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ALASKA DEPARTMENT OF FISH AND GAME
DIVISION OF COMMERCIAL FISHERIES

UPPER COOK INLET
ANNUAL MANAGEMENT REPORT
1987



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INTRODUCTION

The Upper Cook Inlet management area consists of that portion of Cook Inlet north of the latitude of Anchor Point and is divided into the Central and Northern Districts (Figure 1). The Central District is approximately 75 mi long, averages 32 mi in width, and is further subdivided into six subdistricts. The Northern District is 50 mi long, averages 20 mi in width and is divided into two subdistricts. At present, all five species of Pacific salmon (*Oncorhynchus* sp.), razor clams (*Siliqua patula*), and Pacific herring (*Clupea harengus pallasii*) are subject to commercial harvest in Upper Cook Inlet. Harvest statistics are gathered and reported by six-digit numerical statistical areas and sub-areas (Figure 2).

Salmon

Since the inception of a commercial fishery in 1882, many gear types, including fish traps, gill nets, and seines have been employed with varying degrees of success to harvest salmon in Upper Cook Inlet. Currently, set (fixed) gill nets are the only gear permitted in the Northern District, while both set and drift gill nets are used in the Central District. The use of seine gear is restricted to the Chinitna Bay Subdistrict where they are employed only sporadically. Drift gill nets have accounted for 60% of the average annual salmon harvest since 1966 with set gill nets harvesting virtually all of the remainder (Appendix Tables 1-6).

Commercial salmon harvest statistics specific to gear type and area are available only back to 1954 (Appendix Table 7). Run-timing and migration routes utilized by all species overlap to such a degree that the commercial fishery is largely mixed-stock and mixed-species in nature. Typically, the Upper Cook Inlet harvest represents approximately 5% of the statewide catch.

In terms of their economic value, sockeye salmon (*O. nerka*) are by far the most important component of the catch followed in order by chum (*O. keta*), coho (*O. kisutch*), pink (*O. gorbuscha*) and chinook salmon (*O. tshawytscha*) (Appendix Table 8, Figure 3).

Herring

Commercial herring fishing began in Upper Cook Inlet in 1973 with a modest harvest of bait-quality fish along the east side of the Central District and has expanded in recent years to include small-scale sac roe fisheries in Chinitna and Tuxedni Bays (Appendix Table 9). The total herring harvest has averaged less than 400 tons having an exvessel value below \$200,000, one of the smallest herring fisheries in the state.

Because the glacial waters of Upper Cook Inlet preclude the use of aerial surveys to estimate biomass of herring stocks, the

management approach utilized has necessarily departed from the standard techniques of the more traditional herring fisheries. Present management policy allows for modest increases in harvest levels on a yearly basis, monitoring catches for shifts in age composition, and establishing harvest levels that appear to be sustainable. Gill nets are the only legal gear for herring in Upper Cook Inlet with set gill nets being used almost exclusively. Harvests are generally concentrated in the Clam Gulch area (bait herring) and in the Snug Harbor and Magnetic Island areas of Tuxedni Bay and near Clam Cove and Camp Point in Chinitna Bay (roe herring).

Razor Clams

The commercial harvest of razor clams from Upper Cook Inlet beaches dates back to 1919. Harvest levels have fluctuated from no fishery for as many as eight consecutive years to production in excess of half a million pounds (live weight) in 1922 (Appendix Table 10). The sporadic nature of the fishery has been a function of limited market opportunities rather than limited availability of the resource.

Razor clams are present in many areas of Cook Inlet with particularly dense concentrations occurring near Polly Creek on the western shore and from Clam Gulch to Ninilchik on the eastern shore. The eastern shoreline has been set aside for sport harvest only since 1959 and all commercial harvests since that time have come from the west shore, principally from the Polly Creek area. A large portion of the Polly Creek beach is approved for the harvest of clams for the human food market. Bait clams may be taken only outside of this approved area. No size restrictions or overall harvest limits are in place for any area. Virtually all of the commercial harvest has come by hand-digging. Current regulations allow the use of mechanical harvesters (dredges) south of Spring Point or within a one mile section of the Polly Creek beach. Numerous attempts to develop feasible dredging operations have been largely unsuccessful due to excessive breakage or limited resources in the area open to this gear.

