REPORT OF THE CANADA/UNITED STATES NORTHERN BOUNDARY

TECHNICAL COMMITTEE

January 8, 1986

Vancouver, B.C.

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Northern Boundary Technical Committee Status Report Executive Summary

1. Sockeye, chum and pink stocks returning to southern Southeast Alaska and northern B.C. follow complicated and wide ranging migration routes which frequently result in the interception of one country's fish by the other country. Selected fisheries in Alaska which intercept Canadian fish are Tree Point/Cape Fox gillnet, District 104 seine, Clarence Strait/Revilla Channel seine and District 106 gillnet and seine. Selected fisheries in northern B.C. which intercept Alaskan fish are Area 1 troll and net, Area 3 troll and net, and the Area 4 and 5 net.

2. All of the selected interception fisheries in both Canada and Alaska have long fishing histories at various levels and were implemented to target on production from the country of origin. At present most of the fisheries are managed to target on one species initially then switch to another species when it becomes dominant in the catches.

3. Increases in fishing efficiency over time have probably occurred for all gear types as a result of improvements to gear, vessel design, electronics, etc.

4. In 1986 the total pink salmon return to southern Southeast Alaska is expected to be 37.9 million. Formal forecasts for other species are not produced. The expected returns to northern B.C. are as follows: In Area 3 for pinks 2.0 million; for sockeye 456,000 and for chum 80,000. In Area 4 for pinks 2.9 million and for sockeye 3.0 million.

5. The U.S. and Canada initiated a major research effort in 1982 directed at clarifying the interception rates of pink and sockeye salmon in key boundary area fisheries. For sockeye salmon the analysis of scale pattern differences and adult tagging were used in 1982 and 1983 and scale patterns analysis alone was used in 1984 and 1985. In 1982 adult tagging of pink salmon was conducted. In 1984 and 1985 the adult pink salmon tagging program was repeated and scale pattern analysis, electrophoresis and parasite analysis for sockeye salmon was conducted.

Results from the 1982-1984 studies indicate that major interceptions of Canadian sockeye are occurring in the Tree Point gillnet and Noyes Island purse seine fisheries. Gillnet and purse seine fisheries in the Clarence Strait area also are harvesting significant numbers of Canadian sockeye salmon. Based on the 1982 and 84 adult pink tagging, the Canadian Area 1 troll and net fisheries were identified as major interceptors of Alaskan pink salmon. The Area 3 net fishery also caught significant numbers of Alaskan pink salmon. Low interception levels were identified in a number of other fisheries. U.S. interception rates of Canadian pink salmon stocks were highest at Cape Fox; in addition, low levels were identified in the Cape Muzon/Dall Island, lower Clarence Strait, and Noyes Island fisheries. In some cases, due to high numerical catches, the numbers of fish intercepted may be significant.

The specific interception rate information is contained in the research progress report section 4.0. Graphs and tables comparing the results are also included. The differences in interception rates between years indicate the need for caution in interpreting limited years of stock separation data.

1.0 NORTHERN BOUNDARY AREA TECHNICAL COMMITTEE TERMS OF REFERENCE

In order to facilitate the development of a fisheries annex for the northern B.C. - southern Southeast Alaska area that takes into account all provisions of Article III of the 1982 draft treaty, the Northern Boundary Area Technical Committee shall:

(1) review the status of boundary area fisheries including catch and effort levels, possible changes in gear efficiency and changes in fishing patterns;
(2) describe present fisheries regimes and current management practices;
(3) update current information on interception rates and identify current harvest patterns for stocks of mutual concern;
(4) identify data gaps and program needs in northern boundary area;
(5) examine potential enhancement opportunities in the area and identify possible benefits and effects on existing fisheries; and
(6) report to the Governments of the United States and Canada prior to December 2, 1984, on the activities set out in paragraphs (1) - (5) above (a preliminary report to be submitted by November 17, 1984).

2.0 DESCRIPTION OF BOUNDARY AREA FISHERIES

2.1 SOUTHERN SOUTHEAST ALASKA

2.1.1 Tree Point

The Tree Point gillnet area, also known as the Cape Fox, Portland Canal and Foggy Bay gillnet fisheries, was offered as an alternative to a gillnet fishery in Burroughs Bay which existed prior to 1957. The fishery was initiated in 1957 in the Portland-Pearse Canal areas and was designed primarily to target chum salmon stocks arising from Portland Canal production. Expansion of the gillnet fishery outside the Canal began in 1960 and by 1963 gillnet gear was fishing the entire shoreline between Garnet and Foggy Points. Prior to the 1957-1960 period, purse seines operated in both Section 1A and Section 1B and fish traps operated in Section 1B (see Fig. 3A and 3b).

Prior to 1972, the season start up dates for Sections 1A and 1B were determined annually by the Board of Fisheries. The 1B portion began as early as June 9 and as late as June 19 and the 1A portion as early as June 9 and as late as July 21. In an effort to standardize the opening dates, the Board in 1972, set the openings for 1B and 1A for the third Sunday in June and July, respectively. The late opening date for 1A was established in recognition of the generally depressed condition of the chum stocks in the area. In keeping with this concern, in 1979 the established opening date for Section 1A was completely removed from the regulations and openings and closures have been carried out entirely by emergency order.

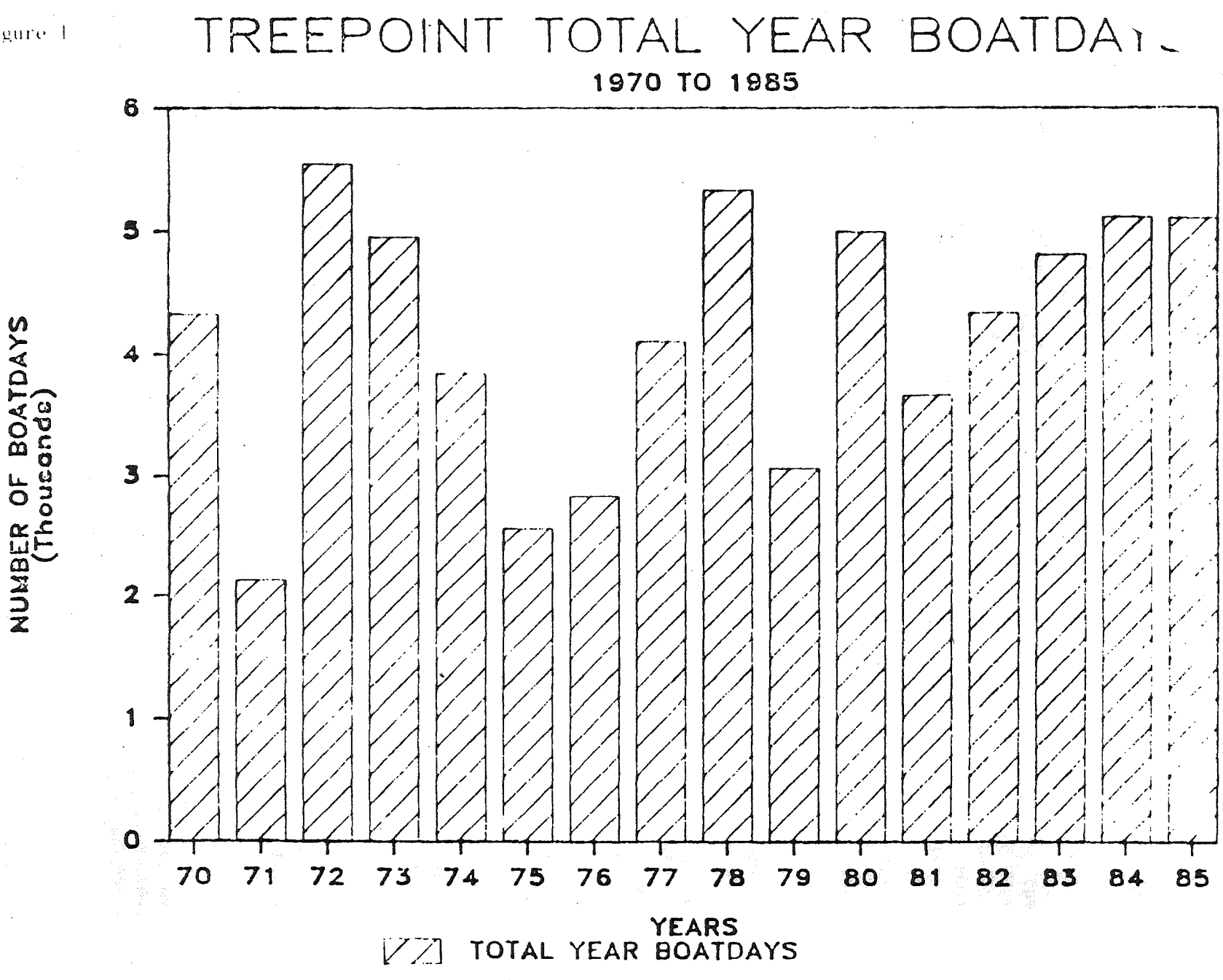
During the years prior to 1970, the gear level in the fishery remained fairly constant, generally below 90 vessels. Following 1970, it rapidly increased to 150-200 vessels during peak weeks. The level remained relatively high through 1979 and then dropped somewhat to its present level of between 100-135 boats during the season's peak.

In the years since its inception, the fleet's efficiency has increased considerably. Most fishermen have upgraded to more powerful, larger vessels capable of fishing in more severe weather conditions than in the earlier years of the fishery. Nets currently used in the fishery have a higher catch rate than did the nets used a few years ago because of both the improved materials used in their construction and improved ability to match colors and mesh size to the various fisheries in the region. Although, by regulation, monofilament nets are prohibited from use, newer nets employ materials constructed of multiple strands of monofilament loosely gathered around a central core. Processors buying Tree Point production have accommodated the fleet by making available ice on-the-grounds and a tender fleet which both improves the quality of the catch as well as making it possible for the fishermen to spend more time fishing. In recent years, the 1B portion of the Tree Point gillnet fishery continues to be opened by regulation on the third Sunday in June. Early in the season, the fishery targets on sockeye and chum stocks destined for Alaskan watersheds, the majority of which are located in Portland Canal, Revilla Channel, Boca De Quadra and Behm Canal and sockeye returns to the Nass and Skeena Rivers located in northern British Columbia. Beginning in mid-July management emphasis is placed on pink salmon stocks with the opening of portions of the inside waters to seining. The Pink Salmon Management Plan for District 101 generally remains in effect through August.

> 5 AAC 33.360. DISTRICT ONE PINK SALMON MANAGEMENT PLAN. In district 1, when a purse seine fishery is harvesting pink salmon stocks subject to concurrent salmon fishing by drift gill nets n Section 1-B, the following time formula must be followed for the Section 1-B drift gill net fishery.
>
> (1) when the purse seine fishery is open for any portion of one day during a fishing week, the drift gill net fishery must be open for 48 hours during the same fishing week;
>
> (2) when the purse seine fishery is open for any portion of two days during a fishing week, the drift gill net fishery must be open for 96 hours during the same fishing week;
>
> (3) when the purse seine fishery is open for any portion of three or more days during a fishing week, the drift gill net fishery must be open for 120 hours during the same fishign week.
>
> Authority: AS 16.05.060
> AS 16.05.251

By mid-August, the fleet begins to leave Tree Point for points north and south, and by late August, the fleet size is generally less than 50 boats. Late August and September management is based on the harvest of late chum and coho returns. During this period, effort is greatly reduced over earlier fishing weeks. The fishery is closed each year on or before September 20 when the troll coho season closes.

Figure 1


TREEPOINT TOTAL YEAR BOATDAYS
1970 TO 1985
NUMBER OF BOATDAYS
(Thousands)
0
1
2
3
4
5
6
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
YEARS
TOTAL YEAR BOATDAYS

The 1A portion of the gillnet area has not been open since 1973 in an effort to increase chum escapements to the Portland Canal watershed.

2.1.2 District 104

The District 104 (Noyes Island) purse seine fishery began in the early 1930's. In its early years the fishery was conducted on an intermittent basis. With the advent of traps in the area in the 1930's, the harvest was taken by both gear types until traps were abolished when Alaska became a state (see Fig. 3a and 3b).

By the early 1940's the District 104 purse seine fishery was making contributions to canneries located at Waterfall, Steamboat Bay, Craig, Hydaburg, and Klawock, all located on the west coast of Prince of Wales Island.

From its inception until 1968 the fishery generally operated on a six-day fishing week beginning in early July. The rationale for this was that the fishery was often hampered by severe wind and sea conditions and therefore significantly less efficient than the inside seine fisheries which operated on a standard four-day week. Further, it was thought that because the fishable coastline in District 104 accounted for only a small portion of the available coastline bordering outside waters that only a small portion of the total inshore salmon migration would be vulnerable to the fishery. It has become apparent that this assumption is erroneous. In recent years, the fishery has demonstrated a capability for harvesting significant portions of the inshore migrating pink salmon returns as well as other species.

In 1969, because of a continuing decline in the pink salmon stocks in southern Southeast Alaska, the standard fishing week in the district was reduced to four days. During the 1970's stock levels showed little sign of recovery and the need for drastic measures became apparent if stocks were to be returned to a state of health which would warrant a viable commercial harvest. In the early to mid-1970's fishing in District 104 as well as inside districts was severely curtailed in an effort to improve escapements. In recent years, early season effort in the district has been stabilized in keeping with U.S. - Canada interim agreements and the need to conserve U.S. salmon stocks.

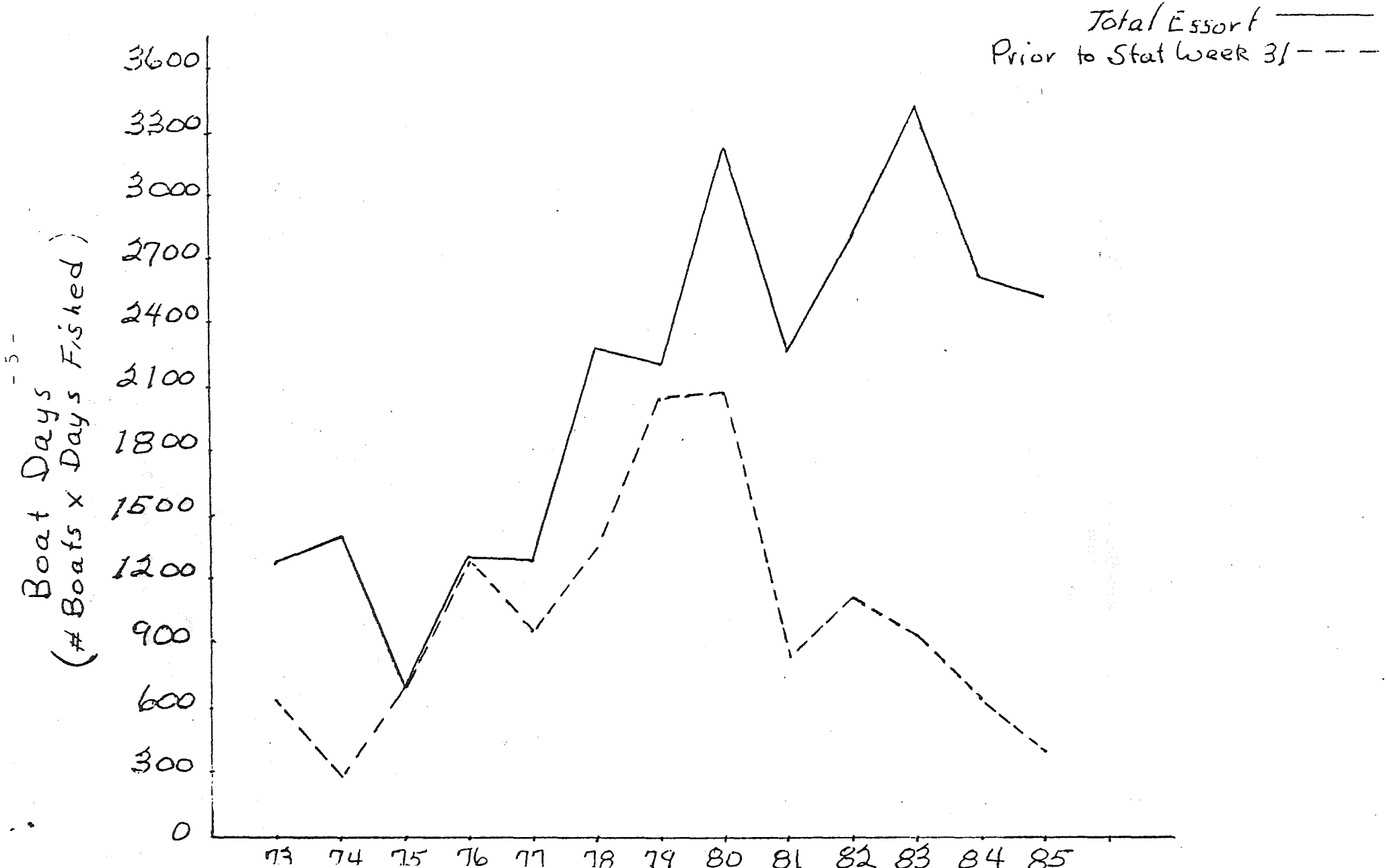
During the 1970's the health of the salmon stocks in southern Southeast Alaska has exhibited an improved trend. Along with this, the ability of the seine fleet to harvest salmon has been significantly increased. Early in the decade some industry groups began building new limit seine vessels (50 feet length, 58 feet overall) to replace smaller outmoded vessels in their fleets. Shortly thereafter, individual fishermen began upgrading to larger, more efficient vessels, larger seine skiffs with more powerful engines and stronger heavier, and deeper gear. Along with this came the ability to fish during more inclement weather along the outer coastal areas. In addition, many of the vessels now carry tanks or other means of holding fish throughout an entire fishing period giving them the ability to fish longer hours making more "sets," especially if the half-purse method is employed.

In recent years, District 104 continues to be opened by regulation on the

Figure 2

District 4 Purse Seine Essort

Total Year vs. Prior to Statistical Week 31



first Sunday in July. Beginning in 1981 fishing time during the initial period was curtailed to two days then to one day in 1984 for the purpose of reducing effort on sockeye and chum stocks early in July. Tagging indicates that sockeye stocks harvested in the District 104 fishery in July are returning to a large number of watersheds in southern Southeast Alaska and the Skeena and Nass Rivers in northern British Columia. Chum stocks are thought to be primarily returning to watersheds located in inside southern Southeast Alaska areas, however, limited tagging of chum in District 104 in 1983 indicated Canadian chum salmon were also present. Toward mid-to-late July, management emphasis changes to pink salmon and continues on this basis until the end of the season, generally late in August. During this period the fishery has been restricted to the same amount of fishing time allowed in inside areas. However, if weak pink salmon runs develop in inside areas, fishing time in District 104 is reduced or portions of the District closed.

2.1.3 Clarence Strait--Revilla Channel

Seine fisheries in lower Clarence Strait and Revilla Channel have existed at various levels of interest since at least the 1930's. With the termination of trap fishing in 1959, the seine fishery became the primary method of harvesting the salmon stocks passing through these two areas into watersheds in Clarence Strait, Revilla Channel, Behm Canal and contiguous waters (see Fig. 3a and 3b).

In previous years, the fleet generally fished in bays and inner strait areas. As the resource declined in the 1950's and early 1960's the fishery was moved farther away from terminal areas and fishing time was reduced in an effort to improve the health of stocks returning to those watersheds. Ultimately, the Clarence Strait-Revilla Channel fisheries have evolved into coastal fisheries harvesting salmon on shorelines between Cape Chacon and Moira Sound in lower Clarence Strait, and Foggy Point and Throne Arm in Revilla Channel. These fisheries do not generally move further inside until later in the season when good escapements to Districts 101 and 102 watersheds are assured.

Gear levels in these fisheries vary considerably depending upon not only the abundance of fish in these two areas but also the fishing success in other areas of the region, including northern Southeastern Alaska.

These two areas are generally opened on the basis of the abundance of pink salmon stocks. Initial openings in the two areas normally occur simultaneously beginning during the second or third weeks in July and are generally of a short 15-hour duration. Subsequent fishing periods are based on the size of the returns as they develop but are generally between two and four days weekly.

The first opening in July seldom draws more than a token effort in the lower Clarence Strait fishery. Most of the gear concentrates on the shoreline between Foggy Point and Cone Point in Revilla Channel. This fishery targets on pink stocks returning to the early systems in Boca De Quadra and Behm Canal. Toward late July and early August effort becomes more evenly spread between

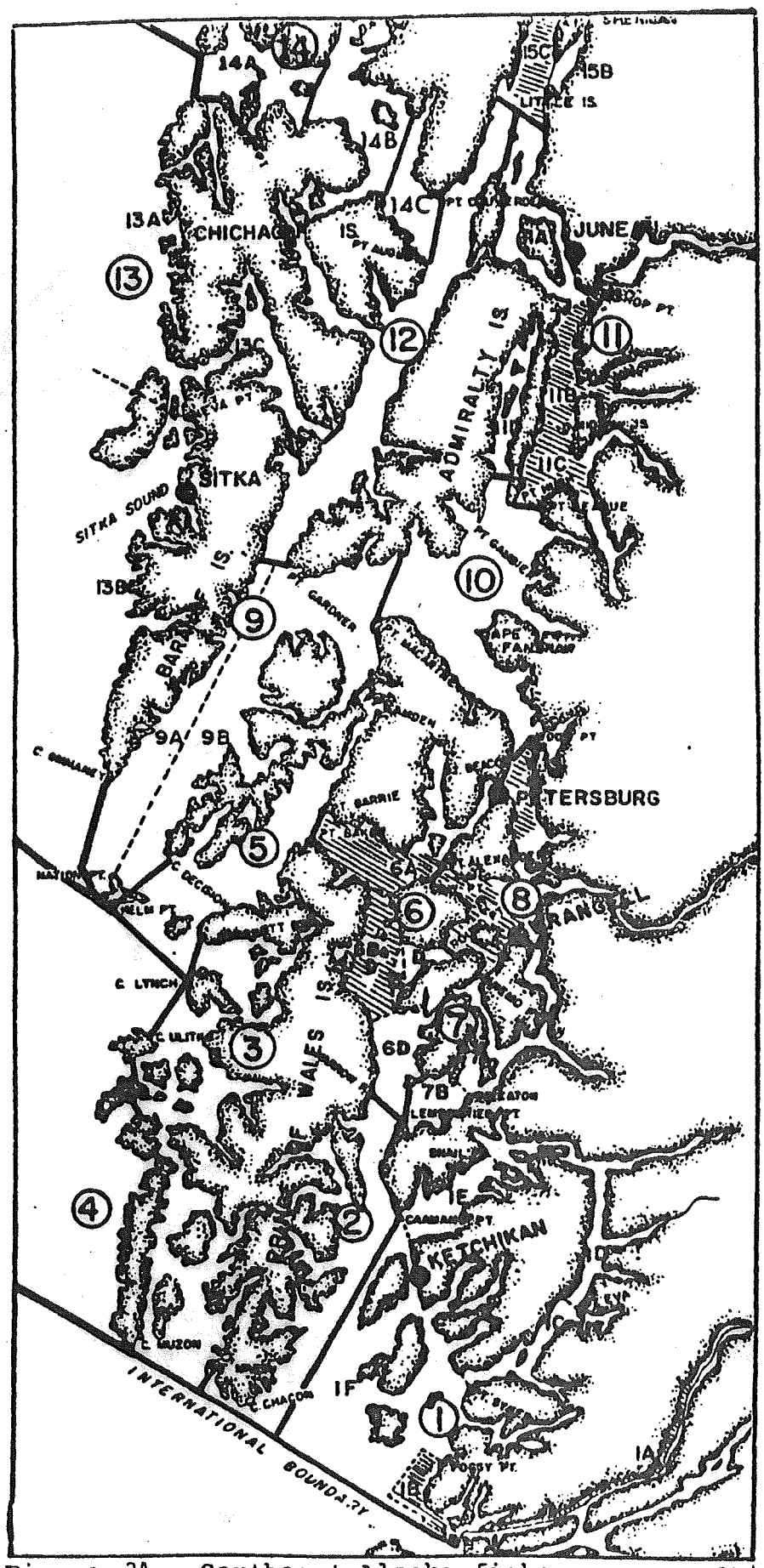


Figure 3A. Southeast Alaska fishery management Districts 101 - 115 (1-15).

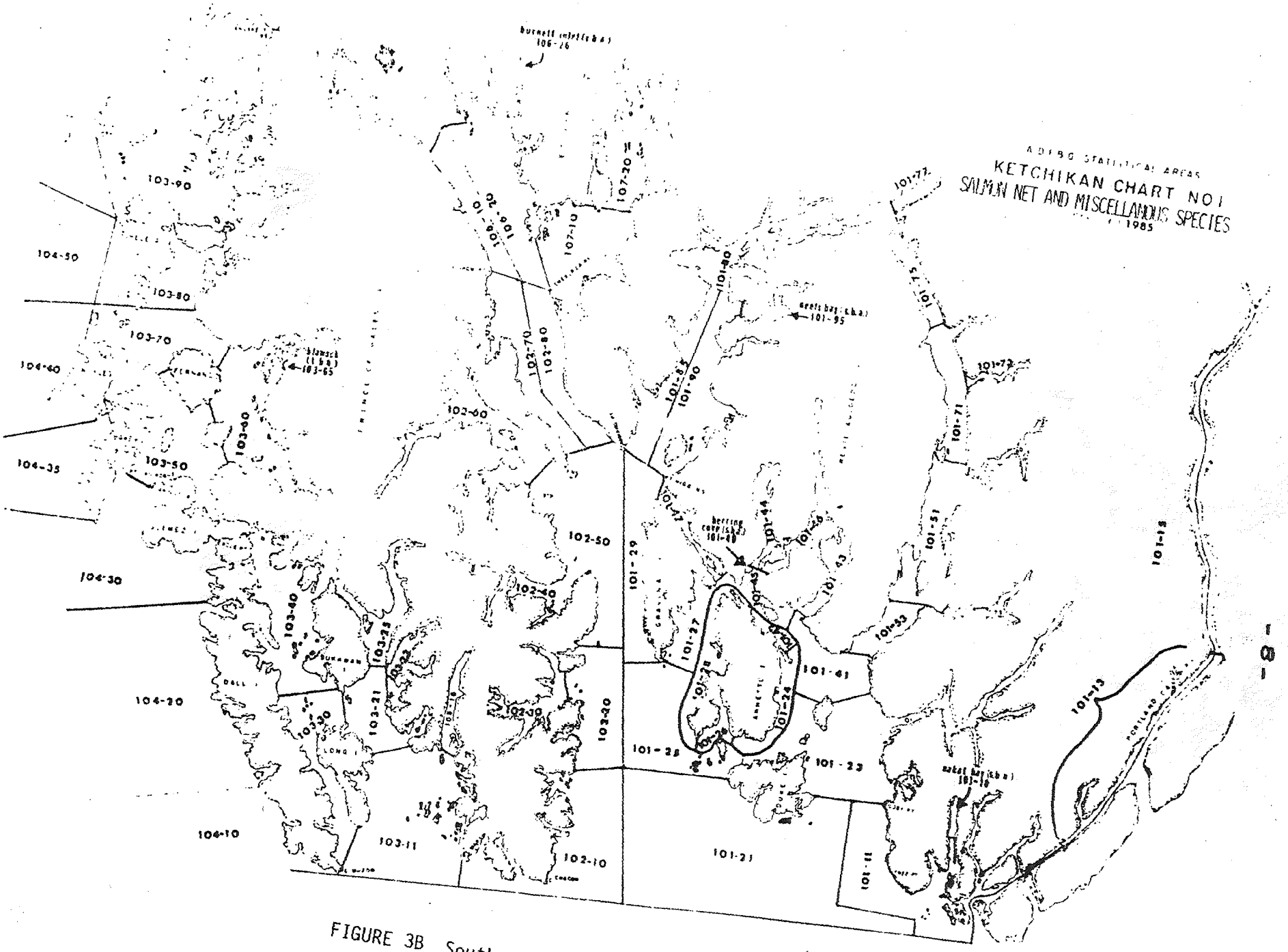


FIGURE 3B Southern Southeastern Management Districts

Districts 101 and 102 as later returns of pink salmon move through these areas. As in District 104, the fleet's efficiency has increased considerably.

2.1.4 District 106 Gillnet Fishery

A. Historical Review

District 106 was originally opened to drift gillnetting in a small portion of Sumner and Clarence Straits in 1957. This fishery was implemented to harvest some of the southern Southeast Alaska populations of sockeye salmon. It was gradually expanded to the existing size of the major District 106 gillnet fishery by 1963. It now includes interception and terminal fisheries on sockeye, pink, and coho salmon and encompasses eastern Sumner Strait and northern Clarence Strait. Open sockeye fishing periods were usually three days per week from 1963 through 1973. Since 1973, openings have been based upon run strength with weekly fishing days varying between zero and 4 days per week. In 1984, the gillnet fishing areas was expanded slightly to include the Screen Island shoreline in Section 6D just east of Section 6C. This new area is opened in conjunction with Districts 6B and 6C, except for a seven-week closure beginning in late July, when seine fishermen use the area (see Fig. 3a and 3b).

B. Changes in Fishing Efficiency and Fishing Patterns Since 1979

Fishing efficiency has increased in a number of ways. The harvest rate of nets has increased with less visible, multistrand gear. Fishing vessels have become longer and wider. This has increased their capability of fishing during poor weather and to hold more fish prior to unloading. With increased hold capacity has also come better fish preserving techniques so entire week's catches can be held and delivered at one time. Better communications equipment has enabled fishermen to get more up-to-date information on harvests in other locations. The Department of Fish & Game now provides timely weekly catch data for the region and historical catch trend documentation is available from recently improved computerized catch files. Limited entry has significantly decreased the turnover of fishermen in the fishing fleet and has created a large core of extremely knowledgeable fishermen.

In the early 1970's there was less in-week movement between areas by the gillnet fishing fleet. Fisheries tended to be open for the standard three-day period each week. During the past ten years the fishing pattern in District 106 has also been changed. Major reductions in time and area have occurred due to poor runs of sockeye, pink and coho salmon and to adjust for the Canadian fishery. Average effort in the District 106 fishery has ranged between 65 and 95 vessels. However, with the high mobility of the Southeast Alaska gillnet fleet, the effort during any given week has ranged between 20 and 150 vessels.

C. Present Fishing Regime and Current Management Practices

The present drift gillnet fishing season in District 106 begins on the third Sunday in June. Vessels move freely between fishing districts throughout southeastern so effort and catch are controlled by regulating the amount of fishing time and area. Each fishing vessel's gear is limited to a maximum of 300 fathoms of net, 60 meshes deep with a minimum of 30 strands in the web. The fishery harvests sockeye salmon until mid-July or early August,

concentrates on pink salmon until mid-August or early September and then switches to coho salmon.

The current management for the three target species initially depends on any preseason forecasts, brood year escapements, historic harvest patterns, and known migration routes and run timing. This information is used to determine the duration and area of the initial fishery. Sockeye management is conducted in two distinct areas: the Sumner Strait fishery in Section 6A which intercepts Stikine fish, local stocks and sockeye bound for more southern areas and the northern Clarence Strait fishery in Sections 6B and 6C which intercept local stocks and sockeye bound for more southern areas. If the Stikine sockeye run is very poor, Section 6A is kept closed during the first three-to-five weeks of the season to protect Stikine stocks. This eliminates almost all of the harvest of Stikine stocks. Once the fishery begins, each weekly opening is based upon the catch per boat per day, the Stikine indexing program data, any significant changes in the number of vessels fishing, expected fishing effort and various other data. If the incidence of immature feeder kings in the fishery is high, the fishery is closed during the hours of darkness when these fish are most available to the gear. When pink salmon become dominant in the weekly catches, the management emphasis is switched to this species. If the pink run is predicted to be poor, the fishing time will be decreased; the district will be closed; or if the sockeye run is still significant and the pinks are small in average weight, a 5 1/2-inch minimum mesh size may be instituted. If the pink run is predicted to be good, fishing time will be increased as the pink run progresses, fishing time will be adjusted based upon observations of schooling fish off the mouths of local streams in District 106. Specific area closures will be made in portions of the district with depressed pink returns. If pink runs are poor and coho runs are good, the district may switch to coho management by mid-August with a 6 inch minimum mesh size. If runs of both species are harvestable, coho management usually begins in early September as the fishery begins targeting on coho. The coho fisheries usually last from zero to three days per week and may continue into late September.

2.1.5 District 106 Purse Seine Fishery

A. Historical Review

The District 106 purse seine fishery has a similar historical background as the rest of the purse seine fisheries in Southeastern Alaska. In earlier years it included all of the waters of the district and as the size of the gillnet fishing area increased the purse seining area was correspondingly decreased to a portion of northern Clarence Strait. District 106 has the only area in Southeastern Alaska where seiners and gillnetters have traditionally utilized the same area. This occurs in Section 6C and along the Screen Island shore in Section 6D just east of Section 6C (see Fig. 3a and 3b).

B. Changes in Fishing Efficiency and Fishing Patterns Since 1970

Purse seining efficiency changes in District 106 have been similar to changes in the rest of the Southeastern fishery. In the early 1970's the purse seine fishery was generally open on a standard fishing week basis for

two-to-four days per week. Purse seining began in late July or early August and extended into early to mid-September. With declining runs in recent years, the openings in the district have been more sporadic, shorter, and in smaller areas where concentrations of fish have been observed. Pinks have been the primary target species, however when the season is open into September some of the fleet will try to maximize the amount of coho taken incidentally during pink fishing.

C. Present Fishing Regimes and Current Management Practices

The depressed pink salmon stock condition in portions of District 106 coupled with the harvest of these fish in other fishing districts has greatly reduced the purse seining in District 106. Very limited openings on observed concentrations have occurred in recent years. When the stocks rebuild and significant harvestable surplus are again experienced, the fishery will become more extensive. Fishing times, when the district is open, are generally concurrent with the purse seine openings in the remainder of southern Southeast Alaska.

2.2 NORTHERN BRITISH COLUMBIA

2.2.1 Status of Fisheries: Catch and Effort

Catches by species and effort by gear type for Area 1 troll and Areas 3, 4 and 5 net fisheries during the period 1973-85 are included in Section 7.0. Figure 1 and 2 show trends in Area 3 pink catch and fishing effort respectively.

Area 3

Pink

During the period 1973-85 the average annual catch of pinks in Area 3 was 1,585,602 pieces (fish). Outer Area 3 (3-1 to 3-4 or 3X, 3Y and delta 3Z) comprised 953,094 of this total. Catches in Area 3 have been erratic and are characterized by peaks in 1977-78 and again in 1983-84. Since 1978 catches have increased; this corresponds to increased returns and escapements of salmon to northern B.C. streams, particularly in Areas 3 and 4. During the period 1973-84 the proportion of outer Area 3 catch relative to the total Area 3 catch ranged from 57% (1973) to 97% (1979) and averaged 74%. In 1985, the proportion has declined to 47% (see attached map).

Effort or gear days are calculated by multiplying the number of vessels fishing each day times the number of days fished. In Area 3 seine effort has fluctuated peaking in 1974, 1977, 1978 and in 1983. In contrast gillnet effort peaked in 1977 and then declined. In Outer Area 3 seine effort followed a trend similar to all of Area 3 but effort peaked in 1982. Gillnet effort has declined.

Sockeye

The Area 3 net fishery during the period 1973 - 1985 had an average sockeye catch of 386,005 pieces; of this total 217,654 pieces were caught in outer areas (3-1 to 3-4). Annual catches have fluctuated widely in Area 3 and show several strong peaks followed by abrupt declines. Catch trends in outer areas of Area 3 are directly affected by the strength of the Skeena River sockeye and pink stocks which migrate through Area 3 in proportions which can change yearly. The catches in inside areas of Area 3 are almost entirely determined by the strength of Nass River stocks.

Chum

Chum catches are largely incidental in directed sockeye and pink fisheries. During the period 1973 - 1985 chum catches in Area 3 averaged 157,706 pieces. Catches have been erratic and are characterized by peaks in 1980 (302,000), 1983 (181,000) and 1984 (281,000).

