISLAND	04/18		200	10	3	.80
BURNABY ISLAND	04/18		200	10	5	2.00
BURNABY ISLAND	04/18		100	10	3	.40
BURNABY ISLAND	04/18		100	30	3	1.20
BURNABY ISLAND	04/18		500	50	3	10.00
BURNABY ISLAND	04/18		100	50	3	2.00
BURNABY ISLAND	04/18		1000	6	5	6.00
BURNABY ISLAND	04/18		400	30	3	4.80
BIG GOOSE BAY	04/19		1800	7	1	.63
DAVEY ISLETS	04/20		100	20	4	1.30
DAVEY ISLETS	04/20		500	5	3	1.00
DAVEY ISLETS	04/20		400	25	1	.50
BEATTIE ANCHORAGE	04/01	04/02	400	8	1	.16
BEATTIE ANCHORAGE	04/01	04/02	1600	20	3	12.80
DAWSON COVE	05/12		3700	15	3	22.20
BARGE POINT	05/12		1800	20	1	1.80
BARGE POINT	05/24	05/25	700	20	1	.70
BEATTIE ANCHORAGE	05/24	05/25	200	200	7	76.00
CUMSHEWA INLET	04/15		4200	20	4	54.60
CONGLOMERATE POINT	04/02		700	8	4	3.64
AREA TOTAL			60275			698.54

HERRING SPAWN SUMMARY TABLE FOR 1978

SPAWNING GROUND	DATE SPAWNED START	DATE SPAWNED END	LENGTH YDS.	WIDTH YDS.	INTEN- SITY	STD.SQ. YDS. (1000'S)
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AREA:2W, WEST COAST G.C.I.

SKIDEGATE INLET	*	05/11	05/12	4260	10	3	17.04
RENNELL SOUND		04/05		800	2	1	.08
RENNELL SOUND		04/05		800	5	1	.20
RENNELL SOUND		04/05		800	2	1	.08
RENNELL SOUND		04/05		1500	7	1	.52
SEAL INLET		04/09		150	4	3	.24
SEAL INLET		04/09		300	8	7	4.56
SEAL INLET		04/09		350	4	7	2.66
SEAL INLET		04/09		500	4	4	1.30
SEAL INLET		04/09		600	6	3	1.44
SEAL INLET		04/09		700	6	1	.21
SEAL INLET		04/09		200	4	5	.80
SEAL INLET		04/09		200	4	5	.80
SEAL INLET		04/09		1300	4	5	5.20
SEAL INLET		04/09		1100	6	4	4.29
INSKIP CHANNEL		03/31		2700	4	3	4.32
INSKIP CHANNEL		03/31		300	30	5	9.00
INSKIP CHANNEL		03/31		2800	2	3	2.24
INSKIP CHANNEL		03/31		2000	4	3	3.20
LOUSCOONE INLET		03/17		250	30	3	3.00
LOUSCOONE INLET		03/17		250	50	3	5.00
LOUSCOONE INLET		03/18		800	10	3	3.20
LOUSCOONE INLET		03/18		550	5	3	1.10
LOUSCOONE INLET		03/18		900	5	3	1.80
LOUSCOONE INLET		03/18		350	20	5	7.00
LOUSCOONE INLET		03/22		900	5	1	.22
LOUSCOONE INLET		03/22		400	10	3	1.60
LOUSCOONE INLET		03/22		400	10	3	1.60
LOUSCOONE INLET		04/14	04/15	300	12	3	1.44
FLAMINGO INLET		04/03		1000	20	3	8.00
NEWCOMBE INLET		04/14		2200	5	5	11.00
AREA TOTAL				29660			103.15

AREA:3,NASS

PIRATE POINT		05/17	05/21	2640	5	3	5.28
PIRATE POINT		05/17	05/21	200	2	2	.08
AREA TOTAL				2840			5.36

HERRING SPAWN SUMMARY TABLE FOR 1978

SPAWNING GROUND	DATE SPAWNED START	DATE SPAWNED END	LENGTH YDS.	WIDTH YDS.	INTEN- SITY	STD.SQ. YDS. (1000'S)
AREA:4,SKEENA						
BIG BAY	03/26	03/31	125	125	1	.78
REEKS POINT	03/26	03/31	100	125	1	.62
SIMPSON POINT	03/26	03/31	250	325	1	4.06
WEST BASE POINT	03/26	03/31	150	300	1	2.25
SHATTOCK POINT	03/26	03/31	250	20	2	1.00
SHATTOCK POINT	03/26	03/31	150	5	1	.04
SHATTOCK POINT	03/26	03/31	150	5	1	.04
SHATTOCK POINT	03/26	03/31	150	50	4	4.87
BELLETTI POINT	03/26	03/31	500	20	3	4.00
BELLETTI POINT	03/26	03/31	600	20	3	4.80
BURNT CLIFF ISLAND	03/26	03/31	750	20	3	6.00
BURNT CLIFF ISLAND	03/26	03/31	100	10	1	.05
BURNT CLIFF ISLAND	03/26	03/31	20	10	1	.01
BELLETTI POINT	04/05	04/08	400	200	3	32.00
CHISMORE PASSAGE	04/17	04/18	2000	5	3	4.00
CHISMORE PASSAGE	04/18	04/19	1800	5	3	3.60
CHISMORE PASSAGE	04/17	04/20	600	8	5	4.80
CHISMORE PASSAGE	04/17	04/20	500	5	3	1.00
HUMPBACK BAY	04/19	04/20	800	3	1	.12
HUMPBACK BAY	04/19	04/20	100	5	3	.20
HUMPBACK BAY	04/19	04/20	200	3	1	.03
ELLIOTT ISLAND	05/01	05/05	1400	5	1	.35
ELLIOTT ISLAND	05/01	05/05	400	2	3	.32
ELLIOTT ISLAND	05/01	05/05	600	10	3	2.40
ELLIOTT ISLAND	05/01	05/05	800	2	3	.64
CHISMORE PASSAGE	05/23	05/25	300	5	2	.30
CHISMORE PASSAGE	05/23	05/25	100	5	2	.10
HUMPBACK BAY	05/23	05/25	70	10	2	.14
ADA ISLAND	05/23	05/25	50	25	2	.25
ADA ISLAND	05/23	05/25	50	50	2	.50
LAMB POINT	05/23	05/25	25	5	2	.02
LAMB POINT	05/23		10	5	2	.01
DIGBY ISLAND	06/02		5	5	1	.00
DIGBY ISLAND	06/02		10	10	1	.00
DIGBY ISLAND	06/02		50	10	1	.02
DIGBY ISLAND	06/02		100	10	1	.05
OONA RIVER	06/02	06/03	100	25	1	.12
OONA RIVER	06/02	06/03	20	2	1	.00
OONA RIVER	06/02	06/03	20	50	4	.65
AREA TOTAL			13805			80.17