1987 COMMERCIAL SALMON FISHERY

The commercial harvest of 10.5 million salmon in 1987 easily bettered the previous record harvest of 7.9 million set in 1986. The record catch was comprised of an extraordinarily strong sockeye salmon harvest, a robust catch of coho salmon, a good catch of chinook salmon and relatively poor catches of pink and chum salmon. Due primarily to high prices for sockeye salmon, the exvessel value of the salmon harvest was estimated at \$101 million, more than double the previous record high of \$45 million set in 1986 and representing more than 20 % of the statewide salmon harvest value. The Commercial Fisheries Entry Commission

issued 586 drift gill net permits (72% Alaska residents) and 743 set gill net permits (90% Alaska residents), both numbers down slightly from the previous year (Appendix Table 11). Based on fish tickets received, 586 drift and 625 set net permit holders actually made landings.

A number of regulatory changes affecting the Upper Cook Inlet commercial salmon fishery were enacted by the Alaska Board of Fisheries at a meeting held in Anchorage in December of 1986. The changes included: 1) The Kalgin Island Subdistrict, formerly described as those waters around the island encompassed by the mean lower low water line, was extended offshore an additional mile. This change would preclude Kalgin Island setnetters from moving offshore to fish during openings of contiguous subdistricts. 2) The "closed waters" area at the mouth of the Kenai River was expanded to include all waters within a line running from the regulatory marker north of the river to the Coast Guard navigational buoy IKE to the regulatory marker south of the river. 3) The area open to set gillnetting on the mainland at the entrance to Tuxedni Channel was extended one mile further south. 4) A minor wording change was made in the Upper Cook Inlet Salmon Management Plan (5AAC 21.363) to clarify the Board's intent in setting priorities for competing uses. 5) gill net web was permitted to be constructed of less than 30 filaments so long as it contained a minimum of six filaments, each having a diameter of at least 0.2 millimeters. An effective date of 1 January, 1988 was placed on this regulatory adjustment. 6) a quota on the number of chinook salmon that could be harvested in the Upper Subdistrict set gill net fishery was adopted but was struck down in Superior Court prior to the beginning of the fishing season. Had the regulation remained in place, the set net fishery in that portion of the Upper Subdistrict south of Rig Tenders Dock on Salamatof Beach would have closed if the catch of chinook salmon greater than 28 inches in length exceeded 7,000 at any time prior to 25 July. The season would reopen on 25 July regardless of harvest levels. Challenged in Kenai Superior Court by the Kenai Peninsula Fishermen's Cooperative, this regulation was found by Judge Charles Cranston to have been adopted without due consideration or creation of allocative criteria required by legislation passed the previous year and was therefore invalid.

An analysis of return-per-spawner data gathered over a twenty year period strongly indicated that the escapement goal for sockeye salmon in the Kenai River, a range of 350,000 to 500,000, was below the level that would insure optimum returns (Tarbox and Waltemyer, 1986). As a result of this analysis, the goal was changed to a range of 400,000 to 700,000 beginning with the 1987 season.

Falling world oil prices severely reduced the State of Alaska royalty income from oil produced on the North Slope and forced substantial cuts in operating budgets throughout state government. Changes affecting the commercial fishery included a

substantial reduction in the scope of the sockeye salmon stock identification program, severely reduced catch sampling of other salmon species and curtailed aerial documentation of fishing effort and location.

Emergency Order announcements and the Commercial Fishing Report (a brief summary of catch and escapement prepared three times each week) were distributed to radio stations in the Kenai-Soldotna area (KSRM, KCSY, KKEN) and Homer (KGTL, KPEN, KBBI). Several telephone-answering machines provided fishermen with 24-hour access to the latest fishing period and escapement information.

Prior to each season, the staff issues a combination of forecasts and projections of expected salmon returns and harvest levels to assist both processors and fishermen in planning for the year. the sockeye salmon return was forecast to be 4.8 million out of a total return of 5.8 million (Table 1). The harvest projections for the other species ranged from average to slightly above average.

The Glacier Bay Oil Spill

While 1987 will undoubtedly be remembered primarily for the record-shattering catch of sockeye salmon, providing a strong challenge will be the memory of the crude oil spill from the tanker, *Glacier Bay*. The following account is not intended to serve as the Department's analysis of events but rather represents one observer's perceptions of the spill. The direct effect of the oil spill on management of the commercial fishery is discussed in the "Sockeye Salmon" section of this report.