Figure 4

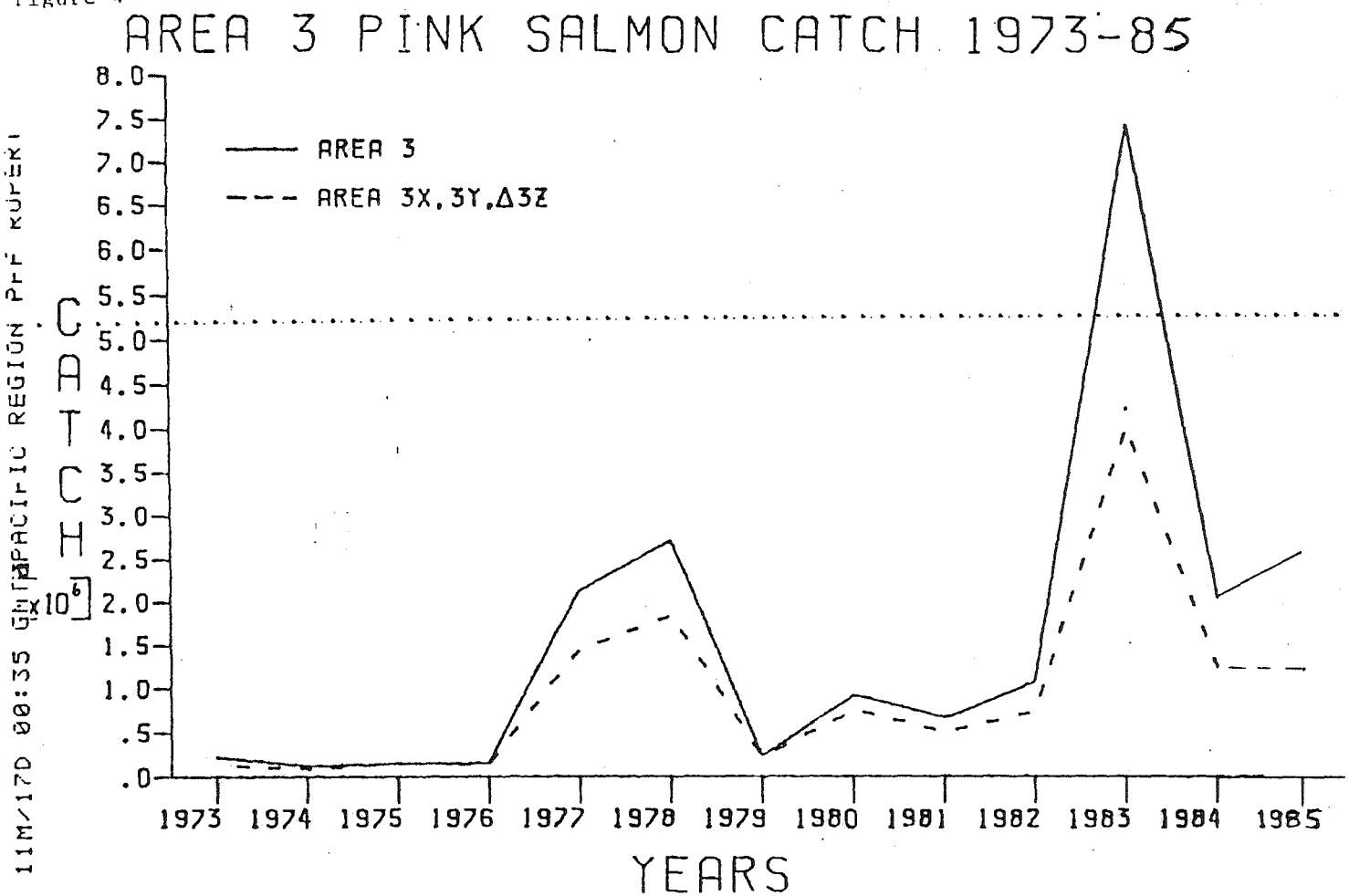
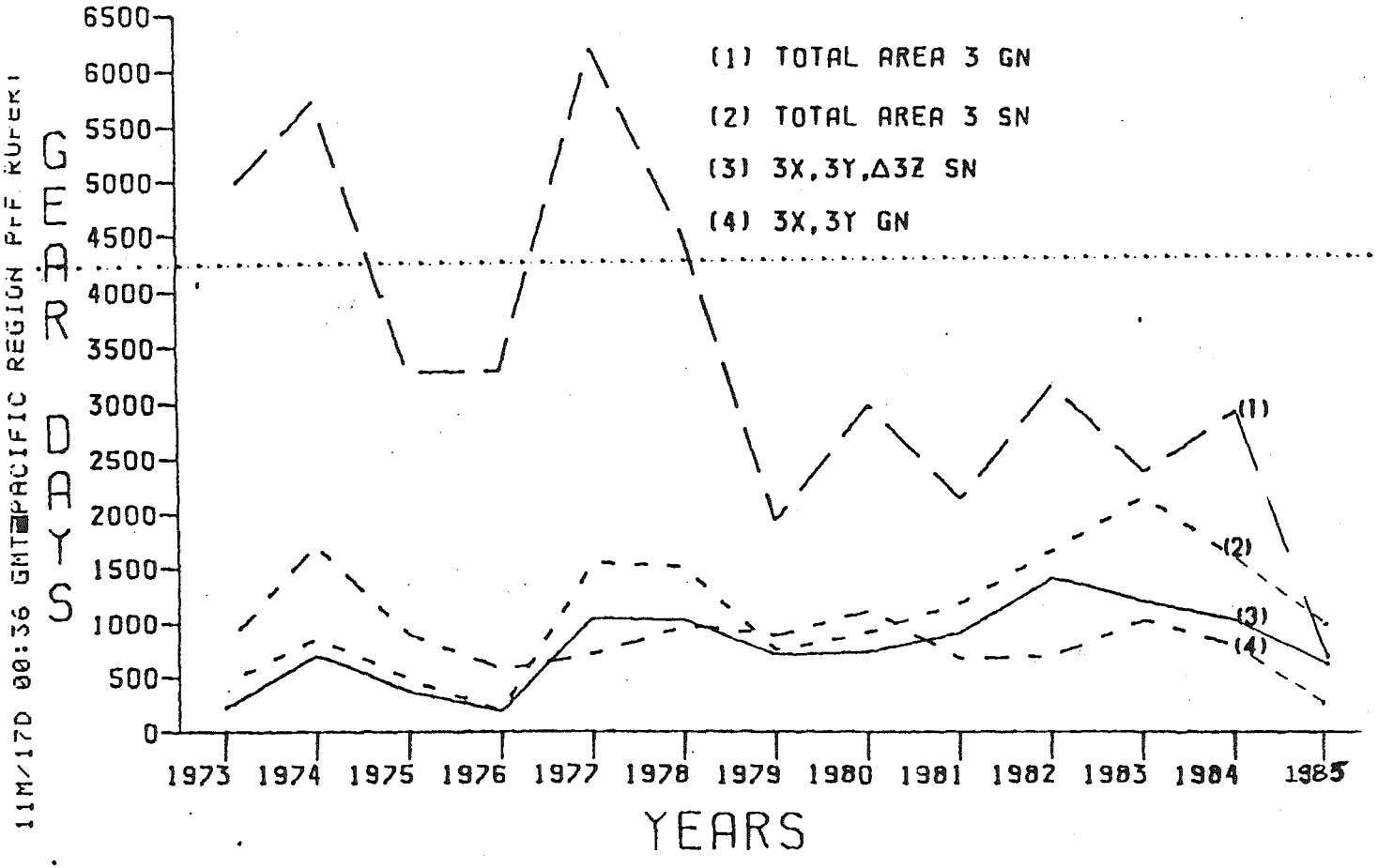

AREA 3 PINK SALMON CATCH 1973-85
AREA 3
AREA 3X,3Y,Δ3Z
CATCH
x10^6
8.0
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
.5
.0
1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985
YEARS

Figure 5. AREA 3 GEAR DAYS-PINK SALMON



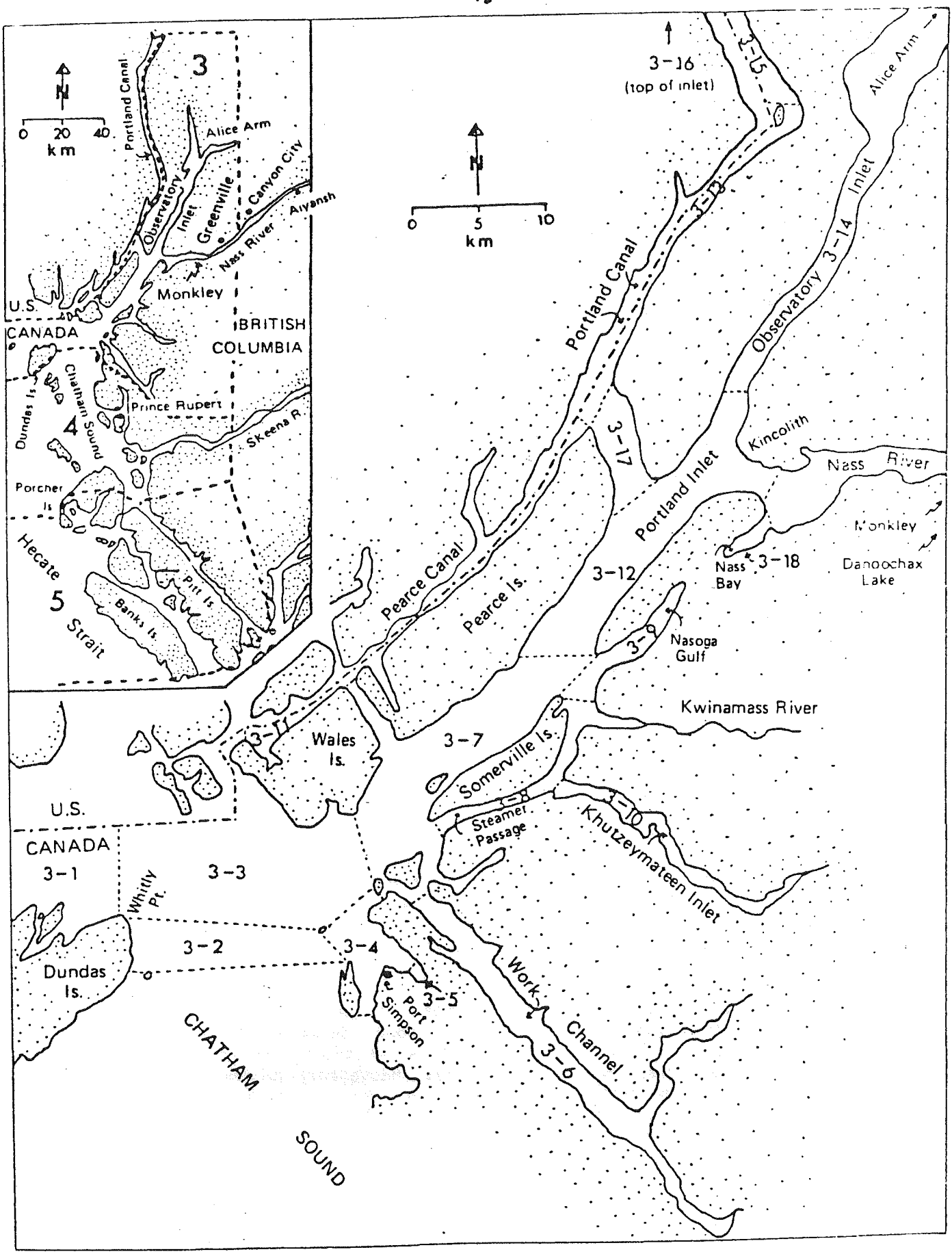


Fig. 6. Location of Area 3 management units, B.C. (insert shows location of Areas 3, 4, and 5.)

Area 1

Pink

The Area 1 troll fishery catch during the period 1971-85 averaged 242,406 pinks. Catches varied substantially from year to year but peaked in 1980 (721,646) and 1984 (1,777,577). Similarly effort varied yearly and was highest in 1980 and 1984. Catch appears to be driven by the pink market value of fish in addition to abundance (see attached map).

Sockeye

The Area 1 net catch of sockeye and pink during the period 1973-1985 averaged 56,847 and 136,801 pieces respectively. Catches vary from year to year depending on the proportion of Skeena and Nass stocks which migrate through the area.

2.2.2 Review of Interception Fisheries Since 1970

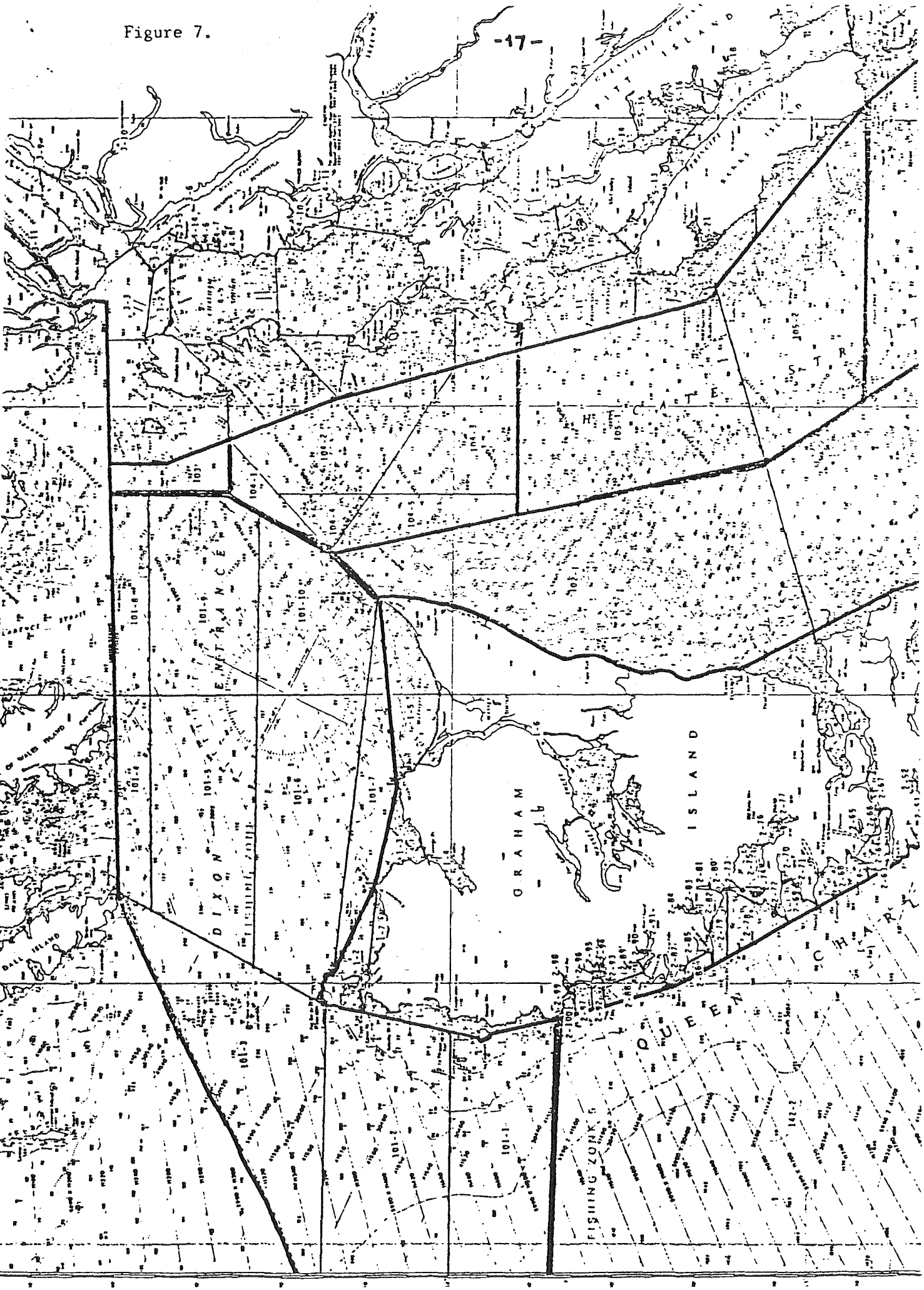
Changes in Gear

Powered drum seiners began operating along the B.C. coast in the mid to late 1960's. By the early 1970's virtually all seines were equipped with powered drums and then, later, running lines. The total number of vessels of all types decreased during this period, but the number of seines increased as licences were converted and transferred to seines. Recently, some seines have added bow thrusters and in a few instances stern thrusters as well. In the late 1970's due to improved economic conditions and tax incentives there was a trend to replace smaller vessels with larger ones with increased hold capacity. Also, during this period there was a replacement of electronic equipment with more sophisticated equipment. Gillnet vessels improved hydraulic systems and increased in size. However, gillnet length and depth remained at 200 fathoms and 60 meshes respectively and monofillament nets were not allowed.

Trollers also upgraded their vessels by increasing their size and hold capacity, installing freezers and equiping themselves with improved electronic gear. There was also a trend to reduce turn around time between trips and thereby increase effort. Since 1981, however, various gear restrictions have been implemented to offset the apparent increases in efficiency and effort. In addition, season length has been progressively curtailed to further reduce exploitation of chinook.

The impact of the above gear changes on gear efficiency has not been determined. The vessels are generally larger and more mobile and therefore better able to travel to different fishing areas and if warranted stay out for longer periods of time. Seine vessels have undoubtedly increased the number of sets made per fishing period. But this would have to be weighed against the increased delays in waiting for desirable fishing tie-off sites because of increased gear concentrations.

Figure 7.


PITT ISLAND
HECATE STR
DIXON ENTRANCE
GRAHAM ISLAND
QUEEN CHAR
FISHING ZONE
DALL ISLAND

2.2.3 Fishing Patterns

Area 3

Effort has fluctuated in Area 3. Increases in seine effort in some years are a result of seines moving to Area 3 because alternative fishing sites have been closed due to stock concerns. The higher gear concentrations resulted in an increase in the number of 'open sets'. In these instances the seine net is not tied to the shoreline but the set is made in open water, sometimes well away from the shore, and consequently fishing effectiveness is probably reduced. With reduced fleet sizes, fewer open sets are observed.

The distribution of the fleet varies depending on the location of stocks within Area 3. The fleet is quite mobile and moves quickly to areas of high fish abundance. Thus, depending on where the fish landfall or migrate the fleet will congregate. For example, in 1983 the fishery was confined mainly to the northern half of Area 3 with most of the catches occurring along the southwest shoreline of Wales and Pearse Islands and the west side of Portland Inlet. In 1984, however, fishing was much more spotty and the fleet was concentrated in the southern half of Area 3 along the Bernie-Maskelyne Islands and the west side of Dundas Island and Sommerville shoreline.

Area 1

In Area 1, peak troll catches and troll effort were recorded in 1980 and 1984. This increase is in part due to southern vessels moving to Area 1 to target on coho and chinook.

Generally, the troll fleet is highly mobile and is capable of moving quickly to areas of fish abundance. Fleet distribution therefore can change in a short time and will vary depending on the location and distribution of target species. In 1984, for example, the fleet at the beginning of July was concentrated along the northern end of the Queen Charlotte Islands with a portion of the fleet in the Cape Muzon-Cape Chacon area. Subsequently, vessels moved to the outside of Area 3, off Dundas Island and in a line from Dundas to the east side of the northern end of the Queen Charlotte Islands. This movement coincided with the migration of Yakoun pinks returning to Masset Inlet based on tag returns from the 1984 international tagging program. In the middle of August the fleet was congregated along the west side of the northern end of the Queen Charlotte Island.

2.2.4 Current Management Practices

Area 3

The Nass River sockeye gillnet fishery in recent years began at the end of June. This was a delay from previous years and is designed to reduce exploitation on depressed chinooks and early sockeye. In-season abundance is determined from the Nass River test fishery and commercial catch levels. This information determines actual fishing patterns until at least mid-July.

Beginning in mid to late July, pink salmon abundance becomes the primary management indicator for determining fishing times. Seines begin fishing in mid-July. This is a delay from previous years and was implemented to reduce exploitation of depressed chinook stocks.

Concern for chum stocks limits directed fishing; the extent of the Portland Canal fishery is determined by stock consideration, and cooperative arrangements with the U.S. Concerning the management of outer portions of Area 3 (3-1 to 3-4) the strategy is to coordinate management with the Area 4 fishery and provide for the conservation of stocks while preventing the escalation of interception rates past recent levels.

Area 1

The troll season has been reduced in recent years. In 1984, the Area 1 troll season was divided into two openings: May 23 - June 3 and July 1 - Sept. 19. The decrease in fishing time of over 70 days (45% reduction from 83 season) to reduce the exploitation of chinook. In 1985 similar restrictins were applied with openings on May 9 - May 20 and July 1 to September 30. In-season abundance is monitored by an analysis of saleslip catch estimates coupled with independent estimates of catch from effort over-flights coupled with port sampling of catches. The catch estimates are made by using a combination of aerial surveys and interview data.

The Area 1 troll fishery targets primarily on coho and chinook and only in years of high pink abundance and relatively good market value have trollers concentrated on pinks. For example, in 1983, despite a high abundance of pink salmon in Dixon Entrance, most trollers were shaking pinks because of poor market values, and, as a result, lowering their efficiency to catch target species. The Area 1 troll catch in this same year, was less than the 1971-84 average despite a record net catch and stock size of pink salmon to Area 3 streams.

3.0 Fishery Review for 1985 and Expections for 1986

3.1 Southern Southeast Alaska

3.1.1 1985 Salmon Forecast

Formal forecasts are not made for species of salmon other than pinks. The 1985 pink salmon forecast indicated a point return of 30.8 million fish. Assuming an escapement of 6 million a balance of 23.8 million was projected for harvest.

The actual 1985 return of pink salmon to southern Southeast Alaska amounted to approximately 53 million. Of this total almost 31 million were harvested.

3.1.2 Review of 1985 Fishing Season

District 104

The District 104 seine fishery opened by regulation on July 7. The U.S./Canada Treaty calls for limiting the sockeye catch in that fishery during the period 1985 through 1988 to a maximum four year total of 480,000 prior to statistical week 31. Toward this end, the 1985 management plan for District 104 called for a guideline harvest level of 120,000 sockeye during the first three weekly fishing periods. The first two periods of the 1985 season were short and amounted to 15 hours each. The third weekly period was split into a 39 hour and a 15 hour fishery. The total catch of sockeye for the three weekly periods occurring prior to statistical week 31 was 100,516.

Gear levels in the District were lower than in recent past years during the early portion of the fishery because of simultaneous seine openings in other areas in the region. Gear levels in the first three weeks were approximately 119, 65 & 104 boats consecutively. Effort increased somewhat through the peak of the fishery which occurred in early August, however, because of heavy westerly winds in the area from late July through mid August and large pink returns to District 103, much of the gear which traditionally fishes District 104 shifted to District 103 waters.

Catches in both District 103 and 104 were heavy and processing capability was severely strained. Between August 11 and August 24, over 11 million salmon were harvested from those two Districts of which most were pinks. Despite heavy catches in Districts 3 and 4, the escapement index to District 3 streams will amount to about 4.6 million pink salmon, almost three times the goal level.

The 1985 season sockeye catch was 427,636 compared with an average of 386,203 for the period 1980-84. Only 24% of the sockeye harvest was taken prior to statistical week 31 in 1985 compared to an average of 53% during the period 1980-84.

Tree Point

The Tree Point gillnet fishery opened by regulation for the 1985 season on the third Sunday in June; June 16.

Catches during the first two weeks of the fishery indicated that availability in the fishery of both sockeye and wild stock chum was near or below average. As a result of this a more conservative approach was indicated and fishing periods during the succeeding two weeks (beginning June 30 & July 7) were reduced to 3 & 2 days respectively. Beginning on July 14 and extending through the first week in September the Tree Point gillnet fishery was managed according to the dictates of the pink salmon management plan which is provided for by regulation. This action was taken due to the sharp increase in the availability of pink salmon in District 101. The additional effort on pinks triggered by the plan in attendance with an increase in the availability of sockeye and chum as well as pink salmon, significantly increased the harvest of all three species over the next six weeks, through late August. Over the period 1980-84, an average of 60% of the season sockeye catch had been harvested through the 29th statistical week. By comparison, only 39% had been taken by that same time in 1985. Timing in the pink returns did not seem to exhibit a similar trend. The peak weekly pink catch came, as usually occurs, around the first week in August.

In the interest of chum salmon conservation and in keeping with the Treaty between the U.S. and Canada, Portland and Pearse Canals remained closed throughout the entire 1985 season, north of Akeku Point which lies at the southern entrance to Edward Passage in lower Pearse Canal. Chum escapements into Fish Creek, a tributary to the Salmon River, were projected to be near goal level at 22,000. Escapements to Tombstone River and Hidden Inlet appeared to be well below goal level.

Effort levels for the season were slightly above the previous 5 year average (1980-84). The number of boat days fished in 1985 amounted to 5,109 compared to an average of 4,577.

It should be noted that recent year chum harvests in the Tree Point fishery (1983-85) have been influenced by returns to Nakat Inlet releases.

3.1.3 Management Performance Relative to Treaty Requirements

District 104

The U.S.-Canada Treaty calls for a maximum harvest of 480,000 sockeye from District 104 prior to statistical week 31 over the period 1985 through 1988. In 1985 a total 100,516 were taken prior to that statistical week leaving a balance of 379,484 sockeye to be apportioned among the three years 1986 through 1988.

Tree Point

The U.S.-Canada Treaty specifies that the District 1-A and 1-B gillnet fishery be limited in a manner that will result in an average annual harvest of 130,000 sockeye. The 1985 season harvest of sockeye in the Tree Point gillnet fishery totalled 167,011.

3.1.4 1986 Salmon Forecast - Southern Southeast Alaska

The 1986 pink salmon return to Southern Southeast Alaska is expected to continue exhibiting the strength it has in recent years. The point prediction of 37.9 million represents the largest ever made in this program. The range of return is 30.6 - 45.3 million. Using an escapement goal of 6 million the point harvest estimate is 31.9 million, very close to the actual 1985 harvest.

Distribution in the return should be similar to 1985 with about half of the harvest of the available surplus coming from Districts 103 and 104 on the West Coast of Prince of Wales Island. The return to District 101 should be similar to last years while District 102 returns should show more strength than in 1985. The fishing pressure required to harvest surplus pinks returning to Districts 101, 102 and 104 will most likely result in little harvestable surplus in Districts 105 through 108.

3.2 Northern British Columbia

3.2.1 1985 Salmon Forecasts for Areas 3, 4 and 5

Area 3

Pink

The return of pink salmon to Area 3 in 1985 was forecast to be approximately 1,000,000. Despite a record escapement in the brood year (737,335) an average return was forecast due to poor overwintering conditions.

Sockeye

A slightly above average return of 500,000 was forecast for Area 3 based on brood year escapement levels.

Chum

The 1985 return of chum salmon to Area 3 was forecast to be poor based on below average escapement levels in the brood years.

Area 4

Pink

The forecast return of pink salmon to Area 4 for 1985 was 2.6 million. A record escapement in the brood year resulted in the forecast of above average return.

Sockeye

An above average return of 2.7 million was forecast based on brood year escapement levels and smolt information.

Area 5

Pink

A below average return of 250,000 was forecast based on brood year escapement levels.

Sockeye

A well below average return of 50,000 sockeye was predicted for 1985.

3.2.2. REVIEW OF 1985 FISHING SEASON IN AREAS 1, 3, 4, and 5

Area 1 Net Fishery:

The 1985 Area 1 fishery can be separated into a summer and fall fishery. The summer fishery is conducted in the Langara Island region off the northwest corner of the Queen Charlotte Islands. This is primarily a seine fishery which harvest passing sockeye and pink mainly bound for the Skeena River. Catches of Nass and Fraser River and Southeast Alaska stocks are also taken. The fall fishery takes place in inside waters (Masset Inlet, Naden Harbour) and is conducted mainly by gillnets. This fishery targets on chums returning to local streams in Area 1.

Weekly catch summaries for all salmon species are provided in the attached table. In 1985 the summer fishery operated for a total of 10 days between July 14 and August 20. The fall fishery operated for 14 days between September 23 and October 16.

Area 1 Pink Troll Fishery

The 1985 troll fishery in Area 1 was divided into two openings: May 9 to May 20 and July 1 to September 30. The early fishery corresponds with a halibut opening with chinook comprising the majority of the salmon catch. The later fishery is directed at all salmon species with July and August being the two months when most of the pink catch occurs.

The total pink catch for 1985 as reported by saleslip information as of November 18 was 710,074. Total vessel days amounted to 18,299 which is somewhat less than the 1980 to 1984 average of 20,651 vessel days.

Area 3 Net Fishery:

The gillnet season in Area 3 began on June 30 and ended on August 20, 1985 while seines began fishing on July 14 and the season ended on August 20. Total vessel days for both gillnet and seines was 813 and 1,099 respectively. This compares with recent averages of 3,278 for gillnets and 1,194 for seines.

The total catch for both gears is shown in the attached tables. Of the total pink catch approximately 1,246,913 or 47% was harvested in sub-areas 3-1, 3-2, 3-3 and 3-4.

The fishing pattern in Area 3 in July was designed to protect the early component of the Nass sockeye stocks which appeared weak. Additional fishing time however was permitted on Nass sockeye beginning in late July when it was evident that the run was late. The pink fishery was managed to the abundance of Area 3 pinks and openings in outside areas (eg. 3-3) were co-ordinated with openings in inside areas (eg. 3-7). The total run of sockeye to the Nass River in 1985 was 450,000. Escapement reached 350,000 which was distributed as follows: Meziadin lake received an escapement of 290,000 while Bowser Lake, Damdochax Lake and Fred Wright Lake received 30,000; 15,000 and 15,000

respectively. The pink return to Area 3 totalled 3.1 million which was greater than expected. The total escapement was 500,000. The Nass spawning escapements were as follows: Kwinamass River - 150,000; Iknouk River - 80,000; Dogfish Creek - 60,000, Khutzeymateen River - 50,000; Ishkheenickh River - 30,000.

Area 4 Net Fishery:

The gillnet season in Area 4 began on June 30 and ended on August 22, 1985 with a total of 26.25 days of fishing during that time. Seines began fishing on July 21 and ended on August 16 with a total of 9 days of fishing. Total vessel days for both gillnets and seines was 12,504 and 819 respectively. Recent average vessel days for gillnets and seines are 8,177 and 274 respectively (1975 to 84).

The total return of sockeye to the Skeena in 1985 was approximately 4.7 million. This was 2 million more than predicted. Escapement totalled 2,185,000 of which 2,150,000 returned to the Babine Lake system. Of the 2.15 million approximately 1.2 million were destined for the spawning channels, 500,000 returned to the Upper and Lower Babine River and 100,000 tc the unenhanced Babine Lake tributaries. The remaining 350,000 sockeye remained in Babine Lake. The pink return to Area 4 totalled 4.0 million, 1.4 million larger than expected. The total escapement of 2.1 million was distributed as follows: Lakelse River 600,000; Kitwanga River 300,000; Kispiox River 200,000; Babine River 300,000; Morice River 70,000; Kisumkalum River 100,000; Skeena mainstem 250,000 and Coast streams 150,000 (see attached maps).

Area 5 Net Fishery:

As in Areas 3 and 4 the gillnet season began on June 30 in Area 5 while the seine season began on July 14. Due to weakness in the Area 5 sockeye and pink stocks the early portion of the season had limited fishing times and the season was terminated earlier than normal on August 12. Total vessel days for both gillnets and seines was 169 and 241 respectively. This compares with recent averages of 882 for gillnets and 179 for seines. The total catches are presented in the attached tables. Of the total pink catch approximately 2000 or 0.7% was harvested in sub-area 5-11 (see attached maps).

The fishing pattern in July was designed to harvest passing Skeena sockeye stocks while protecting local stocks with closures in several Management Units. In August the fishery continued to target on Skeena sockeye stocks and also Skeena pink stocks. This pattern continued until mid-August when concern for local Area 5 pink stocks resulted in the termination of the fishery on August 12.

The total sockeye catch of approximately 57,000 was much larger than average being comprised largely of Skeena stocks. Sockeye escapement to Area 5 streams was estimated to be about 37,000 which is double the average escapement during the last 5 years. The pink catch of 300,000 is near average for recent years while the escapement of 170,000 is slightly larger the target of 150,000. Chum stocks continued to show weakness in Area 5.

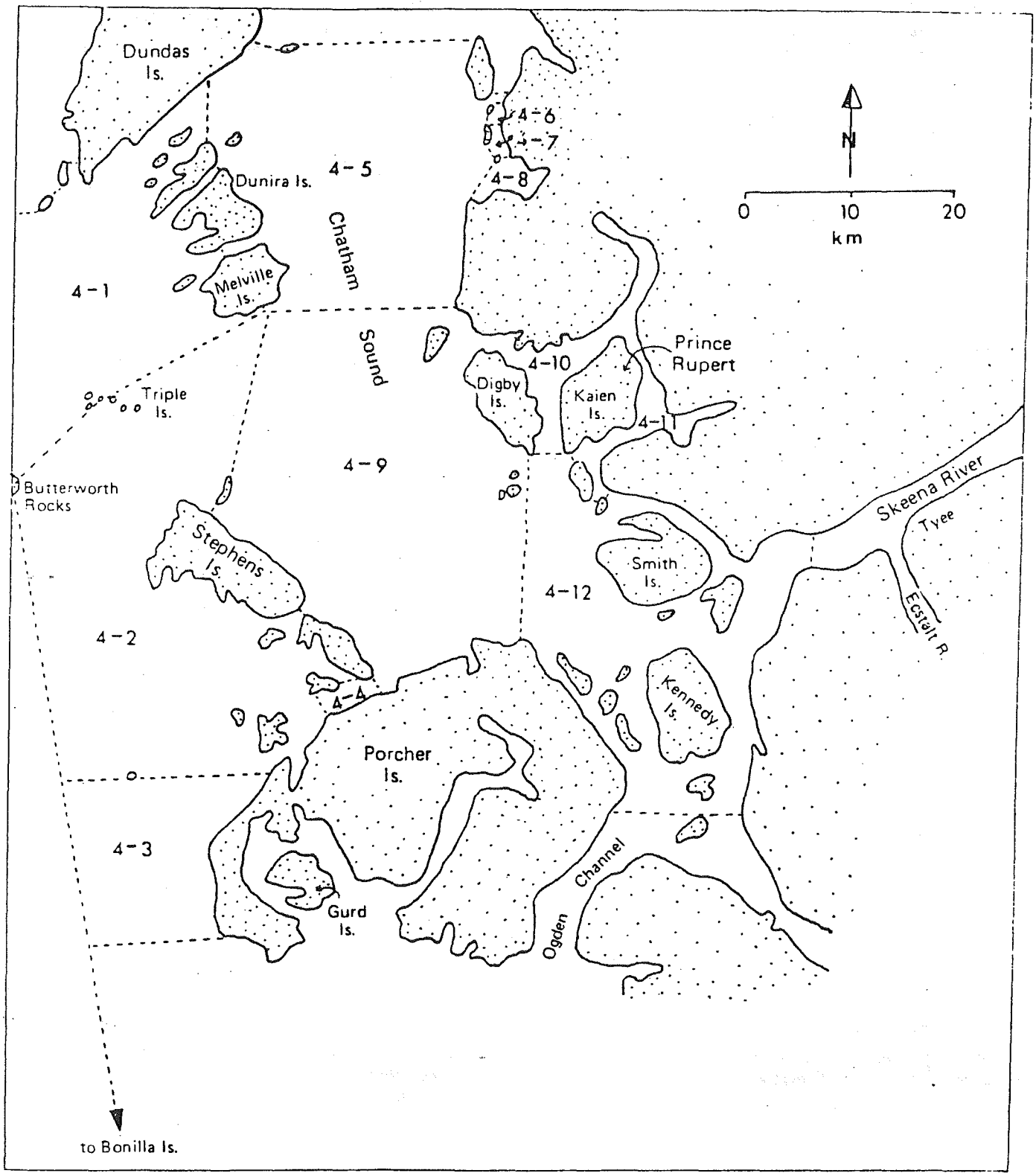


Fig. 8. Location of Area 4 management units, B.C.