HERRING SPAWN SUMMARY TABLE FOR 1978

SPAWNING GROUND	DATE SPAWNED START	DATE SPAWNED END	LENGTH YDS.	WIDTH YDS.	INTEN- SITY	STD. SQ. YDS. (1000'S)
AREA: 5, GRENVILLE-PRINCIPE						
DRIES INLET	03/28	03/31	400	300	3	48.00
DRIES INLET	03/29		100	25	3	1.00
DRIES INLET	03/28		1500	50	3	30.00
CAMP CREEK	03/28		50	50	3	1.00
CAMP CREEK	03/28		700	100	3	28.00
KITKATLA CREEK	03/28		700	40	4	18.20
KITKATLA CREEK	03/28		600	20	3	4.80
KITKATLA CREEK	03/29		600	80	4	31.20
KITKATLA CREEK	03/29		100	5	3	.20
KITKATLA CREEK	03/29	03/31	40	25	3	.40
GURD ISLAND	04/10		100	5	3	.20
GURD ISLAND	04/12		400	30	4	7.80
PORCHER PENINSULA	04/12	04/14	800	15	2	2.40
PORCHER PENINSULA	04/12	04/14	1200	25	3	12.00
PORCHER PENINSULA	04/15		200	50	6	14.00
PORCHER PENINSULA	04/15		300	200	2	12.00
ROBERT ISLAND	04/22		200	15	1	.15
ROBERT ISLAND	04/22		300	40	3	4.80
BILLY BAY	04/23	04/24	50	20	4	.65
BILLY BAY	04/23	04/24	300	20	4	3.90
BILLY BAY	04/23	04/24	30	20	3	.24
BILLY BAY	04/23	04/24	50	25	4	.81
BILLY BAY	04/23	04/24	20	10	3	.08
BILLY ISLANDS	04/22	04/24	40	40	4	1.04
BILLY ISLANDS	04/22	04/24	40	20	4	.52
BILLY ISLANDS	04/22	04/24	50	20	5	1.00
BILLY ISLANDS	04/22	04/24	100	20	1	.10
BILLY ISLANDS	04/22	04/24	100	50	2	1.00
BILLY ISLANDS	04/22	04/24	200	10	3	.80
BILLY ISLANDS	04/22	04/24	80	50	4	2.60
BILLY ISLANDS	04/22	04/24	40	10	4	.26
BILLY ISLANDS	04/22	04/24	100	10	4	.65
GASBOAT PASSAGE	04/24	04/25	300	15	3	1.80
GASBOAT PASSAGE	04/24	04/25	200	20	4	2.60
GASBOAT PASSAGE	04/24	04/26	200	150	2	6.00
GASBOAT PASSAGE	04/24	04/26	200	200	4	26.00
GASBOAT PASSAGE	04/24		50	15	3	.30
BILLY BAY	05/07		400	100	2	8.00
BILLY BAY	05/08		300	50	2	3.00
AREA TOTAL			11140			277.50

HERRING SPAWN SUMMARY TABLE FOR 1978

SPAWNING GROUND	DATE SPAWNED START	DATE SPAWNED END	LENGTH YDS.	WIDTH YDS.	INTEN- SITY	STD. SO. YDS. (1000'S)
AREA: 6, BUTEDAILE						
MARVIN ISLANDS	04/04	04/07	300	25	6	10.50
MARVIN ISLANDS	04/04	04/07	175	14	6	3.43
MARVIN ISLANDS	04/04	04/07	350	16	6	7.84
MARVIN ISLANDS	04/04	04/07	225	50	5	11.25
PARSONS ANCHORAGE	04/04	04/07	425	20	6	11.90
PARSONS ANCHORAGE	04/04	04/07	350	4	3	.56
PARSONS ANCHORAGE	04/04	04/06	50	8	3	.16
PARSONS ANCHORAGE	04/04	04/06	80	8	3	.26
PARSONS ANCHORAGE	04/03	04/07	500	18	6	12.60
PARSONS ANCHORAGE	04/03	04/06	200	4	1	.04
PARSONS ANCHORAGE	04/03	04/05	175	10	3	.70
PARSONS ANCHORAGE	04/02	04/06	100	12	5	1.20
PARSONS ANCHORAGE	04/02	04/05	300	8	3	.96
PARSONS ANCHORAGE	04/02	04/05	100	6	3	.24
PARSONS ANCHORAGE	04/02	04/05	350	4	3	.56
PARSONS ANCHORAGE	04/01	04/04	275	6	1	.08
KITASU BAY	04/01	04/04	325	4	1	.06
KITASU BAY	04/01	04/04	200	4	5	.80
KITASU BAY	04/01	04/04	725	6	6	6.09
KITASU BAY	04/01	04/04	750	8	3	2.40
KITASU BAY	04/01	04/04	125	8	3	.40
KITASU BAY	04/02	04/05	1200	14	6	23.52
KITASU BAY	04/02	04/05	625	10	5	6.25
KITASU BAY	04/02	04/05	900	8	5	7.20
KITASU BAY	04/03	04/06	250	8	3	.80
WILBY POINT	04/03	04/06	350	8	3	1.12
WILBY POINT	04/03	04/06	125	10	5	1.25
WILBY POINT	04/04	04/06	100	10	5	1.00
WILBY POINT	04/04	04/06	250	12	3	1.20
WILBY POINT	04/05	04/07	300	10	3	1.20
WILBY POINT	04/05	04/07	175	10	5	1.75
WILBY POINT	04/05	04/07	350	4	3	.56
WILBY POINT	04/05	04/07	100	8	5	.80
WILBY POINT	04/05	04/07	75	4	1	.01
WILBY POINT	04/05	04/07	150	8	5	1.20
WILBY POINT	04/05	04/07	300	10	3	1.20
WILBY POINT	04/05	04/07	350	8	5	2.80
WEETEEAM BAY	03/28		70	6	5	.42
WEETEEAM BAY	03/25	03/28	100	5	3	.20
WEETEEAM BAY	03/25	03/28	80	8	7	1.22
WEETEEAM BAY	03/25	03/28	45	8	7	.68
WEETEEAM BAY	03/25	03/28	40	5	3	.08
WEETEEAM BAY	03/25	03/28	40	8	3	.13
BENT HARBOUR	03/25	03/28	100	5	3	.20
BENT HARBOUR	03/25	03/28	40	5	3	.08
BENT HARBOUR	03/25	03/28	20	5	5	.10
BENT HARBOUR	03/25	03/28	200	6	3	.48

HERRING SPAWNING SUMMARY TABLE FOR 1978

SPAWNING GROUND	DATE SPAWNED START	END	LENGTH YDS.	WIDTH YDS.	INTEN- SITY	STD.SQ. YDS. (1000'S)
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AREA:6,BUTEDALE

CONTINUED

BENT HARBOUR	03/25	03/28	40	6	3	.10
BENT HARBOUR	03/25	03/28	20	3	1	.00
WEETEEAM BAY	03/25	03/28	30	4	1	.01
WEETEEAM BAY	03/25	03/28	60	5	3	.12
WEETEEAM BAY	03/25	03/28	25	6	3	.06
WEETEEAM BAY	03/25	03/28	60	5	3	.12
WEETEEAM BAY	03/25	03/28	50	5	3	.10
WEETEEAM BAY	03/25	03/28	100	10	5	1.00
WEETEEAM BAY	03/25	03/28	40	6	5	.24
WEETEEAM BAY	03/25	03/28	40	5	5	.20
WEETEEAM BAY	03/25	03/28	40	4	1	.01
WEETEEAM BAY	03/25	03/28	60	4	3	.10
WEETEEAM BAY	03/30	04/02	185	6	3	.44
WEETEEAM BAY	03/30	04/02	425	8	5	3.40
WEETEEAM BAY	03/30	04/02	125	8	3	.40
WEETEEAM BAY	03/30	04/02	70	6	5	.42
WEETEEAM BAY	03/30	04/02	200	10	3	.80
WEETEEAM BAY	03/30	04/02	300	10	3	1.20
KITASU BAY	04/07	04/09	700	10	5	7.00
AREA TOTAL			14985			143.20

AREA:7,BELLA BELLA

HURRICANE ISLAND	03/06		50	5	3	.10
STRYKER BAY	03/07		25	6	1	.01
STRYKER BAY	03/08		10	4	3	.02
STRYKER BAY	03/17		50	10	3	.20
MCNAUGHTON GROUP	03/17		100	8	3	.32
CECILIA ISLAND	03/21	03/30	500	100	5	50.00
MCNAUGHTON GROUP	03/24		150	5	3	.30
MCNAUGHTON GROUP	03/24		50	5	3	.10
MCNAUGHTON GROUP	03/24		150	15	5	2.25
SEAFORTH CHANNEL	03/25		1200	4	2	.96
SEAFORTH CHANNEL	03/25		300	20	4	3.90
SEAFORTH CHANNEL	03/25		700	4	1	.14
SEAFORTH CHANNEL	03/25		250	20	5	5.00
SEAFORTH CHANNEL	03/25		100	10	7	1.90
SEAFORTH CHANNEL	03/25		150	4	1	.03
SEAFORTH CHANNEL	03/25		100	30	5	3.00
SEAFORTH CHANNEL	03/25		200	4	1	.04
SEAFORTH CHANNEL	03/25		600	6	1	.18
CAPE MARK	03/25	04/02	4000	14	4	36.40