Loaded with more than 300,000 barrels of North Slope crude destined for the Tesoro refinery at Nikiski, the *Glacier Bay* was moving to an anchorage approximately five miles southwest of the mouth of the Kenai River in the early morning hours of 2 July when it struck a rock and ruptured the hull, resulting in a 3,000 barrel spill. With the seaworthiness of the vessel in doubt, it was permitted to proceed to Nikiski to offload. Containment boom deployment at the refinery dock proved impossible due to tidal currents and a small spill during offloading at about 5:00 A.M. 3 July fouled Salamatof Beach from Nikiski to Arness Dock. The main portion of the spill formed several large black slicks that drifted with the tides, generally moving up into the forelands at high slack and retreating to the east of Kalgin Island at low water.

The spilled oil appeared to depart from predicted behavior in two principle ways. It persisted within the confines of Upper Cook Inlet for over two weeks, contrary to pre-spill assumptions that any non-dispersed spill would exit the inlet in several days. It also exhibited an unexpected affinity for the tidal rips, generally remaining offshore except in a few instances and

actually consolidating within the rips with time. Weathering was very slow to occur, with emulsification becoming significant only after many days of exposure. Numerous pancake-sized emulsified blotches were observed in the rips or found washed ashore. Clean-up efforts using skimmers was largely ineffective due to the viscosity of weathered crude and the presence of large quantities of naturally-occurring debris in the rips. One week into the spill, the most effective cleaning tool proved to be vessel-mounted front-end loaders using holed buckets. The spill gradually migrated southward but apparently removed itself from concern primarily through loss of buoyancy after all volatile fractions had dissipated. The spill ceased to be factor in fisheries management after two weeks.

Sockeye Salmon

The 1987 sockeye salmon return to Upper Cook Inlet shattered all previous records with an accountable total run approaching 12 million and a commercial harvest of 9.5 million, nearly double the previous record catch of 5 million set in 1983 and representing 27% of the statewide sockeye salmon harvest. Combined with an excellent price averaging \$1.50 per pound, the sockeye salmon catch was valued at \$96.4 million or 95% of the total exvessel value of the salmon harvest.

Management of the Upper Cook Inlet sockeye salmon fishery integrates information received from a variety of programs which together provide an in-season model of the actual return. These programs include offshore test fishing, stock identification, in-district test fishing, escapement enumeration by sonar and comparative analysis of historic commercial harvest and effort levels.

The offshore test fishing program employs a chartered gill net vessel fishing in a standardized manner along a transect crossing Cook Inlet from Anchor Point to the Red River delta. The purpose is to provide an in-season estimation of sockeye salmon run-strength by determining fish passage rates (computed by correlating the vessel's daily catch with subsequent commercial harvests and escapement) and fitting these rates to the appropriate run-timing profile. In 1987, the charter was awarded to the F/V *Corrina Kay*.

Use of scale pattern analysis to apportion commercial sockeye salmon catches to river-of-origin was first employed in Upper Cook Inlet in 1977 and has since become an integral part of the salmon management regime. Although this program is most effective in the post-season allocation of total return by river system, in-season use is possible subject to several limitations. Due to the sharp and late entry pattern of sockeye salmon entering the Susitna River, adequate escapement samples (i.e. scales from fish of known origin) used in constructing a stock separation model are frequently unavailable. This occurred again

in 1987 with insufficient Susitna River escapement samples available during a portion of the critical management period in mid-July. However, using the hypothesis that growth characteristics within a river system are to a certain extent consistent within a brood year, a model was devised based on four-year-old fish that returned the previous year (1986). This model was then utilized to apportion in-season catches. Shortly after mid-July, it was possible to construct a model using current-year samples (Table 2).

An in-district test fishing program utilizes six to eight commercial drift gill net vessels to locate concentrations of sockeye salmon within the Central District during the interval separating commercial fishing periods. Because sockeye salmon migrate through the district in a fairly predictable pattern, knowledge of the locations of large concentrations of fish is useful in assessing the progress of the fish toward their home rivers. Because this effort represents a fairly small sampling power, no estimates of abundance are generated. A variation of this program was utilized on 12 July with ten vessels employed to determine not only fish distribution but also the location of crude oil concentrations. Considering this somewhat unorthodox assignment, the program provided some very useful information and indicated the basic strategy to be employed in successfully keeping fish, fishermen and oil separated.

Use of hydroacoustic devices to quantify salmon escapement into glacial rivers was first employed in Upper Cook Inlet in the Kenai and Kasilof Rivers in 1968 and expanded to the Susitna River in 1978 and the Crescent River in 1979. Operations followed standard procedures in all systems except the Susitna River in 1987 with no significant problems observed (Table 3). For the second year, the Susitna River escapement was monitored by sonar in the Yentna River only due to budgetary restrictions and past problems with obtaining satisfactory estimates within the mainstem of the Susitna. An escapement goal of 100,000 to 150,000 sockeye salmon has been established for the Yentna based on the historical proportion of the total Susitna escapement utilizing this tributary (King and Tarbox, 1987).