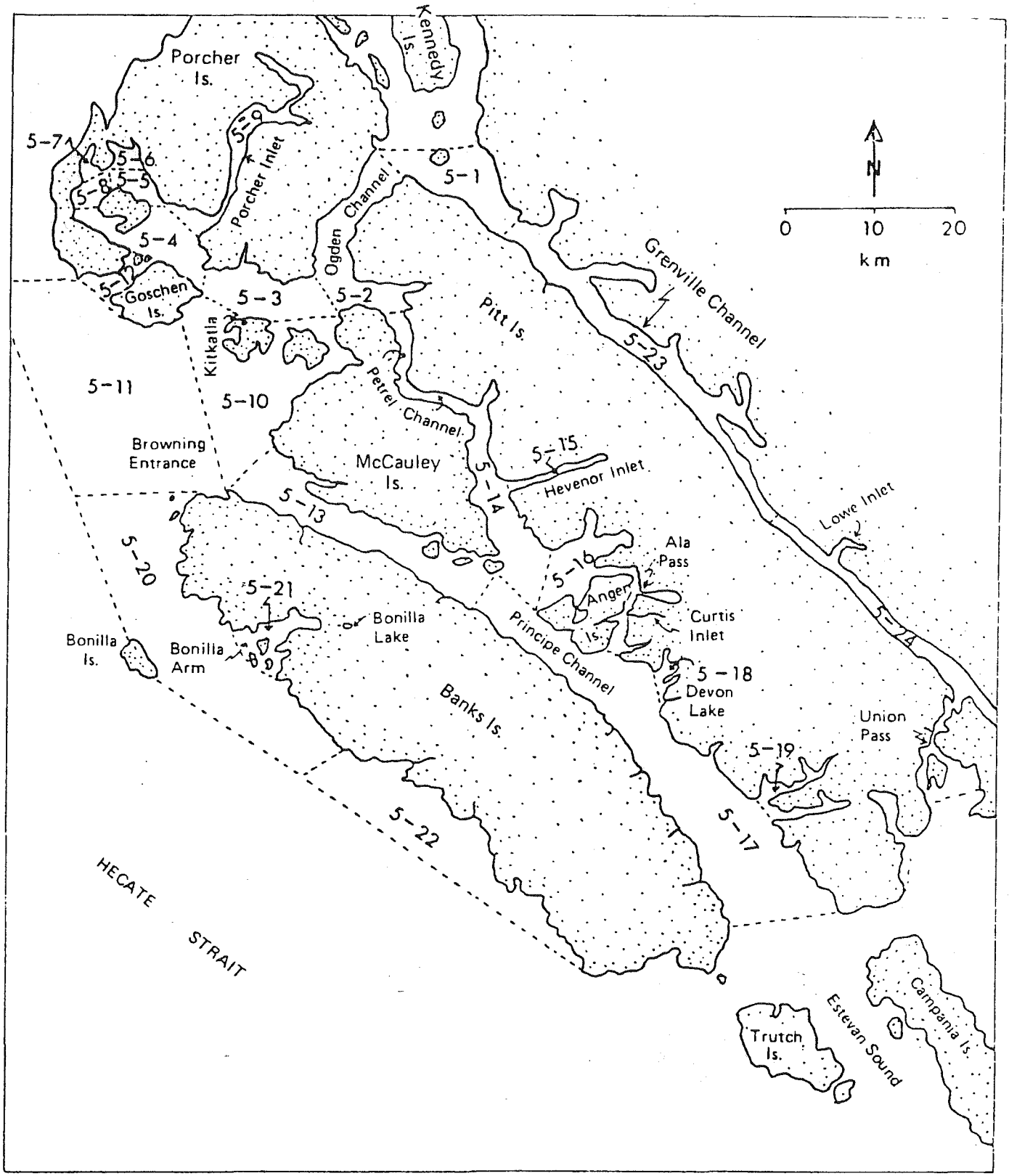


Fig. 9. Location of Area 5 management units, B.C.

3.2.3 Management Performance Relative to Treaty Requirements

Area 1 Pink Troll Fishery

According to the U.S.-Canada treaty the Area 1 pink troll fishery was to be managed to not exceed a total pink catch of 1,000,000 pieces for 1985 and 1986 combined. In 1985 Canada was to manage Area 1 to a total troll pink catch of 700,000 pieces. Also those portions of 101-3 and 103 north of 54° 35' and 101-4 and 101-8 were to close to pink salmon fishing when 300,000 pieces were harvested in Area 1.

The total pink catch in Area 1 as reported by saleslip information as of November 18 is 710,074. Of this total 425,588 was harvested prior to the closure of the most northerly sub-areas noted above on August 3, 1985. The in-season catch monitoring program (ISCMP) was not able to adequately track pink troll catches in Area 1. Catch estimates were made by fishery officers who conducted interviews with trollers on the grounds. The above sub-areas were closed when the 300,000 catch level had been reached. Saleslip catch show that this level was actually reached one week earlier. The pink troll catch in the Cape Chacon-Cape Muzon areas was approximately 40% of the Area 1 catch prior to August 3 and 20% of the total Area 1 catch for the season.

Area 3-1 to 3-4 and 5-11 Net Fishery

Under the U.S.-Canada treaty Canada is required to manage its net fishery in Areas 3-1 to 3-4 and 5-11 in a manner that will result in an average catch of 900,000 pieces.

In 1985 the 3-1 to 3-4 and 5-11 pink catch totalled 1,248,913, according to saleslip information dated December 3, 1985. The Area 3 pink fishery was managed according to the abundance of Area 3 pinks which returned at much higher levels than expected as did the Area 4 pink stocks. As a result of the larger than expected returns, catch levels in the outer portions of Area 3 exceeded the 900,000 target. However the 3-1 to 3-4 catch of 1,246,913 amounts to 47% of the total Area 3 catch which historically has ranged from 57% to 97%. The 5-11 pink catch amounted to 2,000 pieces which is approximately 0.7% of the total Area 5 catch.

3.2.4 1986 Salmon Forecasts for Areas 3, 4 and 5

Expectations

Pink

The brood year escapement of 530,000 was one of the largest even year pink escapements recorded in Area 3. Due to the good escapement level an above average return is expected in 1986. Some overwinter freezing conditions may reduce the return slightly. A total return of about 2 million is expected.

Sockeye

The return of sockeye to the Nass River is expected to be above average in 1986. Both brood years 1981 and 1982 had good escapement and over wintering conditions. Using average return rates a total stock of 456,000 is expected for 1986.

Chum

The return of chum salmon to Area 3 in 1986 is expected to be poor. The total return is expected to be approximately 80,000 which is well below the most recent 10 year average return of 180,000.

Area 4

Expectations

Pink

The return of pink salmon to Area 4 in 1986 is expected to be above average. Using average return rates for recent years a total return of 2.9 million is predicted.

Sockeye

An above average return of 3 million sockeye is expected for 1986 based on smolt to adult survival rates and average rate of return information.

Area 5

Expectations

Pink

Base on brood year escapement and average return rates a return of approximately 525,000 is expected.

Sockeye

With weak brood year escapements a below average return of approximately 45,000 is expected.

4.0 Research Progress Report

4.1 Estimates of National Contribution Rates for Selected Fisheries In Southern Southeast Alaska and Northern British Columbia Derived from Adult Tagging

The primary objective of the joint U.S.-Canada salmon tagging program is to provide reliable estimates of national contributions to several major intercepting fisheries. Estimates used in past international discussions and negotiations were developed primarily from the major tagging programs of 1924-30, 1944-48, 1956-58, and 1966-68 while information from smaller tagging programs also contributed to these estimates. The estimates, while representing the 'best available' information at the time of their development were generally recognized to be of questionable reliability due to the design of the tagging programs. In a jointly prepared (circ. 1970) U.S.-Canada technical report (Interception of Canada-Bound Salmon by Alaskan Fishermen and of Alaska - Bound Salmon by Canadian Fishermen in the SE Alaskan - Northern British Columbia Region, 1967-70) the authors state 'as a general rule, the tagging and tag recovery efforts have not been adequate in terms of tags applied, time, location, and effort to provide reliable data for interception estimates'. Changing patterns in the conduct of fisheries and stock status also resulted in the need to obtain estimates of national contributions more representative of current conditions.

While the current joint tagging study was designed to correct certain shortcomings of previous tagging programs, estimates of national contributions derived from each year's research still represent contributions under the set of circumstances, i.e., relative stock sizes and migration patterns, which occurred in a given year. Thus, the appropriateness of applying each season's estimates to other years will depend on the degree of similarity in the near shore migratory behaviour, the similarity of location and magnitude of interception fisheries between years, and the similarity of annual variations in returns to stocks occurring in the region.

Several design features of this tagging study distinguish it from previous studies. First, tagging and tag recovery efforts were distributed throughout southern Southeast Alaska and northern British Columbia where most pink and sockeye salmon stocks contributing to major intercepting fisheries pass. Second, numbers of tagged fish released were the largest of any adult salmon tagging study ever conducted in the area. Finally, random sampling of catches and escapements provided a basis for estimating total numbers of tagged salmon recovered in fisheries and reaching the spawning grounds. In previous studies assumptions of equal recoverability of tags in fisheries and streams of the two countries was required in the absence of random catch and escapement sampling.

During each year of this study tagged fish were released not only in intercepting fisheries of primary interest but also in other fisheries expected to recover 'primary' tags. This provided a means of estimating the destination of tagged fish recovered in intervening fisheries while

migrating to spawning grounds. (In earlier studies, tags recovered in fisheries were either omitted from analysis or included along with certain assumptions regarding their ultimate destination). Major tagging efforts were expended in intercepting fisheries of greatest interest, including Noyes Island, Dall Island/Cape Muzon, Sumner Strait, Clarence Strait, and Tree Point/Cape Fox in Southeast Alaska and Areas 1, 3X, 3Y, 3Z, 4, and 5 in British Columbia.

Estimates of national contribution rates for these fisheries were derived from the tagging studies through the solution of a series of equations expressing stock contribution proportions as functions of estimated total recoveries in stock escapements. The unknowns in the equations were the proportionate contributions of each defined stock to the various fisheries; solution of the equations yielded estimates of the stock proportions. For national contribution rate estimates, the individual stocks defined above were aggregated into two groups, U.S. and Canada.

The accompanying text and figures summarize the interception rates derived by Canada for 1982 and 1983 and by both nations for 1984. Preliminary interception rate calculations for 1982 by both nations were incorrect. Data file and program errors were detected which after correction resulted in numerous changes in the 1982 interception rates. Canadian 1982 interception estimates have been revised and are included in the present report. However until U.S. interception rate calculations are updated through incorporation of the error corrections within its own data base, finalization of the 1982 U.S. interception rates will remain pending. U.S. interception rates for 1983 are awaiting final biometric review and in depth analysis.

Estimation of interception rates for 1982 (Canadian), 1983 (Canadian), and 1984 (Canadian and U.S.) were based on analyses by Canadian (LGL, Ltd. 1983-85) and U.S. personnel (Hoffman et. al. 1983-85). Canadian estimates are catch weighted values over the entire period of the fisheries. Preliminary Alaskan estimates are simple unweighted averages of July and August composition estimates for the same fisheries. Point estimates for the preliminary 1984 U.S. estimates are based upon best escapement estimates and an assumed absence of secondary tag loss for Canadian stocks of the Skeena and Kwinamass.

There is a high level of agreement between the U.S. and Canadian interception estimates for 1984 (Figure 10). The average percent difference over all fisheries was 3.2% for pink salmon in 1984. The close agreement between the 1984 U.S. and Canadian estimates was not unexpected as both used similar data inputs and analysis routines.

A comparison of the 1982 and 1983 interception estimates for Canadian sockeye in U.S. fisheries as calculated by Canada indicate a considerably higher level of Canadian sockeye for 1983 in the Noyes Island, Muzon, Cape Fox, and lower Clarence Strait fisheries (Tables 2 and 4). The differencs between the 1982 and 1983 sockeye salmon estimates are difficult to explain but may be related to changing oceanographic conditions. The trend towards an increase in the interception of Canadian

sockeye in U.S. fisheries is supported by the 1982 and 1983 scale analysis studies although the magnitude of the change is less than that indicated by the tagging study (Oliver, et. al. 1984). The proportion of the tagged sockeye moving into southern areas of British Columbia was apparently greater in 1983 than in 1982. However, as there was no random tag recovery program operating in southern British Columbia in 1983, it was not possible to evaluate the significance of the change.

The interception rate of U.S. sockeye in Canadian fisheries is very small with the exception of the Area 1 net fishery where in both 1982 and 1983 estimates ranged between 3.2 and 11% (Tables 2 and 4). The interception rates on Canadian sockeye in U.S. fisheries however are much larger ranging from a low of 21 to 35% in lower Clarence Strait and Cordova Bay fisheries to between 43 and 80% in the Noyes Island, Cape Fox, Muzon, and upper Clarence Strait fisheries in 1982. Interception rates for sockeye salmon in 1983 ranged from a low of 31 to 45% in Sumner and upper Clarence Strait to a high of 90% or greater in the Noyes Island, Muzon, lower Clarence Straits, and Cape Fox/Tree Point fisheries (Table 4).

Estimates of interception rates on pink salmon exhibited a different pattern than illustrated for sockeye. The interception rates of U.S. pink salmon in Canadian fisheries are large, ranging from a low of 21% for 1982 in Areas 4 and 5 and 23% for 1984 in Area 5, up to a high of over 80% in 1982 and over 70% for 1984 in the Area 1 troll fishery. Conversely, the interception rates on Canadian stocks in U.S. fisheries were generally less than 20 and 35% in 1982 and 1984, respectively. Tables 1 to 5 include information on interception rates and the estimated catch of each countries fish in selected U.S. and Canadian fisheries.

In order to assist in the understanding of salmon stock distribution in boundary area fisheries and assist in interpreting the interception rate tables included in this report, maps showing the migration routes of major stock units are provided (Figs. 11 to 16). For specific interception rate information refer to the tables provided. These maps are intended to depict generalized major migration routes only and not the proportion of stocks in individual fisheries. Information from the 1982-84 U.S. Canada boundary area adult salmon tagging program was used to develop the migration routes.

Overall U.S. and Canadian Pink Salmon Interception Rates
(U.S. verses Canada version)

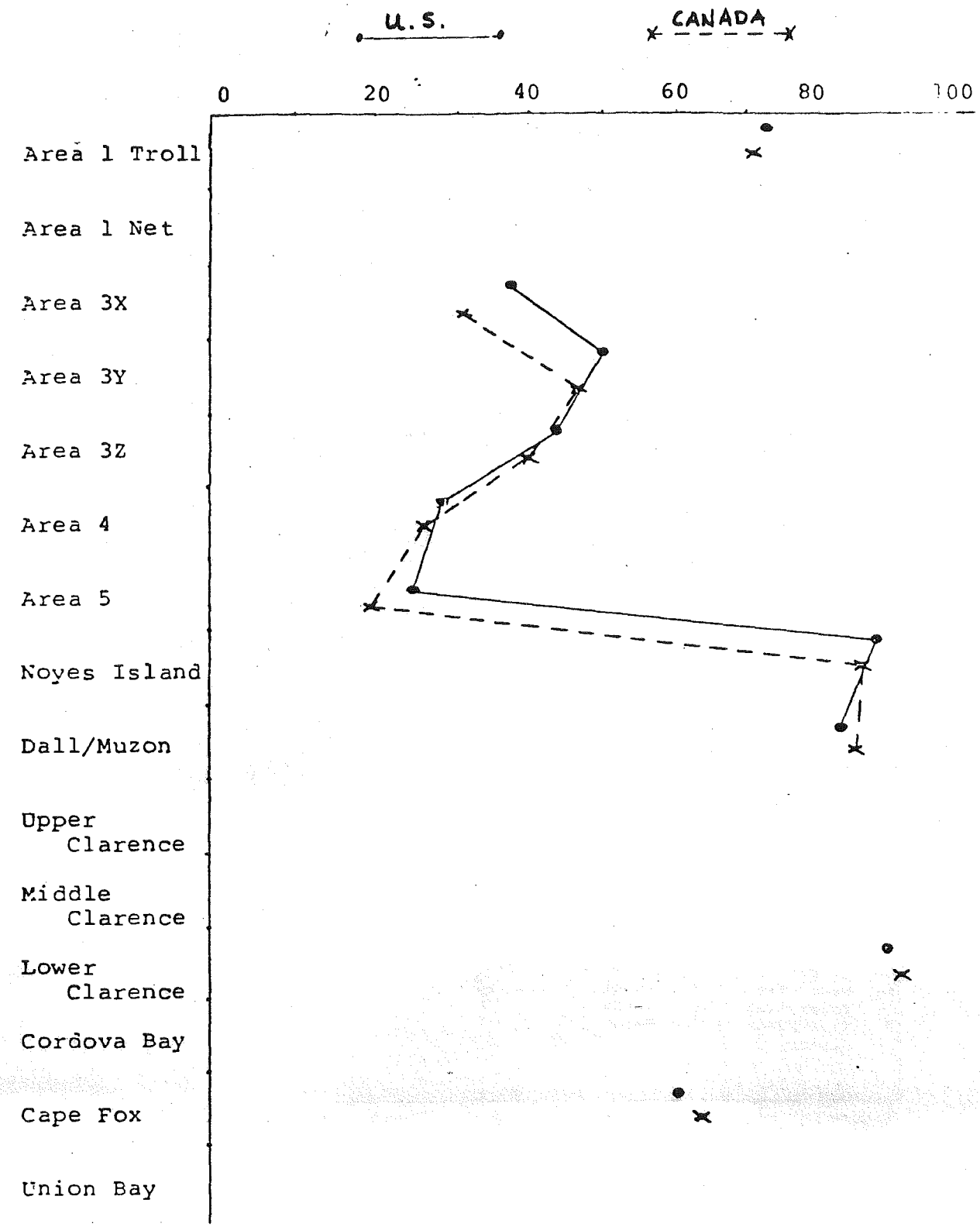
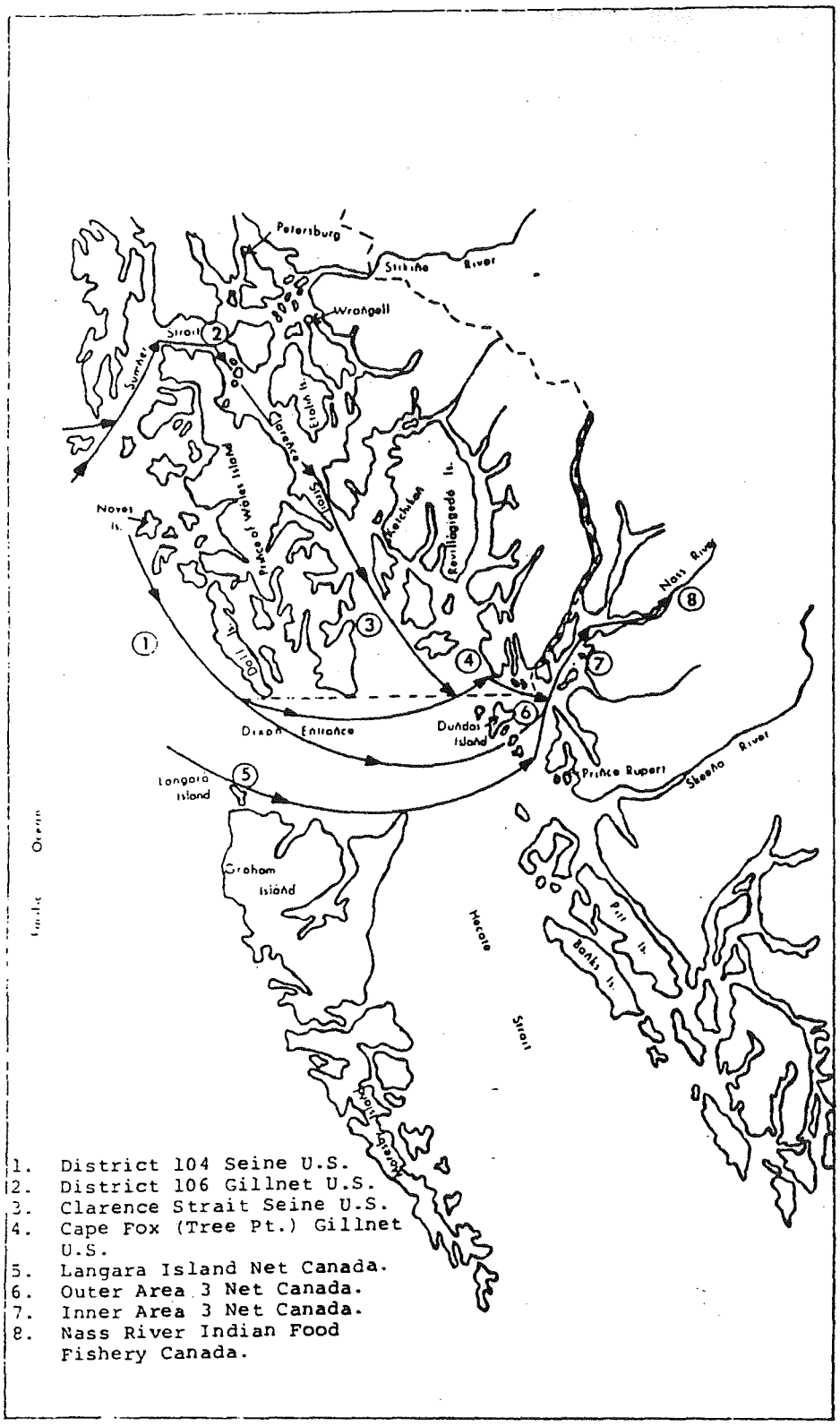


Figure 10. Estimates of the overall interception rate on southern Southeast Alaska and northern British Columbia even year pink salmon stocks in Canadian and U.S. fisheries for 1984



1. District 104 Seine U.S.
2. District 106 Gillnet U.S.
3. Clarence Strait Seine U.S.
4. Cape Fox (Tree Pt.) Gillnet U.S.
5. Langara Island Net Canada.
6. Outer Area 3 Net Canada.
7. Inner Area 3 Net Canada.
8. Nass River Indian Food Fishery Canada.

Figure 11. Migration routes of Nass River (Canada) sockeye salmon stocks based on 1982 and 1983 U.S/Canada research.

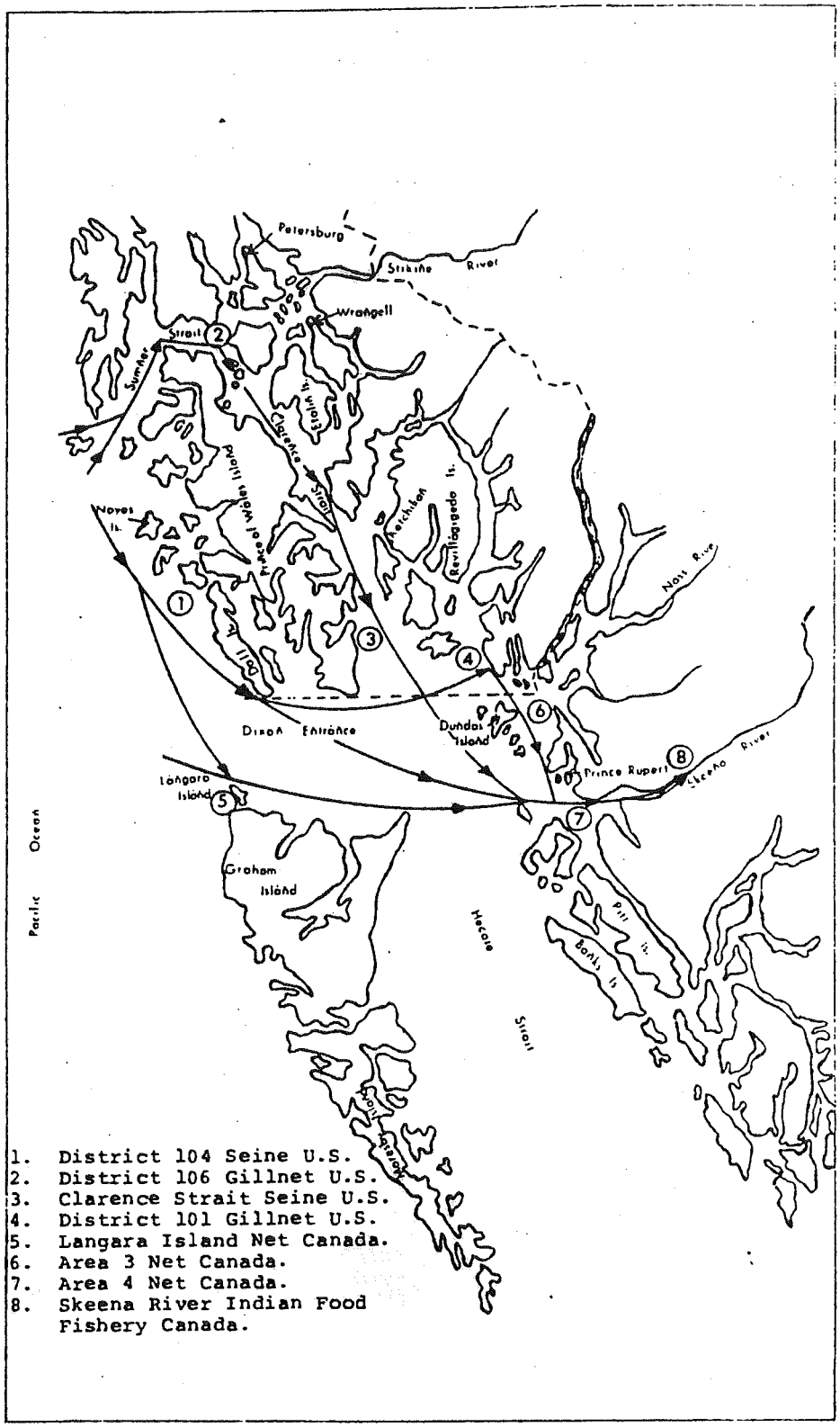


Figure 12. Migration routes of Skeena River (Canada) sockeye salmon stocks based on 1982 and 1983 U.S/Canada research.

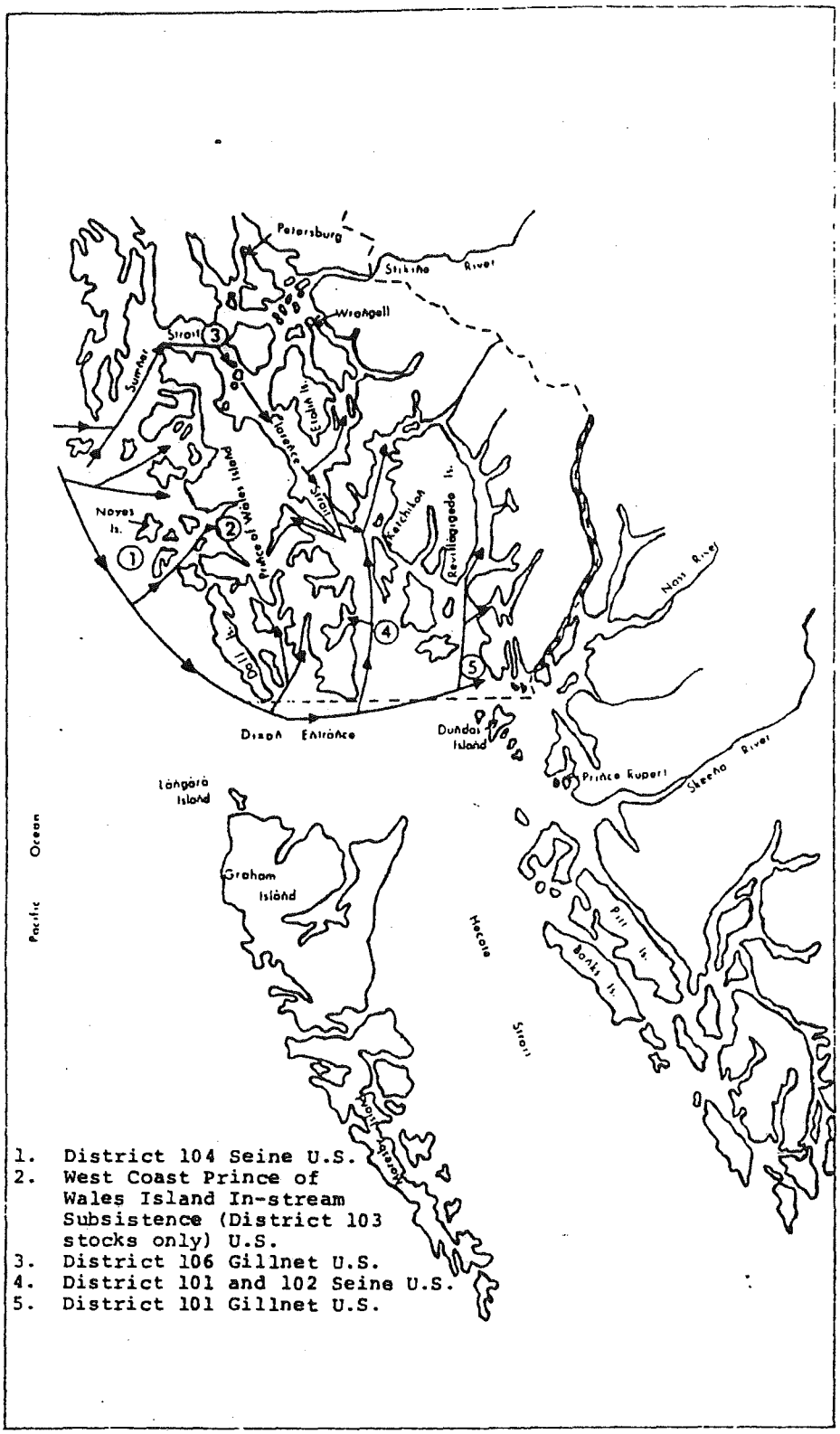


Figure 13. Migration routes of major sockeye salmon stocks returning to Alaska Districts 1,2,3,5,6, and 7 based on 1982 and 1983 U.S/Canada research.

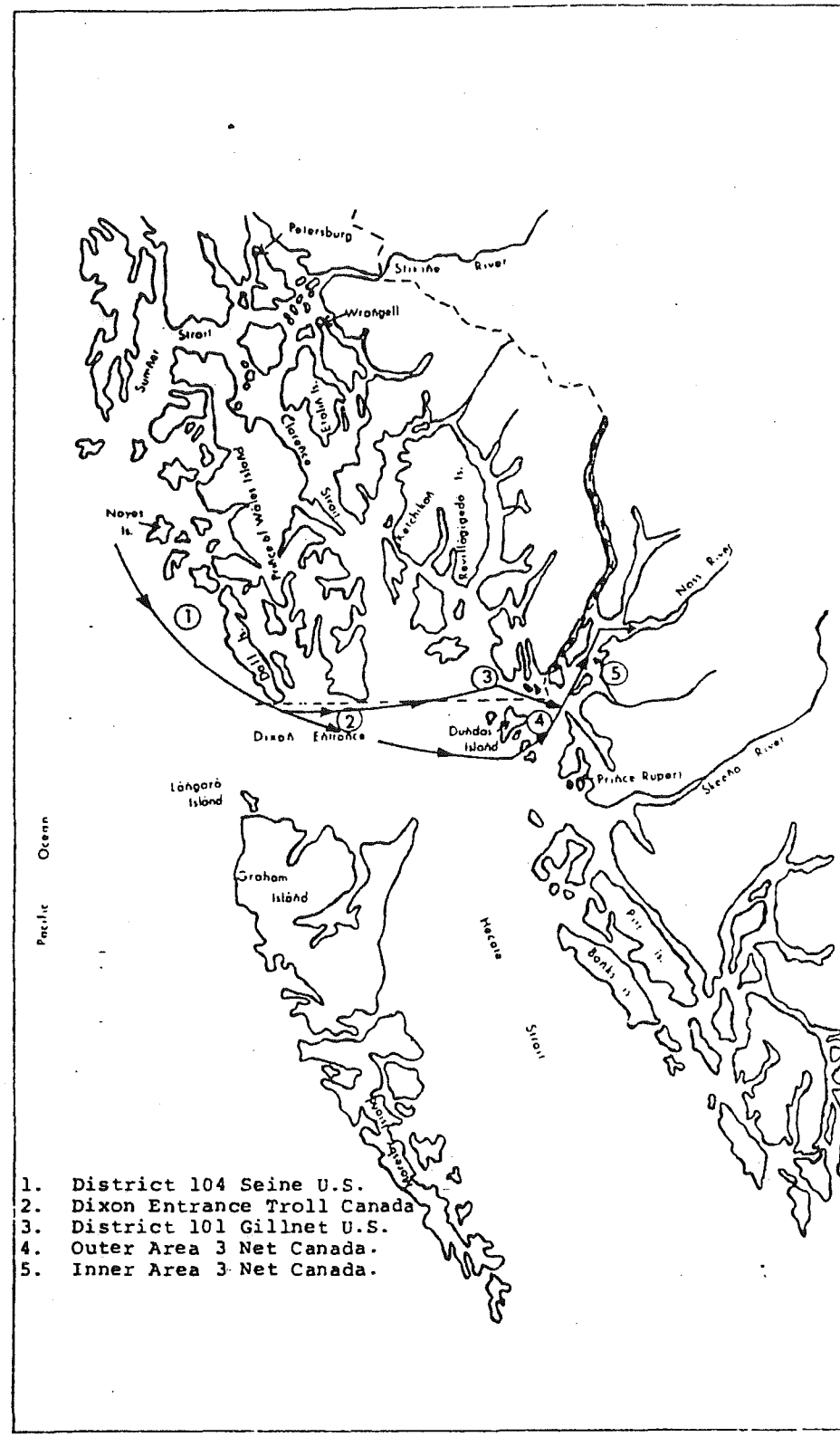


Figure 14. Migration routes of major even year pink salmon stocks returning to Area 3 in Canada based on 1982 and 1984 U.S/Canada research.

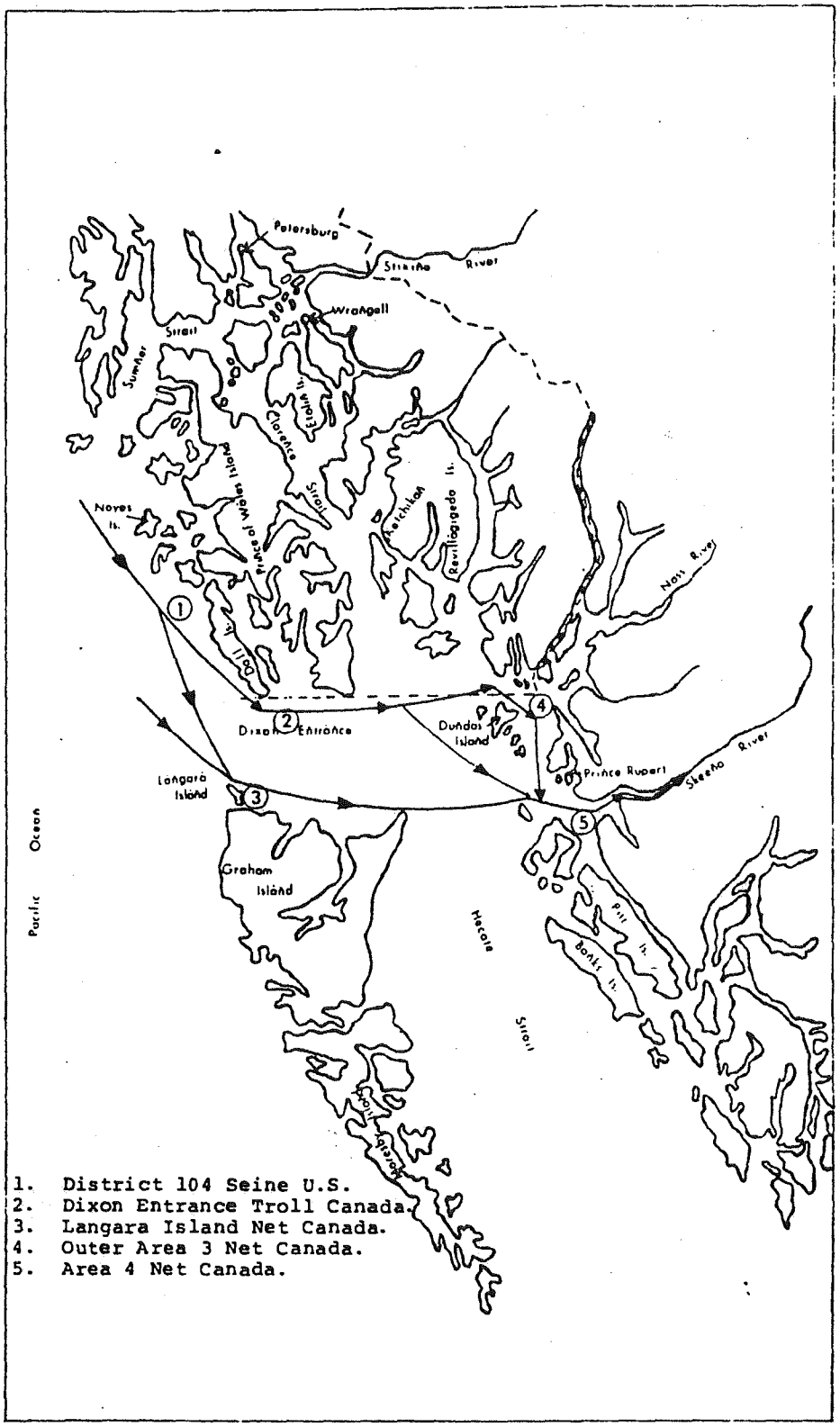
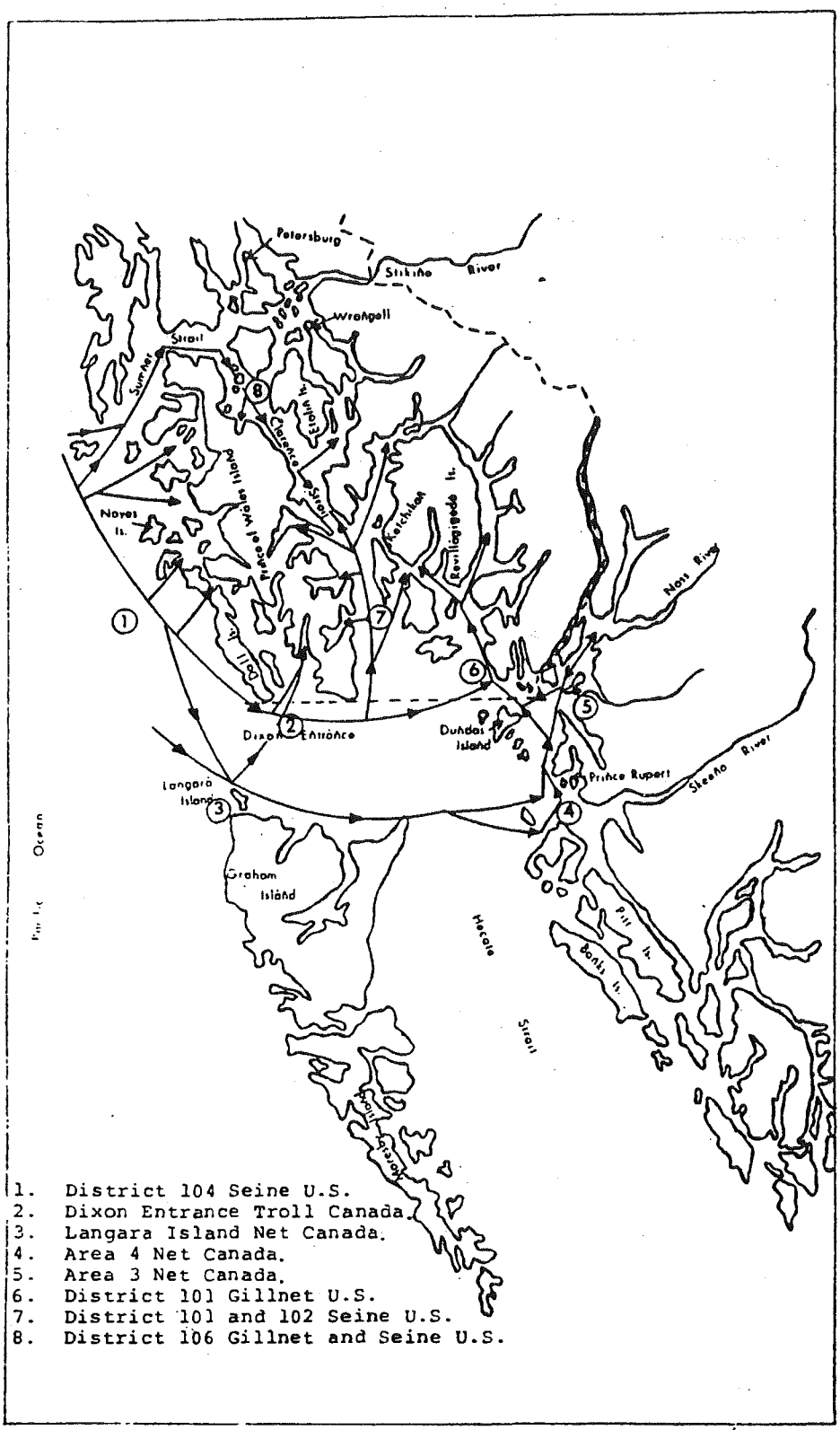


Figure 15. Migration routes of Skeena River (Canada) even year pink salmon stocks based on 1982 and 1984 U.S/Canada research.