HERRING SPAWN SUMMARY TABLE FOR 1978

SPAWNING GROUND	DATE SPAWNED START	DATE SPAWNED END	LENGTH YDS.	WIDTH YDS.	INTEN- SITY	STD.SQ. YDS. (1000'S)
AREA: 7, BELLA BELLA						
CONTINUED						
MCNAUGHTON GROUP	03/27		50	10	4	.32
MCNAUGHTON GROUP	03/27		125	2	3	.16
MCNAUGHTON GROUP	03/27		20	40	5	.80
MCNAUGHTON GROUP	03/27		100	10	5	1.00
MCNAUGHTON GROUP	03/27		150	10	5	1.50
MCNAUGHTON GROUP	03/27		100	15	1	.07
HOUGHTON ISLANDS	03/28		100	3	1	.01
PRINCESS ALICE ISLAND	03/28		200	50	3	4.00
PRINCESS ALICE ISLAND	03/28		100	30	3	1.20
STRYKER BAY	03/30		50	25	7	2.37
STRYKER BAY	03/30		600	10	3	2.40
STRYKER BAY	03/30		200	4	1	.04
STRYKER BAY	03/30		150	3	3	.18
MOSS PASSAGE	03/30		300	5	3	.66
MCNAUGHTON GROUP	03/30	03/31	100	5	5	.50
MCNAUGHTON GROUP	03/30	03/31	700	10	4	4.55
TRIQUET ISLAND	03/30	03/31	175	75	3	5.25
TRIQUET ISLAND	03/30	03/31	100	25	1	.12
TRIQUET ISLAND	03/30	03/31	100	15	3	.60
HURRICANE ISLAND	03/31		100	8	3	.32
HURRICANE ISLAND	03/31		200	5	3	.40
HURRICANE ISLAND	03/31		150	5	3	.30
HOUGHTON ISLANDS	03/31		50	4	3	.08
HOUGHTON ISLANDS	03/31		400	30	5	12.00
HOUGHTON ISLANDS	03/31		100	10	3	.40
HOUGHTON ISLANDS	03/31		100	60	7	11.40
HOUGHTON ISLANDS	03/31		200	20	1	.20
HOUGHTON ISLANDS	03/31		150	50	3	3.00
REID PASSAGE	03/31		400	75	3	12.00
REID PASSAGE	03/31		400	5	3	.80
REID PASSAGE	03/31		150	5	1	.04
LAMBARD INLET	03/31		100	10	5	1.00
LADY TRUTCH PASS	03/31		700	15	5	10.50
LADY TRUTCH PASS	03/31		1200	5	3	2.40
EDNA ISLANDS	03/31	04/01	150	50	2	1.50
EDNA ISLANDS	03/31	04/01	150	25	3	1.50
SPIDER ANCHORAGE	03/31	04/01	50	2	3	.04
SPIDER ANCHORAGE	03/31	04/01	350	3	3	.42
SPIDER ANCHORAGE	03/31	04/01	100	75	5	7.50
BERRY INLET	03/31	04/01	100	50	3	2.00
BERRY INLET	03/31	04/01	100	15	3	.60
TRIQUET ISLAND	04/01		125	40	4	3.25
TRIQUET ISLAND	04/01	04/04	175	50	5	8.75
TRIQUET ISLAND	04/01	04/04	175	250	1	2.19
TRIQUET ISLAND	04/01		50	25	3	.56
BRYDON CHANNEL	04/01		700	5	3	1.40
MCNAUGHTON GROUP	04/01		1500	10	3	6.00

HERRING SPAWN SUMMARY TABLE FOR 1978

SPAWNING GROUND	DATE SPAWNED START	END	LENGTH YDS.	WIDTH YDS.	INTEN- SITY	STD.SQ. YDS. (1000'S)
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AREA:7,BELLA BELLA

CONTINUED

MCNAUGHTON GROUP	04/01	04/05	400	10	3	1.60
MCNAUGHTON GROUP	04/01		100	100	1	.50
TRIQUET ISLAND	04/01		100	50	2	1.00
SPIDER ANCHORAGE	04/01	04/02	600	3	3	.72
HURRICANE ISLAND	04/01	04/02	50	10	4	.32
HURRICANE ISLAND	04/01	04/02	150	3	3	.18
PRINCESS ALICE ISLAND	04/01		75	15	1	.06
PRINCESS ALICE ISLAND	04/01		250	80	7	38.00
PRINCESS ALICE ISLAND	04/01		125	10	1	.06
MCNAUGHTON GROUP	04/01	04/05	500	20	4	6.50
MCNAUGHTON GROUP	04/01	04/05	200	10	3	.80
MCNAUGHTON GROUP	04/01	04/05	200	5	3	.40
EDWARDS POINT	04/01	04/02	350	10	3	1.40
LOUISA COVE	04/04		2200	10	5	22.00
BRYDON CHANNEL	04/04		100	15	5	1.50
BRYDON CHANNEL	04/04		25	2	3	.02
BRYDON CHANNEL	04/04		25	2	3	.02
BRYDON CHANNEL	04/04		25	2	3	.02
BRYDON CHANNEL	04/04		10	3	3	.01
BRYDON CHANNEL	04/04		800	10	3	3.20
STRYKER BAY	04/06	04/07	800	4	1	.16
STRYKER BAY	04/06	04/07	425	10	3	1.70
CAPE MARK	04/10		600	15	3	3.60
CAPE MARK	04/10		300	10	3	1.20
ST JOHN HARBOUR	04/13		800	10	4	5.20
CHOKED P	04/13		800	20	7	30.40
CHOKED P	04/13		1200	15	5	18.00
CHOKED P	04/13		400	30	7	22.80
CHOKED P	04/13		800	20	7	30.40
CHOKED P	04/13		700	15	5	10.50
CHOKED P	04/13		400	15	5	6.00
CHOKED P	04/13		600	10	3	2.40
AREA TOTAL			34340			431.64

AREA:8,BELLA COOLA

NORTH BENTINCK ARM	03/01	03/03	100	5	3	.20
NORTH BENTINCK ARM	03/01	03/03	75	2	3	.06
NORTH BENTINCK ARM	03/01	03/03	50	5	3	.10
NORTH BENTINCK ARM	03/25	03/26	75	5	1	.02
NORTH BENTINCK ARM	03/25	03/26	100	10	1	.05
NORTH BENTINCK ARM	03/25	03/26	2650	6	1	.79