Upper Cook Inlet commercial catch statistics refined to gear type, area and date are available back to 1966. Recent computerization of these statistics make them extremely valuable for use in evaluating in-season fishery performance. The 1987 commercial catch by gear type and area can be found in Table 4 while catches by period and area are contained in Tables 5 through 13. A summary of emergency orders can be found in Table 14 and a summary of fishing periods by gear type and area in Table 15. Effort levels and trends are confirmed in-season by aerial survey (Table 16).

Sockeye salmon returning to the Crescent River on the west side of Cook Inlet are harvested primarily by the set net fishery in

the surrounding Western Subdistrict. Management strategy for this stock is based on altering Western Subdistrict set net fishing time in response to the progression of daily escapement counts. Using run-timing data garnered from past years, the average cumulative percent of the escapement is applied to each days count and a projected total escapement calculated. A projection in excess of the escapement goal (50,000-100,000) prompts additional fishing time while a projection short of the goal leads to reduced time. The projection is tempered by a subjective estimate of timing variation in the current year and has been highly successful in providing management direction. By 20 July, the escapement total was projected to meet or exceed the upper end of the desired escapement range and an additional 48 hours of fishing time was permitted followed by an extension through the regular period on 24 July. By this date, it was apparent the goal would be exceeded and fishing was permitted on a continuous basis through 5 August when sockeye salmon catches declined substantially and chum and coho salmon began to dominate the harvest. The Western Subdistrict sockeye salmon catch of 101,552 was one of the better harvests on record and the escapement in the Crescent River of 119,000 was reasonably close to the goal.

Current season opening regulations contain provisions for opening segments of the Upper Cook Inlet fishery prior to "normal" dates if specified sockeye salmon escapement levels are attained. When the Kasilof River escapement reached 50,000 on 23 June, it triggered a drift gill net opening on Wednesday, 24 June, two days earlier than the normally scheduled opening period on 26 June and a set gill net opening on 26 June for that portion of the Upper Subdistrict south of a regulatory marker located 4 1/2 miles north of the Kasilof River (the Blanchard Line). This area of the set net fishery was not scheduled to open until 3 July. Early season catches throughout Upper Cook Inlet were typically light and no further adjustments of fishing time occurred through the first week of July. The oil spill on 2 July resulted in advisories to fishermen as to the location of the oil and expected trajectories but no actual closures of areas until 10 July. For that fishing period, drifting was restricted to that portion of the Central District south of the latitude of Redoubt Point (roughly the southern one-third of the district) and set gillnetting was closed along the north face of Kalgin Island. These closures were imposed to lessen the likelihood of contaminated catches while still allowing a viable fishery in the area of greatest fish concentration. The success of the strategy was apparent after the 10 July drift period produced a catch of nearly 600,000 sockeye salmon, one of the largest catches in the history of the fishery. After the Department of Environmental Conservation downgraded the threat of oil impacting the north face of Kalgin Island, the set net fishing time lost in that area on 10 July was restored on 11 July.

Because the general area of sockeye salmon concentrations in the offshore areas typically moves northward as July progresses, and sightings of oil slicks were moving steadily southward, the fishing period scheduled for 13 July was considered critical in determining if an orderly harvest could continue while oil persisted. Before implementing any restrictions for that fishing period, a group of ten drift vessels were contracted to test fish on 12 July. Five of these boats were directed to fish the tidal rip areas along the length of Kalgin Island and the remaining five fished from the southern end of Kalgin to the Kalgin bar buoy (approximately at the latitude of Ninilchik). The purpose was to determine both the locations of fish and oil concentrations and the feasibility of catching fish near oil-contaminated waters without fouling either gear or catch. The results showed that fish could be cleanly harvested from the areas where oil was visible since the oil was tightly trapped within the rips while the fish were found primarily along the outer edges. The test fishing also revealed that relatively few fish could be found above the southern end of the island while very little oil was encountered below it. With these results in hand, it was decided that the most prudent course of action was to restrict drift fishing on 13 July to that area south of the southern tip of Kalgin Island. The resulting fishing period produced very few incidents of fouled catches or gear but catches declined substantially from the previous period. A review of offshore test fishing daily indices strongly indicates that the reduced catch resulted primarily from a slackening of fish entry into the district, not from movement of fish into restricted waters.