1. District 104 Seine U.S.
2. Dixon Entrance Troll Canada.
3. Langara Island Net Canada.
4. Area 4 Net Canada.
5. Area 3 Net Canada.
6. District 101 Gillnet U.S.
7. District 101 and 102 Seine U.S.
8. District 106 Gillnet and Seine U.S.

Figure 16. Migration routes of Alaska District 1,2,3,5,6, and 7 even year pink salmon stocks based on 1982 and 1984 U.S/Canada research.

Table 1. 1982 total catch, percent composition and catch by country of origin based on Canadian tagging analyses for pink salmon from selected U.S. and Canadian fisheries.

Fishery	Catch	%		Number	
		U.S.	Can	U.S.	Can
Area 1 Troll	56,340	84	16	47,326	9,014
Area 1 Seine	18,036	62	38	11,182	6,854
Area 3					
3X	440,226	44	56	193,699	246,527
3Y	168,767	45	55	75,945	92,822
3Z	437,107	35	65	152,987	284.120
Area 4 (outside)*	99.079	21	79	20,807	78,272
Area 5 (outside)**	19,151	21	79	4,022	15,129
District 4					
Noyes	3,915,692	92	8	3,602,437	313,255
Muzon	801,840	88	12	705,619	96,221
District 6					
Upper Clarence	25,409	97	3	24,647	762
District 2					
Middle Clarence	0	99	1		
District 2 & 1					
Lower Clarence	4,667,105	96	4	4,480,421	186,684
District 3					
Cordova Bay	524,270	97	3	508,542	15,728
District 1-B					
Cape Fox-Tree Point	1,390,958	80	20	1,112,766	278,192
District 7					
Union Bay	109,482	92	8	100,723	8,759

* The catch in inside portions of Area 4 totalled 220,336. This catch was not included in the analysis because tagging was only conducted in the outer portions of Area 4.

** The catch in inside portions of Area 5 totalled 62,979. This catch was not included in the analysis because tagging was only done in the outer portions of Area 5.

Table 2. 1982 total catch, percent composition and catch by country of origin based on Canada tagging analyses for sockeye salmon from selected U.S. and Canadian fisheries.

Fishery	Catch	%		Number	
		U.S.	Can	U.S.	Can
Area 1 Troll	3,840	-			
Area 1 Seine	58,665	11	89	6,453	51,212
Area 3					
3X	278,724	5	95	13,936	264,788
3Y	97,604	5	95	4,880	92,724
3Z	270,546	5	95	13,527	257,019
Area 4 (outside)*	162,371	8	92	12,990	149,381
Area 5 (outside)**	42,312	1	99	423	41,889
District 104					
Noyes	194,223	21	79	40,787	153,436
Muzon	91,192	20	80	18,238	72,954
District 6					
Upper Clarence	193,352	31	69	59,939	133,413
District 2					
Middle Clarence	0	57	43		
District 2 & 1					
Lower Clarence	121,040	79	21	95,622	25,418
District 3					
Cordova Bay	400	65	35	260	140
District 1-B					
Cape Fox-Tree Point	208,228	29	71	60,386	147,842
District 7					
Union Bay	305	-			

* The catch in inside portions of Area 4 totalled 1,529,426. This catch was not included in the analysis because tagging was only conducted in the outer portions of Area 4.

**The catch in inside portions of Area 5 totalled 28,864. This catch was not included in the analysis because tagging was only done in the outer portions of Area 5.

Table 3. 1982 total catch, percent composition and catch by country of origin based on U.S. scale analyses for sockeye salmon from selected U.S. and Canadian fisheries.

Fishery	Catch	%		Number	
		U.S.	Can	U.S.	Can
Area 1 Troll	3,850				
Area 1 Seine	58,092				
Area 3					
3X					
3Y					
3Z					
Area 4 (outside)					
Area 5					
District 4					
Noyes					
	285,415	37.7	62.3	107,601	177,814
Muzon					
District 6					
Upper Clarence	193,376	48.7	51.3	94,174	99,202
District 2					
Middle Clarence					
District 2 & 1					
Lower Clarence					
District 3					
Cordova Bay					
District 1-B					
Cape Fox-Tree Point	190,575	36.4	63.6	69,369	121,206
District 7					
Union Bay					

Table 4. 1983 total catch, percent composition and catch by country of origin based on Canadian tagging analyses for sockeye salmon from selected U.S. and Canadian fisheries.

Fishery	Catch	%		Number	
		U.S.	Can	U.S.	Can
Area 1 Troll	3,947				
Area 1 Seine	32,428	3.2	96.1	1,038	31,340
Area 3					
3X	30,565	0.7	99.3	214	30,351
3Y	250,644	1.4	98.1	3,509	245,882
3Z	169,674	0.5	99.5	848	168,826
Area 4 (outside)	285,137	0.4	99.5	1,141	283,996
Area 5	14,361	0.0	100.0	0	14,361
District 4					
Noyes	511,256	8.3	91.4	42,434	467,288
Muzon	141,543	3.7	95.4	5,237	135,032
District 6					
Sumner Strait		48.8	30.9	38.0	
		50.1			
District 6	50,878			25,490	19,334
Upper Clarence		51.3	45.1		
District 2					
Middle Clarence	4,477				
District 2 & 1					
Lower Clarence	75,018	6.3	93.5	4,726	70,142
District 3					
Cordova Bay	733				
District 1-B					
Cape Fox-Tree Point	143,616	8.3	89.9	11,920	129,111
District 7					
Union Bay	1,239				

Table 5. 1984 total catch, percent composition and catch by country of origin based on U.S. and Canadian tagging analyses for pink salmon from selected U.S. and Canadian fisheries. The percent composition are averages of U.S. and Canadian estimates.

Fishery	Catch	%		Number	
		U.S.	Can	U.S.	Can
Area 1 Troll	1,177,577	73	27	859,631	317,946
Area 1 Seine	680,993*	-			
Area 3					
3X	268,796	35.5	64.5	95,423	173,373
3Y	785,493	49.5	50.5	388,819	396,674
3Z	1,295,428	43.0	57.0	557,034	738,394
Area 4	1,001,999	28.5	71.5	285,570	716,429
Area 5	576,968	22.5	77.5	129,818	447,150
District 104					
Noyes	3,430,670	90.5	9.5	3,104,756	325,914
Muzon	3,154,798	87.0	13.0	2,744,674	410,124
District 6					
Upper Clarence	444,700				
District 2					
Middle Clarence	216,250				
District 2 & 1					
Lower Clarence	7,207,550	94	6	6,775,097	432,453
District 3					
Cordova Bay	766,616				
District 1-B					
Cape Fox-Tree Point	1,832,732	62.5	37.5	1,145,458	687,275
District 7	156,908				
Union Bay					

*617,453 pinks were caught in the terminal fishery occurring in Masset Inlet.

Table 6A. A comparison of the contribution of U.S. and Canadian origin sockeye salmon to select U.S. fisheries in 1982 based on Canadian tagging and U.S. scale analysis.

	District		
	101-11	104	106
U.S. Contribution Based on Tagging	55,267	58,507	59,947
U.S. Contribution Based on Scales	69,369	107,596	94,174
Difference Between Scales & Tagging	14,102	49,089	34,227
Canadian Contribution Based on Tagging	135,308	226,894	133,429
Candian Contribution Based on Scales	121,206	177,805	99,202
Difference Between Scales & Tagging	14,102	49,089	34,227
% $\frac{\text{Difference}}{\text{Total Catch}}$	7.4	17.2	17.2

Table 6B. A comparison of the contribution of U.S. and Canadian origin sockeye salmon to select U.S. fisheries in 1983 based on Canadian tagging and U.S. scale analysis.

	District		
	101-11	104	106
U.S. Contribution Based on Tagging	11,920	39,168	25,490
U.S. Contribution Based on Scales	51,702	156,671	33,936
Difference Between Scales & Tagging	39,781	117,504	8,446
Canadian Contribution Based on Tagging	129,111	609,714	19,334
Candian Contribution Based on Scales	91,914	496,127	16,942
Difference Between Scales & Tagging	37,197	113,587	2,392
% $\frac{\text{Difference}}{\text{Total Catch}}$	26.8	17.7	10.7

4.2 Estimates of National Contribution Rates for Fisheries in Southern Southeast Alaska Derived by Scale Pattern Analysis

Status of Boundary Area Sockeye Stock Identification Techniques using Scale Characteristics

Separation of Canadian and Alaskan sockeye stocks using scale characteristics appears to be an accurate technique. Two analyses are discussed: (1) composite samples are formed to represent Alaskan and Nass/Skeena stocks (two-way model); and (2) similar samples are formed to represent Nass, Skeena, and Alaskan stocks (three way model). Such analyses contain implicitly an assumption of the relative abundance of the component stocks of each aggregation of stocks. Further, the analyses contain the assumption that all stocks present in an interception fishery are included among the component stocks of the aggregations. Estimates of stock composition and measures of their precision would be affected if these assumptions were not satisfied. A test of the models described later indicates the procedure performed well in 1983. Mean classification accuracy in 1984 of two-way models was 96.9%. The point estimate and 90% confidence interval for the U.S. interception of Canadian stocks in 1984 was 336 thousand fish ± 4 thousand provided that all assumptions were met. Weekly stock contribution rates by age class for important fisheries are routinely produced using this technique making possible very precise estimates of migratory timing.

Preliminary research has demonstrated the feasibility of estimating the contribution of Nass and Skeena River sockeye salmon stocks separately rather than combining the systems. Mean classification accuracy of preliminary three-way models capable of allocating boundary area catches to the Nass River, Skeena River, or Alaskan groups was 82.6%. Preliminary analysis of 1984 boundary catches indicates that the great majority of Canadian sockeye taken in the District 101-11 gillnet fishery were of Nass River origin while Skeena River stocks contributed the majority of Canadian fish taken in the District 104 seine fishery.

Review of the 1984 Boundary Area Sockeye Salmon Scale Pattern Allocation Results

Based on scale pattern analysis, the estimated interception of Canadian sockeye salmon stocks in 1984 southern Southeast Alaska net fisheries (Districts 101-108) was approximately 336 thousand (58%) of the 577 thousand harvested (Table 7). This compares with 733 thousand harvested in 1982 of which 439 thousand (57%) were Canadian and 909 thousand harvested in 1983 of which 633 thousand (70%) were Canadian. As in previous years Canadian stocks were present in significant numbers in all southern Southeast Alaskan net fisheries, although fisheries located in inside waters intercepted lower proportions of Canadian stocks than did fisheries adjacent to the border or along the outer coast.

Interception of Canadian Nass and Skeena River sockeye salmon was highest in Alaska's District 104 seine fishery and District 101-11 gillnet fishery. In District 104, Canadian sockeye accounted for 215 thousand (73%) of the 294 thousand harvested. In District 101-11 Canadian fish accounted for 54 thousand (61%) of a catch of 88 thousand. Weekly stock composition estimates for all significant Alaskan net fisheries in 1984 are presented in Tables 8 to 12.

The Nass and Skeena Rivers contributed the great majority of Canadian sockeye salmon stocks taken in Alaskan boundary area fisheries in 1984. Stocks from southern British Columbia systems, which were present in significant numbers in District 104 in 1983, were not detected in Southeast Alaska fisheries in 1984. However, the large catch at Noyes Island in early August was unusual and corresponded exactly with a large estimated proportion of Fraser River sockeye (62%) using other methods (see section 4.3) for samples obtained at Langara Island, Area 1 during July 29-Aug. 4, 1984. Because the 1984 Fraser run was predominately from Chilco Lake (a glacial stock with scale patterns that may resemble Southeast Alaskan stocks), misclassification with Southeast Alaskan stocks may have occurred. The contribution by coastal stocks of central British Columbia is unknown since they were not represented by standards in the scale analysis models and may be misclassified as Southeast Alaskan stocks.

The main migratory route for Nass and Skeena sockeye salmon in Alaskan waters in 1984 was along the southern outside coast (District 104). However, a significant number of Nass and Skeena River sockeye salmon entered Alaskan inside waters through Sumner Strait (District 106) and migrated south through Clarence Straits (Districts 101 and 102).

Blind Test of 1983 Discriminant Function Models

The blind test of the accuracy of models used to allocate 1983 commercial catches was performed by using these models to classify scales collected at the time sockeye salmon were tagged in mixed stock interception fisheries. Scales from tagged fish which were recovered in escapements were processed using standard techniques by personnel who had no knowledge of their origin. Proportions of these fish contributed by the stocks were estimated for comparison with known values. In tests of all models utilized, 90% confidence intervals of stock proportions included actual proportions. Complete details of this experiment are in the ADF&G final report on 1984 U.S.-Canada research (ADF&G 1985).

able 7. Estimated contribution by nation of origin of sockeye salmon harvested in Alaska Districts 101-108, 1984.

istrict	Gear Type	Nation of origin	Estimated Number	%	90% C.I. Lower	90% C.I. Upper	Coefficient of Variation
101	Gillnet	Alaska	34,762	39.4	33,437	36,086	2.3
		Nass/Skeena	53,464	60.6	52,140	54,789	1.5
		Total	88,226				
101	Seine	Alaska	49,209	60.3	47,481	50,937	2.2
		Nass/Skeena	32,445	39.7	30,717	34,173	3.3
		Total	81,654				
102	Gillnet [1]						
102	Seine	Alaska	17,653	82.1	17,170	18,136	1.7
		Nass/Skeena	3,764	17.9	3,281	4,247	7.8
		Total	21,417				
103	Seine [1]						
104	Seine	Alaska	78,821	26.8	72,687	84,995	5.0
		Nass/Skeena	214,847	73.2	208,713	220,981	1.8
		Total	293,668				
105	Seine [1]						
106	Gillnet	Alaska	60,367	65.8	58,131	62,603	2.2
		Nass/Skeena	24,661	26.9	22,845	26,477	4.4
		Tahltan	2,677	2.9	1,706	3,648	22.0
		Stikine	4,084	4.4	2,681	5,487	20.9
		Total	91,789				
106	Seine [1]						
107	Seine [1]						
108	Gillnet [1]						
All istricts		Alaska	240,812	41.8	233,575	248,045	1.8
		Canada	335,942	58.2	331,493	340,389	1.3
		Total	576,754				

Because of catches of a few hundred incidentally caught sockeye salmon and an insufficient number of samples from this catch, no estimates were made for this district.

Table 8. Estimated contribution of sockeye salmon stocks originating in Alaska and Canada to Alaska's District 101 drift gillnet fishery, 1984.

Dates	Group	Catch 1.2	1.3	2.2	2.3	Other	Total	90% C.I. Lower	Upper	Percent
06/17-06/23	Alaska	626	1,200	369	360	335	2,889	2,405	3,373	22.8
(week 25)	Nass/Skeena	983	2,966	3,922	800	913	9,585	9,101	10,069	77.2
	Total	1,609	4,166	4,291	1,160	1,247	12,474			100.0
06/24-06/30	Alaska	267	729	252	135	56	1,439	1,207	1,672	26.8
(week 26)	Nass/Skeena	420	703	2,346	301	115	3,885	3,652	4,117	73.2
	Total	687	1,432	2,598	437	170	5,324			100.0
07/01-07/07	Alaska	461	864	380	319	24	2,048	1,621	2,475	19.3
(week 27)	Nass/Skeena	1,040	2,148	4,683	579	71	8,521	8,094	8,948	80.7
	Total	1,501	3,012	5,063	898	95	10,569			100.0
07/08-07/14	Alaska	381	2,731	25	356	6	3,499	3,095	3,902	39.8
(week 28)	Nass/Skeena	832	1,327	2,470	646	12	5,286	4,883	5,690	60.2
	Total	1,212	4,059	2,495	1,001	18	8,785			100.0
07/15-07/21	Alaska	379	3,846	414	813	0	5,452	4,860	6,043	43.8
(week 29)	Nass/Skeena	828	1,664	3,766	730	0	6,987	6,396	7,579	56.2
	Total	1,207	5,510	4,180	1,542	0	12,439			100.0
07/22-07/28	Alaska	471	4,872	175	738	0	6,257	5,727	6,787	58.5
(week 30)	Nass/Skeena	524	1,150	2,103	663	0	4,440	3,910	4,970	41.5
	Total	995	6,022	2,278	1,401	0	10,697			100.0
07/29-08/04	Alaska	321	3,889	278	711	4	5,203	4,831	5,575	63.7
(week 31)	Nass/Skeena	357	660	1,666	277	4	2,963	2,591	3,335	36.3
	Total	678	4,548	1,944	988	8	8,166			100.0
08/05-08/11	Alaska	196	1,464	256	820	0	2,735	2,492	2,978	50.9
(week 32)	Nass/Skeena	218	389	1,710	319	0	2,636	2,393	2,879	49.1
	Total	414	1,853	1,966	1,139	0	5,371			100.0
08/12-08/18	Alaska	74	573	350	756	0	1,752	1,430	2,074	21.3
(week 33)	Nass/Skeena	2,470	1,263	2,301	446	0	6,480	6,158	6,802	78.7
	Total	2,544	1,836	2,651	1,202	0	8,232			100.0
08/19-08/25	Alaska	103	566	149	907	1	1,727	1,562	1,892	50.4
(week 34)	Nass/Skeena	339	287	536	535	2	1,699	1,534	1,864	49.6
	Total	442	853	685	1,442	3	3,426			100.0
08/26-09/01	Alaska	36	199	53	485	1	774	723	825	64.2
(week 35)	Nass/Skeena	119	101	189	22	1	432	381	483	35.8
	Total	156	300	241	508	2	1,207			100.0
09/02-09/08	Alaska	46	254	67	619	1	987	911	1,063	64.2
(week 36)	Nass/Skeena	152	129	240	28	1	550	474	626	35.8
	Total	198	383	307	647	2	1,537			100.0
Fishery	Alaska	3,359	21,188	2,767	7,020	428	34,762	33,437	36,086	39.4
Total	Nass/Skeena	8,282	12,788	25,931	5,346	1,117	53,464	52,140	54,789	60.6
	Total	11,641	33,976	28,698	12,366	1,545	88,226			100.0

Table 9. Estimated contribution of sockeye salmon stocks originating in Alaska and Canada to Alaska's District 101 purse seine fishery, 1984.

Dates	Group	Catch 1.2	1.3	2.2	2.3	Other	Total	90% C.I. Lower	Upper	Percent
07/08-07/14	Alaska	99	289	138	48	4	578	483	673	32.0
(week 28)	Nass/Skeena	413	119	665	26	8	1,231	1,136	1,326	68.0
	Total	512	408	803	74	12	1,809			100.0
07/15-07/21	Alaska	1,404	3,911	572	556	39	6,482	5,934	7,030	59.7
(week 29)	Nass/Skeena	1,103	1,613	1,327	302	26	4,371	3,823	4,919	40.3
	Total	2,507	5,524	1,899	858	65	10,853			100.0
07/22-07/28	Alaska	698	4,261	184	348	65	5,560	5,222	5,898	76.7
(week 30)	Nass/Skeena	549	495	436	189	20	1,689	1,351	2,027	23.3
	Total	1,247	4,756	624	537	85	7,249			100.0
07/29-08/04	Alaska	2,344	6,744	966	957	186	11,197	10,460	11,934	68.2
(Week 31)	Nass/Skeena	2,138	1,071	1,405	520	87	5,221	4,484	5,958	31.8
	Total	4,482	7,815	2,371	1,477	273	16,418			100.0
08/05-08/11	Alaska	3,026	10,591	1,149	1,412	369	16,547	15,461	17,633	73.7
(week 32)	Nass/Skeena	2,675	664	1,681	767	132	5,919	4,833	7,005	26.3
	Total	5,701	11,255	2,830	2,179	501	22,466			100.0
08/12-08/18	Alaska	552	2,008	1,389	2,627	169	6,745	5,983	7,507	37.3
(week 33)	Nass/Skeena	7,119	1,195	2,591	159	284	11,348	10,586	12,110	62.7
	Total	7,671	3,203	3,980	2,786	453	18,093			100.0
08/19-09/01	Alaska	611	470	366	634	19	2,100	1,844	2,356	44.1
(week 34/35)	Nass/Skeena	2,092	305	244	0	25	2,666	2,410	2,922	55.9
	Total	2,703	775	610	634	44	4,766			100.0
Fishery	Alaska	8,734	28,274	4,768	6,582	851	49,209	47,481	50,937	60.3
Total	Nass/Skeena	16,089	5,462	8,349	1,963	582	32,445	30,717	34,173	39.7
	Total	24,823	33,736	13,117	8,545	1,433	81,654			100.0

Table 10. Estimated contribution of sockeye salmon stocks originating in Alaska and Canada to Alaska's District 102 purse seine fishery, 1984.

Dates	Group	Catch 1.2	1.3	2.2	2.3	Other	Total	90% C.I. Lower	Upper	Percent
07/08-07/14	Alaska	55	182	24	29	1	291	180	402	91.2
(week 28)	Nass/Skeena	21	0	6	1	0	28	-83	139	8.8
	Total	76	182	30	30	1	319			100.0
07/15-07/21	Alaska	629	2,087	275	336	14	3,341	3,230	3,452	91.2
(week 29)	Nass/Skeena	242	0	69	9	1	321	210	432	8.8
	Total	971	2,087	344	345	15	3,662			100.0
07/22-07/28	Alaska	869	3,437	318	530	29	5,183	4,955	5,411	88.7
(week 30)	Nass/Skeena	335	227	81	14	4	661	433	889	11.3
	Total	1,204	3,664	399	544	33	5,844			100.0
07/29-08/04	Alaska	198	802	100	86	32	1,218	1,001	1,435	85.2
(Week 31)	Nass/Skeena	84	94	25	2	6	211	-6	428	14.8
	Total	282	896	125	88	38	1,429			100.0
08/05-08/11	Alaska	630	2,554	320	275	101	3,880	3,663	4,097	85.2
(week 32)	Nass/Skeena	266	300	81	7	18	672	455	889	14.8
	Total	896	2,854	401	282	119	4,552			100.0
08/12-08/18	Alaska	574	630	270	234	10	1,718	1,611	1,825	80.3
(week 33)	Nass/Skeena	243	102	68	6	2	421	314	528	19.7
	Total	817	732	338	240	12	2,139			100.0
08/19-08/25	Alaska	537	467	433	132	36	1,605	1,424	1,786	55.6
(week 34)	Nass/Skeena	1,065	75	110	3	28	1,281	1,100	1,462	44.4
	Total	1,602	542	543	135	64	2,886			100.0
08/26-09/01	Alaska	25	69	53	46	1	194	175	213	75.2
(week 35)	Nass/Skeena	49	11	13	1	0	74	55	93	28.7
	Total	74	80	66	47	1	258			103.9
09/02-09/15	Alaska	33	94	48	42	6	223	203	243	70.1
(weeks 36-37)	Nass/Skeena	65	15	12	1	2	95	75	115	29.9
	Total	98	109	60	43	8	318			100.0
Fishery	Alaska	3,550	10,322	1,841	1,710	230	17,653	17,170	18,136	82.09
Total	Nass/Skeena	2,370	824	465	44	61	3,764	3,281	4,247	17.91
	Total	5,920	11,146	2,306	1,754	291	21,417			100.00

Table 11. Estimated contribution of sockeye salmon stocks originating in Alaska and Canada to Alaska's District 104 purse seine fishery, 1984.

Dates	Group	Catch						90% C.I.		Percent
		1.2	1.3	2.2	2.3	Other	Total	Lower	Upper	
07/01-07/14	Alaska	1,879	3,801	789	727	58	7,254	6,196	8,312	33.6
(week 27&28)	Nass/Skeena	6,862	4,444	2,233	676	116	14,331	13,273	15,389	66.4
	Total	8,741	8,245	3,022	1,403	174	21,585			100.0
07/15-07/21	Alaska	1,328	4,794	1,074	789	138	8,123	6,720	9,526	27.2
(week 29)	Nass/Skeena	10,856	5,836	3,943	734	370	21,739	20,336	23,142	72.8
	Total	12,184	10,630	5,017	1,523	508	29,862			100.0
07/22-07/28	Alaska	1,773	9,075	1,553	695	71	13,167	10,664	15,670	25.5
(week 30)	Nass/Skeena	22,853	11,835	2,917	647	209	38,461	35,958	40,964	74.5
	Total	24,626	20,910	4,470	1,342	280	51,628			100.0
07/29-08/04	Alaska	6,444	12,988	1,707	1,650	138	22,927	18,416	27,438	25.5
(Week 31)	Nass/Skeena	39,585	19,645	6,744	598	402	66,974	62,463	71,485	74.5
	Total	46,029	32,633	8,451	2,248	540	89,901			100.0
08/05-08/11	Alaska	4,663	7,292	1,859	733	117	14,664	11,798	17,530	25.0
(week 32)	Nass/Skeena	26,632	10,322	6,478	265	353	44,050	41,184	46,916	75.0
	Total	31,295	17,614	8,337	998	470	58,714			100.0
08/12-08/18	Alaska	4,768	2,991	801	1,180	124	9,864	7,946	11,782	29.5
(week 33)	Nass/Skeena	17,102	3,306	2,481	440	298	23,627	21,709	25,545	70.5
	Total	21,870	6,297	3,282	1,620	422	33,491			100.0
08/19-09/25	Alaska	1,118	812	217	552	35	2,734	2,286	3,182	33.4
(week 34)	Nass/Skeena	3,599	897	674	200	71	5,441	4,993	5,889	66.6
	Total	4,717	1,709	891	752	106	8,175			100.0
08/26-09/01	Alaska	48	18	11	5	6	88	68	108	28.2
(week 35)	Nass/Skeena	154	20	34	2	14	224	204	244	71.8
	Total	202	20	34	2	14	312			100.0
Fishery	Alaska	22,021	41,771	8,011	6,331	687	78,821	72,687	84,955	26.8
Total	Nass/Skeena	127,643	56,305	25,504	3,562	1,833	214,847	208,713	220,981	73.2
	Total	149,664	98,076	33,515	9,893	2,520	293,668			100.0

Table 12 Estimated contribution of sockeye salmon stocks originating in Alaska and Canada to Alaska's District 106 gillnet fishery, 1984.

Dates	Group	Catch 1.2	1.3	2.2	2.3	Other	Total	90% C.I. Lower	Upper	Percent
06/17-06/23	Alaska	386	752	61	158	7	1,364	1,256	1,472	80.9
(week 25)	Nass/Skeena	0	119	62	19	1	201	138	264	11.9
	Tahltan	0	110	0	1	1	112	18	206	6.6
	Stikine	0	0	0	8	0	8	-16	32	0.5
	Total	386	981	123	186	9	1,685			100.0
06/24-06/30	Alaska	572	1,446	235	380	38	2,671	2,428	2,914	72.3
(week 26)	Nass/Skeena	71	200	238	45	8	562	421	703	15.2
	Tahltan	114	160	0	2	4	280	83	477	7.6
	Stikine	158	0	0	19	3	180	54	306	4.9
	Total	915	1,806	473	446	53	3,693			100.0
07/01-07/07	Alaska	1,290	2,906	444	822	13	5,475	4,962	5,988	71.0
(week 27)	Nass/Skeena	254	331	404	86	3	1,078	781	1,375	14.0
	Tahltan	366	476	0	0	2	844	403	1,285	10.9
	Stikine	295	0	0	16	1	312	34	590	4.0
	Total	2,205	3,713	848	924	19	7,709			100.0
07/08-07/14	Alaska	1,208	4,323	529	813	11	6,884	6,128	7,640	64.8
(week 28)	Nass/Skeena	722	1,271	481	85	4	2,563	2,019	3,107	24.1
	Tahltan	363	769	0	0	2	1,134	477	1,791	10.7
	Stikine	35	0	0	15	0	50	-189	289	0.5
	Total	2,328	6,363	1,010	913	17	10,631			100.0
07/15-07/21	Alaska	2,194	7,857	1,297	1,929	37	13,314	12,000	14,628	69.4
(week 29)	Nass/Skeena	1,207	956	850	113	9	3,135	2,311	3,959	16.3
	Tahltan	239	0	0	67	1	307	-210	824	1.6
	Stikine	1,351	947	0	116	6	2,420	1,257	3,583	12.6
	Total	4,991	9,760	2,147	2,225	53	19,176			100.0
07/22-07/28	Alaska	2,068	9,673	1,063	2,216	15	15,035	13,846	16,224	67.2
(week 30)	Nass/Skeena	2,778	3,088	974	90	7	6,937	5,770	8,104	31.0
	Tahltan	0	0	0	0	0	0			0.0
	Stikine	416	0	0	0	0	416	-85	917	1.9
	Total	5,262	12,761	2,037	2,306	22	22,388			100.0
07/29-08/04	Alaska	922	5,936	517	963	50	8,388	7,515	9,261	54.3
(week 31)	Nass/Skeena	2,067	2,743	888	916	40	6,654	5,805	7,503	43.1
	Tahltan	0	0	0	0	0	0			0.0
	Stikine	52	0	0	347	2	401	10	792	2.6
	Total	3,041	8,679	1,405	2,226	92	15,443			100.0
08/05-08/11	Alaska	517	2,841	206	465	13	4,042	3,775	4,309	70.1
(week 32)	Nass/Skeena	735	373	354	164	5	1,631	1,382	1,880	28.3
	Tahltan	0	0	0	0	0	0			0.0
	Stikine	0	0	0	97	0	97	6	188	1.7
	Total	1,252	3,214	560	726	18	5,770			100.0
08/12-08/18	Alaska	524	420	687	175	6	1,812	1,642	1,982	60.2
(week 33)	Nass/Skeena	496	138	380	62	4	1,080	924	1,236	35.9
	Tahltan	0	0	0	0	0	0			0.0
	Stikine	83	0	0	37	0	120	8	232	4.0
	Total	1,103	558	1,067	274	10	3,012			100.0
08/19-09/22	Alaska	315	601	148	227	91	1,382	1,275	1,489	60.6
(weeks 34-38)	Nass/Skeena	340	218	176	51	35	820	731	909	35.9
	Tahltan	0	0	0	0	0	0			0.0
	Stikine	43	34	0	0	3	80	3	157	3.5
	Total	698	853	324	278	129	2,282			100.0
Fishery	Alaska	9,996	36,735	5,187	8,148	281	60,367	58,131	62,603	65.8
Total	Nass/Skeena	8,670	9,437	4,807	1,631	116	24,661	22,845	26,477	26.9
	Tahltan	1,082	1,515	0	70	10	2,677	1,706	3,648	2.9
	Stikine	2,433	981	0	655	15	4,084	2,681	5,487	4.4
	Total	22,181	48,688	9,994	10,504	422	91,789			100.0

1/ Allocations for statistical weeks 25 to 28 are for District 106-30 only. Allocations for statistical weeks 29 to 38 are for all of District 106.

4.3 Utility of biological markers for sockeye stock identification

Over the past 4 years, at least 52 sockeye stocks in Southeast Alaska and British Columbia have been examined for electrophoretic and parasitic characteristics that might be useful for stock identification. The similarity dendrogram in Fig. 17 was constructed using 6 such characters - the prevalence of the brain parasite Myxobolus neurobius, and allele frequencies at 5 loci (PGM-1, PGM-2, LDH-4, IDH-3 and IDH-4). The first 4 characters vary widely among the 52 stocks and are very useful for stock identification; the latter 2 characters (IDH-3 and IDH-4) are of only limited usefulness but can be assayed with minimal additional expense. Fig. 17 illustrates the patterns of similarity among stocks, and thus, the difficulty of distinguishing them using these characters.

Simulations with stock mixtures of known composition show that stocks which cluster together to the right of the vertical dashed line at -2 are very difficult to distinguish. Stocks or stock-groupings that remain distinct to the left of the vertical dashed line at -4 are more easily recognized. The contributions to mixtures by stock-groupings that cluster together between the dashed lines can generally be estimated with accuracies ranging from ±10-30%.

The major obstacle to successful application of this technique to determine national origin of sockeye, is that several stock-groupings include both Alaskan and Canadian stocks. In particular, one cluster (the 'typical coastal' group) includes most Southeast Alaskan stocks and several stocks from the northern and central B.C. coast. Further sampling of other B.C. coastal stocks is required to determine how generally they resemble Southeast Alaskan stocks.

Where management groupings (e.g. Alaskan vs Canadian) do conflict with groupings based on similarity, additional characters must be found. Research is underway to incorporate scale characters in the analysis; further resolution of some clusters should be possible, especially where glacial lakes (e.g. Owikeno, Long and Bowser) have been grouped together with interior, non-glacial systems. Two additional loci (GPT and GL-2) also offer promise, but further refinement of assaying techniques is required. In the meantime, it is often possible to judge which stocks within clusters are unlikely to be present in mixed-stock catches on the basis of run timing, knowledge of migration routes, distance from the fishery and magnitude of escapement. Therefore, it is preferable to sacrifice stock resolution in favour of increased accuracy using present techniques.

Contributions by major stock-groupings have been estimated for sockeye samples collected during pink tagging activities in 1984 at Langara Island (Area 1), the north end of Dundas Island (Area 3) and the inside of Porcher Island (Area 4) (Table 13). The estimated proportion contributed by the typical coastal group which includes both Alaskan and Canadian stocks, was highest at Langara Island (18.3%) during July 8-21. Elsewhere, this group contributed less than 10%.