HERRING SPAWN SUMMARY TABLE FOR 1978

SPAWNING GROUND	DATE SPAWNED START	DATE SPAWNED END	LENGTH YDS.	WIDTH YDS.	INTEN- SITY	STD.SQ. YDS. (1000'S)
AREA: 8, BELLA COOLA						
CONTINUED						
NORTH BENTINCK ARM	03/25	03/26	250	3	2	.15
NORTH BENTINCK ARM	03/25	03/26	100	5	1	.02
NORTH BENTINCK ARM	03/25	03/26	100	10	1	.05
NORTH BENTINCK ARM	03/25	03/26	450	5	1	.11
NORTH BENTINCK ARM	03/25	03/26	150	5	1	.04
NORTH BENTINCK ARM	03/25	03/26	40	5	1	.01
NORTH BENTINCK ARM	03/25	03/26	50	2	2	.02
NORTH BENTINCK ARM	03/25	03/26	150	4	1	.03
KWAKSHUA CHANNEL	04/03		200	75	3	6.00
KWAKSHUA CHANNEL	04/03		200	75	3	6.00
KWAKSHUA CHANNEL	04/03		200	50	3	4.00
KWAKSHUA CHANNEL	04/03		35	15	3	.21
KWAKSHUA CHANNEL	04/03		25	10	1	.01
NORTH BENTINCK ARM	03/01		100	5	3	.20
NORTH BENTINCK ARM	03/01		200	4	1	.04
NORTH BENTINCK ARM	03/01		15	5	3	.03
NORTH BENTINCK ARM	03/01		50	5	4	.16
NORTH BENTINCK ARM	03/01	03/03	25	3	4	.05
NORTH BENTINCK ARM	03/01	03/03	350	2	4	.45
NORTH BENTINCK ARM	03/01	03/03	50	2	4	.06
NORTH BENTINCK ARM	03/01	03/03	50	4	3	.08
NORTH BENTINCK ARM	03/01	03/03	200	2	4	.26
NORTH BENTINCK ARM	03/01	03/03	200	3	4	.39
NORTH BENTINCK ARM	03/01	03/03	200	3	4	.39
NORTH BENTINCK ARM	03/01	03/03	500	3	4	.97
NORTH BENTINCK ARM	03/01	03/03	200	1	1	.01
NORTH BENTINCK ARM	03/01	03/03	250	1	3	.10
NORTH BENTINCK ARM	03/01	03/03	50	2	3	.04
NORTH BENTINCK ARM	03/01	03/03	50	2	1	.00
NORTH BENTINCK ARM	03/01	03/03	50	3	3	.06
KIMSQUIT BAY	03/07	03/08	1000	20	1	1.00
KWAKUME POINT	04/05	04/07	200	8	3	.64
KWAKUME POINT	04/05	04/07	100	20	5	2.00
KWAKUME POINT	04/05	04/07	120	10	4	.78
KWAKUME POINT	04/05	04/07	75	8	4	.39
KWAKUME POINT	04/05	04/07	50	5	4	.16
KWAKUME POINT	04/05	04/07	120	30	2	.72
ILLAHIE INLET	04/05	04/07	2100	12	5	25.20
ILLAHIE INLET	04/05	04/07	100	10	7	1.90
ILLAHIE INLET	04/05	04/07	250	8	5	2.00
ILLAHIE INLET	04/05	04/07	60	2	3	.05
ILLAHIE INLET	04/05	04/07	100	6	4	.39
ILLAHIE INLET	04/05	04/07	6500	8	5	52.00
AREA TOTAL			18315			108.42

HERRING SPAWN SUMMARY TABLE FOR 1978

SPAWNING GROUND	DATE SPAWNED START	DATE SPAWNED END	LENGTH YDS.	WIDTH YDS.	INTEN- SITY	STD.SQ. YDS. (1000'S)
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AREA:9,RIVERS INLET

KILBELLA BAY	03/10	03/13	4300	3	3	5.10
KILBELLA BAY	03/10	03/13	1100	5	3	2.20
RIVERS INLET-HEAD	03/12	03/14	2800	3	3	3.36
RIVERS INLET-HEAD	03/12	03/14	3650	5	3	7.70
RIVERS INLET-HEAD	03/12	03/14	1150	30	1	1.72
RIVERS INLET-HEAD	03/12	03/14	1100	15	1	.82
SANDELL BAY	04/04	04/05	300	2	3	.24
SANDELL BAY	04/04	04/05	30	20	3	.24
SANDELL BAY	04/04	04/05	200	3	3	.24
SANDELL BAY	04/04	04/05	150	200	3	12.00
SANDELL BAY	04/04	04/05	50	50	1	.12
SANDELL BAY	04/04	04/05	100	2	3	.08
SANDELL BAY	04/04	04/05	150	3	3	.18
SANDELL BAY	04/04	04/05	100	3	5	.30
MCALLISTER POINT	04/04	04/05	400	2	3	.32
MCALLISTER POINT	04/04	04/05	1100	3	5	3.30
MCALLISTER POINT	04/04	04/05	800	3	1	.12
SHOTBOLT BAY	04/03	04/05	2800	8	4	14.56
MCPHEE BAY	04/03	04/05	1400	5	4	4.55
STONE POINT	04/03	04/05	2000	2	3	1.60
ALLARD BAY	04/19	04/20	300	3	4	.58
SANDELL BAY	04/04	04/05	200	3	3	.24
AREA TOTAL			24380			59.65

AREA:10,SMITH INLET

TAKUSH HARBOUR	03/31	04/01	300	3	3	.36
TAKUSH HARBOUR	03/31	04/01	750	4	5	3.00
TAKUSH HARBOUR	03/31	04/01	250	3	7	1.42
TAKUSH HARBOUR	03/31	04/01	100	3	5	.30
TAKUSH HARBOUR	03/31	04/01	400	3	3	.48
TAKUSH HARBOUR	03/31	04/01	50	2	3	.04
TAKUSH HARBOUR	03/31	04/01	150	3	1	.02
TAKUSH HARBOUR	03/31	04/01	350	3	5	1.05
TAKUSH HARBOUR	03/31	04/01	100	9	5	.90
TAKUSH HARBOUR	03/31	04/01	250	3	5	.75
DRY CREEK	03/30	03/31	100	2	3	.08
DRY CREEK	03/30	03/31	200	4	7	1.52
DRY CREEK	03/30	03/31	20	10	7	.38
DRY CREEK	03/30	03/31	150	3	5	.45
DRY CREEK	03/30	03/31	150	7	5	1.05
DRY CREEK	03/30	03/31	50	7	5	.35

HERRING SPAWNING SUMMARY TABLE FOR 1978

SPAWNING GROUND	DATE SPAWNED START	DATE SPAWNED END	LENGTH YDS.	WIDTH YDS.	INTEN- SITY	STD.SQ. YDS. (1000'S)
AREA:10,SMITH INLET		CONTINUED				
DRY CREEK	03/30	03/31	200	3	5	.60
DRY CREEK	03/30	03/31	250	6	3	.60
DRY CREEK	03/30	03/31	300	100	3	12.00
DRY CREEK	03/30	03/31	100	3	5	.30
DRY CREEK	03/30	03/31	150	5	5	.75
DRY CREEK	03/30	03/31	350	3	5	1.05
DRY CREEK	03/30	03/31	50	3	3	.06
DRY CREEK	03/30	03/31	50	2	3	.04
DRY CREEK	03/30	03/31	150	3	5	.45
DRY CREEK	03/30	03/31	100	15	5	1.50
DRY CREEK	03/30	03/31	400	4	5	1.60
DRY CREEK	03/30	03/31	150	2	3	.12
MCBRIDE BAY	03/30	03/31	50	2	7	.19
MCBRIDE BAY	03/30	03/31	50	2	5	.10
MCBRIDE BAY	03/30	03/31	50	2	1	.00
MCBRIDE BAY	03/30	03/31	400	6	3	.96
MCBRIDE BAY	03/30	03/31	30	3	3	.04
MCBRIDE BAY	03/30	03/31	50	3	3	.06
MCBRIDE BAY	03/30	03/31	150	3	3	.18
MCBRIDE BAY	03/30	03/31	100	2	5	.20
MCBRIDE BAY	03/30	03/31	350	5	1	.09
INDIAN ISLAND	04/03	04/04	200	50	3	4.00
BURNT ISLAND HARBOUR	04/11	04/14	100	1	3	.04
BURNT ISLAND HARBOUR	04/11	04/14	425	2	5	.85
BURNT ISLAND HARBOUR	04/11	04/14	300	3	6	1.26
BURNT ISLAND HARBOUR	04/11	04/14	675	2	5	1.35
BURNT ISLAND HARBOUR	04/11	04/14	200	2	3	.16
BURNT ISLAND HARBOUR	04/11	04/14	200	1	3	.08
BURNT ISLAND HARBOUR	04/11	04/14	200	3	5	.60
BURNT ISLAND HARBOUR	04/11	04/14	200	3	3	.24
BURNT ISLAND HARBOUR	04/11	04/14	200	2	3	.16
BURNT ISLAND HARBOUR	04/11	04/14	275	3	5	.83
BURNT ISLAND HARBOUR	04/11	04/14	350	3	7	2.00
BURNT ISLAND HARBOUR	04/11	04/14	100	2	3	.08
BURNT ISLAND HARBOUR	04/11	04/14	150	3	3	.18
BURNT ISLAND HARBOUR	04/11	04/14	125	2	5	.25
BURNT ISLAND HARBOUR	04/11	04/14	650	1	3	.26
AREA TOTAL			11200			45.38