On 13 July, sockeye salmon abundance increased markedly along the lower Upper Subdistrict beaches, presumably primarily fish bound for the Kasilof River, and in response, the set net fishery south of the Blanchard line was extended through the evening of 14 July and a drift period limited to within three miles of this stretch of beach was announced for 14 July. During the late night hours of 13 July, however, crude oil moved onto the beach in the area of Clam Gulch and was fouling gear as far north as Kalifonsky Beach. Several buyers contacted the Department, informing the staff that they were suspending buying due to the presence of oily fish in the catch. At 1:00 A.M. 14 July, a decision was reached to close the set net fishery effective at 7:00 A.M. but advising set netters to remove their gear from the water as soon as possible and also closing the drift opening scheduled to begin at 7:00 A.M.

By late in the evening of 14 July, the oil had moved offshore slightly and increased fish activity was again reported along the lower beaches. The set nets south of the Blanchard Line were opened at 1:00 A.M. 15 July but no corresponding drift period was scheduled due to the continued presence of oil just offshore of the set nets. With strong catches occurring, the set net fishery was extended through the regular period on 17 July. Throughout

this time period, oil continued to occasionally foul gear at the outside perimeter of the fishery.

The regular fishing period scheduled for 17 July was allowed to proceed without restriction as oil sightings had decreased in frequency while spreading geographically. It did not appear that any further attempts to work around the oil were feasible as fish were moving steadily northward and the risk of a heavily contaminated catch seemed slight. Fishermen were warned that the risk of oil contamination still remained highest in the northern portion of the Central District but no areas were closed to fishing. The drift catch of 700,000 sockeye salmon during this period was the highest single-period harvest ever recorded and few cases of encounters with oil were reported. From this point on, oil ceased to be a factor in scheduling fishing periods.

Sightings of large numbers of fish along the lower east side beaches and the status of the Kasilof River sockeye salmon escapement (151,000 through the 17th) prompted an opening of the set nets south of the Blanchard Line at 5:00 P.M. 18 July and an opening of drifting along the same stretch of beach within three miles of shore on 19 July. The 441 boats making landings from this period averaged 730 sockeye salmon per vessel, an extraordinary catch in light of the limited area open to fishing. Set net catches were similarly heavy but both gear types appeared to be harvesting large numbers of Kenai River-bound sockeye salmon. Since no appreciable escapement had yet occurred in that river, no extension of either fishery was permitted past 7:00 P.M. 19 July. With very heavy catches occurring in the drift fishery and on the east side beaches during the regular period on 20 July but with the Kenai River escapement only beginning to build, the set net fishery south of the Blanchard line was extended through 21 July but only within 1/2 mile of the beach to keep the Kenai River component of the catch to a minimum.

At this point in time, total run projection by the offshore test fishing program equaled approximately 9 million sockeye salmon while the stock separation analysis of the drift catch to date suggested that the Kenai River was experiencing the strongest return although a substantial component of the run was bound for the Susitna River. Through 20 July, the total sockeye salmon harvest had reached 4.3 million, adequate escapement in the Kasilof River was assured (182,000 past the counters), escapement in the Kenai River was building rapidly (113,000 daily count for 7/20) and no appreciable escapement had as yet appeared in the Susitna River. Weak catches along the west side of the Northern District on 20 July indicated that the Susitna escapement picture was not likely to improve dramatically in the short-term.

Accordingly, the Upper Subdistrict set gill nets were opened at 4:00 P.M. 21 July and a drift period opened in the area east of a line from the East Foreland Light to Cape Ninilchik for twelve hours on 22 July, the intent being to maintain strong catches of

Kasilof and Kenai River stocks while giving a greater degree of protection to fish bound for the Susitna. Catches on the 22nd were extremely heavy with 845,000 fish taken, 510,000 in the drift fishery. Escapement into the Kenai remained heavy with counts of 150,000 on 21 July (the highest ever recorded in a 24-hour period) and 138,000 on 22 July. The east side set nets were extended in 24- or 48-hour blocks continuously through 29 July when for a brief period the area south of Clam Gulch was closed as sockeye salmon catches tapered off and coho catches were building. The full area was opened again on the afternoon of 1 August and remained open through 7 August.