Fig. 17. LIKELIHOOD RATIO DISTANCE

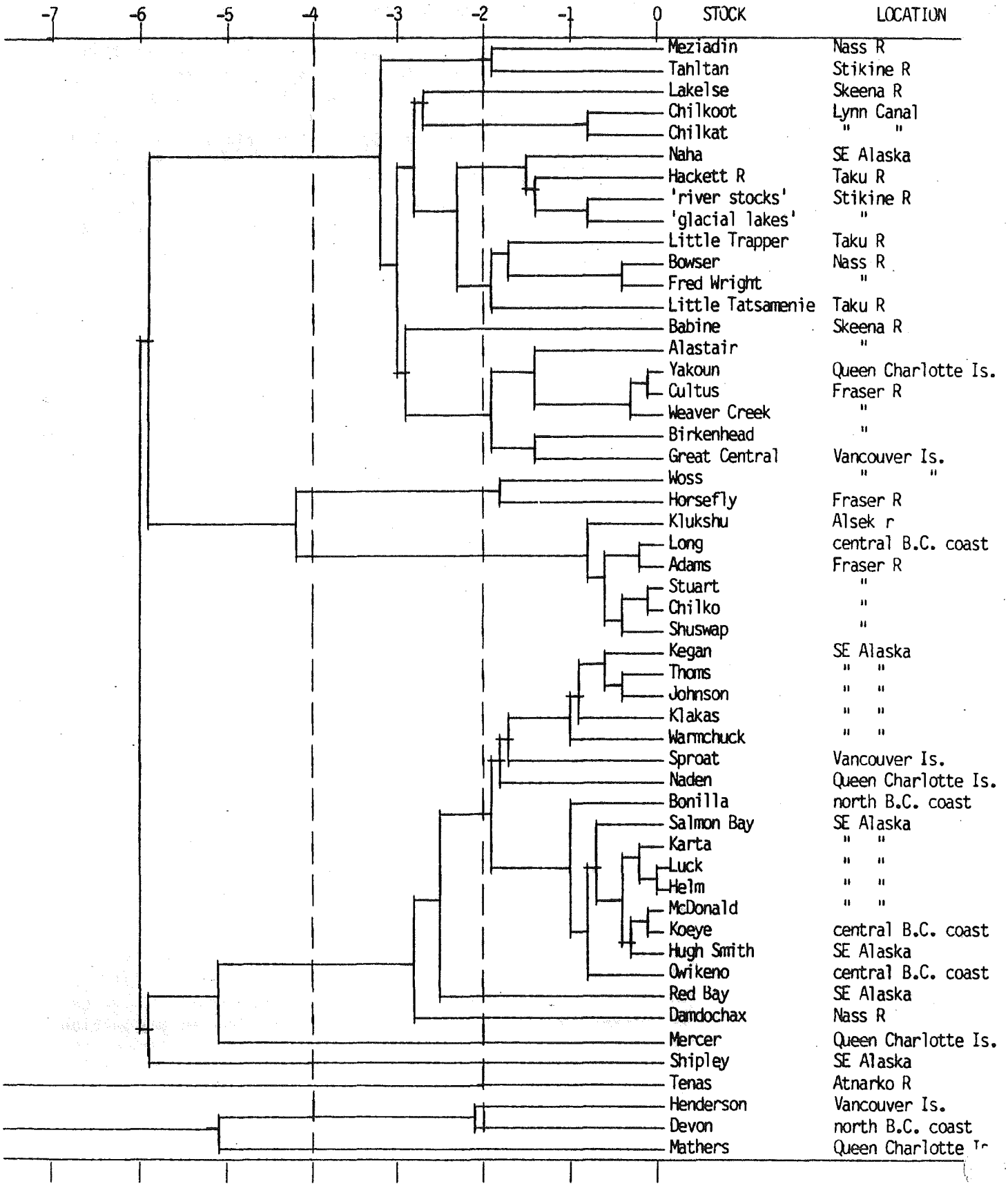


Table 13. Estimated proportions (± 1 standard deviation) contributed by major sockeye stock-groupings at fishing locations in northern British Columbia in 1984.

Location	Date	Skeena, Nass and similar stocks (including Naha, Chilkoot and Chilkat)	Upper Fraser Long Klukshu	typical coastal group (Kegan,... Damdochax)	Other stocks (including Shipley)
Langara Island	July 8-21	0.575 (0.057)	0.157 (0.052)	0.183 (0.037)	0.085 (0.051)
	July 29-Aug 4	0.350 (0.076)	0.622 (0.073)	0.019 (0.008)	0.009 (0.007)
Dundas Island	June 20-25	0.760 (0.053)	0.110 (0.045)	0.070 (0.029)	0.060 (0.027)
	July 1-14	0.851 (0.054)	0.051 (0.045)	0.031 (0.018)	0.067 (0.036)
	July 15-21	0.929 (0.048)	0.061 (0.045)	0.010 (0.003)	0 (-)
	July 22-28	0.918 (0.047)	0.072 (0.047)	0.010 (0.006)	0 (-)
	July 29-Aug 4	0.919 (0.044)	0.075 (0.043)	0.006 (0.003)	0 (-)
	Aug 5-11	0.871 (0.062)	0.080 (0.051)	0.022 (0.009)	0.027 (0.037)
Porcher Island	July 1-14	0.802 (0.055)	0.018 (0.011)	0.087 (0.037)	0.093 (0.051)
	July 15-21	0.932 (0.044)	0.063 (0.042)	0.005 (0.001)	0 (-)
	July 22-28	0.952 (0.044)	0.044 (0.043)	0.004 (0.001)	0 (-)
	July 29-	0.930 (0.043)	0.035 (0.032)	0.016 (0.010)	0.019 (0.027)

Shipley Lake contributed less than 0.2% in all samples. Other Alaskan stocks (i.e. Chilkat, Chilkoot and Naha) have been ignored since they cannot be distinguished reliably from Nass and Skeena stocks, and since with the exception of Naha, they are well removed from the fishing sites.

The upper Fraser stocks (including the dominant Chilko run) contributed substantially (62%) to catches at Langara Island during late July and early August.

Sockeye catches from the Alaska District 101 gillnet fishery in 1985 were sampled to determine the prevalence of the brain parasite, Myxobolus neurobius (Table 14). The proportion of sockeye infected with this parasite is a useful index of the maximum contribution by Alaskan stocks. All Alaskan sockeye stocks sampled to date have a parasite prevalence

Table 14. Prevalence of the brain parasite, Myxobolus neurobius, in sockeye from District 101 gillnet catches in 1985.

Statistical Week	Sockeye Catch	Number Sampled	Proportion Infected[1] (± 95% confidence interval)
25	12,885	50	0.04 (0.06)
26	15,246	100	0.06 (0.05)
27	11,809	50	0.14 (0.11)
28	8,745	100	0.07 (0.06)
29	16,335	100	0.09 (0.06)
30	28,603	0	-
31	17,331	100	0.18 (0.08)
32	22,621	100	0.10 (0.06)
Total (weighted by catch)[2]		600	0.10

[1] proportion infected represents the maximum Alaskan contribution.
[2] excludes weeks not sampled.

exceeding 85% except Chilkat, Chilkoot and Naha. In contrast, the majority of Canadian stocks (but not all) are unparasitized. Thus, the greatest the Alaskan contribution to the District 101 sockeye catch in 1985 could be, is the estimated proportion of parasitized fish, i.e. only 10%. However, this estimate is based on only the first 80% of the catch because no samples were obtained after week 33 to represent the last 20% of the catch.

5.0 DATA GAPS AND PROGRAM NEEDS

5.1 Background

Cooperative U.S.-Canada salmon interception research was started in 1982 in the boundary area. Primary emphasis was placed on tagging studies to determine interception rates. Both sockeye and pink salmon were tagged in 1982. Less funding was available in 1983 so only sockeye salmon were tagged. Funding stabilized at the 1983 level in 1984 and 1985 and only pink salmon were tagged in both years. Chum salmon were tagged incidentally in 1983, 1984, and 1985. Basic migratory information on chum salmon was very sparse in the boundary areas.

Tagging salmon to determine interception rates has many drawbacks. The high cost alone made seeking alternative methods imperative. Three other methods are currently being evaluated -- scale pattern analysis, genetic methods (electrophoresis), and parasite analysis. Scale pattern analysis is being evaluated on sockeye salmon. Electrophoresis is being evaluated on sockeye and chum salmon (Canada is undertaking a preliminary study on pinks). Parasite analysis is being evaluated by Canada on sockeye only.

5.2 Sockeye Salmon

Sockeye salmon have been tagged for two years, 1982 and 1983. However, a major El Nino event occurred in 1983 and migration patterns and timing may have been unusual. Therefore, more studies are required to describe migratory behaviour in more typical years. Fortunately, the reliability of alternative stock identification methods may make large scale tagging programs for sockeye salmon unnecessary. A summary of these methods follows:

Scale Pattern Analysis -- This technique has provided interception estimates that are similar to those obtained from tagging data. Scale pattern analysis could probably replace tagging as a less expensive method for determining interception rates. Separation of U.S and Canadian stocks appears reliable although, as with other methods, some British Columbia stocks may be misclassified as Alaskan stocks. Many refinements still have to be worked out before major stocks within each country can be consistently identified.

Parasite Analysis -- The presence or absence or a protozoan brain parasite, Myxobolus neurobius, has been shown to be very useful in separating U.S. and Canadian stocks of sockeye salmon in the Dixon Entrance area. It could also be very useful for stock separation in certain local fisheries. This technique requires further verification but it is already very useful.

Genetic analysis -- The baseline electrophoretic data on genetic variation

of sockeye populations was accumulated during the 1982 seasons. Mixed stock samples from known and potential interception fisheries were taken in 1983, 1984 and 1985.

Preliminary analysis of the 1983 and 1984 mixed stock samples indicated that the genetic technique would be reliable in some limited fisheries. However, broad application in the major interception fisheries does not appear to be reliable at this time.

A combination type analysis where the electrophoresis and parasite information are used in a single analysis appears to have good reliability in making interception estimates in both broad and narrow applications. Addition of the scale data in a combination analysis should add even more power to the analysis.

5.3 Pink Salmon

Even year pink salmon stocks were tagged in 1982 and 1984 and odd year stocks in 1985. Unusually late arrival of the run in 1982 and problems with weather, tag availability, and vessels in 1984 make another year of even year pink tagging desirable. Furthermore, apparent differences in some interception estimates between 1982 and 1984 emphasis the need to continue monitoring pink interception in the Boundary Area. The second year of odd year tagging will occur in 1987.

Alternative methods of stock identification for pink salmon are needed but none will be available soon. Lack of freshwater growth on the scales make development of a reliable scale method very doubtful. Electrophoretic methods may be useful but the large number of stocks involved makes development of a broader regional baseline necessary and this could take several years to develop. Nevertheless, this work should begin.

Estimating escapements of pink salmon is another major problem in Southeast Alaska and British Columbia. Numerous small streams make weirs impractical. A method of calculating escapement from multiple surveys using a stream life factor is currently being evaluated. This research should receive high priority. The technique could probably be applicable to chum salmon as well.

5.4 Chum Salmon

The treaty specifically identifies Portland Canal chum as a special conservation problem. Summer chum salmon are of particular concern. Chum salmon have been tagged incidentally to pink and sockeye salmon in 1983, 1984 and 1985. This preliminary data indicate that a complicated interception pattern exists. Chum salmon approach Portland Canal from both the north and the south and are probably intercepted in distant fisheries from central British Columbia to Noyes Island as well as Tree Point and Dundas Island areas.

An expanded tagging program for chum salmon is planned for 1987 and will be designed so that interception estimates can be made. This program will require better escapement estimates than are presently available and improvements in enumeration methods will be initiated in 1986.

Use of scale pattern analysis as a stock identification method on chum salmon offers slim hope for success. Like pink salmon, chum salmon show no freshwater growth on their scales.

Studies evaluating electrophoresis as a stock identification tool on chum salmon were initiated by both Canada and the U.S. in 1984. The baseline data for Canadian streams was completed in 1985. Expansion and verification of baseline data will continue in Alaska during 1986. The usefulness of this technique for estimating interceptions in mixed stock fisheries can probably be predicted from the baseline data in 1987. Widespread egg transfers between hatcheries and enhancement facilities may confuse the mixed stock analysis. Therefore, a major caveat may exist in using electrophoresis for separating mixed stocks of chum salmon in southern Southeast Alaska. This potential caveat is being examined.

Canadian CWT data on chum salmon and the incidental tagging data indicate that hatchery chum salmon bound for Nakat Inlet and Neets Bay in Alaska may be intercepted in Canadian Areas 1 and 3. Monitoring CWT chum in commercial catches in these areas should continue.

5.5 Coho Salmon

Very little information exists on escapements of coho salmon. The counting fence on the Meziadan River was maintained through October in 1985 to enumerate coho but in Southeast Alaska and British Columbia numerous small spawning streams and late spawning (October-February) make counts a difficult and expensive task. Likewise, obtaining samples for alternative methods of stock identification will be arduous and expensive. Essentially no information is available on stock descriptions. A pilot study should be undertaken on scale pattern analysis, electrophoresis and parasites to identify stocks.

In Canada, a key stream program for coho has been implemented to provide a reliable estimate of coho escapement for specific streams. Mark-recapture programs, fences and other population estimation methods are being considered for various streams in northern B.C.

5.6 Chinook Salmon

For the most part, chinook salmon in Alaska can be enumerated by aerial and/or foot surveys in most systems but translating these counts to total escapement estimates is difficult. The use of a stream life factor with multiple surveys, now being evaluated for pink salmon may also be useful for chinook salmon.

Very scant information is available on identification of specific stocks of chinook salmon. A pilot study should be initiated to evaluate the usefulness of scale pattern analysis, electrophoresis, and parasites to identify stocks.

In Canada, a key stream program similar to coho has been implemented to provide a reliable estimates of chinook escapement for specific streams. A mark-recapture program on the Kalum River, a tributary of the Skeena, was initiated in 1984 and undertaken again in 1985. Smaller systems continue to be examined by foot and aerial methods.

5.7 Steelhead

No information on either catch or escapement of steelhead has been exchanged between U.S. and Canada. Steelhead catches are recorded in Canadian fisheries and both countries conduct stream surveys in which the escapements of steelhead are noted. In Canada, the Provincial government manages steelhead and is responsible for escapement surveys.

As a first step in improving the information base of this species both Canada and the U.S. should record and exchange information on commercial catches.

6.0 Potential Enhancement Opportunities

6.1 Current U.S. Enhancement Projects that will Contribute to Boundary Area Fisheries

The following descriptions are of both state and private hatchery facilities that will contribute salmon to the catches of fisheries in southern Southeast Alaska and potentially to northern British Columbia. These facilities are in various stages of brood stock development. The level at which they will contribute to various fisheries is not well understood as few years of microwire tag recovery data are available. For each facility discussed, two maps are provided, one to show it general location and the second to indicate the terminal areas where hatchery stocks can be harvested with little impact on natural salmon stocks. In the case of private nonprofit hatcheries, operators are allowed to harvest their returns in a designed special harvest area up to a level where their costs will be recovered. For state hatcheries terminal harvests are usually conducted by the gear type that is allowed by regulation to harvest salmon in the surrounding district. State hatcheries currently do not utilize returns for cost recovery purposes. Included with the maps are tables that show the targeted production number of eggs for each facility by species and estimates of the subsequent number of returning adults.

1. Neets Bay Hatchery

This hatchery is the major facility operated by the Southern Southeast Regional Aquaculture Association (SSRAA). It is located at the head of Neets Bay in west Behm Canal. This major facility will produce both summer and fall chum as well as coho and chinook. In 1985 approximately 329,000 adult fall chum and 43,000 summer chum salmon returned to the facility or were taken in fisheries. This facility demonstrated excellent chum salmon survival rates for 1983, 1984 and 1985 returns. The Neets Bay terminal area is quite large and should provide an excellent opportunity to harvest salmon returning to the hatchery without affecting natural salmon stocks.

2. Whitman Lake Hatchery

The first facility to be built by the Southern Southeast Regional Aquaculture Association was used to develop brood stock for their other facilities. Currently, relatively low numbers of chinook and coho are reared at the site. An experimental sockeye program is also being conducted. This hatchery has only a very small terminal fishing area and returning salmon in excess of brood stock needs will be harvested for cost recovery. Terminal fisheries with the commercial fleet are not anticipated.

3. Nakat Remote Release Site

Utilizing chum salmon eggs incubated at their Whitman Lake and/or Neets Bay hatcheries, the Southern Southeast Alaska Regional Aquaculture Association has been receiving and releasing summer run chum salmon at Nakat Inlet since 1979. Nakat Inlet is located within the Section 1-B (Tree Point) gillnet area immediately east of Cape Fox. Excellent chum returns were experienced at this site in 1983 and 1984. Using updated microwire tag returns, it is estimated that in 1983, 32,000 Nakat chums were taken by U.S. fishermen and 41,000 by Canadian fishermen. In 1984, U.S. fishermen took an estimated 50,000 Nakat chum salmon and Canadian fishermen harvested approximately 58,000. In 1985, U.S. fishermen took an estimated 69,000 Nakat chums. The 1985 Canadian harvest on Nakat chums is not available yet. Current plans are to add fall chum and coho production to the Nakat releases. Because of their location, Nakat chum releases appear to be heavily harvested in normal commercial fishing operations. If necessary, any excesses to brood stock needs that reach Nakat Inlet can be harvested there in the reasonably large terminal harvest area that is available.

4. Beaver Falls Hatchery

Located in George Inlet and at the southern end of the Ketchikan road system, this facility was initially used to conduct research on chum salmon incubation techniques. Currently the facility is being used to incubate sockeye eggs for fry releases at remote lakes. Chum salmon returning to this facility are now being used to provide eggs for the Klawock hatchery. In 1985, fishermen took approximately 93,000 Beaver Falls chum salmon.

5. Tamgas Hatchery

This facility is located on the Annette Island Reserve and operates with Federal funds for the Native community of Metlakatla. This facility is currently in the brood stock buildup stage and substantial numbers of chum, coho and chinook salmon are planned for the future. The hatchery is located in Tamgas Harbor on the southern end of Annette Island, which should offer an adequate terminal harvest area. Because the fisheries in Reserve waters (3,000 feet from shore) are managed by the Federal Department of Interior, the normal planning process was not accomplished for this facility.

6. Klawock Hatchery

Located on the west coast of Prince of Wales Island, this State hatchery is adjacent to the communities of Craig and Klawock. The coho and fall run chum salmon produced at this facility are expected to contribute well to the Districts 103 and 104 purse seine fisheries. In 1985, total returns to Klawock Hatchery included

approximately 47,000 chum salmon and 67,000 coho salmon. A proposed mission change for this facility will include production of sockeye salmon. Microwire tag recoveries will determine whether or not this facility will contribute to Dixon Entrance area fisheries.

6.2. Enhancement in Northern B.C.

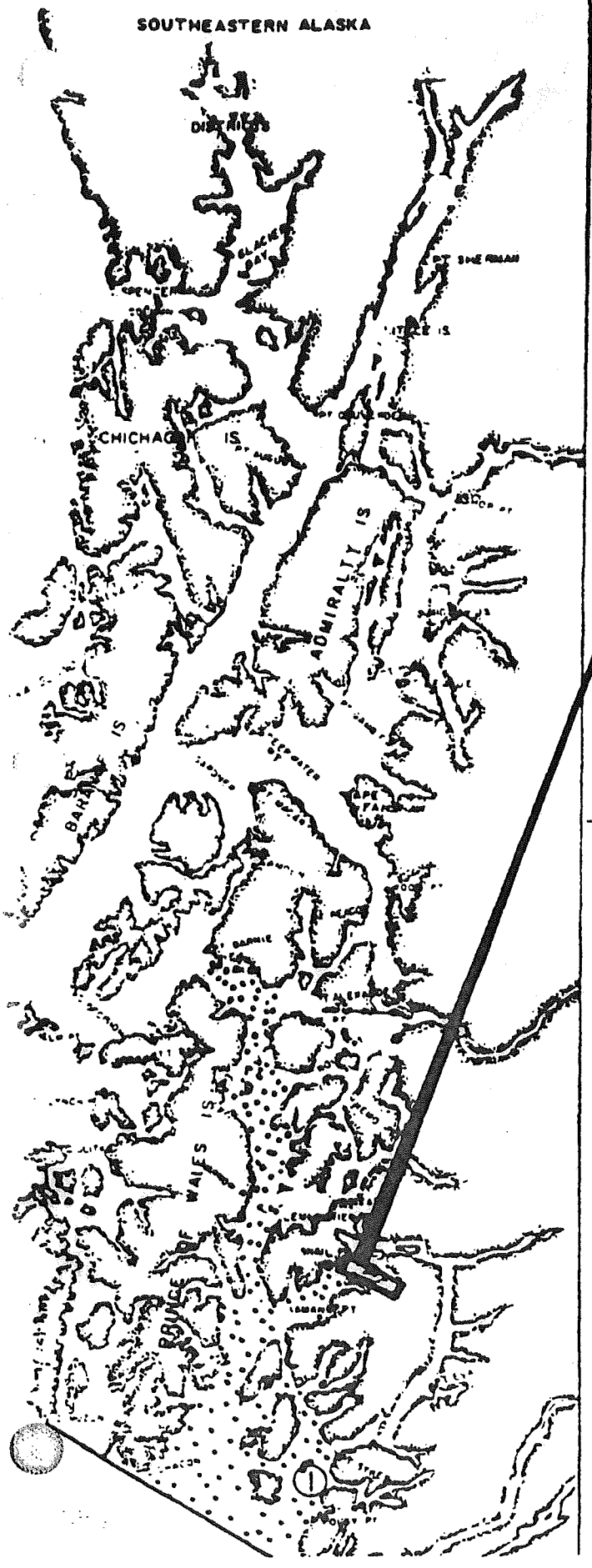
In northern B.C. there are five major enhancement facilities: Table 9 reviews production targets for each facility. Except for the Babine sockeye channels, which have been at full egg production since the mid-1970's, the facilities have only recently operated, and in most cases, are not at full egg production.

Recent disease problems in the Fulton spawning channels may affect adult production in the succeeding years. Beginning in 1982 IHN viral outbreaks in the Fulton River system of the Babine resulted in a decline in the sockeye fry production from the 1981 brood. The problem increased in 1983 but was most devastating in 1984. As a result of the 1983 outbreaks the 1986 sockeye return is expected to have a slightly weaker return of age 4 fish. In 1987 however a serious weakness in the age 4 return is expected due to the 1984 outbreak while the age 5 return will also be affected by the 1983 outbreak.

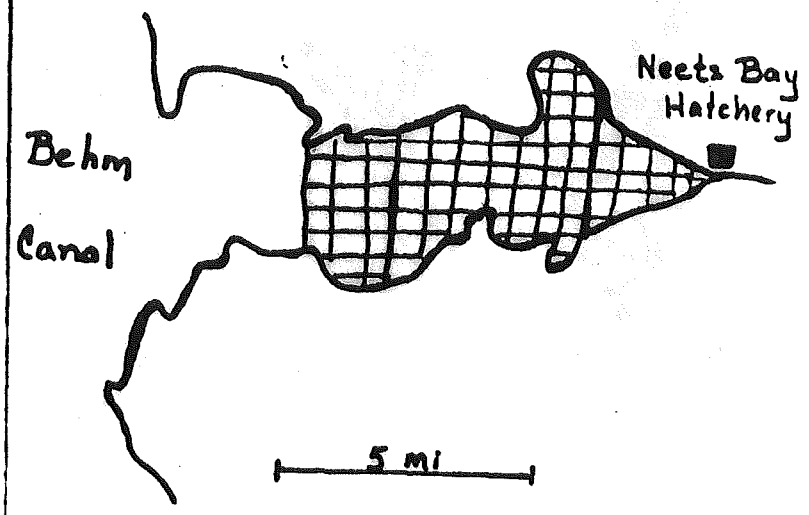
In addition to major facilities, there are a number of small enhancement projects operated by local community organizations, schools and Indian bands. The majority of these projects are concerned with coho and chinook, although other species are also enhanced. Egg production is small and generally does not exceed 50,000 except in a few community development projects, which have a maximum capacity of 500,000 eggs or less.

During the period 1984-86, the Salmon Enhancement Program (SEP) in B.C. has proposed implementing several new enhancement projects all with low egg production; many are small stream improvements. These projects are not designed to create new fisheries but instead boost production modestly in various stocks exploited in current fisheries.

In northern B.C., at least in the short term, no major facilities are proposed. Enhancement will be largely confined to stream improvements and small incubation projects which do not require comprehensive or sophisticated technology.



NEETS BAY



ADJACENT FISHERY (MIXED WILD & HATCHERY STOCK

TERMINAL AREA = SEINE, SPORT, TROLL

SPECIAL HARVEST AREA= SEINE, GILLNET, TRC

PLANNED MAX. CAPACITY PRODUCTION

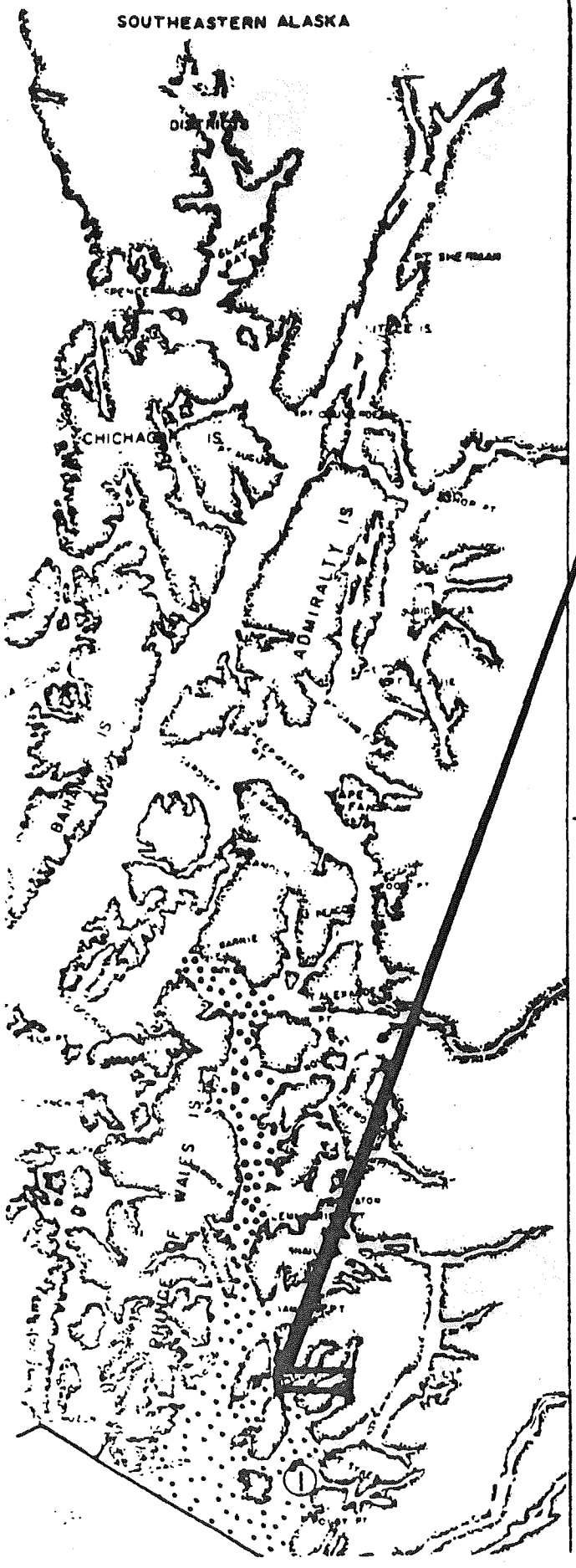
SPECIES	EGGS ($\times 10^6$)	ADULTS
CHUM (SUMMER/FALL)	40.0 1/	1.2 ($\times 10^6$)
COHO	2.7 2/	160-200,000
CHINOOK	2.0	50-90,000

1/ PLUS 20.0 TO BE INCUBATED FOR RELEASE AT NAKAT INLET

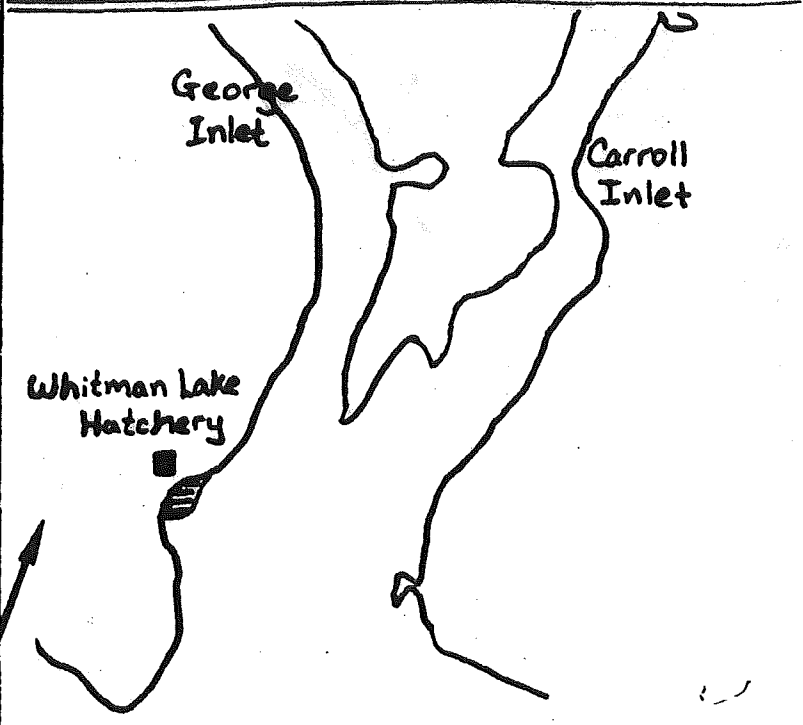
2/ MAY GO TO 5 MILLION BUT HIGHLY DOUBTFUL

3/ DEPENDS ON SMOLT PREDATION STUDIES

Figure 20. Neets Bay Hatchery



WHITMAN LAKE HATCHERY



ADJACENT FISHERY (MIXED WILD & HATCHERY STOCK

TERMINAL AREA = No TERMINAL FISHERY PLANNED

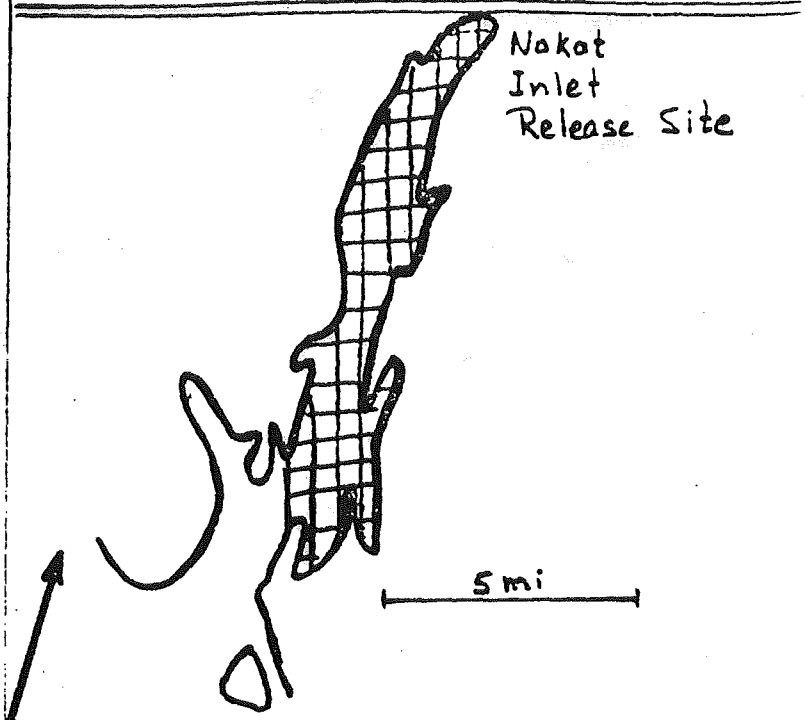
SPECIAL HARVEST AREA = GILLNET, TROLL, SEIN

PLANNED MAX. CAPACITY PRODUCTION

SPECIES	EGGS ($\times 10^6$)	ADULTS
COHO	1.0	50,000
CHINOOK	0.4	24,000
SOCKEYE	2.0	120,000

Figure 21. Whitman Lake Hatchery

NAKAT INLET



ADJACENT FISHERY (MIXED WILD & HATCHERY STOCK

TERMINAL AREA = SPORT, TROLL, SEINE

SPECIAL HARVEST AREA = GILLNET, SEINE, TROLL

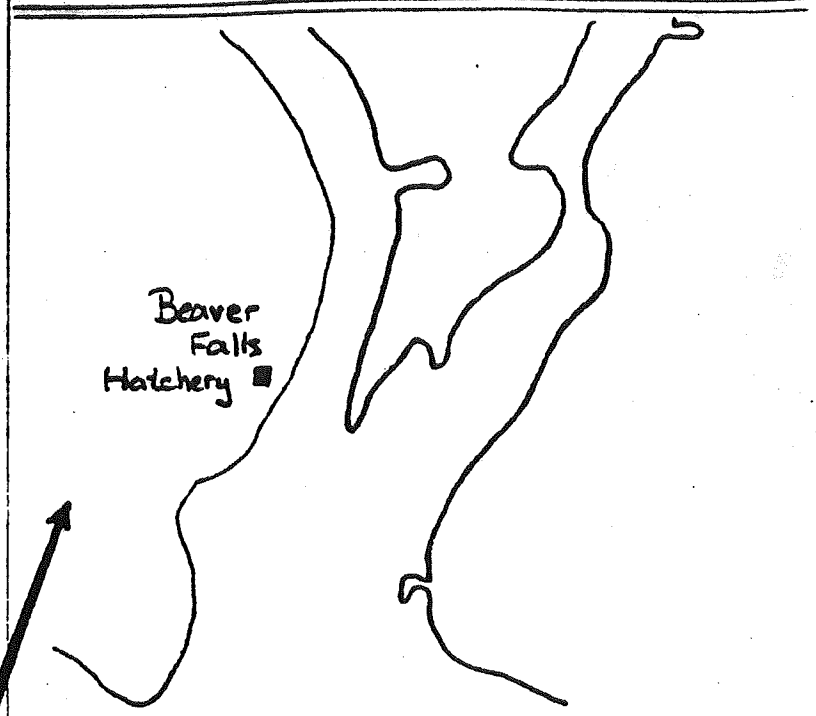
PLANNED MAX. CAPACITY PRODUCTION

SPECIES	EGGS ($\times 10^6$)	ADULTS
CHUM (SUMMER/FALL)*	20	600,000

*FALL CHUM TO BE REQUESTED FOR 1985 RELEASE. BOT SUMMER AND FALL STOCKS TO BE INCUBATED AT NEETS BAY.

Figure 22. Nakat Inlet Remote Release Site

BEAVER FALLS HATCHERY



ADJACENT FISHERY (MIXED WILD & HATCHERY STOCKS

TERMINAL AREA = *

SPECIAL HARVEST AREA = NOT RELEVANT

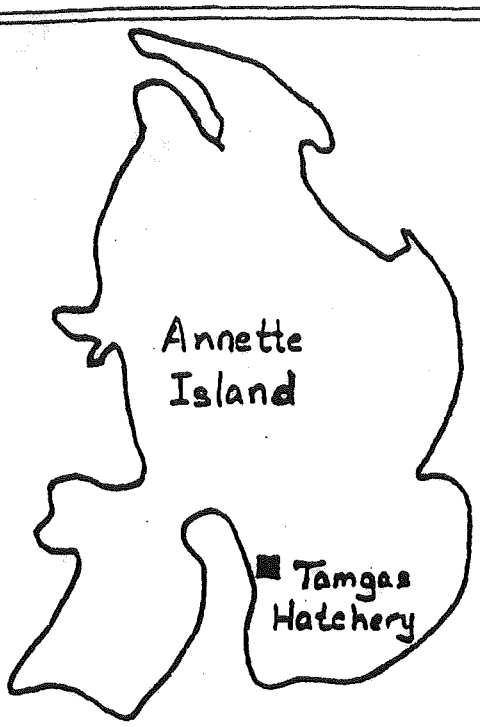
PLANNED MAX. CAPACITY PRODUCTION

SPECIES	EGGS ($\times 10^6$)	ADULTS
SOCKEYE	2.4 ($\times 10^6$)	?

*FRY TO BE RELEASED AT REMOTE LAKES YET TO BE SELECTED. THEREFORE, TERMINAL AREA GEAR AND ADJACENT FISHERIES UNKNOWN.