HERRING SPAWNING SUMMARY TABLE FOR 1978

SPAWNING GROUND	DATE SPAWNED START	END	LENGTH YDS.	WIDTH YDS.	INTEN- SITY	STD. SQ. YDS. (1000'S)
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AREA:11,SEYMOUR-BELIZE

NUGENT SOUND	03/24		2700	1	3	1.08
NUGENT SOUND	04/02		3300	1	3	1.32
AREA TOTAL			6000			2.40

AREA:12,ALERT BAY

MOORE BAY	03/16		400	7	7	5.32
JOE COVE	03/22		1000	7	6	9.80
WAKEMAN SOUND	03/14	03/17	5000	5	5	25.00
MONDAY ANCHORAGE	03/31		1000	5	6	7.00
MONDAY ANCHORAGE	04/01		300	5	5	1.50
KNIGHT INLET	03/22		2000	50	3	40.00
KNIGHT INLET	03/22		6000	3	5	18.00
KNIGHT INLET	03/22		1000	3	5	3.00
KNIGHT INLET	03/20	03/22	3500	3	5	10.50
WAKEMAN SOUND	04/10		8000	3	5	24.00
AREA TOTAL			28200			144.12

AREA:13,QUATHIASKI

BUTE INLET	03/12		300	2	5	.60
BUTE INLET	03/14		200	2	5	.40
BUTE INLET	03/15		300	2	5	.60
BUTE INLET	03/16		200	2	5	.40
BUTE INLET	03/16		300	1	3	.12
BUTE INLET	03/17		1800	2	3	1.44
BUTE INLET	03/10		200	20	3	1.60
BUTE INLET	03/22		100	2	3	.08
BUTE INLET	03/10		100	10	3	.40
BUTE INLET	03/18		2000	2	5	4.00
LOUGHBOROUGH INLET	04/03		1200	3	3	1.44
LOUGHBOROUGH INLET	04/26		100	3	5	.30
BELLS BAY	04/21	04/24	2000	4	5	8.00
SMALL INLET	04/22	04/24	200	75	5	15.00
GRANITE BAY	04/21	04/24	30	10	3	.12
FRANCISCO POINT	03/23	03/26	1750	4	3	2.80
HYACINTHE BAY	03/20	03/23	200	75	5	15.00

HERRING SPAWN SUMMARY TABLE FOR 1978

SPAWNING GROUND	DATE SPAWNED START	DATE SPAWNED END	LENGTH YDS.	WIDTH YDS.	INTEN- SITY	STD. SQ. YDS. (1000'S)
AREA:13,QUATHIASKI		CONTINUED				
HERIOT BAY	03/23	03/25	1180	15	3	7.08
HYACINTHE BAY	03/25	03/26	500	10	3	2.00
HYACINTHE BAY	03/23	03/25	280	50	5	14.00
DREW HARBOUR	03/26	03/28	800	10	3	3.20
AREA TOTAL			13740			78.58

AREA:14,COMOX

CUTTAM POINT	03/10		500	30	5	15.00
PARKSVILLE	03/10		850	100	7	161.50
FRENCH CREEK	03/13	03/15	3500	100	6	490.00
BIG QUALICUM RIVER	03/13	03/15	4000	75	5	300.00
BIG QUALICUM RIVER	03/13	03/15	3500	75	3	105.00
LITTLE QUALICUM RIVER	03/13	03/15	4000	80	6	448.00
BIG QUALICUM RIVER	03/14		5200	100	6	728.00
NILE CREEK	03/14		300	25	3	3.00
BIG QUALICUM RIVER	04/01		2000	150	5	300.00
HINDOO CREEK	04/02		1000	100	3	40.00
UNION BAY	04/02		3000	75	2	45.00
COMOX HARBOUR	03/17		4500	150	7	1282.50
COMOX FLATS	03/11	03/17	1875	450	7	1603.12
COMOX HARBOUR	03/10	03/17	3500	375	7	2493.75
WILLEMAR BLUFF	05/28		150	150	3	9.00
SEAL ISLETS	03/02	03/10	3500	50	5	175.00
SEAL ISLETS	03/01	03/10	4000	175	5	700.00
KOMAS BLUFF	02/28		2000	30	5	60.00
KOMAS BLUFF	03/01	03/08	2000	75	5	150.00
DENMAN ISLAND (EAST)	02/28		1500	30	6	63.00
DENMAN ISLAND (EAST)	03/04		400	30	6	16.80
DENMAN ISLAND (EAST)	03/04		31	30	3	.37
DENMAN ISLAND (EAST)	03/31		2000	25	3	20.00
PHIPPS POINT	03/05		500	30	5	15.00
WHALING STATION BAY	03/05		800	25	5	20.00
TRIBUNE BAY	03/05		1200	40	5	48.00
AREA TOTAL			55806			9292.05

HERRING SPAWN SUMMARY TABLE FOR 1978

SPAWNING GROUND	DATE SPAWNED START	DATE SPAWNED END	LENGTH YDS.	WIDTH YDS.	INTEN- SITY	STD. SG. YDS. (1000'S)
AREA:15,WESTVIEW						
SLIAMMON VILLAGE	03/10	03/11	600	35	6	29.40
SCUTTLE BAY	03/10	03/11	500	150	5	75.00
SCUTTLE BAY	03/10	03/11	200	300	4	39.00
SCUTTLE BAY	03/10	03/11	750	25	4	12.19
SCUTTLE BAY	03/10	03/11	900	20	4	11.70
SCUTTLE BAY	03/10	03/11	400	300	5	120.00
SCUTTLE BAY	03/10	03/11	300	75	3	9.00
ATREVIDA REEF	03/09	03/11	500	30	5	15.00
ATREVIDA REEF	03/09	03/11	350	20	4	4.50
ATREVIDA REEF	03/09	03/11	600	30	6	25.20
ATREVIDA REEF	03/09	03/11	1000	700	5	700.00
ATREVIDA REEF	03/11	03/13	1500	25	3	15.00
DINNER ROCK	03/10	03/13	500	7	3	1.40
LUND	04/03		200	4	3	.32
FINN BAY	04/20		200	5	5	1.00
AREA TOTAL			8500			1058.76
AREA:16,PENDER HARBOUR						
DESERTED BAY	03/14		400	1	3	.16
AREA TOTAL			400			.16
AREA:17,NANAIMO						
LADYSMITH HARBOUR	03/22		800	10	3	3.20
DUNSMUIR ISLAND	02/28		150	3	3	.18
KULLEET BAY	03/16		1000	50	5	50.00
EVENING COVE	04/06		1200	100	5	120.00
YELLOW POINT	03/18		500	10	1	.25
EVENING COVE	03/18		75	75	3	2.25
STUART CHANNEL	04/06		1200	100	5	120.00
COFFIN POINT	04/06		700	35	7	46.50
YELLOW POINT	03/18		2700	40	5	108.00
STUART CHANNEL	03/21		600	8	5	4.80
STUART CHANNEL	03/21		50	5	1	.01
STUART CHANNEL	03/22		250	5	5	1.25
YELLOW POINT	03/20		1600	50	5	80.00