The drift fishery on 22 July exhibited generally poor compliance with boundary restrictions and also a disturbingly high proportion (38%) of Susitna-bound fish using the sibling model, the only one available at the time. After a regular period on 24 July, continued concern over getting a reasonable escapement into the Susitna River resulted in the drift fleet being used sporadically inside the East Foreland-Ninilchik Line (12 hours on 25, 27, 28, and 29 July) with the remainder of the Central District remaining closed to drifting during this time. Beginning 25 July, the "closed waters" area for drift gillnetting at the mouth of the Kenai was reduced by approximately one-half in a further attempt to stem the escapement into the Kenai River and large numbers of fish ultimately were caught in the newly opened waters. To aid in conserving Kenai River coho salmon, the open waters were further restricted to north of the latitude of Clam Gulch and east of the East Foreland-Ninilchik line for a 12 hour period on 30 July and 8 hours on 1 August, with the regular period on 31 July allowed to proceed without restriction. Eight more hours of drifting were opened inside the East Foreland-Ninilchik line on 2 August, the regular period on 3 August was closed entirely to protect a very weak chum salmon return, and one last additional 12 hour period opened inside the eastern line on 4 August.

By 26 July, it became apparent that the escapement goal of 50,000 sockeye salmon established for Fish Creek would be exceeded and, in accordance with regulation, the inaugural opening of the Fish Creek terminal fishery in Knik Arm was announced for 7:00 A.M. 27 July. Closed by regulation after 29 July, the three day fishery went very smoothly with the catch of 24,000 sockeye and 2,000 coho salmon shared by the 25 permit holders participating. Most fishermen noted the sockeye salmon harvested showed a slight "blush" that lowered the value of the catch.

Final sockeye salmon escapement estimates in monitored streams indicated a mixed bag of successes and failures in achieving goals (Appendix Table 12, Figures 4-9). The Kenai River, with a goal of 400,000-700,000, finished with a count of 1,596,871. Although far in excess of the goal, it was encouraging to note that this escapement was distributed quite evenly throughout the drainage and it should prove to be very interesting to monitor

the productivity of this brood year. The Kasilof River, with a goal of 150,000-250,000, had a final escapement estimate of 249,250. The Crescent River exceeded it's goal range of 50,000-100,000 with a count of 118,897. Fish Creek surpassed it's 50,000 fish goal by a substantial margin with a final count of 91,215. The Yentna River, the leading indicator of escapement success in the Susitna River, fell well short of the 100,000-150,000 sockeye salmon goal with a final apportioned count of only 66,020.

Chum Salmon

The 1987 harvest of 349,132 chum salmon was the poorest catch since 1971 and only about half of the long-term average. The chum salmon catch was valued at \$1.1 million or 1% of the total value of the salmon fishery. Approximately 61% of the catch occurred in the drift gill net fishery, 19% in the Northern District set net fishery and 15% in the set net fishery on the west side of the Central District.

The major chum salmon stock harvested in Upper Cook Inlet originates from the Susitna River and the return overlaps to a great degree both in time and area with the return of the major sockeye salmon stocks. Management strategy is predicated on determination of relative run strength as indicated by catch-per-unit-effort (CPUE) data generated in the drift fishery. Immediately following the departure of the bulk of the sockeye salmon from the fishing grounds, drift fishing time is adjusted based on apparent run strength, harvest to date and the recent pattern of fishing permitted for the harvest of sockeye salmon.

During the latter stages of the sockeye salmon harvest in the drift fishery, it was apparent that chum salmon catches per vessel were far below average and this fact contributed to the closure of most of the Central District to drift fishing on 27 July. When no improvement in run strength was noted by early August, another drift closure was implemented on 3 August to give additional protection to the very weak return. Escapement of chum salmon in Northern District streams is not quantified to any great degree with impressions of abundance limited to an index obtained from the Yentna River sonar counters (and rated as mediocre for 1987) and observations of egg-take crews operating in the Matanuska River rating the chum salmon abundance there as "average" (Tom Mears, Cook Inlet Aquaculture Association, Soldotna, Alaska, personal communication).

The chum salmon return to Chinitna Bay streams was managed similarly to past years. In accordance with Board policy, the bay was opened for all gear types by emergency order from the beginning of the season until mid-July. Only set net gear was allowed to fish for the remainder of July and catches indicated a fair return of chum salmon was occurring. Aerial surveys were conducted in the area in early August and escapement into

Clearwater Creek reached satisfactory levels on 17 August. The bay was then opened to all gear types on each regular period for the remainder of the season. The Chinitna Bay chum salmon harvest of 26,910 was only slightly below the long-term average for the area. Approximately 86% of the 1987 harvest was taken by set gill nets, 13% by drift gill nets and the remainder by purse seines.