Figure 23. Beaver Falls Hatchery

TAMGAS HATCHERY



ADJACENT FISHERY (MIXED WILD & HATCHERY STOCK

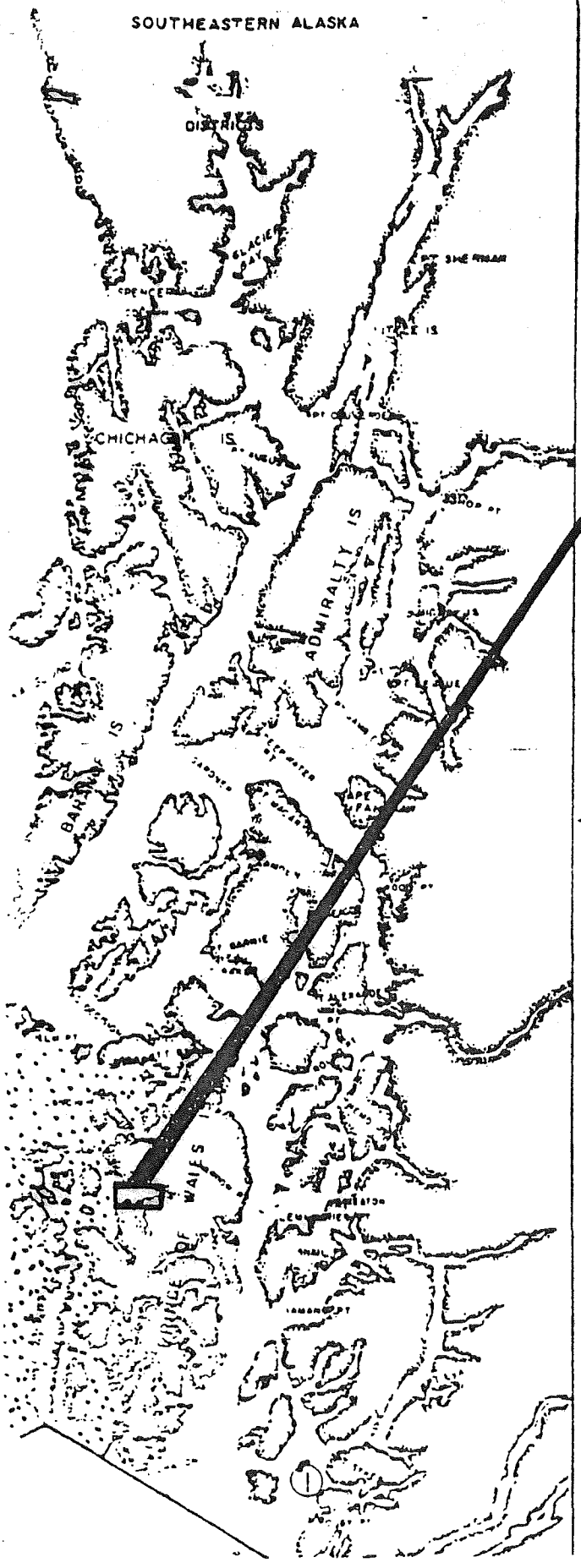
TERMINAL AREA = NOT APPLICABLE

SPECIAL HARVEST AREA = NOT APPLICABLE

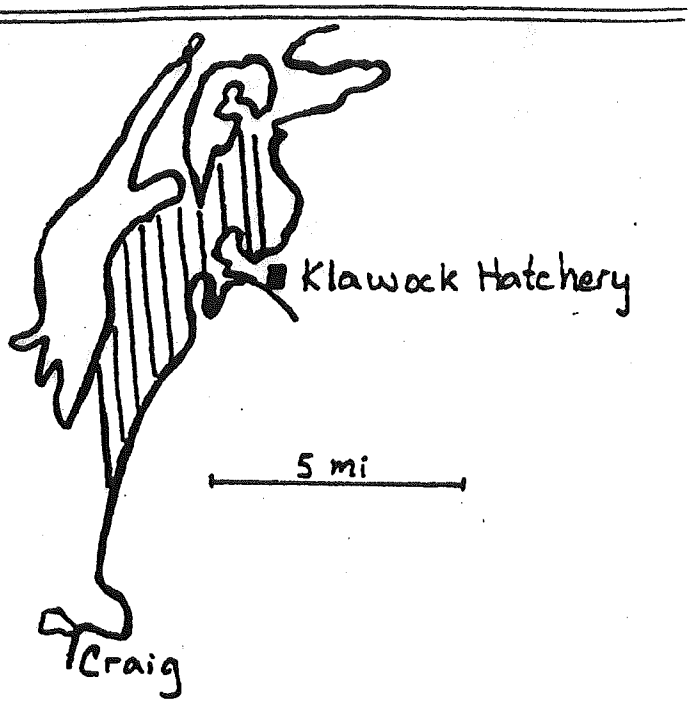
PLANNED MAX. CAPACITY PRODUCTION

SPECIES	EGGS (x10^6)	ADULTS
CHUM	30.0	240,000
COHO	10.0	620,000
KING	5.0	95,000
PINK	10.0	80,000

Figure 24. Tamgas Hatchery



KLAWOCK HATCHERY



ADJACENT FISHERY (MIXED WILD & HATCHERY STOCKS)

TERMINAL AREA = SEINE, SPORT, TROLL

SPECIAL HARVEST AREA = NOT RELEVANT

PLANNED MAX. CAPACITY PRODUCTION

SPECIES	EGGS ($\times 10^6$)	ADULTS
CHUM	71.0	1.1 ($\times 10^6$)
COHO	4.0	0.25

Figure 25. Klawock Hatchery

Table 15. PRODUCTION TARGETS 1985 BROOD - NORTH COAST

Project	Species	Stock	1984 Brood Release Target	1984 Brood Release Production*	1985 Brood Target Egg	1985 Brood Target Release	1985 Brood Target Returns	
Snootli	Chinook	Atnarko	432,000	904,000	1,000,000	720,000	21,600	Atnarko stock below Young Creek.
					1,200,000	860,000	25,920	Additional egg-take if funding available. AMAP from Atnarko above Young Creek to 1,000,000. Difference to be taken below Young Creek.
		Wannock	180,000	125,000	200,000	144,000	4,320	Incubation at Snootli. Half the fry to be vaccinated (vibriosis), then transferred to seapens at Wannock at 1 g size. Remainder to be reared to 2 g, tagged, transferred and released directly into Wannock. Eggs taken in excess of 200,000 to a maximum of 250,000 will be incubated and reared at Wannock. Total egg-take will depend on run-timing and funding (air travel costs).
		Salloompt	-	-	30,000	21,600	650	Eggs to be taken from Salloompt and
		Nasatsum	-	-	30,000	21,600	650	Nusatsum on an opportunity basis during chum egg-take if funding permits. Release into home stream.

* preliminary estimate

AMAP = as many as possible

Table 16. PRODUCTION TARGETS BROOD - NORTH COAST

Project	Species	Stock	1984 Brood Release Target	1984 Brood Release Production*	1985 Brood Target Egg	1985 Brood Target Release	1985 Brood Target Returns	
	Chum (summer)		AMAP to 7,200,000 fry		AMAP to 7,700,000 eggs			Reduced target reflects incubation and rearing constraints.
			Expectation					
Snootli		Salloompt	1,440,000	1,908,000	2,200,000	1,584,000	31,680	1984 brood fed and partial fed fry releases.
		Thorsen/Nuhalk	720,000	948,000	1,100,000	792,000	15,840	1984 brood fed fry release.
		Snootli	720,000	1,938,000	2,200,000	1,584,000	31,680	1984 brood fed and unfed fry releases.
		Fish/Air	720,000	2,510,000	2,200,000	1,584,000	31,680	1984 brood fed and partial fed fry releases.
		Necleetsconnay	720,000	1,054,000	0	0	0	Expect enhancement work through MILAP. 1984 brood fish were reared in seapen for short period of time.
			4,320,000	8,358,000	7,700,000	5,544,000	111,000	
	Chum (fall)	Bella Coola	720,000	0	25,000	-	-	Eggs to be provided by PIP, then returned to PIP at eyed stage. Purpose to compare incubation survival at Snootli to that for 25,000 eggs incubated at PIP site in response to 1984 brood mortalities at PIP site. Developmental data at Snootli will provide guidance re double-use of summer chum facilities for fall chum.
		Noieck or Taleomy	72,000	0	0	0	0	Funding not available.
	Coho	Bella Coola	86,000	100,000	150,000	108,000	1,625	Fed fry release.
	Steelhead	Atnarko	90,000	90,000	140,000	105,000	1,050	Unfed fry release.

* preliminary estimate

AMAP = as many as possible

Table 17. PRODUCTION TARGETS 1985 BROOD - NORTH COAST

Project	Species	Stock	1984 Brood Release Target	1984 Brood Release Production*	1985 Brood Target Egg	1985 Brood Target Release	1985 Brood Target Returns	
	Cutthroat	Bella Coola	-	-	30,000	25,000	200	Unfed fry release.
llant	Chum	Pallant	6,080,000	10,133,000	9,500,000	6,080,000	152,000	Seapen-reared.
		Mathers	790,000	0	2,000,000	1,440,000	28,000	1984 brood work cancelled due to fence washout and funding constraints. 1985 brood eggs will be incubated at Pallant. AMAP will be reared in freshwater at Pallant (approx. 800,000) prior to return to Mathers. Balance to be reared at Mathers or released as unfed or partial-fed fry at Mathers. Target may not be achieved due to adult availability.
	Coho	Pallant	216,000	353,000	see below			Fed fry release to lower Pallant, Mosquito Creek and Braverman.
			-	-	70,000	50,000	750	Fed fry plant throughout inaccessible reaches of Pallant watershed excluding small tributaries to lake. Alternatively adults captured at falls may be transported above. 300 adults should yield approximately 50,000 fry. While adult transport would help alleviate fish jumping at impassable falls, spawning may occur in small streams. Also it would be difficult to assess (through marking) contribution of resultant smolts and one objective of stocking is to determine coho rearing capacity.

continued

* preliminary estimate

MAP = as many as possible

Project	Species	Stock	1984 Brood Release Target	1984 Brood Release Production*	1985 Brood Target Egg	1985 Brood Target Release	1985 Brood Target Returns	
Pallant	Coho (cont'd)	Pallant			140,000	100,000	1,500	Fed fry transplant to Braverman (inaccessible area).
					140,000	100,000	1,500	Fed fry plant to Mosquito Creek and lower Pallant if underseeded by natural spawners. Some fry may be diverted to trial seapen rearing study.
Kitimat	Chinook	All	1,440,000	1,976,000	AMAP to 3,000,000 eggs			
					2,000,000	1,440,000	44,000	Expectation.
		Stocks include mainstem lower Kitimat (green fish), upper Kitimat, Hirsch, Dala and Kildala. Bish, and Big and Little Wedeene may be explored but production is considered unlikely due to low escapement levels. Egg targets by stock are flexible in order to allow maximum production and to fill available habitat as quickly as possible. Utilization of available spawners is not to exceed 30% of total run.						
	Chum	All	720,000	1,996,000	AMAP to 11,000,000			
					3,000,000	2,160,000	43,200	Expectation.
		Stocks include Hirsch, Humphries, Dala, Kildala, Bish and early mainstem run captured in lower river. Egg targets by stock are flexible in order to maximize production and to fill natural spawning capacity as quickly as possible. Utilization of available spawners is limited to 30% unless run is extremely low in which case the limit may be increased to 60% (McNeil and MacDonald to determine in-season).						

* preliminary estimate
AMAP = as many as possible

Table 19. PRODUCTION TARGETS 1985 BROOD - NORTH COAST

Project	Species	Stock	1984 Brood Release Target	1984 Brood Release Production*	1985 Brood Target Egg	1985 Brood Target Release	1985 Brood Target Returns	
timat	Coho	All	405,000	600,000	900,000	600,000	90,000	1985 brood release target may increase from 600,000 to 800,000 smolts but only if this increase will not limit 1986 brood chum production.
		Stocks include lower Kitimat and tributaries (primarily Cecil), Bish, Dala and Kildala. Design plan smolt releases to Bish, Dala and Kildala range from 30,000 to 50,000 per stock. The balance of production will be distributed throughout the lower Kitimat valley. Upper Kitimat stocks are not to be captured for egg-takes and lower river stock will not be planted into the upper river. Colonization of inaccessible areas of lower river tributaries may be done in the future but only after evaluation of potential target habitat.						
	Steelhead	Kitimat	29,000	64,000	75,000	60,000	2,400	Target is geared to smolt numbers. Egg-to-fry survival has been exceptionally high so egg target is proportionately reduced.
ulton	Sockeye	Fulton	15,000,000	9,290,000	30,000,000	15,000,000	135,000	Channel 1
			72,000,000	99,910,000	180,000,000	72,000,000	648,000	Channel 2
			27,000,000	41,340,000	150,000,000	27,000,000	243,000	River
			114,000,000	150,540,000	360,000,000	114,000,000	1,026,000	System
inkut	Sockeye	Pinkut	45,000,000	46,600,000	90,000,000	45,000,000	405,000	Channel
			3,000,000	14,300,000	27,000,000	3,000,000	27,000	Lower river
			-	8,700,000	-	-	-	Upper river (airlift)
			48,000,000	69,600,000	117,000,000	48,000,000	432,000	System

* preliminary estimate

MAP = as many as possible

7.0 Selected Data Summaries

TABLE 20. AREA 1 CATCH SUMMARY

YEAR	GEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK(LB)	STHD	TOTAL	BOAT DAYS	DAYS FISHING
1985	GN	17	110	775	15460	9	1	16372	74	24
	SN	125895	20119	236915	37059	9203	455	421646	241	24
1984	GN	10034	221	2990	275	313	21	13854	18	27
	SN	21675	7231	678003	6002	3759	173	716843	547	27
1983	GN	1113	640	564	360	24	12	2713	6	12
	SN	31315	4762	133421	2275	2069	122	173964	108	12
1982	GN	800	90	107	256	8	8	1269		
	SN	58665	9670	18036	12195	7672	62	106700		
1981	GN	42065	5953	14131	6386	564	426	69527		
	SN	177831	18869	263961	10296	11606	208	474771		
1980	GN	27026	16152	7475	2622	663	88	54426		
	SN	46027	11422	98261	8020	5029	94	168853		
1979	GN	4220	1164	1189	852	194	73	7692		
	SN	65286	15181	126096	5332	5039	103	217039		
1978	GN	894	403	167	1943	73	1	3481		
	SN	4797	2751	17680	3980	1800	53	31061		
1977	GN	23238	1148	5048	1732	555	15	31736		
	SN	13294	2451	37595	3439	4048	12	60839		
1976	GN	7417	2687	1482	1476	453	27	13542		
	SN	3418	1400	3862	1089	1042	18	12829		
1975	GN	16844	15697	23276	8073	2098	216	66196		
	SN	9756	3392	16646	3282	3301	39	36416		
1974	GN	11396	9836	7509	14578	615	203	44139		
	SN	5015	1491	69304	5642	766	88	81706		
1973	GN	16298	7466	5925	22681	310	175	52847		
	SN	14770	917	15425	30769	192	50	62123		
AVE 73-82	GN	15019	6068	6631	6068	553	123	34446		
	SN	40086	5974	66687	6344	4070	73	125234		
	TOTAL	55105	12034	73318	14404	4623	196	159680		
AVE 75-84	GN	13365	4416	5643	2398	494	89	26404		
	SN	43407	6933	139356	5591	4557	88	199932		
	TOTAL	56772	11349	144999	7989	5051	177	226336		

NOTE: 1973 TO 1984 CATCH FIGURES ARE TAKEN FROM THE B.C. CATCH STATISTICS PUBLICATIONS.
1985 CATCH FIGURES ARE BASED ON PRELIMINARY B.C. SALESLIPS DATED DECEMBER 3, 1985.
(WHEN FINAL, THESE FIGURES WILL BE ENTERED IN THE B.C. CATCH STATISTICS PUBLICATIONS).

Table 21. AREA 3 CATCH SUMMARY

YEAR	GEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK(LG)	STHD	TOTAL	BOAT DAYS	DAYS FISHING
1985	GN	117794	11721	190679	19709	1005	2155	343063	813	21
	SN	299997	38961	2467177	106762	6057	1777	2920731	1099	17
1984	GN	123389	28068	234082	140989	3314	4233	534075	2929	23
	SN	147832	49324	2115635	176345	6124	1819	2497079	1580	20
1983	GN	105571	25772	324441	69505	1081	2464	528834	2377	22
	SN	345312	130312	7063283	113918	7906	1594	7662325	2157	22
1982	GN	252957	20203	62091	19704	8181	2215	365351	3155	34
	SN	393917	71450	984009	51201	11147	1197	1512921	1659	34
1981	GN	153303	8232	113478	22934	2744	1177	301868	2127	26
	SN	250837	10288	534113	20974	4840	705	821757	1189	26
1980	GN	68099	16760	140159	204068	1360	1257	431703	2980	20
	SN	99053	20202	714832	97625	3764	649	936125	912	20
1979	GN	94028	14349	40307	41125	2054	660	192523	1931	17
	SN	123635	23372	185155	21573	4803	257	358795	773	17
1978	GN	174774	30330	205699	69761	3711	1359	485634	4487	40
	SN	112156	57147	2467376	79754	7199	748	2724380	1499	40
1977	GN	406211	30360	332862	142576	6006	1406	919421	6207	37
	SN	320381	17062	1789114	143099	6596	471	2276723	1546	35
1976	GN	154734	12258	51998	19000	7305	584	245879	3293	28
	SN	65728	6224	107522	7236	836	135	187681	183	21
1975	GN	89487	24863	39045	21782	7711	538	183426	3289	30
	SN	40381	5063	123183	5189	3171	58	177045	472	26
1974	GN	316849	17581	36416	160550	7466	868	539730	5715	37
	SN	202845	3941	73584	54544	3764	76	338754	860	30
1973	GN	513703	12858	70478	169904	9558	993	777494	4838	46
	SN	45089	3539	146110	70357	2749	45	267889	444	36
AVE 73-82	GN	222415	18779	109253	87140	5610	1106	444303	3802	32
	SN	165402	21829	712500	55155	4887	434	960207	951	29
	TOTAL	387817	40608	821753	142295	10497	1540	1404510	4753	61
AVE 75-84	GN	162255	21120	154416	75144	4347	1589	418871	3278	28
	SN	189923	39044	1608422	71691	5639	763	1915483	1194	26
	TOTAL	352178	60164	1762838	146835	9986	2352	2334354	4472	54

NOTE: 1973 TO 1984 CATCH FIGURES ARE TAKEN FROM THE B.C. CATCH STATISTICS PUBLICATIONS.
1985 CATCH FIGURES ARE BASED ON PRELIMINARY B.C. SALESLIPS DATED DECEMBER 3, 1985.
(WHEN FINAL, THESE FIGURES WILL BE ENTERED IN THE B.C. CATCH STATISTICS PUBLICATIONS).

TABLE 22. AREA 3(1-4) CATCH SUMMARY

YEAR	GEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK(LG)	STHD	TOTAL	BOAT DAYS	DAYS FISHING
1985	GN	56007	6087	31088	7842	577	535	102136	365	21
	SN	253813	31261	1215825	62796	5088	938	1569721	743	17
1984	GN	45675	6283	76977	36137	665	1323	167060	780	21
	SN	119849	36043	1304663	106203	3860	1302	1571920	1014	20
1983	GN	58461	14048	97264	20721	517	1169	192180	1030	22
	SN	222854	90801	3837467	58407	4137	809	4214475	1195	22
1982	GN	74108	13071	42826	11073	1353	1068	143499	688	28
	SN	302220	47989	668997	31983	7358	855	1059402	1317	28
1981	GN	108569	5048	87683	13815		663	215778	661	17
	SN	198317	6613	396929	14887		505	617251	822	17
1980	GN	57067	10257	106416	78096		734	252570	1117	16
	SN	88697	16233	575455	63628		583	744596	667	17
1979	GN	77471	11251	36498	21169		419	146808	880	15
	SN	122516	23252	182940	20194		253	349155	674	15
1978	GN	67740	16331	129717	31798		594	246180	974	34
	SN	73771	35028	1680759	48730		572	1838860	863	34
1977	GN	79846	9441	177557	28624		294	295762	714	24
	SN	229905	10774	1241671	60135		333	1542818	890	24
1976	GN	21876	4905	38221	5552		178	70732	562	15
	SN	62151	5750	104773	6431		105	179210	175	15
1975	GN	47695	12170	33183	10038		275	103361	888	21
	SN	39116	4116	121265	2993		45	167535	324	21
1974	GN	139007	8186	25646	35899		283	209021	1698	25
	SN	183124	2963	56304	15683		59	258133	652	18
1973	GN	75303	4929	33537	19808		235	133812	798	26
	SN	24344	1813	86563	17791		25	130536	139	26
AVE 73-82	GN	74868	9559	71128	25587		474	181752	898	22
	SN	132416	15453	511566	28246		334	688750	652	22
	TOTAL	207284	25012	582694	53833		808	870502	1550	44
AVE 75-84	GN	63851	10281	82634	25702	778	672	183393	829	21
	SN	145940	27660	1011492	41359	5111	536	1228522	794	21
	TOTAL	209791	37941	1094126	67061	5889	1208	1411915	1623	42

NOTE: 1973 TO 1982 CATCH FIGURES ARE TAKEN FROM B.C. SALESLIP DATA. FOR PINKS, 1973-82, THE CATCH IS CALCULATED: 3X+3Y+DELTA 3Z, WHERE DELTA 3Z=25% OF 3Z.

1983 AND 1984 DATA WERE CALCULATED FROM THE TOTAL AREA 3 SALESLIPS USING THE ANNUAL HAILCOUNTS TO ALLOCATE THE CATCH TO 3(1-4) AND TO 3(7-17).

1985 CATCH FIGURES ARE BASED ON PRELIMINARY B.C. SALESLIPS DATED DECEMBER 3, 1985, USING WEEKLY HAILCOUNTS TO DIVIDE THE CATCH INTO 3(1-4) AND 3(7-17). SEE TABLE ENTITLED "1985 AREA 3 NET CATCH SPLIT". WEEKLY TOTALS WERE THEN SUMMED BY GEAR TYPE.

+ FOR CHINOOK, THE 3(1-4) AND 3(7-17) DATA ARE AVAILABLE ONLY FOR LG AND JACKS COMBINED PREVIOUS TO 1982. THE AVERAGE SHOWN AT THE BOTTOM OF THE TABLE, THEN, IS FOR YEARS 1982-1985 ONLY.

Table 23. AREA 3(7-17) CATCH SUMMARY

YEAR	GEAR	SOCKEYE	COHO	PINK *	CHUM	CHINOOK(LG) +	STHD	TOTAL	BOAT DAYS	DAYS FISHING
1985	GN	61787	5634	159591	11867	428	1620	240927	448	21
	SN	46184	7700	1251352	43966	969	839	1351010	356	17
1984	GN	77714	21785	157105	104852	2649	2910	367015	2149	23
	SN	27983	13281	810972	70142	2264	517	925159	566	20
1983	GN	47110	11724	227177	48784	564	1295	336654	1347	22
	SN	122458	39511	3225816	55511	3769	785	3447850	962	22
1982	GN	178849	7132	19265	8631	6828	1147	221852	2467	30
	SN	91697	23461	315012	19218	3789	342	453519	332	30
1981	GN	44734	3184	25795	9119		514	83346	1466	19
	SN	52520	3675	137184	6087		200	199666	367	19
1980	GN	11032	6503	33743	125972		523	177773	1863	17
	SN	10356	3969	139377	33997		66	187765	245	17
1979	GN	16557	3098	3809	19956		241	43661	1051	12
	SN	1119	120	2215	1379		4	4837	69	12
1978	GN	107034	13999	75982	37963		765	235743	3513	40
	SN	38385	22119	786617	31024		176	878321	636	40
1977	GN	326365	20919	155305	113952		1112	617653	5493	35
	SN	90476	6288	547443	82964		138	727309	656	33
1976	GN	132858	7353	13777	13448		406	167842	2731	22
	SN	3577	474	2749	805		30	7635	8	15
1975	GN	41792	12693	5862	11744		263	72354	2401	21
	SN	1265	947	1918	2196		13	6339	142	17
1974	GN	177842	9395	10770	124651		585	323243	4017	32
	SN	19721	978	17280	38861		17	76857	208	25
1973	GN	438400	7929	36941	150096		758	634124	4040	45
	SN	20745	1726	59547	52566		20	134604	305	34
AVE 73-82	GN	147546	9221	38125	61553		631	257759	2904	27
	SN	32986	6376	200934	26910		101	267685	297	24
	TOTAL	180532	15597	239059	88463		732	525444	3201	52
AVE 75-84	GN	98405	10839	71782	49442	2617	918	232389	2448	24
	SN	43984	11385	596930	30332	2698	227	683840	398	23
	TOTAL	142389	22224	668712	79774	5315	1145	916229	2846	47

NOTE: 1973 TO 1982 CATCH FIGURES ARE TAKEN FROM B.C. SALESLIP DATA. FOR PINKS, 1973-82, THE CATCH IS CALCULATED: 3Z-DELTA 3Z, WHERE DELTA 3Z=25% OF 3Z.

1983 AND 1984 DATA WERE CALCULATED FROM THE TOTAL AREA 3 SALESLIPS USING THE ANNUAL HAILCOUNTS TO ALLOCATE THE CATCH TO 3(1-4) AND TO 3(7-17).

1985 CATCH FIGURES ARE BASED ON PRELIMINARY B.C. SALESLIPS DATED DECEMBER 3, 1985, USING WEEKLY HAILCOUNTS TO DIVIDE THE CATCH INTO 3(1-4) AND 3(7-17). SEE TABLE ENTITLED "1985 AREA 3 NET CATCH SPLIT". WEEKLY TOTALS WERE THEN SUMMED BY GEAR TYPE.

+ FOR CHINOOK, THE 3(1-4) AND 3(7-17) DATA ARE AVAILABLE ONLY FOR LG AND JACKS COMBINED PREVIOUS TO 1982. THE AVERAGE SHOWN AT THE BOTTOM OF THE TABLE, THEN, IS FOR YEARS 1982-1985 ONLY.

TABLE 24. AREA 4 CATCH SUMMARY

YEAR	GEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK(LB)	STHD	TOTAL	BOAT DAYS	DAYS FISHING
1985	GN	1841974	53403	980616	84997	13427	21840	2996257	12504	26
	SN	325624	13788	743545	26439	5493	1745	1116634	819	9
1984	GN	581968	34722	629337	98249	6519	19359	1370154	7705	22
	SN	173491	11589	372662	29022	3198	2070	592032	761	6
1983	GN	285137	38682	639560	24366	2437	4688	994870	4699	15
	SN	0	0	0	0	0	0	0	0	0
1982	GN	1314982	43577	149160	35864	7682	11427	1562692	8799	18
	SN	376815	21602	170255	26706	5223	958	601559	827	6
1981	GN	1362820	29062	846828	35226	9878	8972	2292786	13170	26
	SN	187085	3926	295706	7736	3975	280	498708	401	8
1980	GN	328320	20358	161436	67546	5181	3994	586835	5726	13
	SN	5262	1096	12345	3124	160	12	21999	6	2
1979	GN	1214058	42259	605277	51830	8129	5340	1926893	11103	19
	SN	12757	5208	40269	2673	1345	39	62291	36	4
1978	GN	394214	55442	286595	54448	4552	3867	799118	6487	28
	SN	11733	3693	79817	7014	716	25	102998	76	4
1977	GN	813988	57006	1062708	58252	7137	4644	2003735	10941	28
	SN	44904	2919	321003	8287	1084	83	378280	244	4
1976	GN	635150	26205	176687	11722	3608	2819	856191	6289	17
	SN	16476	981	29584	2156	130	21	49348	39	7
1975	GN	433467	23252	409051	17316	5872	3018	891976	6849	26
	SN	54535	4741	109033	5325	994	128	174756	400	14
1974	GN	1155855	24247	219704	51095	9043	4035	1463979	11703	26
	SN	224964	3696	80015	9813	1097	91	319676	480	20
1973	GN	1231431	39187	536248	82573	10980	4399	1904818	10368	37
	SN	75801	1975	65484	6429	729	35	150453	211	16
AVE 73-82	GN	868429	36060	445369	46587	7206	5252	1428902	9144	24
	SN	101033	4984	120351	7926	1545	167	236007	272	9
	TOTAL	989462	41044	565720	54513	8751	5419	1664909	9416	33
AVE 75-84	GN	736410	37057	496664	45482	6100	6813	1328525	8177	21
	SN	88306	5576	143067	9204	1683	362	248197	279	6
	TOTAL	824716	42633	639731	54686	7783	7175	1576722	8456	27

NOTE: 1973 TO 1984 CATCH FIGURES ARE TAKEN FROM THE B.C. CATCH STATISTICS PUBLICATIONS.
1985 CATCH FIGURES ARE PRELIMINARY ESTIMATES FROM SALESLIP ESTIMATES DATED DEC.3, 1985.
(WHEN FINAL, THESE FIGURES WILL BE ENTERED IN THE B.C. CATCH STATISTICS PUBLICATIONS.)

TABLE 25. AREA 5 CATCH SUMMARY

YEAR	GEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK(LG)	STHD	TOTAL	BOAT DAYS	DAYS FISHING
1985	GN	16287	2037	16961	5558	86	385	41314	169	16
	SN	40638	2827	280105	9319	467	405	333761	241	12
1984	GN	11954	7317	28616	14097	150	371	62505	435	15
	SN	23582	12669	548352	13979	519	438	599539	355	14
1983	GN	10379	8202	33465	18253	151	115	70565	501	14
	SN	3982	3749	97487	1751	102	52	107123	55	14
1982	GN	35314	10248	23726	12695	297	178	82458	548	17
	SN	35862	5384	58404	7685	1284	55	108674	197	17
1981	GN	25171	5809	26377	7909	194	130	65590	552	11
	SN	3884	536	12933	1107	264	29	18753	49	11
1980	GN	23703	12997	101142	33131	299	298	171570	852	15
	SN	3025	4289	369507	6749	296	39	383905	158	15
1979	GN	19673	12842	24896	13003	355	116	70885	683	19
	SN	4974	1314	81307	2215	267	23	90100	169	19
1978	GN	31066	25458	107231	33713	574	316	198358	1350	33
	SN	3480	3157	226022	6218	455	30	239362	205	33
1977	GN	21568	20467	171008	26474	454	238	240209	1199	31
	SN	7153	4965	162690	5893	346	26	181073	253	31
1976	GN	18589	18351	228363	12550	468	121	278442	1604	28
	SN	487	3752	297249	885	73	6	302452	146	28
1975	GN	9703	13368	37086	8391	246	73	68867	493	26
	SN	19422	5741	312474	3582	831	115	342165	207	24
1974	GN	11596	24263	46696	13464	433	92	96544	638	18
	SN	2121	2124	98296	3523	171	8	106243	89	11
1973	GN	20949	11067	23573	18840	1530	92	76051	1001	27
	SN	9466	2227	121751	6490	233	23	140190	380	21
AVE 73-82	GN	21733	15487	79010	18017	485	165	134897	892	23
	SN	8987	3349	174063	4435	422	35	191292	185	21
	TOTAL	30720	18836	253073	22452	907	201	326189	1077	44
AVE 75-84	GN	20712	13506	78191	18022	319	196	130945	822	21
	SN	10585	4556	216643	5006	444	81	237315	179	21
	TOTAL	31297	18062	294834	23028	763	277	369320	1001	42

NOTE: 1973 TO 1984 CATCH FIGURES ARE TAKEN FROM THE B.C. CATCH STATISTICS PUBLICATIONS.
1985 CATCH FIGURES ARE BASED ON PRELIMINARY B.C. SALESLIPS DATED DECEMBER 3, 1985.
(WHEN FINAL, THESE FIGURES WILL BE ENTERED IN THE B.C. CATCH STATISTICS PUBLICATIONS.)

TABLE 26. CANADIAN PINK CATCH IN DESIGNATED INTERCEPTION AREAS 1973 TO 1985

YEAR	AREA 3(1-4) NET	+ AREA 5-11 NET	AREAS 3(1-4)+(5-11) CATCH	AREA 1 TROLL
1973	120100	11076	131176	31380
1974	81950	40107	122057	44504
1975	154448	66504	220952	23862
1976	142994	24741	167735	1123
1977	1419228	47681	1466909	67063
1978	1810476	34601	1845077	57445
1979	219438	9847	229285	112766
1980	681871	145781	827652	721646
1981	484612	3833	488445	264065
1982	711823	54149	765972	56340
1983	3934731	9000	3943731	193807
1984	1381640	6150	1387790	1177577
1985	1246913	2000	1248913	710074#
73-82	582694	43832	626526	138019
75-84	1094126	40229	1134355	267569

NOTE -1973 TO 1982 AREA 3(1-4) NET CATCH INCLUDES 25% OF SUB-AREA 3Z. THIS FRACTION IS THE "DELTA 3Z" WHICH WE USED PRIOR TO 1983.
-1983, 1984 & 1985 AREA 3 NET DATA ARE BASED ON TOTAL SALESLIP FIGURES USING HAILCOUNTS TO ALLOCATE THE CATCH TO AREAS 3(1-4) AND 3(7-17).
-1985 CATCH FIGURES ARE BASED ON THE PRELIMINARY B.C. SALESLIPS DATED DECEMBER 3, 1985.

\+ IN 1982, AREA 5-1 WAS RENAMED AREA 5-11.

\# PRELIMINARY B.C. SALESLIPS (PETRIE.SOURCE) STAT 05 NOV.18, 1985.

TABLE 27. 1985 AREA 1 NET CATCH *

WEEK ENDING	GEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK(LG)	STHD
JULY 20	SN	9699	10000	12962	2097	890	45
JULY 27	SN	58595	7053	60711	3118	5631	252
AUG 03	SN	15543	1365	86256	3557	590	134
AUG 10	SN	18274	406	36768	944	809	20
AUG 17	SN	12048	785	23000	951	672	1
AUG 24	SN	11736	373	19218	469	611	3
TOTAL	SN	125895	19982	238915	11136	9203	455

** 1985 AREA 1 NET CATCH

WEEK ENDING	GEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK(LG)	STEELH
SEPT 28	GN	0	39	0	602	1	0
	SN	0	2	0	81	0	0
OCT 05	GN	0	3	0	1340	0	0
	SN	0	0	0	9	0	0
OCT 12	GN	17	39	775	1505	7	0
	SN	0	0	0	0	0	0
OCT 19	GN	0	29	0	12013	1	1
	SN	0	135	0	25833	0	0
TOTAL	GN	17	110	775	15460	9	1
	SN	0	137	0	25923	0	0
TOTAL AREA 1	GN	17	110	775	15460	9	1
	SN	125895	20119	238915	37059	9203	455

* CATCHES FROM SUMMER FISHERY. PRELIMINARY B.C. SALESLIPS DATED DEC 03/85

** CATCHES FROM FALL FISHERY. PRELIMINARY B.C. SALESLIPS DATED DEC 03/85

Table 28. 1985 AREA 3 NET CATCH*

WEEK ENDING	GEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK (LG)	STEELHEAD
JULY 06	GN	12310	577	6605	2189	346	81
JULY 13	GN	18529	2730	3761	2084	133	162
JULY 20	GN	9280	527	729	314	149	50
	SN	36369	9756	45147	9385	1533	144
JULY 27	GN	29796	1870	34278	2619	183	580
	SN	99811	5281	219721	23761	2134	362
AUG. 03	GN	26083	2654	93959	5340	116	944
	SN	71290	7662	933153	26901	1269	748
AUG. 10	GN	14294	1886	35267	2339	37	145
	SN	48973	8568	548789	23228	630	237
AUG. 17	GN	5257	523	10876	1945	13	104
	SN	39830	7137	672890	22058	449	260
AUG. 24	GN	2245	954	5204	2879	28	89
	SN	3724	557	47477	1429	42	26
TOTAL	GN	117794	11721	190679	19709	1005	2155
	SN	299997	38961	2467177	106762	6057	1777

*
CATCHES FROM PRELIMINARY B.C. SALESLIPS DATED DEC. 3, 1985.