HERRING SPAWN SUMMARY TABLE FOR 1978

SPAWNING GROUND	DATE SPAWNED START	DATE SPAWNED END	LENGTH YDS.	WIDTH YDS.	INTEN- SITY	STD.SQ. YDS. (1000'S)
AREA:17,NANAIMO		CONTINUED				
STUART CHANNEL	03/26		1000	10	1	.50
STUART CHANNEL	03/26		2500	10	5	25.00
BOAT HARBOUR	03/08		100	3	1	.01
BOAT HARBOUR	03/13		1300	50	5	65.00
FLEWETT POINT	03/24		600	8	5	4.80
FALSE NARROWS	03/18		1000	400	3	160.00
ROUND ISLAND	03/18		3200	20	5	64.00
FALSE NARROWS	03/25		900	200	3	72.00
PYLADES CHANNEL	03/20		500	5	3	1.00
DEGNEN BAY	03/18		200	5	3	.40
BREAKWATER ISLAND	03/17		2500	15	5	37.50
BREAKWATER ISLAND	03/23		800	10	5	8.00
VALDES ISLAND	03/17		100	5	5	.50
HORSWELL BLUFF	03/18		850	75	7	121.12
LAGOON HEAD	03/16		400	50	1	1.00
LAGOON HEAD	03/16		300	50	5	15.00
HAMMOND BAY	03/16		150	75	1	.56
NECK POINT	03/16		50	50	5	2.50
NECK POINT	03/16		100	50	7	9.50
HORSWELL BLUFF	04/06		800	75	9	180.00
NECK POINT	04/07		500	20	7	19.00
HAMMOND BAY	04/06		1000	20	5	20.00
LAGOON HEAD	04/08		250	20	5	5.00
ICARUS POINT	03/16	03/18	1400	125	5	175.00
NECK POINT	03/16	03/18	200	25	3	2.00
ICARUS POINT	03/16	03/18	1250	100	5	125.00
ICARUS POINT	03/16	03/18	1200	100	5	120.00
BLUNDEN POINT	03/13	03/16	5400	15	1	4.05
LANTZVILLE	03/13		375	20	3	3.00
BLUNDEN POINT	03/13	03/16	1400	20	5	28.00
LANTZVILLE	03/13	03/16	700	20	5	14.00
LANTZVILLE	03/16	03/18	500	75	5	37.50
NANOOSE BAY	03/13	03/16	300	15	1	.22
FLEET POINT	03/13	03/16	200	50	1	.50
FLEET POINT	03/13	03/16	300	75	1	1.12
LANTZVILLE	03/13	03/16	500	50	3	10.00
NANOOSE BAY	03/10	03/14	300	15	1	.22
NANOOSE BAY	03/10	03/14	700	15	1	.52
NANOOSE BAY	03/10	03/14	400	50	3	8.00
NANOOSE BAY	03/10		550	400	3	88.00
WALLIS POINT	03/08	03/12	175	150	9	78.75
WALLIS POINT	03/14	03/16	300	25	7	14.25
WALLIS POINT	03/12	03/16	225	25	5	5.63
WALLIS POINT	03/12	03/14	1750	15	1	1.31
DORCAS POINT	03/13		1200	25	7	57.00
AREA TOTAL			49250			2122.96

HERRING SPAWN SUMMARY TABLE FOR 1978

SPAWNING GROUND	DATE SPAWNED START	DATE SPAWNED END	LENGTH YDS.	WIDTH YDS.	INTEN- SITY	STD. SQ. YDS. (1000'S)
AREA: 18, COWICHAN						
CHAIN ISLANDS	02/16		500	50	1	1.25
CHAIN ISLANDS	02/18		100	10	1	.05
LYALL HARBOUR	02/19		150	10	1	.07
WELBURY BAY	02/24	02/25	1000	5	3	2.00
LYALL HARBOUR	02/25		250	100	1	1.25
LYALL HARBOUR	02/25		200	50	1	.50
BOOT COVE	02/25		200	30	1	.30
WELBURY BAY	02/27		200	10	3	.80
WELBURY BAY	02/27		150	10	3	.60
GANGES HARBOUR	02/27		200	15	3	1.20
GANGES HARBOUR	02/28		125	10	3	.50
BOOT COVE	02/27		25	10	3	.10
GANGES HARBOUR	03/01		55	10	3	.22
KING ISLETS	03/01		25	10	3	.10
GANGES HARBOUR	03/02		75	10	3	.30
WELBURY BAY	03/02		75	15	5	1.12
GANGES HARBOUR	03/03		30	10	3	.12
ANNETTE INLET	03/03		75	10	3	.30
GANGES HARBOUR	03/04	03/05	400	50	2	4.00
ANNETTE INLET	03/05	03/06	30	5	1	.01
ANNETTE INLET	03/05	03/06	50	20	3	.40
SELBY COVE	03/05	03/06	60	10	3	.24
SELBY COVE	03/05	03/06	50	10	3	.20
GANGES HARBOUR	03/07	03/08	200	50	3	4.00
GANGES HARBOUR	03/07	03/08	150	100	1	.75
LONG HARBOUR	03/07	03/08	100	20	3	.80
LONG HARBOUR	03/07	03/08	100	25	3	1.00
GANGES HARBOUR	03/08		450	75	1	1.69
GANGES HARBOUR	03/08		75	10	3	.30
GANGES HARBOUR	03/07	03/08	200	50	1	.50
GANGES HARBOUR	03/09		700	100	3	28.00
GANGES HARBOUR	03/09		750	35	3	10.50
GANGES HARBOUR	03/09		1100	75	2	16.50
GANGES HARBOUR	03/09		25	10	3	.10
GANGES HARBOUR	03/09		100	10	3	.40
GANGES HARBOUR	03/09		250	10	3	1.00
GANGES HARBOUR	03/09		50	5	3	.10
GANGES HARBOUR	03/09		60	5	4	.19
KING ISLETS	03/10		50	15	3	.30
BOOT COVE	03/10		25	5	3	.05
GANGES HARBOUR	03/12		100	10	3	.40
GANGES HARBOUR	03/12	03/13	150	15	1	.11
GANGES HARBOUR	03/13		125	10	1	.06
GANGES HARBOUR	03/13		75	10	3	.30
GANGES HARBOUR	03/14		60	5	1	.01
GANGES HARBOUR	03/14		25	5	1	.01
GANGES HARBOUR	03/14		100	10	3	.40

HERRING SPAWN SUMMARY TABLE FOR 1978

SPAWNING GROUND	DATE SPAWNED START      END	LENGTH YDS.	WIDTH YDS.	INTEN- SITY	STD.SQ. YDS. (1000'S)
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AREA:18,COWICHAN

CONTINUED

FULFORD HARBOUR	03/14	350	75	3	10.50
SELBY COVE	03/17	850	4	3	1.36
ANNETTE INLET	03/17	75	30	1	.11
GANGES HARBOUR	03/17	150	50	1	.37
GANGES HARBOUR	03/17	100	50	1	.25
GANGES HARBOUR	03/19	75	15	1	.06
GANGES HARBOUR	03/19	100	25	1	.12
ANNETTE INLET	03/20	100	10	3	.40
GLENTHORNE PASSAGE	03/20	200	50	1	.50
ANNETTE INLET	03/21	75	10	5	.75
ANNETTE INLET	03/21	75	10	5	.75
SELBY COVE	03/21	550	5	5	2.75
SELBY COVE	03/21	200	5	5	1.00
FULFORD HARBOUR	03/21	600	85	5	51.00
GANGES HARBOUR	03/22	100	20	3	.80
GANGES HARBOUR	03/22	120	25	3	1.20
GANGES HARBOUR	03/25	25	25	3	.25
FULFORD HARBOUR	03/25	250	10	3	1.00
SELBY COVE	03/25	650	5	3	1.30
GLENTHORNE PASSAGE	03/27	750	10	3	3.00
ELLEN BAY	03/28	600	10	3	2.40
ELLEN BAY	03/28	200	10	3	.80
BOUT COVE	04/06	200	30	3	2.40
AREA TOTAL		15440			166.19

AREA:19,VICTORIA

NO DEPOSITION RECORDED.

AREA:20,JUAN DE FUCA

NO DEPOSITION RECORDED.