Coho Salmon

The 1987 harvest of 451,404 coho salmon was approximately 50% above the long term average and the seventh consecutive year of relatively high catches. Valued at \$2.4 million, the coho salmon harvest represented 2.3% of the total value of the commercial salmon fishery. Approximately 47% of the harvest was taken in the drift fishery with 21% coming from the Northern District set nets and the remainder from the Central District set net fishery.

For discussion purposes, it is useful to divide Upper Cook Inlets' diverse coho salmon stocks impacted by the commercial fishery into three broad categories. The first category contains those stocks bound for the Susitna River and other Northern District streams and migrating through the Central District principally during the last three weeks of July. The Cook Inlet Salmon Management Plan designates Susitna River coho salmon as a stock upon which the minimum degree of commercial interception should be inflicted, to the extent consistent with other goals established within the Plan. While simple in concept, this directive is much more difficult to implement in practice. The Management Plan gives a higher priority to the sustained yield commercial harvest of more abundant sockeye, chum and pink salmon stocks, many of which are bound for the same streams, during roughly the same time period and along the same pathways utilized by Susitna River coho salmon stocks. Consequently, these stocks are normally exploited at fairly significant levels in the commercial drift and Northern District set net fisheries. Since these coho salmon stocks frequently exhibit a slightly later run-timing than the principle stocks of sockeye salmon, is it occasionally possible to time fishery closures aimed principally at stock conservation of sockeye salmon to take advantage of peaks in abundance of coho salmon but such opportunities arise too rarely to greatly enhance the safe passage of coho salmon through the fishery.

Susitna River coho salmon exhibited a slightly later than normal run-timing in 1987 with a 20 July peak observed in the drift fishery followed by a sustained movement of fish through the Northern District during late July and into early August. It is likely that closures of the drift fishery on 27 July (to protect Susitna River sockeye and chum salmon) and 3 August (to protect chum salmon) had a substantial beneficial effect in reducing the overall drift harvest. Although no means currently exist by which to quantify Susitna River coho salmon escapement,

Department biologists familiar with freshwater sport fisheries within the drainage reported coho salmon abundance as ranging from fair to good.

Similar management directives and problems exist for the second coho salmon stock in this discussion - the early coho salmon return to the Kenai River. Harvested incidentally with Kenai and Kasilof River sockeye and pink salmon stocks, primarily in the Upper Subdistrict set gill net fishery, this coho salmon stock first appears in significant numbers in late July and peaks in abundance from 5-10 August. The harvest of 75,000 coho salmon in the set net fishery was well above average, partly due to a strong return (as evidenced by above-average daily catches) and also to additional fishing time directed at harvesting surplus Kenai and Kasilof River sockeye salmon. The peak daily catches of coho salmon in the set net fishery occurred on 6 and 7 August and additional fishing time directed at sockeye ceased at that point. In-river escapement, as indicated by angler success rates, was slightly below average.

The third grouping of coho salmon stocks consists of a loose collection of individual returns to streams on the west side of the Central District from Chinitna Bay to the Kustatan River. Under the management plan, this grouping is managed primarily for commercial yield although day-to-day management activities are less than rigorous. No escapement estimates are generated and fishing time in these areas is based on relative annual CPUE values during the progression of the season. All areas remained fairly close to long-term average values throughout August and fishing time was limited to the base level of two 12-hour periods weekly.

Pink Salmon

Pink salmon returns to Upper Cook Inlet during odd-numbered years are normally very weak and 1987 proved to be no exception. The harvest of 109,801 fish was approximately two-thirds of the average odd year catch. Valued at just \$84,000, the catch occurred primarily in the drift gill net fishery (42%) and the Upper Subdistrict set gill net fishery (43%). The catch resulted entirely from efforts directed at other species and similarly, no management efforts were directed toward pink salmon. No escapement goals or estimates are in place for odd-year pink salmon.

Chinook Salmon

The 1987 harvest of 39,661 chinook salmon represents the highest catch since 1957 and was valued at \$1.6 million. Taken primarily in the Upper Subdistrict set net (21,379 or 54%) and Northern District set net (12,701 or 32%) fisheries, a significant portion of the catch also occurred in the drift fishery (4,552 or 11%).