AREA 3 REPORT SPLIT

Table 29. 1985 AREA 3 NET CATCH SPLIT *

3-1, 3-2, 3-3 & 3-4

WEEK ENDING	GEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK (LG)	STEELHEAD
JULY 06	GN	3873	198	1719	876	134	0
JULY 13	GN	17478	2716	3600	1986	122	150
JULY 20	GN	9280	527	729	314	149	4
	SN	35399	9721	37824	6508	1454	74
JULY 27	GN	11443	1236	2980	1276	109	47
	SN	91479	3654	134385	14069	1891	186
AUG. 03	GN	6542	746	11699	1447	39	168
	SN	62580	6573	454777	16510	1108	505
AUG. 10	GN	2053	192	2428	325	3	67
	SN	37963	7436	297729	14460	525	116
AUG. 17	GN	3895	206	4515	690	9	73
	SN	24577	3450	262166	10265	89	52
AUG. 24	GN	1443	265	3418	928	12	26
	SN	1815	428	28944	983	21	5
TOTALS	GN	56007	6087	31088	7842	577	535
	SN	253813	31261	1215825	62796	5088	938

3-7 TO 3-17

GEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK (LG)	STEELHEAD
GN	8437	379	4886	1313	212	81
GN	1051	14	161	98	11	12
GN	0	0	0	0	0	46
SN	970	35	7323	2877	79	70
GN	18353	634	31298	1343	74	533
SN	8332	1627	85336	9692	243	176
GN	19541	1908	82260	3893	77	776
SN	8710	1089	478376	10391	161	243
GN	12241	1694	32839	2014	34	78
SN	11010	1132	251060	8768	105	121
GN	1362	317	6361	1255	4	31
SN	15253	3687	410724	11793	360	208
GN	802	689	1786	1951	16	63
SN	1909	129	18533	446	21	21
	61787	5634	159591	11867	428	1620
	46184	7700	1251352	43966	969	839

* CATCHES FROM PRELIMINARY B.C. SALESLIPS DATED DEC. 3/85. WEEKLY SALESLIP TOTALS SEPARATED INTO AREAS 3(1-4) & 3(7-17) BY SPECIES:

3(1-4) WEEKLY GN HAILCOUNTS / TOTAL AREA 3 W... / GN HAILCOUNTS * TOTAL AREA 3 WEEKLY GN SALESLIPS = 3(1-4) F... THAT WEEK

Table 30. 1985 AREA 4 NET CATCH *

WEEK ENDING	GEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK (LG)	STEELHEAD
JULY 06	GN	111483	5950	16701	6941	2678	1321
JULY 13	GN	219140	8721	11814	6784	2705	1308
JULY 20	GN	471416	11097	36393	10740	4027	3587
JULY 27	GN	347162	5000	60719	13773	1844	3203
	SN	168180	6527	167193	15157	3457	708
AUG. 03	GN	284525	4507	200405	10308	1197	3742
	SN	141918	5942	418251	8113	1849	996
AUG. 10	GN	153596	6665	226706	12028	449	2300
AUG. 17	GN	185535	6951	290257	17711	325	4304
	SN	15526	1319	158101	3169	187	41
AUG. 24	GN	69117	4512	137621	6712	202	2075
TOTAL	GN	1841974	53403	980616	84997	13427	21840
	SN	325624	13788	743545	26439	5493	1745

*

CATCHES FROM PRELIMINARY B.C. SALESLIPS DATED DEC. 3, 1985.

Table 31. 1985 AREA 5 NET CATCH

WEEK ENDING	GEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK (LG)	STEELHEAD
JULY 6	GN	2573	153	557	852	46	7
JULY 13	GN	1560	104	339	210	8	5
JULY 20	GN	1142	101	544	117	7	9
	SN	1109	111	1842	85	87	5
JULY 27	GN	3636	76	3830	841	12	57
	SN	15551	746	40489	2898	174	131
AUG. 3	GN	1778	165	1740	500	1	35
	SN	14126	358	72650	1734	108	72
AUG. 10	GN	4401	1288	8223	2617	9	178
	SN	4399	689	61011	795	21	98
AUG. 17	GN	1197	150	1728	421	3	94
	SN	5453	923	104113	3807	77	99
TOTAL	GN	16287	2037	16961	5558	86	385
	SN	40638	2827	280105	9319	467	405

* CATCHES FROM PRELIMINARY B.C. SALESLIPS DATED DEC. 3, 1985.

TABLE 32. AREA 1 TROLL PINK CATCHES 1971-84

YEAR	PINK	BOAT DAYS
1985	710074	18299
1984	1177577	21218
1983	193807	20409
1982	56340	18175
1981	264065	19343
1980	721646	24109
1979	112766	13896
1978	57445	11193
1977	67063	8744
1976	1123	8859
1975	23862	11526
1974	44504	9298
1973	31380	8806
1972	124622	9783
1971	49809	11101

SOURCE:1971-84 -B.C. CATCH STATISTICS.
1985 -PRELIMINARY B.C. SALESLIPS (PETRIE.SOURCE)
STAT 05 NOV. 18, 1985.

AREA 1-1985 PINK CATCH ESTIMATE

WEEK ENDING	BOAT DAYS	CATCH
MAY 11-JUNE 08	1355	0
JUNE 15	1	257
22	6	181
29	44	3516
JULY 06	1681	84707
13	1993	102116
20	1807	72426
27	1508	69013
AUG.03	1436	93372
10	1445	119659
17	1069	68977
24	1072	46939
31	1116	28916
SEPT.07	988	10759
14	1059	4004
21	807	2039
28	690	1015
OCT.05	222	2176
TTD	18299	710074

SOURCE: PRELIMINARY B.C. SALESLIPS (PETRIE.SOURCE) STAT 05 NOV. 18, 1985.

Table 33. BOATS FISHING PORTLAND CANAL GILLNET AREA (Days Fished)

Stat. Wk.	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
23										
24										
25	72(4)	57(4)		121(4)	210(3)	110(4)			179(4)	149(4)
26	83(4)	70(4)	111(4)	160(4)	227(2)	122(4)	107(4)	114(4)	186(4)	154(4)
27	86(4)	86(4)	124(4)	169(4)	205(2)	115(4)	133(4)	113(4)	206(3)	166(4)
28	95(5)	94(4)	132(4)	150(3)	closed	107(3)	133(4)	133(4)	182(3)	129(4)
29	111(5)	100(4)	135(4)	155(3)	147(1.5)	98(2)	133(4)	155(4)	139(2)	113(2)
30	100(4)	95(4)	136(5)	149(4)	160(2)	--	83(3)	153(1)	154(3)	115(2)
31	88(4)	51(2)	128(4)	122(3)	152(2)	--	--	169(3)	165(4)	88(2)
32	84(4)	--	123(4)	98(3)	128(3)	78(2)	--	106(3)	111(3)	51(1)
33	79(5)	--	109(4)	108(2)	127(3)	79(2)	--	105(4)	102(3)	--
34	75(5)	30(4)	116(5)	102(3)	116(3)	92(2)	79(1)	132(3)	104(4)	--
35	58(5)	22(5)	88(4)	47(2)	98(4)	76(2)	69(4)	59(2)	53(3)	--
36	24(4)	17(4)	56(4)	42(2)	44(3)		34(4)	36(2)	16(3)	--
37	18(3)		35(4)	29(3)	32(2)		10(5)	16(3)	6(3)	--
38			27(4)	13(3)	3(3)		2(5)	5(3)	11(3)	--
39			6(3)		3(3)		1(5)	-(2)		
oat Days	4289	2408	5550	4797	4058	2555	2829	4107	5337	3071
ays Open	56	39	57	43	36.5	25	43	42	45	23

Table 33. Cont'd. BOATS FISHING PORTLAND CANAL GILLNET AREA (Days Fished)

Stat. Wk.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
23	23(3)									
24	56(3)									
25	109(4)	106(3)			123(4)	110(4)				
26	124(4)	132(4)	102(4)	97(4)	127(4)	126(4)				
27	133(3)	129(3)	111(4)	125(4)	128(2.5)	119(3)				
28	135(4)	129(3)	98(3)	121(2)	142(2.5)	95(2)				
29	137(4)	117(2)	123(4)	125(2)	125(4)	97(6)				
30	123(2)	100(2)	138(4)	135(4)	124(4)	103(5)				
31	73(1)	74(2)	120(2)	126(5)	109(5)	102(5)				
32	124(3)	89(5)	107(4)	99(5)	99(5)	104(5)				
33	128(5)	73(4)	86(4)	107(5)	99(5)	107(5)				
34	118(5)	118(4)	68(5)	92(5)	75(5)	102(5)				
35	70(4)	75(2)	48(5)	67(5)	69(4)	45(5)				
36	23(5)	30(2)	55(5)	44(4)	49(3)	55(4)				
37	5(3)	17(2)	45(4)	31(3)	34(3)	51(3)				
38	3(3)	5(2)	32(3)	38(3)	5(3)	24(3)				
39	--			12(3)						
Boat Days	4996	3665	4345	4792	5121	5230				
Days Open	56	40	51	54	54	58				

Table 34. BOAT DAYS - TREE POINT

Stat. Wk.	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
23										
24										
25	288	228	--	484	630	440	--	--	716	592
26	332	280	444	640	454	488	428	456	744	616
27	344	344	496	676	410	460	532	452	618	664
28	475	376	528	450	--	321	532	532	546	516
29	555	400	540	465	221	196	532	620	278	226
30	400	380	680	596	320	--	249	153	462	230
31	352	102	512	366	304	--	--	507	660	176
32	336	--	492	294	384	156	--	318	333	51
33	395	--	436	216	381	158	--	420	306	--
34	375	120	580	306	348	184	79	396	416	--
35	290	110	352	94	392	152	276	118	159	--
36	96	68	224	84	132	--	136	72	48	--
37	51	--	140	87	64	--	50	48	18	--
38	--	--	108	39	9	--	10	15	33	--
39	--	--	18	--	9	--	5	--	--	--
Total # Boat Days for Year	4289	2408	5550	4797	4058	2555	2829	4107	5337	3071

Table 34 cont'd.

BOAT DAYS - TREE POINT

Stat. Wk.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
23	69									
24	168									
25	436	318			492	440				
26	496	528	420	388	508	504				
27	399	387	444	500	320	351				
28	540	387	294	242	355	190				
29	548	234	492	250	500	485				
30	246	200	552	540	496	515				
31	73	148	240	630	545	510				
32	372	445	428	495	495	520				
33	640	292	344	535	495	535				
34	590	472	340	460	375	510				
35	280	150	240	335	276	225				
36	115	60	275	176	147	220				
37	15	34	180	91	102	153				
38	9	10	96	114	15	72				
39	--	--	--	36						
Total # Boat Days for Year	4996	3665	4345	4792	5121	5230				

Table 35. DISTRICT 4 PURSE SEINE BOAT DAYS 1971-1983

Stat. Wk.	1971	1972	1973	1974	1975	1976	1977	1978	1979
27	--	--	--	--	--	--	--	660	472
28	--	24	96	136	348	344	372	168	712
29	--	120	284	93	364	420	452	320	664
30	--	175	232	64	--	504	132	200	202
31	--	36	312	258	--	--	99	240	60
32	--	325	304	234	--	--	108	90	--
33	141	264	30	171	--	--	66	222	80
34	204	400	10	162	--	30	--	215	27
35	138	276	--	260	--	--	38	120	--
36	115	48	--	8	--	--	--	28	--
37	0	4	--	--	--	--	--	--	--
Total Boat Days	598	1672	1268	1386	712	1298	1267	2263	2217

Table 35. cont'd. DISTRICT 4 PURSE SEINE BOAT DAYS 1971-1983(cont)

Stat. Wk.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
27	--	--	--	--	109					
28	832	306	408	368	224	93				
29	920	328	328	324	90	54				
30	316	225	225	234	220	288				
31	260	266	266	572	450	348				
32	384	536	536	645	620	548				
33	255	364	364	828	564	372				
34	225	236	236	288	339	630				
35	39	--	--	154		184				
36	8	--	--	--	108					
37	--	--	--	--						
Total Boat Days	3239	2261	2363	3413	2724	2517				

Table 36

BOATS FISHING DISTRICT 4 PURSE SEINE AREA (DAYS FISHED)[1] 1970 to Present

Stat. Wk.	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
27	N/O	N/O	N/O	N/O	N/O	N/O	N/O	N/O	165(4)	118(4)
28	11(6)	N/O	6(4)	24(4)	34(4)	87(4)	86(4)	93(4)	42(4)	178(4)
29	8(6)	N/O	24(5)	71(4)	31(3)	91(4)	105(4)	113(4)	80(4)	166(4)
30	13(4)	N/O	35(5)	58(4)	32(2)	N/O	126(4)	66(2)	40(5)	101(2)
31	37(4)	N/O	9(4)	78(4)	86(3)	N/O	N/O	33(3)	60(4)	60(1)
32	37(4)	N/O	65(5)	76(4)	78(3)	N/O	N/O	36(3)	45(2)	N/O
33	22(5)	47(3)	66(4)	10(3)	57(3)	N/O	N/O	22(3)	74(3)	40(2)
34	29(6)	51(4)	80(5)	5(2)	54(3)	N/O	30(1)	N/O	43(5)	9(3)
35	5(6)	23(6)	69(4)	N/O	65(4)	N/O	N/O	38(1)	24(5)	N/O
36	0(4)	23(5)	16(3)	N/O	4(2)	N/O	N/O	N/O	14(2)	N/O
37	N/O	0(5)	2(2)	N/O	N/O	N/O	N/O	N/O	N/O	N/O
TOTALS (Boat Days)	716	598	1672	1268	1386	712	1298	1267	2263	2217
Days Open	45	23	41	25	27	8	13	20	38	20

1. This is the number of calendar days during which fishing occurred, these are not always full 24 hour days.

Table 36.cont'd BOATS FISHING DISTRICT 4 PURSE SEINE ARE (DAYS FISHED)[1] 1970 to Present

Stat. Wk.	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
27										
28	204(4)	153(2)	204(2)	184(2)	109(1)	93(1)				
29	230(4)	164(2)	174(2)	162(2)	112(2)	54(1)				
30	158(2)	75(3)	164(2)	117(2)	45(2)	96(3)				
31	130(2)	133(2)	55(.5)	143(4)	110(2)	116(3)				
32	128(3)	134(4)	91(2)	215(3)	150(3)	137(4)				
33	51(5)	91(4)	97(3)	207(4)	155(3)	93(4)				
34	45(5)	59(4)	101(4)	96(3)	141(4)	105(6)				
35	13(3)		88(4)	77(2)	113(2)	46(4)				
36	2(4)		90(5)							
37										
TOTALS (Boat Days)	3239	2261	2363	3413	2611					
Days Open	28	21	25.5	22	19					

Table 37.

Southeast Alaska Salmon Fisheries
Commercial Chinook Salmon Harvest
Purse Seine
Weekly Catch
District 101

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun. 11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun. 18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun. 25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	12	0	0	0	0	0	0	0
28	Jul. 9	0	0	0	0	0	187	0	0	0	378	0	86	4
29	Jul. 16	0	60	0	0	0	491	0	0	0	550	40	221	306
30	Jul. 23	55	27	0	0	3	310	0	36	0	226	102	192	358
31	Jul. 30	59	129	0	0	46	558	0	28	22	59	130	215	241
32	Aug. 6	157	130	3	0	24	75	47	80	82	144	49	300	197
33	Aug. 13	24	75	7	0	32	63	78	58	47	236	27	266	
34	Aug. 20	0	33	1	0	5	76	28	70	170	177	28	184	
35	Aug. 27	0	16	11	2	7	45	0	13	0	116	18	57	0
36	Sep. 3	0	2	0	1	7	2	0	7	0	46	2	2	0
37	Sep. 10	0	0	0	14	0	0	0	0	0	3	0	1	0
38	Sep. 17	0	0	0	0	0	0	0	0	0	0	0	0	0
39	Sep. 24	0	0	0	0	0	0	0	0	0	0	0	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct. 15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct. 22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct. 29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	295	472	22	17	124	1819	153	292	321	1935	396	1524	1113

Table 38.

Southeast Alaska Salmon Fisheries
Commercial Sockeye Salmon Harvest
Purse Seine
Weekly Catch
District 101

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun. 11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun. 18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun. 25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	421	0	0	0	0	0	0	0
28	Jul. 9	0	0	0	0	0	8925	0	0	0	6282	14	1057	422
29	Jul. 16	0	5883	0	0	0	20613	0	0	0	20833	4879	11298	9270
30	Jul. 23	5996	4053	0	0	3853	10023	0	5786	0	8404	8850	7835	15479
31	Jul. 30	5583	4597	0	0	19552	17155	0	5064	5674	4590	14314	21589	16769
32	Aug. 6	1515	3717	264	0	11614	5860	3369	13712	16991	7385	9690	23718	33752
33	Aug. 13	96	1432	174	0	8321	4990	1757	8194	1850	15761	7525	17567	19288
34	Aug. 20	0	1250	62	0	1286	1949	940	7398	792	6953	4394	4328	23714
35	Aug. 27	0	551	133	76	961	921	0	1017	53	2112	3112	2539	4911
36	Sep. 3	0	75	0	37	671	161	0	451	9	1352	1282	155	1326
37	Sep. 10	0	0	0	40	0	0	0	0	135	145	0	350	5
38	Sep. 17	0	0	0	0	0	0	0	0	0	0	0	0	1
39	Sep. 24	0	0	0	0	0	0	0	0	0	0	0	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct. 15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct. 22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct. 29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	13190	21558	633	153	46258	71018	6066	41622	25504	73817	54050	91236	

* In 1984, 27 Sockeye salmon misreported in stwk 23, were added to stwk 32

Table 39.

Southeast Alaska Salmon Fisheries
Commercial Coho Salmon Harvest
Purse Seine
Weekly Catch
District 101

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun.18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun.25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	189	0	0	0	0	0	0	0
28	Jul. 9	0	0	0	0	0	3096	0	0	0	1378	8	216	126
29	Jul.16	0	1308	0	0	0	10355	0	0	0	6651	1647	1472	1802
30	Jul.23	1733	479	0	0	38	8682	0	1115	0	4088	3488	693	2406
31	Jul.30	588	1779	0	0	11157	10653	0	1809	6790	1573	4022	10318	3180
32	Aug. 6	2018	3121	542	0	14687	5546	1158	2018	9142	4016	4838	8562	7456
33	Aug.13	468	3769	930	0	4947	5372	1567	3381	1223	11209	4387	13955	73
34	Aug.20	0	3442	450	0	1666	6065	1521	9221	553	13678	8130	15347	3963
35	Aug.27	0	5634	2253	560	1520	7649	0	6264	331	13679	10683	19887	28710
36	Sep. 3	0	3100	0	842	4420	2818	0	7781	472	20611	7720	1089	7413
37	Sep.10	0	0	0	3512	84	0	6	0	0	6891	0	9303	2877
38	Sep.17	0	0	0	21	20	0	0	3	0	258	0	0	4189
39	Sep.24	0	0	0	0	0	0	0	10	0	59	0	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	0	0	314
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct.15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct.22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct.29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	4807	22632	4175	4935	38539	60425	4252	31602	18511	84091	44923	81442	105450

* In 1984, 21 Coho salmon misreported during stwk 23 were added to stwk 35

Table 40.

Southeast Alaska Salmon Fisheries
Commercial Pink Salmon Harvest
Purse Seine
Weekly Catch
District 101

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun. 11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun. 18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun. 25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	3130	0	0	0	0	0	1674	0
28	Jul. 9	0	0	0	0	0	179160	0	0	0	26971	1469	111251	2685
29	Jul. 16	0	118180	0	0	0	540661	0	0	0	105273	72480	525481	126277
30	Jul. 23	111602	42953	0	0	166543	897426	0	117009	0	103769	658548	563204	288848
31	Jul. 30	200376	99310	0	0	1218354	1744827	0	143074	360666	51853	1518936	1152195	827638
32	Aug. 6	226845	237081	142029	0	1133623	928462	108655	959599	692218	256480	788380	1642485	1794031
33	Aug. 13	24647	137562	124442	0	585375	819421	139956	1480162	227388	717745	1278935	1225903	1594408
34	Aug. 20	0	156701	26921	0	158697	868275	58882	956297	68912	789466	1065906	551847	2025415
35	Aug. 27	0	110075	29448	122535	30067	349156	0	465833	56076	903579	698784	344119	799242
36	Sep. 3	0	41215	0	93314	22840	29904	0	188751	24031	1097547	161488	60207	147774
37	Sep. 10	0	0	0	70145	40	0	0	0	2662	313178	0	18859	3823
38	Sep. 17	0	0	0	0	34	0	0	1000	0	0	0	0	292
39	Sep. 24	0	0	0	0	0	0	0	0	0	0	0	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct. 15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct. 22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct. 29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	563470	943077	322840	285994	3315573	6360422	307493	4311725	1431953	4365861	6244927	6197225	7610433

* In 1984, 2144 Pink salmon misreported in stwk 23, were added to stwk 32

Table 41.

Southeast Alaska Salmon Fisheries
Commercial Chum Salmon Harvest
Purse Seine
Weekly Catch
District 101

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun.11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun.18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun.25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	161	0	0	0	0	0	271	0
28	Jul. 9	0	0	0	0	0	8994	0	0	0	3501	13	6358	65
29	Jul.16	0	8282	0	0	0	14725	0	0	0	9025	1801	27389	10995
30	Jul.23	5352	2640	0	0	3086	11279	0	22469	0	7212	4627	19834	9273
31	Jul.30	6450	5914	0	0	9554	12438	0	9106	5652	1191	5415	35925	14279
32	Aug. 6	7820	14338	2243	0	9576	10074	2690	28747	9967	4230	3238	61541	32417
33	Aug.13	1132	9619	2946	0	8840	10213	3891	33160	11556	10513	3151	48644	146
34	Aug.20	0	13762	1018	0	2706	20018	4370	45490	1861	12129	6805	47243	628
35	Aug.27	0	31130	4316	4708	4013	13670	0	33747	2506	19471	13308	91397	55010
36	Sep. 3	0	23063	0	4518	5841	5676	0	20422	1404	43825	7542	8354	21788
37	Sep.10	0	0	0	10192	260	0	2315	0	46	16576	0	103865	52134
38	Sep.17	0	0	0	1606	765	0	0	1553	0	5	0	0	63006
39	Sep.24	0	0	0	0	0	0	0	1183	0	8	0	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	0	0	13035
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct.15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct.22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct.29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	20754	108748	10523	21024	44741	107248	13266	195877	32992	127686	45900	450621	349303

* In 1984, 32 Chum salmon misreported during stwk 23 were added to stwk 37

Table 42.

Southeast Alaska Salmon Fisheries
Commercial Chinook Salmon Harvest
Purse Seine
Weekly Catch
District 102

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun. 11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun. 18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun. 25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Jul. 9	0	0	0	0	0	307	0	0	0	0	0	6	0
29	Jul. 16	0	0	0	0	0	540	0	0	0	99	0	73	1800
30	Jul. 23	147	27	0	0	1	667	0	11	0	347	18	110	99
31	Jul. 30	111	197	0	0	108	887	0	26	354	106	15	15	38
32	Aug. 6	297	66	29	0	60	84	597	817	274	537	10	167	225
33	Aug. 13	197	108	121	0	116	136	505	57	329	721	0	84	18
34	Aug. 20	82	15	245	71	48	168	31	36	65	1391	28	124	0
35	Aug. 27	7	66	110	53	21	176	0	20	1	557	5	5	0
36	Sep. 3	10	32	0	66	21	10	0	7	0	137	13	5	0
37	Sep. 10	2	0	29	18	15	0	4	0	0	6	0	1	0
38	Sep. 17	2	12	0	0	2	0	0	1	0	0	1	0	0
39	Sep. 24	1	0	3	7	9	0	0	0	0	0	0	0	0
40	Oct. 1	0	0	4	0	0	0	0	0	0	1	0	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	4	0	0	0
42	Oct. 15	0	0	0	0	0	0	0	0	0	1	0	0	0
43	Oct. 22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct. 29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	856	523	541	215	401	2975	1137	975	1023	3907	90	590	2180

Table 43.

Southeast Alaska Salmon Fisheries
Commercial Sockeye Salmon Harvest
Purse Seine
Weekly Catch
District 102

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun. 11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun. 18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun. 25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Jul. 9	0	0	0	0	0	7289	0	0	0	0	0	319	0
29	Jul. 16	0	0	0	0	0	5236	0	0	0	2629	18	3652	6727
30	Jul. 23	6800	1198	0	0	159	10310	0	448	0	5856	2587	5676	5015
31	Jul. 30	8873	3592	0	0	15527	14272	0	3203	8350	3340	1721	1429	1648
32	Aug. 6	7655	3503	5205	0	11125	4798	13983	6540	8394	4335	1014	4552	8171
33	Aug. 13	2715	3944	4336	0	8432	6325	5034	11481	5978	3191	358	2137	4167
34	Aug. 20	1043	1812	1970	1834	1936	3130	1513	3801	1181	2070	2532	2888	4911
35	Aug. 27	170	1226	872	1944	764	1021	0	716	121	1036	1989	268	3957
36	Sep. 3	23	229	0	614	1135	205	0	333	0	225	868	211	48
37	Sep. 10	13	0	111	186	115	0	312	0	0	46	0	25	28
38	Sep. 17	16	47	0	9	85	0	0	0	0	0	36	0	0
39	Sep. 24	2	4	2	9	5	0	0	8	0	0	0	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	1	0	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	18	0	0	0
42	Oct. 15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct. 22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct. 29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	27310	15555	12496	4596	39283	52586	20842	26530	24034	22747	11123	21167	34674

Table 44.

Southeast Alaska Salmon Fisheries
Commercial Coho Salmon Harvest
Purse Seine
Weekly Catch
District 102

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun. 11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun. 18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun. 25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Jul. 9	0	0	0	0	0	3550	0	0	0	0	0	356	0
29	Jul. 16	0	0	0	0	0	4019	0	0	0	3203	52	1295	5250
30	Jul. 23	924	557	0	0	2	6347	0	281	0	4874	845	3332	2459
31	Jul. 30	2404	2204	0	0	2866	11870	0	443	3724	2751	1180	967	1097
32	Aug. 6	8175	3573	3012	0	2719	4641	13014	1721	8544	5921	552	7892	8578
33	Aug. 13	6649	5190	5324	0	6418	11134	7897	3966	5087	11199	241	8131	5322
34	Aug. 20	4699	4549	6843	3439	5588	11842	2353	3924	2077	10946	5791	15721	7264
35	Aug. 27	1140	10582	9140	6277	6366	12596	0	2086	28	10372	13796	3876	14636
36	Sep. 3	3418	5025	0	12945	18799	6232	0	3163	0	2411	8304	3212	299
37	Sep. 10	2911	0	7619	6543	5631	0	4253	0	0	648	0	1392	0
38	Sep. 17	1601	2635	0	336	2541	0	0	69	0	0	763	1268	657
39	Sep. 24	260	589	1705	1120	818	0	0	46	0	0	0	700	0
40	Oct. 1	0	16	387	0	0	0	0	0	0	1290	0	0	171
41	Oct. 8	37	119	16	51	0	0	0	0	0	1822	0	0	0
42	Oct. 15	0	3	0	0	0	0	0	0	0	1	0	0	0
43	Oct. 22	0	0	0	0	0	5	0	6	0	0	0	0	0
44	Oct. 29	0	3	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	32218	35045	34046	30711	51748	72236	27517	15705	19460	55438	31524	48142	45733

* In 1984, 9 Coho salmon misreported during stwk 23, were added to stwk 34

Table 45.

Southeast Alaska Salmon Fisheries
Commercial Pink Salmon Harvest
Purse Seine
Weekly Catch
District 102

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun.11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun.18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun.25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	0	0	0	0	0	0	800	0
28	Jul. 9	0	0	0	0	0	88791	0	0	0	0	0	16959	0
29	Jul.16	0	0	0	0	0	104688	0	0	0	7918	107	87673	42846
30	Jul.23	107215	8766	0	0	4630	471322	0	1886	0	23187	28140	121167	24042
31	Jul.30	300797	65779	0	0	616671	1062135	0	22282	126305	30535	87378	52258	39706
32	Aug. 6	603930	93950	325759	0	851624	370381	1027574	359796	290735	136748	142759	484112	562547
33	Aug.13	250678	146161	507065	0	593873	1737553	420389	650413	346104	383956	50899	538467	80379
34	Aug.20	127519	106258	189245	430348	178958	1268347	54852	486215	80072	533635	688223	756489	31521
35	Aug.27	35632	160284	119878	742235	105763	474551	0	124583	910	318602	605163	129761	655544
36	Sep. 3	20831	53570	0	546206	70285	42289	0	61529	0	176341	160901	123554	23
37	Sep.10	7688	0	13742	122736	1994	0	5601	0	0	31783	0	23182	0
38	Sep.17	2071	5118	0	5944	453	0	0	388	0	0	25849	8511	2566
39	Sep.24	420	23	35	3234	51	0	0	248	0	0	0	2197	0
40	Oct. 1	0	0	426	0	0	0	0	0	0	5401	0	0	0
41	Oct. 8	0	0	1	1	0	0	0	0	0	333	0	0	0
42	Oct.15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct.22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct.29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	1456781	639909	1156151	1850704	2424302	5620057	1508416	1707340	844126	1648439	1789419	2345130	2446301

* In 1984, 3925 Pink salmon misreported in stwk 23, were added to stwk 34

Table 46.

Southeast Alaska Salmon Fisheries
Commercial Chum Salmon Harvest
Purse Seine
Weekly Catch
District 102

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun. 11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun. 18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun. 25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Jul. 9	0	0	0	0	0	4585	0	0	0	0	0	443	0
29	Jul. 16	0	0	0	0	0	3427	0	0	0	1026	12	1807	1858
30	Jul. 23	3424	1152	0	0	80	9011	0	2322	0	1728	564	3193	783
31	Jul. 30	14244	3816	0	0	8900	16035	0	1312	1212	1340	434	1395	268
32	Aug. 6	31645	6020	12664	0	8944	11911	19207	5165	5446	5022	338	13724	11358
33	Aug. 13	20590	6530	32401	0	10849	34820	13909	23785	10093	14525	166	18732	6758
34	Aug. 20	23846	12498	23819	15237	6178	61316	6768	33345	3776	16986	4781	44980	14365
35	Aug. 27	33300	50159	39106	53760	6908	81607	0	29921	7	21333	17155	14244	43764
36	Sep. 3	94785	25779	0	83312	44965	21738	0	28840	0	10990	10911	31605	1665
37	Sep. 10	105896	0	39903	43310	17538	0	22346	0	0	2850	0	27645	0
38	Sep. 17	43860	116956	0	9201	16498	0	0	1578	0	0	13381	22635	11445
39	Sep. 24	19102	16302	10652	37170	36079	0	0	4677	0	0	0	22151	0
40	Oct. 1	1517	3310	11570	0	0	0	0	0	0	55850	0	0	315
41	Oct. 8	4483	19485	837	10686	0	0	0	0	0	36040	0	0	0
42	Oct. 15	1270	3164	0	0	0	7929	0	0	0	2852	0	0	0
43	Oct. 22	0	0	0	0	0	7505	0	1394	0	0	0	0	0
44	Oct. 29	0	8898	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	397962	274069	170952	252676	156939	259884	62230	132339	20534	170542	47742	202554	95403

Table 47.

Southeast Alaska Salmon Fisheries
Commercial Chinook Salmon Harvest
Purse Seine
Weekly Catch
District 103

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun.11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun.18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun.25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Jul. 9	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Jul.16	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Jul.23	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Jul.30	0	0	0	0	0	0	0	0	3	0	0	0	0
32	Aug. 6	8	23	0	0	0	0	0	3	263	0	0	0	0
33	Aug.13	12	5	42	0	39	9	39	29	169	0	86	57	0
34	Aug.20	5	31	111	0	1	33	67	31	74	46	24	70	0
35	Aug.27	0	31	38	22	35	26	0	13	0	240	30	7	0
36	Sep. 3	0	3	0	16	0	0	0	0	12	96	0	0	0
37	Sep.10	0	0	0	2	0	0	0	0	0	11	0	0	0
38	Sep.17	0	0	0	0	0	0	0	0	0	0	0	0	0
39	Sep.24	0	0	0	0	0	0	0	0	0	0	0	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct.15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct.22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct.29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	25	93	191	40	75	68	106	76	521	393	140	134	0

Table 48.

Southeast Alaska Salmon Fisheries
Commercial Sockeye Salmon Harvest
Purse Seine
Weekly Catch
District 103

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun. 11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun. 18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun. 25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	0	0	0	28	0	0	0	0
28	Jul. 9	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Jul. 16	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Jul. 23	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Jul. 30	0	0	0	0	0	0	0	0	1017	0	0	0	0
32	Aug. 6	694	4765	0	0	0	0	0	336	7884	0	20	155	0
33	Aug. 13	1923	1084	2170	0	4009	395	3603	5142	13014	174	6017	687	11537
34	Aug. 20	242	1673	6563	0	1807	719	1081	2854	15039	508	2582	2378	13747
35	Aug. 27	0	382	2534	1915	66	268	0	1002	554	153	1652	674	854
36	Sep. 3	0	18	0	461	12	0	0	64	398	124	118	0	120
37	Sep. 10	0	0	0	2362	0	0	0	0	0	83	0	0	0
38	Sep. 17	0	0	0	0	0	0	0	0	0	0	0	0	0
39	Sep. 24	0	0	0	1	0	0	0	0	0	0	0	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct. 15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct. 22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct. 29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	2859	7922	11267	4739	5894	1382	4684	9398	37934	1042	10389	3894	26258

* In 1984, 23 Sockeye salmon misreported in stwk 25 were added to stwk 34

Table 49.

Southeast Alaska Salmon Fisheries
Commercial Coho Salmon Harvest
Purse Seine
Weekly Catch
District 103

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun. 11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun. 18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun. 25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	0	0	0	18	0	0	0	0
28	Jul. 9	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Jul. 16	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Jul. 23	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Jul. 30	0	0	0	0	0	0	0	0	888	0	0	0	0
32	Aug. 6	857	1491	0	0	0	0	0	524	11977	0	164	1047	0
33	Aug. 13	5004	4002	1624	0	1114	1239	10222	4513	18002	277	9626	2635	12624
34	Aug. 20	2184	7867	5540	0	2852	4750	3956	10071	9196	3026	8766	18472	2869
35	Aug. 27	0	9467	3716	5759	823	5613	0	5232	5540	8224	7962	17654	4653
36	Sep. 3	0	2473	0	7128	382	392	0	361	3042	5141	2867	0	1116
37	Sep. 10	0	0	0	4761	0	0	0	0	0	1953	0	0	0
38	Sep. 17	0	0	0	0	394	0	0	0	0	0	0	0	0
39	Sep. 24	0	0	0	18	0	0	0	0	0	0	0	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct. 15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct. 22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct. 29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	8045	25300	10880	17666	5565	11994	14178	20701	48663	18621	29385	39818	47094

* In 1984, 241 Coho salmon in stwk 25 and 275 Coho salmon in stwk 26 were misreported and were added to stwk 34

Table 50.

Southeast Alaska Salmon Fisheries
Commercial Pink Salmon Harvest
Purse Seine
Weekly Catch
District 103

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun. 11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun. 18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun. 25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	0	0	0	11375	0	0	0	0
28	Jul. 9	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Jul. 16	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Jul. 23	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Jul. 30	0	0	0	0	0	0	0	0	119531	0	0	0	0
32	Aug. 6	32102	59367	0	0	0	0	0	12552	1518273	0	16560	20270	0
33	Aug. 13	105713	102228	168592	0	309256	132680	837606	882125	2387732	4186	992281	296371	3391932
34	Aug. 20	49080	311391	302395	0	121817	414633	111373	1522789	906040	215958	1043532	1222217	3849460
35	Aug. 27	0	173217	101878	546300	17985	258222	0	563191	224059	161823	563101	755087	394668
36	Sep. 3	0	15522	0	343694	2957	29579	0	18232	96839	374072	76004	0	60318
37	Sep. 10	0	0	0	222493	0	0	0	0	0	143454	0	0	0
38	Sep. 17	0	0	0	0	96	0	0	0	0	0	0	0	0
39	Sep. 24	0	0	0	404	0	0	0	0	0	0	0	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct. 15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct. 22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct. 29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	187895	661725	572865	1112891	452111	835114	948979	2998889	5263849	899493	2691478	2293945	7695378

Table 51.

Southeast Alaska Salmon Fisheries
Commercial Chum Salmon Harvest
Purse Seine
Weekly Catch
District 103

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun. 11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun. 18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun. 25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	0	0	0	100	0	0	0	0
28	Jul. 9	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Jul. 16	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Jul. 23	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Jul. 30	0	0	0	0	0	0	0	0	1129	0	0	0	0
32	Aug. 6	4798	1167	0	0	0	0	0	501	16655	0	152	1795	0
33	Aug. 13	14527	13237	23825	0	10336	685	15187	12073	38449	136	4236	3296	181
34	Aug. 20	28416	10156	40126	0	6358	8151	7344	44375	32980	9347	10665	25857	492
35	Aug. 27	0	12620	38193	55766	1106	15843	0	28475	12861	4770	14018	39535	9245
36	Sep. 3	0	10674	0	42155	1344	6665	0	2102	5216	14411	3963	0	2549
37	Sep. 10	0	0	0	33346	0	0	0	0	0	20101	0	0	0
38	Sep. 17	0	0	0	0	8159	0	0	0	0	0	0	0	0
39	Sep. 24	0	0	0	5208	0	0	0	0	0	0	0	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct. 15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct. 22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct. 19	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	47741	47854	102144	136475	27303	31344	22531	87526	107390	48765	33034	70483	79148

* In 1984, 300 Chum salmon misreported in stwk 25, were added to stwk 35

Table 52.