AREA:21,SWIFTSURE

NO DEPOSITION RECORDED.

HERRING SPAWN SUMMARY TABLE FOR 1978

SPAWNING GROUND	DATE SPAWNED START	DATE SPAWNED END	LENGTH YDS.	WIDTH YDS.	INTEN- SITY	STD. SQ. YDS. (1000'S)
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AREA: 23, BARKLEY SOUND

TOQUART BAY	03/10	03/11	1200	3	3	1.44
TOQUART BAY	03/10	03/11	600	4	3	.96
TOQUART BAY	03/10	03/11	700	3	4	1.36
TOQUART BAY	03/10	03/11	400	3	4	.78
MACOAH PASSAGE	03/10	03/12	400	3	1	.06
MACOAH PASSAGE	03/10	03/12	1600	25	3	16.00
MACOAH PASSAGE	03/10	03/12	1800	10	4	11.70
STOPPER ISLANDS	03/10	03/12	400	1	1	.02
STOPPER ISLANDS	03/10	03/12	400	10	3	1.60
STOPPER ISLANDS	03/10	03/12	250	5	1	.06
STOPPER ISLANDS	03/10	03/12	350	5	1	.09
STOPPER ISLANDS	03/10	03/12	500	20	3	4.00
HERMIT ISLAND	03/15		500	10	5	5.00
LARKIN ISLAND	03/10	03/12	200	5	3	.40
LARKIN ISLAND	03/10	03/12	400	10	3	1.60
LARKIN ISLAND	03/10	03/12	100	5	4	.32
STOPPER ISLANDS	03/10	03/12	350	10	1	.17
STOPPER ISLANDS	03/10	03/12	200	15	3	1.20
STOPPER ISLANDS	03/10	03/12	200	100	4	13.00
STOPPER ISLANDS	03/10	03/12	400	150	3	24.00
STOPPER ISLANDS	03/10	03/12	375	250	6	131.25
SPILLING ISLET	03/10	03/12	450	5	4	1.46
ROWLANDS ISLET	03/10	03/12	300	5	4	.97
OTTAWAY ISLET	03/10	03/12	250	5	5	1.25
DAVID ISLAND	03/10	03/12	250	10	1	.12
DAVID ISLAND	03/10	03/12	550	10	4	3.57
ST INES ISLAND	03/10	03/12	2900	30	4	56.55
ST INES ISLAND	03/10	03/12	1800	6	3	4.32
MACOAH PASSAGE	03/10	03/12	600	50	3	12.00
MACOAH PASSAGE	03/10	03/12	225	40	1	.45
MACOAH PASSAGE	03/10	03/12	550	20	3	4.40
MACOAH PASSAGE	03/10	03/12	625	20	3	5.00
MACOAH PASSAGE	03/10	03/12	400	100	3	16.00
MACOAH PASSAGE	03/10	03/12	1500	250	3	150.00
EQUIS BEACH	03/19		100	10	3	.40
DUTCH HARBOUR	03/19		300	200	3	24.00
USELESS INLET	03/18		600	250	3	60.00
USELESS INLET	03/18		70	50	3	1.40
BAMFIELD INLET	03/26		3117	6	1	.94
BAMFIELD INLET	03/26		1084	6	4	4.23
GRAPPLER INLET	03/26		2200	4	5	8.80
AREA TOTAL			29196			570.90

HERRING SPAWNING SUMMARY TABLE FOR 1978

SPAWNING GROUND	DATE SPAWNED START	DATE SPAWNED END	LENGTH YDS.	WIDTH YDS.	INTEN- SITY	STD.SQ. YDS. (1000'S)
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AREA:24,CLAYOQUOT SOUND

BAWDEN BAY	03/29	04/07	75	25	5	1.88
MATILDA INLET	03/20	04/07	50	15	5	.75
HESQUIAT HARBOUR	03/10	03/14	500	30	5	15.00
HESQUIAT HARBOUR	03/10	03/14	400	100	7	76.00
HESQUIAT HARBOUR	03/10	03/14	400	25	5	10.00
HESQUIAT HARBOUR	03/10	03/14	250	40	3	4.00
HESQUIAT HARBOUR	03/10	03/14	75	15	7	2.14
HESQUIAT HARBOUR	03/10	03/14	50	10	3	.20
HESQUIAT HARBOUR	03/10	03/14	30	10	5	.30
HESQUIAT HARBOUR	03/10	03/14	100	10	3	.40
HESQUIAT HARBOUR	03/10	03/14	125	10	7	2.37
HESQUIAT HARBOUR	03/10	03/14	300	15	7	8.55
HESQUIAT HARBOUR	03/10	03/14	100	10	7	1.90
HESQUIAT HARBOUR	03/10	03/14	400	20	5	8.00
HESQUIAT HARBOUR	03/10	03/14	300	20	7	11.40
HESQUIAT HARBOUR	03/10	03/14	150	15	5	2.25
HESQUIAT HARBOUR	03/10	03/14	50	15	7	1.42
HESQUIAT HARBOUR	03/10	03/14	400	15	7	11.40
HESQUIAT HARBOUR	03/10	03/14	100	50	3	2.00
HESQUIAT HARBOUR	03/10	03/14	75	50	7	7.12
HESQUIAT HARBOUR	03/10	03/14	100	50	3	2.00
HESQUIAT HARBOUR	03/10	03/14	200	50	3	4.00
HESQUIAT HARBOUR	03/10	03/14	150	50	5	7.50
HESQUIAT HARBOUR	03/10	03/14	1200	50	3	24.00
HESQUIAT HARBOUR	03/10	03/14	400	200	1	4.00
HESQUIAT HARBOUR	03/10	03/14	200	50	3	4.00
BECK ISLAND	03/08	03/20	50	30	3	.60
BECK ISLAND	03/08	03/20	15	75	3	.45
BECK ISLAND	03/08	03/20	100	20	3	.80
STONE ISLAND	03/08	03/20	50	7	3	.14
STONE ISLAND	03/08	03/20	150	75	3	4.50
STONE ISLAND	03/08	03/20	250	10	3	1.00
OPITSAT RESERVE	03/08	03/17	250	100	3	10.00
OPITSAT RESERVE	03/08	03/17	100	25	1	.12
OPITSAT RESERVE	03/08	03/17	150	15	1	.11
YELLOW BANK	03/08	03/17	250	150	1	1.87
SARANAC ISLAND	03/08	03/17	100	30	3	1.20
SARANAC ISLAND	03/08	03/17	100	50	3	2.00
YELLOW BANK	03/08	03/17	70	40	3	1.12
CYPRESS BAY	03/12	03/18	30	6	5	.18
CYPRESS BAY	03/12	03/18	120	20	5	2.40
CYPRESS BAY	03/12	03/18	125	20	5	2.50
CYPRESS BAY	03/12	03/18	60	2	3	.05
CYPRESS BAY	03/12	03/18	20	2	3	.02
HECATE BAY	03/08	03/17	100	15	3	.60
HECATE BAY	03/08	03/17	250	5	5	1.25
HECATE BA	03/08	03/17	400	10	3	1.60

HERRING SPAW ; SUMMARY TABLE FOR 1978

SPAWNING GROUND	DATE SPAWNED START	END	LENGTH YDS.	WIDTH YDS.	INTEN- SITY	STD.SQ. YDS. (1000'S)
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AREA:24,CLAYOQUOT SOUND CONTINUED

HECATE BAY	03/08	03/17	300	10	3	1.20
HECATE BAY	03/08	03/17	100	10	1	.05
HECATE BAY	03/08	03/17	300	10	3	1.20
HECATE BAY	03/08	03/17	150	10	3	.60
HECATE BAY	03/08	03/17	150	10	1	.07
HECATE BAY	03/08	03/17	250	10	1	.12
RITCHIE BAY	03/08	03/16	200	8	3	.64
RITCHIE BAY	03/08	03/16	75	10	3	.30
RITCHIE BAY	03/08	03/16	60	10	3	.24
RITCHIE BAY	03/08	03/16	100	10	3	.40
RITCHIE BAY	03/08	03/16	75	15	3	.45
RITCHIE BAY	03/08	03/16	100	8	3	.32
EPPER PASS	03/08	03/16	100	10	3	.40
EPPER PASS	03/08	03/16	100	30	5	3.00
EPPER PASS	03/08	03/16	75	15	5	1.12
EPPER PASS	03/08	03/16	75	10	5	.75
EPPER PASS	03/08	03/16	125	100	5	12.50
EPPER PASS	03/08	03/16	150	20	3	1.20
EPPER PASS	03/08	03/16	400	40	5	16.00
EPPER PASS	03/08	03/16	75	15	5	1.12
EPPER PASS	03/08	03/16	100	75	5	7.50
MEARES ISLAND	03/08	03/16	70	10	5	.70
MEARES ISLAND	03/08	03/16	150	20	5	3.00
MEARES ISLAND	03/08	03/16	220	3	5	.66
MEARES ISLAND	03/08	03/16	200	3	3	.24
MEARES ISLAND	03/08	03/16	60	10	5	.60
MEARES ISLAND	03/08	03/16	25	8	3	.08
ROBERT POINT	03/08	03/16	75	10	5	.75
ROBERT POINT	03/08	03/16	70	10	5	.70
ROBERT POINT	03/08	03/16	150	30	3	1.80
ROBERT POINT	03/08	03/16	125	30	5	3.75
ROBERT POINT	03/08	03/16	200	50	5	10.00
ROBERT POINT	03/08	03/16	40	4	3	.06
VARGAS ISLAND	03/07	03/16	75	50	7	7.12
VARGAS ISLAND	03/07	03/16	50	20	5	1.00
CALMUS PASS	03/07	03/16	100	80	5	8.00
CALMUS PASS	03/07	03/16	80	15	3	.48
CALMUS PASS	03/07	03/16	200	60	5	12.00
VARGAS ISLAND	03/07	03/16	30	10	5	.30
CALMUS PASS	03/07	03/16	150	25	7	7.12
CALMUS PASS	03/07	03/16	250	10	3	1.00
VARGAS ISLAND	03/07	03/16	400	10	3	1.00
VARGAS ISLAND	03/05	03/15	75	15	5	1.12
VARGAS ISLAND	03/05	03/15	75	20	5	1.50
VARGAS ISLAND	03/05	03/15	20	10	5	.20
VARGAS ISLAND	03/05	03/15	150	30	3	1.80
ELLOW BANK	03/05	03/15	150	30	7	8.55

HERRING SPAWN SUMMARY TABLE FOR 1978

SPAWNING GROUND	DATE SPAWNED START	END	LENGTH YDS.	WIDTH YDS.	INTEN- SITY	STD.SQ. YDS. (1000'S)
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AREA:24,CLAYOQUOT SOUND CONTINUED

ELBOW BANK	03/05	03/15	400	350	3	56.00
ELBOW BANK	03/05	03/15	300	175	5	52.50
ELBOW BANK	03/05	03/15	400	350	7	266.00
VARGAS ISLAND	03/05	03/13	1500	100	3	60.00
VARGAS ISLAND	03/05	03/13	1500	100	5	150.00
VARGAS ISLAND	03/05	03/13	1400	300	5	420.00
VARGAS ISLAND	03/05	03/13	15	7	3	.04
VARGAS ISLAND	03/05	03/13	20	5	3	.04
AREA TOTAL			20705			1373.03

AREA:25,NOOTKA SOUND

PORT LANGFORD	02/28	03/14	600	100	7	114.00
PORT LANGFORD	02/28	03/14	250	75	7	35.62
PORT LANGFORD	02/28	03/14	350	50	3	7.00
PORT LANGFORD	02/28	03/14	500	30	7	28.50
PORT LANGFORD	02/28	03/14	400	30	7	22.80
PORT LANGFORD	02/28	03/14	300	40	5	12.00
PORT LANGFORD	02/28	03/28	300	30	7	17.10
PORT LANGFORD	02/28	03/14	900	30	5	27.00
PORT LANGFORD	02/28	03/14	950	30	6	39.90
PORT LANGFORD	02/28	03/14	200	20	6	5.60
NUCHATLITZ VILLAGE	03/16	03/24	100	10	5	1.00
NUCHATLITZ VILLAGE	03/16	03/24	500	10	5	5.00
NUCHATLITZ VILLAGE	03/16	03/24	1000	10	5	10.00
NUCHATLITZ VILLAGE	03/16	03/24	2000	15	5	30.00
OUTER NUCHATLITZ	03/02	03/10	1000	100	5	100.00
OUTER NUCHATLITZ	03/02	03/10	1000	200	6	280.00
OUTER NUCHATLITZ	03/16	03/24	500	30	5	15.00
OUTER NUCHATLITZ	03/16	03/24	400	35	5	14.00
AREA TOTAL			11250			764.52

AREA:26,KYUQUOT SOUND

NO DEPOSITION RECORDED.

HERRING SPAWNING SUMMARY TABLE FOR 1978

SPAWNING GROUND	DATE SPAWNED START      END	LENGTH YDS.	WIDTH YDS.	INTEN- SITY	STD.SQ. YDS. (1000'S)
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AREA:27,QUATSING SOUND

FORWARD INLET	03/12	500	100	4	32.50
FORWARD INLET	03/14	400	100	4	26.00
FORWARD INLET	03/09	1600	150	5	240.00
FORWARD INLET	03/14	750	200	3	60.00
SIDE BAY	03/14	210	100	4	13.65
SIDE BAY	03/14	475	475	4	146.66
ANCHORAGE ISLAND	03/14	250	125	4	20.31
KLASKISH INLET	03/14	100	50	4	3.25
KLASKISH INLET	03/14	150	50	4	4.87
KLASKISH INLET	03/14	300	125	4	24.37
MCDUGAL ISLAND	03/14	1050	150	4	102.37
MCDUGAL ISLAND	03/14	1675	200	4	217.75
MCDUGAL ISLAND	03/14	200	50	4	6.50
MCDUGAL ISLAND	03/14	150	75	4	7.31
HATHAWAY CREEK	04/23	200	50	4	6.50
HATHAWAY CREEK	04/23	50	50	4	1.62
HATHAWAY CREEK	04/23	100	50	4	3.25
MATHEWS ISLAND	03/22	500	50	3	10.00
MATHEWS ISLAND	03/22	500	75	4	24.37
BROWNING INLET	03/28	500	150	3	30.00
GREENWOOD POINT	03/12	700	50	4	22.75
GREENWOOD POINT	03/14	1200	100	3	48.00
GREENWOOD POINT	03/28	1000	50	4	32.50
GREENWOOD POINT	03/28	300	100	5	30.00
HAZARD POINT	03/10	1300	50	5	65.00
HAZARD POINT	03/10	700	200	5	140.00
LEESON HARBOUR	03/12	700	100	4	45.50
LEESON HARBOUR	03/10	400	50	5	20.00
LEESON HARBOUR	03/12	600	50	4	19.50
LEESON HARBOUR	03/10	1000	50	4	32.50
FORWARD INLET	03/14	700	250	3	70.00
FORWARD INLET	03/09	1000	250	5	250.00
FORWARD INLET	03/12	500	150	3	30.00
FORWARD INLET	03/09	750	150	3	45.00

AREA TOTAL

20510

1832.06

AREA:28,HOWE SOUND

NO DEPOSITION RECORDED.



HERRING SPAWN SUMMARY TABLE FOR 1978

SPAWNING GROUND	DATE SPAWNED START      END	LENGTH YDS.	WIDTH YDS.	INTEN- SITY	STD.SQ. YDS. (1000'S)
AREA:29,FRASER RIVER					
BOUNDARY BAY	02/20	1500	50	1	3.75
AREA TOTAL		1500			3.75
GRAND TOTAL		494547			20649.05