Southeast Alaska Salmon Fisheries
Commercial Chinook Salmon Harvest
Purse Seine
Weekly Catch
District 104

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun. 11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun. 18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun. 25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	1351	1317	0	0	16	0	182	0
28	Jul. 9	350	91	241	275	771	155	2670	2676	826	1758	2953	440	1343
29	Jul. 16	275	353	883	465	1491	1338	1881	2459	898	1071	1018	487	927
30	Jul. 23	672	236	0	315	402	464	714	1376	514	1063	1172	2342	3297
31	Jul. 30	826	533	0	0	492	2152	569	1333	782	459	1712	4289	3689
32	Aug. 6	374	845	0	0	346	422	0	1982	1319	2429	852	4214	2402
33	Aug. 13	2	478	0	0	350	736	145	586	514	6574	1381	3031	0
34	Aug. 20	32	300	0	52	0	300	6	199	1203	4201	539	1672	30
35	Aug. 27	0	312	0	0	359	578	0	19	1	2673	501	27	0
36	Sep. 3	0	0	0	0	0	155	0	14	0	995	0	0	0
37	Sep. 10	0	0	0	0	0	0	0	0	0	239	0	0	0
38	Sep. 17	0	0	0	0	0	0	0	0	0	0	0	0	0
39	Sep. 24	0	0	0	0	0	0	0	0	0	0	0	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct. 15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct. 22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct. 29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	2531	3148	1124	1107	4211	7651	7302	10644	6057	21478	10128	16584	11688

* In 1984, 16 Chinook Salmon misreported in stwk 25 were added to stwk 31

Table 53.

Southeast Alaska Salmon Fisheries
Commerical Sockeye Salmon Harvest
Purse Seine
Weekly Catch
District 104

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun. 11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun. 18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun. 25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	36758	31931	75	0	299	0	4550	0
28	Jul. 9	27928	2907	6270	11112	31186	6031	93067	109894	103997	40421	44249	16925	11742
29	Jul. 16	23432	18596	20893	28494	69082	18605	124233	106949	40509	120217	63137	29362	16032
30	Jul. 23	21844	45134	0	65223	38087	11031	49072	50835	42141	52033	64711	51626	72742
31	Jul. 30	30402	25683	0	0	42052	19622	16499	81998	29509	6304	179687	89359	114056
32	Aug. 6	11541	21447	0	0	24155	4005	0	47952	43444	13765	134644	58714	138752
33	Aug. 13	266	3469	0	0	4726	6940	1351	10755	23104	25541	113581	32057	3443
34	Aug. 20	3	1443	0	426	0	725	577	1636	8752	15985	33075	9120	28157
35	Aug. 27	0	426	0	0	167	327	0	12	71	7301	17723	312	11726
36	Sep. 3	0	0	0	0	0	188	0	1	0	2827	0	0	0
37	Sep. 10	0	0	0	0	0	0	0	0	0	608	0	0	0
38	Sep. 17	0	0	0	0	0	0	0	0	0	0	0	0	0
39	Sep. 24	0	0	0	0	0	0	0	0	0	0	0	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct. 15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct. 22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct. 29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	115416	119105	27163	105255	209455	104232	316730	410107	291527	285401	650807	293235	427636

* In 1984, 60 Sockeye salmon misreported in stwk 25 were added to stwk 31

Table 54.

Southeast Alaska Salmon Fisheries
Commercial Coho Salmon Harvest
Purse Seine
Weekly Catch
District 104

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun. 11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun. 18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun. 25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	14258	16238	167	0	223	0	918	0
28	Jul. 9	3283	585	1767	7219	1377	3279	38932	44734	20012	16927	51475	1498	6498
29	Jul. 16	3442	2780	6030	3481	4302	8911	28562	17846	9304	25759	30687	1251	6244
30	Jul. 23	4414	4563	0	2295	2854	6244	10145	15403	17761	10043	20585	11300	17732
31	Jul. 30	5113	6261	0	0	3812	17413	6150	9191	36156	2419	24783	23850	17336
32	Aug. 6	5050	9456	0	0	3943	4884	44	16479	24519	12039	54358	29815	32322
33	Aug. 13	284	6445	0	0	2728	7994	2275	4711	9693	32353	17814	44598	12274
34	Aug. 20	87	7247	0	1689	0	2818	250	4218	13570	16846	8193	26443	21130
35	Aug. 27	0	13582	0	0	4507	5221	0	248	80	20165	7384	4202	11905
36	Sep. 3	0	110	0	0	0	495	0	126	0	15171	0	0	0
37	Sep. 10	0	0	0	0	0	0	0	0	0	1778	0	0	0
38	Sep. 17	0	0	0	0	0	0	0	0	0	0	0	0	0
39	Sep. 24	0	0	0	0	0	0	0	0	0	0	0	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	20	0	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct. 15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct. 22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct. 29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	21673	51029	7797	14684	23523	71517	102596	113123	131095	153743	215279	143875	127441

* In 1984, 446 Coho salmon misreported in stwk 25, were added to stwk 33

Table 55.

Southeast Alaska Salmon Fisheries
Commercial Pink Salmon Harvest
Purse Seine
Weekly Catch
District 104

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun.11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun.18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun.25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	31838	40612	493	0	161	0	12115	0
28	Jul. 9	37491	3185	18385	7827	53462	12712	225539	144772	169251	20137	160457	45451	16367
29	Jul.16	94473	10808	53025	39476	196309	33943	357802	85002	63909	47654	325593	84794	21610
30	Jul.23	108914	42999	0	162696	136886	84130	165782	119219	264865	48770	737346	203807	300578
31	Jul.30	318039	89223	0	0	212104	383063	113913	434979	793858	8349	3775658	778788	675062
32	Aug. 6	245532	272181	0	0	232189	232592	2838	795437	1640977	181309	4756890	1633576	3294655
33	Aug.13	418	200261	0	0	75520	990109	27978	328572	619159	896004	5288079	1880138	18002
34	Aug.20	394	159610	0	107183	0	191878	6343	426511	196871	834469	1135247	1255526	18481
35	Aug.27	0	239122	0	0	11059	88907	0	23121	4074	1191380	556018	155998	338533
36	Sep. 3	0	409	0	0	0	1383	0	251	0	1286705	0	0	0
37	Sep.10	0	0	0	0	0	0	0	0	0	68759	0	0	0
38	Sep.17	0	0	0	0	0	0	0	0	0	0	0	0	0
39	Sep.24	0	0	0	0	0	0	0	0	0	0	0	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	8	0	0	0
41	Oct. 8	0	0	0	0	0	0	512	0	0	2100	0	0	0
42	Oct.15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct.22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct.29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	806261	1017798	71410	317182	917529	2050555	941319	2358357	3752974	4586415	2E+07	6051193	

Table 56.

Southeast Alaska Salmon Fisheries
Commercial Chum Salmon Harvest
Purse Seine
Weekly Catch
District 104

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun.11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun.18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun.25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	10493	7771	91	0	235	0	1970	0
28	Jul. 9	3351	1913	1819	4141	3547	3175	32132	17929	14244	7629	21032	7371	5308
29	Jul.16	10619	2553	5827	6123	14367	8532	32428	47211	1934	39488	11791	11741	3879
30	Jul.23	8875	7029	0	14633	8867	5829	10373	31964	2400	16125	8736	14539	12196
31	Jul.30	14865	6346	0	0	9043	11323	4366	29444	8307	3300	27411	26503	19660
32	Aug. 6	19362	8599	0	0	5938	2609	35	25355	20173	14496	35089	42374	62422
33	Aug.13	312	11514	0	0	3874	23025	1001	12173	12985	50818	34812	52322	20205
34	Aug.20	123	13759	0	6540	0	3108	456	12932	9016	71552	16638	36940	63408
35	Aug.27	0	22967	0	0	3067	5980	0	926	32	62407	14275	9363	25758
36	Sep. 3	0	121	0	0	0	675	0	28	0	68406	0	0	0
37	Sep.10	0	0	0	0	0	0	0	0	0	9962	0	0	0
38	Sep.17	0	0	0	0	0	0	0	0	0	0	0	0	0
39	Sep.24	0	0	0	0	0	0	0	0	0	0	0	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	2034	0	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct.15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct.22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct.29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	57507	74801	7646	31437	48703	74749	88562	178053	69091	346452	169784	203123	212836

* In 1984, 700 Chum salmon misreported during stwk 25 were added to stwk 33

Table 57.

Southeast Alaska Salmon Fisheries
Commercial Chinook Salmon Harvest
Purse Seine
Weekly Catch
District 105

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun. 11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun. 18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun. 25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Jul. 9	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Jul. 16	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Jul. 23	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Jul. 30	0	0	0	0	0	0	0	0	0	0	0	0	10
32	Aug. 6	1	0	1	0	0	0	0	0	1	0	0	0	0
33	Aug. 13	3	47	0	0	0	0	7	6	3	0	1	2	
34	Aug. 20	0	7	0	0	0	1	0	2	2	0	0	22	
35	Aug. 27	0	0	0	0	0	0	0	0	0	0	15	3	0
36	Sep. 3	0	0	0	0	0	0	0	0	0	1	0	1	0
37	Sep. 10	0	0	0	0	0	0	0	0	0	0	0	0	0
38	Sep. 17	0	0	0	0	0	0	0	0	0	0	0	0	0
39	Sep. 24	0	0	0	0	0	0	0	0	0	0	0	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct. 15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct. 22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct. 29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	4	54	1	0	0	1	7	8	6	1	16	28	10

Table 58.

Southeast Alaska Salmon Fisheries
Commercial Sockeye Salmon Harvest
Purse Seine
Weekly Catch
District 105

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun. 11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun. 18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun. 25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Jul. 9	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Jul. 16	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Jul. 23	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Jul. 30	0	0	0	0	0	0	0	0	0	0	0	0	500
32	Aug. 6	12	0	2	0	0	0	0	0	31	0	0	5	110
33	Aug. 13	3	124	0	0	15	11	282	6	113	0	85	29	500
34	Aug. 20	0	8	0	0	4	17	80	7	27	0	40	17	500
35	Aug. 27	0	0	0	0	0	0	0	0	0	0	272	9	0
36	Sep. 3	0	0	0	0	0	0	0	0	0	43	0	2	2
37	Sep. 10	0	0	0	0	0	0	0	0	0	0	0	0	0
38	Sep. 17	0	0	0	0	0	0	0	0	0	0	0	0	0
39	Sep. 24	0	0	0	0	0	0	0	0	0	0	0	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct. 15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct. 22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct. 29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	15	132	2	0	19	28	362	13	171	43	397	62	1612

Table 59.

Southeast Alaska Salmon Fisheries
Commercial Coho Salmon Harvest
Purse Seine
Weekly Catch
District 105

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun. 11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun. 18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun. 25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Jul. 9	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Jul. 16	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Jul. 23	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Jul. 30	0	0	0	0	0	0	0	0	0	0	0	0	100
32	Aug. 6	116	0	29	0	0	0	0	0	1558	0	0	0	40
33	Aug. 13	68	2362	0	0	12	78	205	78	1748	0	416	438	120
34	Aug. 20	0	123	0	0	34	155	7	123	85	0	464	657	1200
35	Aug. 27	0	0	0	15	0	0	0	0	21	0	2519	346	330
36	Sep. 3	0	0	0	0	0	0	0	0	0	805	139	473	51
37	Sep. 10	0	0	0	0	0	0	0	0	0	0	0	0	0
38	Sep. 17	0	28	0	0	0	0	0	0	0	0	0	0	0
39	Sep. 24	0	0	0	0	0	0	0	0	0	0	0	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct. 15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct. 22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct. 29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	184	2513	29	15	46	233	212	201	3412	805	3538	1914	2921

Table 60.

Southeast Alaska Salmon Fisheries
Commercial Pink Salmon Harvest
Purse Seine
Weekly Catch
District 105

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun.11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun.18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun.25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Jul. 9	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Jul.16	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Jul.23	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Jul.30	0	0	0	0	0	0	0	0	0	0	0	0	15000
32	Aug. 6	40568	0	5518	0	10750	0	0	0	124812	0	0	92	230000
33	Aug.13	25638	140439	0	0	20410	50238	94755	13487	143937	0	112768	87842	950000
34	Aug.20	0	18220	0	0	7608	52838	1402	25545	39546	0	58271	75940	640000
35	Aug.27	0	0	0	9092	0	0	0	0	1176	0	69210	41676	120000
36	Sep. 3	0	0	0	0	0	0	0	0	0	99543	0	12909	6177
37	Sep.10	0	0	0	0	0	0	0	0	0	0	0	0	0
38	Sep.17	0	7	0	0	0	0	0	0	0	0	0	0	0
39	Sep.24	0	0	0	0	0	0	0	0	0	0	0	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct.15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct.22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct.29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	66206	158666	5518	9092	38768	103076	96157	39032	309471	99543	240249	218459	1961177

Table 61.

Southeast Alaska Salmon Fisheries
Commercial Chum Salmon Harvest
Purse Seine
Weekly Catch
District 105

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun. 11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun. 18	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Jun. 25	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Jul. 2	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Jul. 9	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Jul. 16	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Jul. 23	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Jul. 30	0	0	0	0	0	0	0	0	0	0	0	0	1000
32	Aug. 6	7521	0	1746	0	0	0	0	0	4688	0	0	649	8250
33	Aug. 13	8174	17223	0	0	704	278	3731	8848	3054	0	2904	25508	129
34	Aug. 20	0	2207	0	0	351	331	401	8576	4428	0	3552	12950	11
35	Aug. 27	0	0	0	3070	0	0	0	0	667	0	6452	9815	3000
36	Sep. 3	0	0	0	0	0	0	0	0	0	4257	10	12891	1960
37	Sep. 10	0	0	0	0	0	0	0	0	0	0	0	0	0
38	Sep. 17	0	1430	0	0	0	0	0	0	0	0	0	0	0
39	Sep. 24	0	0	0	0	0	0	0	0	0	0	0	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct. 15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct. 22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct. 29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	15695	20860	1746	3070	1055	609	4132	17424	12837	4257	12918	61813	38610

Table 62.

Southeast Alaska Salmon Fisheries
Commerical Chinook Salmon Harvest
Drift Gillnet
Tree Point
Weekly Catch

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
18	Apr. 30	0	0	0	0	0	0	0	0	0	0	0	0	0
19	May 7	0	0	0	0	0	0	0	0	0	0	0	0	0
20	May 14	0	0	0	0	0	0	0	0	0	0	0	0	0
21	May 21	0	0	0	0	0	0	0	0	0	0	0	0	0
22	May 28	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Jun. 4	0	0	0	0	0	0	0	115	0	0	0	0	0
24	Jun. 11	0	0	0	0	0	0	0	138	0	0	0	0	0
25	Jun. 18	313	354	622	0	0	851	902	283	145	0	0	281	649
26	Jun. 25	191	75	428	523	279	357	888	287	470	1141	279	377	649
27	Jul. 2	148	87	384	569	223	191	1028	253	138	939	296	334	394
28	Jul. 9	106	0	352	391	230	200	492	211	218	283	119	239	130
29	Jul. 16	109	29	150	209	205	144	209	76	203	757	57	158	145
30	Jul. 23	81	28	0	92	6	550	79	31	36	94	110	85	261
31	Jul. 30	17	26	0	0	73	148	34	15	41	148	76	41	150
32	Aug. 6	17	36	4	0	21	14	22	21	37	66	63	19	51
33	Aug. 13	13	38	4	0	35	31	0	76	60	14	18	13	34
34	Aug. 20	3	20	11	12	20	74	0	15	52	27	8	25	32
35	Aug. 27	6	76	6	7	46	20	0	6	5	28	21	7	267
36	Sep. 3	2	5	0	3	33	7	0	2	4	8	15	6	5
37	Sep. 10	2	1	0	1	11	1	0	0	5	10	18	8	6
38	Sep. 17	0	1	0	0	0	3	0	2	1	452	4	0	3
39	Sep. 24	0	0	0	0	0	0	0	0	0	0	10	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct. 15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct. 22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct. 29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	1008	776	1961	1807	1182	2591	3654	1531	1415	3967	1094	1593	2776

Table 63.

Southeast Alaska Salmon Fisheries
Commerical Sockeye Salmon Harvest
Drift Gillnet
Tree Point
Weekly Catch

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
18	Apr. 30	0	0	0	0	0	0	0	0	0	0	0	0	0
19	May 7	0	0	0	0	0	0	0	0	0	0	0	0	0
20	May 14	0	0	0	0	0	0	0	0	0	0	0	0	0
21	May 21	0	0	0	0	0	0	0	0	0	0	0	0	0
22	May 28	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Jun. 4	0	0	0	0	0	0	0	582	0	0	0	0	0
24	Jun. 11	0	0	0	0	0	0	0	316	0	0	0	0	0
25	Jun. 18	44241	18057	6020	0	0	20706	11574	9791	7407	0	0	12374	12885
26	Jun. 25	26249	10737	4384	31179	48041	38697	18121	15364	25655	22174	16591	5325	15246
27	Jul. 2	22920	7910	3546	27685	32002	14250	15068	12951	8779	26907	14063	10569	11809
28	Jul. 9	21245	0	1703	22027	38579	30676	10090	21117	20747	22186	4431	8771	87
29	Jul. 16	18531	18563	4420	19773	33735	12679	9056	17752	10998	57780	8961	12870	16335
30	Jul. 23	14633	22829	0	15706	8450	17507	15770	7442	7497	23339	25392	11025	28603
31	Jul. 30	5749	14225	0	0	17435	11154	3612	3564	5918	15179	17212	8166	17331
32	Aug. 6	4689	12877	3164	163	5328	3178	5666	7199	9457	11264	22419	5324	22621
33	Aug. 13	1149	5341	1012	0	4342	1973	0	6200	3976	4841	18641	8208	18146
34	Aug. 20	228	2241	713	666	2561	1560	0	2453	3629	3986	4504	3281	11800
35	Aug. 27	103	384	390	557	1184	889	0	1042	963	1984	1967	1255	2376
36	Sep. 3	22	83	0	189	879	86	0	81	287	818	883	536	878
37	Sep. 10	0	44	0	19	170	29	0	39	157	93	757	826	165
38	Sep. 17	5	5	0	1	22	25	0	21	8	24	166	188	71
39	Sep. 24	0	3	0	0	0	0	0	0	0	0	19	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct. 15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct. 22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct. 29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	159764	113299	25352	117965	192728	153409	88957	108766	105478	190575	136006	88718	167011

Table 64.

Southeast Alaska Salmon Fisheries
Commerical Coho Salmon Harvest
Drift Gillnet
Tree Point
Weekly Catch

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
18	Apr.30	0	0	0	0	0	0	0	0	0	0	0	0	0
19	May 7	0	0	0	0	0	0	0	0	0	0	0	0	0
20	May 14	0	0	0	0	0	0	0	0	0	0	0	0	0
21	May 21	0	0	0	0	0	0	0	0	0	0	0	0	0
22	May 28	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Jun. 4	0	0	0	0	0	0	0	27	0	0	0	0	0
24	Jun.11	0	0	0	0	0	0	0	106	0	0	0	0	0
25	Jun.18	233	319	326	0	0	3144	296	450	198	0	0	410	123
26	Jun.25	1072	708	891	530	79	4842	290	949	392	589	653	816	248
27	Jul. 2	1268	968	1064	2249	309	3897	484	1469	167	1160	1993	1064	678
28	Jul. 9	824	0	736	3414	310	4111	1213	1286	757	836	1181	2334	1942
29	Jul.16	1239	785	771	1879	593	3153	1451	1372	253	2453	1805	1141	2106
30	Jul.23	943	650	0	835	362	6800	1516	471	917	2261	2661	1209	2379
31	Jul.30	811	605	0	0	894	4509	449	290	884	1289	3296	1704	1971
32	Aug. 6	2428	2296	1274	28	765	2906	728	1756	2522	2517	5818	1953	3945
33	Aug.13	3151	2477	1536	0	1062	3442	0	2112	2704	3145	3770	4089	3584
34	Aug.20	1436	4243	2298	1074	1359	3596	0	5793	2722	2972	3278	4761	8429
35	Aug.27	1293	4130	3259	2379	2019	3099	0	2210	2803	2772	3095	5624	7736
36	Sep. 3	2518	2022	0	2410	2783	2116	0	1105	1716	4385	5863	4596	8039
37	Sep.10	1021	1639	0	1267	1473	954	0	242	2012	2713	5713	5378	3373
38	Sep.17	222	158	0	102	165	1228	0	357	306	1109	1853	2685	2396
39	Sep.24	0	327	0	108	0	0	0	0	0	0	692	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct.15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct.22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct.29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	18459	21327	12155	16275	12173	47797	6427	19995	18353	28201	41671	37764	46949

Table 65.

Southeast Alaska Salmon Fisheries
Commercial Pink Salmon Harvest
Drift Gillnet
Tree Point
Weekly Catch

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
18	Apr.30	0	0	0	0	0	0	0	0	0	0	0	0	0
19	May 7	0	0	0	0	0	0	0	0	0	0	0	0	0
20	May 14	0	0	0	0	0	0	0	0	0	0	0	0	0
21	May 21	0	0	0	0	0	0	0	0	0	0	0	0	0
22	May 28	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Jun. 4	0	0	0	0	0	0	0	592	0	0	0	0	0
24	Jun.11	0	0	0	0	0	0	0	591	0	0	0	0	0
25	Jun.18	280	1285	65	0	0	6824	293	439	159	0	0	1883	166
26	Jun.25	417	4953	326	2311	889	8874	1544	6609	1101	1787	1667	2424	264
27	Jul. 2	3853	3232	687	3468	8545	15836	4510	15487	8169	3686	25910	7628	1349
28	Jul. 9	7884	0	1137	4574	59836	28445	9080	19463	28871	6091	21287	62475	191
29	Jul.16	26209	8665	11316	25345	145794	28844	17306	68032	58996	13768	29100	81052	362
30	Jul.23	48608	21497	0	15372	64942	56622	27143	24987	54982	21583	164132	105348	81409
31	Jul.30	30561	21167	0	0	233279	65504	6608	18126	34501	21515	107321	124850	124766
32	Aug. 6	94539	47238	35029	2656	112061	100247	6203	115649	81620	30112	118277	117869	154127
33	Aug.13	39016	25699	30244	0	93879	90136	0	213906	62877	20219	180169	96285	137880
34	Aug.20	8623	16375	30163	28548	35167	107920	0	138876	74328	37681	78001	52766	71245
35	Aug.27	5067	10537	14786	77291	13288	19472	0	45652	16597	88828	30758	39839	13660
36	Sep. 3	4327	4577	0	44571	1878	2423	0	5520	3777	68176	11281	9651	7163
37	Sep.10	292	1340	0	5785	161	575	0	934	906	26956	3597	7076	2049
38	Sep.17	53	55	0	134	122	157	0	603	34	6850	659	1043	243
39	Sep.24	0	17	0	6	0	0	0	0	0	0	183	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct.15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct.22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct.29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	269749	166637	123753	210061	769841	531879	72687	675466	426918	347252	772342	710189	649685

Table 66.

Southeast Alaska Salmon Fisheries
Commercial Chum Salmon Harvest
Drift Gillnet
Tree Point
Weekly Catch

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
18	Apr. 30	0	0	0	0	0	0	0	0	0	0	0	0	0
19	May 7	0	0	0	0	0	0	0	0	0	0	0	0	0
20	May 14	0	0	0	0	0	0	0	0	0	0	0	0	0
21	May 21	0	0	0	0	0	0	0	0	0	0	0	0	0
22	May 28	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Jun. 4	0	0	0	0	0	0	0	156	0	0	0	0	0
24	Jun. 11	0	0	0	0	0	0	0	395	0	0	0	0	0
25	Jun. 18	6465	3206	1997	0	0	15765	8305	3369	1446	0	0	9507	4923
26	Jun. 25	10280	4938	3330	3459	13017	28040	8459	12141	3771	3398	12624	15308	15835
27	Jul. 2	15298	6097	3227	3121	17063	15580	16021	14814	5958	3075	16238	20374	11242
28	Jul. 9	16133	0	2305	2917	12967	12932	13169	31077	6191	3816	7165	26092	6894
29	Jul. 16	14994	7340	4043	6580	12794	5542	5646	28618	2197	7962	11928	39407	19440
30	Jul. 23	10452	7143	0	8689	3843	13680	4587	9647	1773	13806	17369	29540	47020
31	Jul. 30	5925	3884	0	0	4216	5237	2570	3443	1142	7155	8769	17085	19762
32	Aug. 6	10635	9178	2633	111	2625	8123	1807	14876	4077	10659	13747	14134	17976
33	Aug. 13	7075	8220	2073	0	4415	4223	0	11992	2498	6142	7634	11908	22665
34	Aug. 20	2455	13356	4889	1818	3622	3103	0	17015	4321	5992	9967	9631	15952
35	Aug. 27	4116	10394	5844	4593	4053	1557	0	5350	2757	9057	9397	12532	9496
36	Sep. 3	4718	4165	0	4470	4124	1144	0	1311	1122	7251	7150	5376	15961
37	Sep. 10	1299	3264	0	430	1304	675	0	222	994	5006	9982	7329	5137
38	Sep. 17	152	255	0	52	278	1130	0	692	90	1240	5359	9484	5942
39	Sep. 24	0	330	0	22	0	0	0	0	0	0	2384	0	0
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct. 15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct. 22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct. 29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	109997	81770	30341	36262	84321	116731	60564	155118	38337	84559	139713	227707	218245

Table 67.

Southeast Alaska Salmon Fisheries
Commercial Chinook Salmon Harvest
Drift Gillnet
Weekly Catch
District 106

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
18	Apr.30	0	0	0	0	0	0	0	0	0	0	0	0	0
19	May 7	0	0	0	0	0	0	0	0	0	0	0	0	0
20	May 14	0	0	0	0	0	0	0	0	0	0	0	0	0
21	May 21	0	0	0	0	0	0	0	0	0	0	0	0	0
22	May 28	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Jun. 4	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun.11	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun.18	810	269	242	0	0	36	323	92	62	74	0	42	142
26	Jun.25	339	263	282	129	129	180	63	132	57	409	25	43	268
27	Jul. 2	112	223	214	0	64	7	61	59	80	423	126	125	110
28	Jul. 9	35	401	116	70	62	43	205	47	105	416	99	44	306
29	Jul.16	166	0	134	43	37	42	153	98	261	81	14	180	[illegible]
30	Jul.23	76	30	0	35	0	1049	258	41	369	24	44	148	31
31	Jul.30	99	175	0	0	0	16	283	63	154	57	25	104	152
32	Aug. 6	103	299	7	0	98	17	721	0	39	0	3	69	34
33	Aug.13	101	95	253	0	276	832	571	8	357	0	49	52	11
34	Aug.20	90	129	467	0	1	291	68	9	81	19	12	45	18
35	Aug.27	0	33	872	48	0	62	8	23	0	43	25	9	53
36	Sep. 3	0	89	0	22	0	70	6	8	0	55	22	7	22
37	Sep.10	0	17	0	14	2	18	0	0	0	50	19	25	3
38	Sep.17	0	2	0	20	2	18	0	0	0	20	18	0	3
39	Sep.24	0	13	0	3	0	1	0	0	0	0	4	0	4
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	82	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct.15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct.22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct.29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	1931	2038	2587	384	671	2682	2720	580	1565	1671	567	893	1689

* Blind Slough is not included in 1985 numbers

Table 68.

Southeast Alaska Salmon Fisheries
Commercial Sockeye Salmon Harvest
Drift Gillnet
Weekly Catch
District 106

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
18	Apr.30	0	0	0	0	0	0	0	0	0	0	0	0	0
19	May 7	0	0	0	0	0	0	0	0	0	0	0	0	0
20	May 14	0	0	0	0	0	0	0	0	0	0	0	0	0
21	May 21	0	0	0	0	0	0	0	0	0	0	0	0	0
22	May 28	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Jun. 4	24	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun.11	53	0	0	0	0	0	0	0	0	0	0	0	0
25	Jun.18	8813	5603	6477	0	0	1124	5702	4355	4162	7768	0	1685	12203
26	Jun.25	7202	8616	3729	6283	20945	1660	3311	7706	9917	37271	5353	3693	10054
27	Jul. 2	5987	10593	6875	0	18806	5319	8738	10562	28201	45766	7061	7709	28388
28	Jul. 9	8262	9085	4753	1567	11174	9672	8792	20701	25164	38003	6082	10716	37601
29	Jul.16	18213	0	5174	2299	3316	5491	11555	30210	49511	17110	4257	19176	44158
30	Jul.23	8696	4963	0	4349	0	3981	11615	21200	32702	34444	12393	22388	47226
31	Jul.30	7919	8445	0	0	0	6494	5254	12286	16343	12218	7962	15443	50450
32	Aug. 6	4377	5068	1670	0	6927	3155	6154	0	8829	0	1405	5770	13459
33	Aug.13	1847	2833	1840	0	5737	3737	3941	268	6633	0	2529	3012	12728
34	Aug.20	602	1490	837	0	22	531	1237	92	1366	221	986	1853	6162
35	Aug.27	0	347	696	777	2	111	60	36	57	408	613	161	2579
36	Sep. 3	0	96	0	185	58	55	14	2	20	141	237	105	264
37	Sep.10	0	17	0	16	36	134	0	0	0	18	48	160	42
38	Sep.17	0	4	0	4	0	110	0	0	0	8	15	3	6
39	Sep.24	0	2	0	1	0	0	0	0	0	0	0	0	3
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	1	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct.15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct.22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct.29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	71995	57242	32051	15481	67023	41574	66373	107418	182905	193376	48942	91874	265323

* Blind Slough numbers is not included in the 1985 numbers

Table 69.

Southeast Alaska Salmon Fisheries
Commerical Coho Salmon Harvest
Drift Gillnet
Weekly Catch
District 106

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
18	Apr.30	0	0	0	0	0	0	0	0	0	0	0	0	0
19	May 7	0	0	0	0	0	0	0	0	0	0	0	0	0
20	May 14	0	0	0	0	0	0	0	0	0	0	0	0	0
21	May 21	0	0	0	0	0	0	0	0	0	0	0	0	0
22	May 28	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Jun. 4	38	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun.11	9	0	0	0	0	0	0	0	0	0	0	109	0
25	Jun.18	421	471	462	0	0	83	89	97	69	105	0	142	382
26	Jun.25	958	1113	523	530	56	249	67	394	53	1081	624	416	867
27	Jul. 2	707	2517	1249	0	178	309	282	339	482	2363	1339	723	2020
28	Jul. 9	1025	2220	1004	251	254	1332	704	1083	414	2481	2082	843	568
29	Jul.16	2637	0	1746	349	82	1650	1799	2340	1844	2042	1158	2126	71
30	Jul.23	2328	921	0	866	0	2768	2247	3054	3893	3436	4860	2779	7515
31	Jul.30	4418	3108	0	0	0	5125	2090	3276	4054	1878	3842	3580	8185
32	Aug. 6	9330	4187	1787	0	1789	3235	4032	0	2380	0	1524	2508	5139
33	Aug.13	10554	4391	4046	0	4560	12497	7851	641	5813	0	3708	4402	8031
34	Aug.20	6022	8427	7519	0	10	7707	6438	2009	1775	1128	7716	10450	8912
35	Aug.27	0	8464	12626	5782	205	10813	1698	2690	822	10746	8941	7167	20417
36	Sep. 3	0	6693	0	7248	417	6857	786	637	1012	11151	10109	7306	9255
37	Sep.10	0	2022	0	2908	503	2006	0	20	0	4936	8645	4807	4690
38	Sep.17	0	593	0	992	313	862	592	0	0	2980	5127	555	1592
39	Sep.24	0	567	0	181	34	85	2476	0	0	492	1529	0	1220
40	Oct. 1	0	20	0	0	0	0	303	0	0	432	1226	0	0
41	Oct. 8	0	0	0	19	0	0	0	0	0	0	0	0	0
42	Oct.15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct.22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct.29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	38447	45714	30962	19126	8401	55378	31454	16580	22611	45251	62430	47913	91074

* Blind Slough is not included in the 1985 numbers

Table 70.

Southeast Alaska Commerical Fisheries
Commerical Pink Salmon Harvest
Drift Gillnet
Weekly Catch
District 106

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
18	Apr.30	0	0	0	0	0	0	0	0	0	0	0	0	0
19	May 7	0	0	0	0	0	0	0	0	0	0	0	0	0
20	May 14	0	0	0	0	0	0	0	0	0	0	0	0	0
21	May 21	0	0	0	0	0	0	0	0	0	0	0	0	0
22	May 28	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Jun. 4	420	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun.11	103	0	0	0	0	0	0	0	0	0	0	165	0
25	Jun.18	523	530	447	0	0	79	5382	135	76	95	0	391	107
26	Jun.25	1302	2576	1782	1392	8410	227	6064	649	512	647	9232	2884	639
27	Jul. 2	4692	6176	7583	0	22381	1792	22968	1111	5032	1556	6646	7131	7221
28	Jul. 9	11357	7302	5756	507	26994	7223	27299	4471	5924	1687	6238	9039	42015
29	Jul.16	40331	0	6386	2126	11670	8202	79662	6588	58556	3688	3847	20213	62253
30	Jul.23	34635	3836	0	3859	0	6568	123492	10677	79131	4216	27314	26302	78347
31	Jul.30	65979	14741	0	0	0	21965	57895	19336	69233	3128	23361	52226	142432
32	Aug. 6	78958	18735	25091	0	143136	24652	140910	0	73117	0	4230	52654	47714
33	Aug.13	49353	18412	60655	0	204401	105289	144412	1860	122596	0	44102	62373	85502
34	Aug.20	15968	16271	50311	0	850	37921	39674	477	20548	1068	36381	96541	57667
35	Aug.27	0	10973	45004	97731	119	3770	276	244	90	4442	28087	5406	52309
36	Sep. 3	0	3646	0	29371	137	1390	178	12	453	3458	15945	2364	8140
37	Sep.10	0	943	0	3971	994	2569	0	0	0	971	1753	846	583
38	Sep.17	0	68	0	472	15	3068	0	0	0	1042	884	0	2
39	Sep.24	0	128	0	10	0	0	0	0	0	0	131	0	15
40	Oct. 1	0	0	0	0	0	0	0	0	0	0	16	0	0
41	Oct. 8	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Oct.15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct.22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct.29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	303621	104337	203015	139439	419107	224715	648212	45560	435268	25998	208167	338535	584946

* Blind Slough is not included in 1985 numbers

Table 71.

Southeast Alaska Salmon Fisheries
Commerical Chum Salmon Harvest
Drift Gillnet
Weekly Catch
District 106

Stat Week	Average Midweek Date	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
18	Apr. 30	0	0	0	0	0	0	0	0	0	0	0	0	0
19	May 7	0	0	0	0	0	0	0	0	0	0	0	0	0
20	May 14	0	0	0	0	0	0	0	0	0	0	0	0	0
21	May 21	0	0	0	0	0	0	0	0	0	0	0	0	0
22	May 28	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Jun. 4	175	0	0	0	0	0	0	0	0	0	0	0	0
24	Jun. 11	17	0	0	0	0	0	0	0	0	0	0	141	0
25	Jun. 18	2902	3094	1492	0	0	41	1284	168	360	187	0	411	836
26	Jun. 25	1716	3944	740	351	801	73	959	324	845	732	886	1128	640
27	Jul. 2	2387	5655	2399	0	1633	447	882	485	2372	915	1455	2274	3682
28	Jul. 9	3053	4620	1100	177	2202	2034	2205	1662	4384	814	1115	3141	7799
29	Jul. 16	9505	0	2265	376	723	1607	7791	5588	5031	1644	834	14412	5793
30	Jul. 23	9481	5740	0	1077	0	837	5679	6683	8862	6039	3887	8354	9558
31	Jul. 30	18363	6492	0	0	0	2267	3541	9517	3511	2917	1796	9184	7042
32	Aug. 6	18919	5622	3346	0	4219	1942	3807	0	4295	0	1155	5854	5717
33	Aug. 13	13669	3967	4338	0	3524	3037	6744	492	3631	0	1798	4757	4293
34	Aug. 20	7542	2939	4096	0	8	1913	2158	623	859	622	2375	7937	3873
35	Aug. 27	0	3639	4192	2769	22	1243	390	566	175	2261	1375	3872	10396
36	Sep. 3	0	2121	0	1612	36	647	67	149	246	1802	1196	4559	4697
37	Sep. 10	0	1127	0	327	84	270	0	12	0	432	737	4370	3392
38	Sep. 17	0	416	0	149	46	147	0	0	0	479	855	462	1160
39	Sep. 24	0	887	0	25	2	40	0	0	0	0	337	0	760
40	Oct. 1	0	40	0	0	0	0	0	0	0	0	343	0	0
41	Oct. 8	0	0	0	5	0	0	0	0	0	0	0	0	0
42	Oct. 15	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Oct. 22	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Oct. 29	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Nov. 5	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	87729	50303	23968	6868	13300	16545	35507	26269	34571	18944	20144	70856	69538

* Blind Slough is not included in the 1985 numbers