The second year of a directed chinook salmon fishery in the Northern District produced similar results to the prior year. The catch of 11,541 was spread rather uniformly over the first three periods (1, 8, and 15 June) with catches falling off sharply by the fourth period (22 June). As in 1986, catches were far better in the General Subdistrict (west side) than in the Eastern Subdistrict.

With a harvest of 21,379 chinook salmon, the Upper Subdistrict set gill net fishery posted its highest catch on record. The magnitude of the catch was the result of several factors although the relative importance of each remains unclear. All factors (commercial catch, sport harvest, tag/recapture escapement estimates and sonar escapement estimates) appear to point to an overall return of late-run Kenai River chinook salmon substantially larger than what is assumed to be average. The number of set nets employed along the Upper Subdistrict beaches continues to increase yearly in response to larger sockeye salmon returns and almost assuredly this growth has contributed to higher chinook salmon catches. The extended fishing periods opened to harvest large surpluses of Kasilof and Kenai River sockeye salmon certainly have contributed to the increase in chinook salmon harvest although catch data clearly indicate that the increased fishing time has not led to a proportional increase in catch.

The reduction in the closed waters area at the mouth of the Kenai River and the extended opportunities available to drift gillnetters to make use of this area resulted in a substantial increase in the contribution of the drift fleet to the overall chinook salmon catch. During the time period the closed waters reduction was in effect (25 July-4 August), the drift fleet harvested 3,215 chinook salmon or nearly 71% of the total caught for the season. The majority of these fish were taken in waters normally closed to commercial fishing.

Post-Season Perspective

Hopefully, it will never again be necessary to conduct the commercial salmon fishery in the midst of a major petroleum products spill but if indeed it is necessary, the following observations may prove helpful.

While efforts are being made to improve oil spill clean-up procedures and capabilities in Upper Cook Inlet, the combination of strong tidal flows, adverse weather and the presence of large amounts of organic debris make it likely that a significant percentage of any large spill will persist after all efforts are made to remove it. Deployment of containment booms proved largely ineffective even in fairly good weather and under modest tidal velocities. In observing oil movement trajectories, slicks acted in a very similar manner to surface water flow patterns well documented in a number of circulation studies conducted in

Cook Inlet (Burbank, 1977) and flow maps would have proven very accurate in predicting day-to-day oil movements. The affinity of the oil slicks for the tidal rips was directly related to this correlation with surface circulation patterns. Wind will move oil contrary to these classic patterns but movement will depend largely on wind and tidal velocity. Light winds appeared to push oil substantial distances during slack water periods or during periods of lesser tidal fluctuations.

Fish contact with crude oil, at least in modest concentrations, apparently has little detrimental effect on the health of the fish themselves but retention of even small amounts of oil destroys the marketability of harvested fish. Crude oil on fish is most easily detected by a strong petroleum odor and close visual inspection will often reveal specks of oil clinging to gill rakers, at the posterior insertion of fins and near the vent. Lightly contaminated fish are often first detected by the presence of small brownish-black smears remaining on the interior surface of plastic totes used to temporarily store the fish prior to processing.

Even light crude oil contamination of nets proved virtually impossible to clean up. Fishermen either discarded fouled gear or, if contamination was isolated and minor, cut out the affected areas of the net. It was interesting and somewhat alarming to find that many fishermen did not possess a great deal of spare gear and after relatively few nets were damaged, hung gear from local suppliers, particularly set gill nets, was impossible to find. Clean-up officials stationed vessels with steam cleaners aboard near Kalgin Island during fishing periods to clean the hulls of any boats passing through oil and no boats with oil on their hulls were permitted to enter freshwater. Despite numerous rumors and reported sightings, no freshwater incursion of crude oil was documented.

It is impossible, as of this writing, to assign a dollar value to the damages caused by the spill of the *Glacier Bay*. Many claims were processed promptly by insurance adjusters and no documentation by the Department of Fish and Game of these settlements exists. Many claims, some for very substantial amounts, remain in litigation and it will likely be several years before resolution is completed. While acknowledging that for some individuals the spill proved quite damaging, the fishing industry as a whole was exceedingly fortunate in reaping a record harvest while suffering relatively minor losses as the result of the spill.

Forecast returns of sockeye salmon for 1988 bear a striking similarity to the returns experienced in 1987, making a thorough critique of 1987 management strategy both timely and useful. The great disparity in run strength between the sockeye salmon returns to the Kenai and Susitna Rivers made accurate achievement

of escapement goals in both systems impossible, given the constraints of a mixed-stock fishery. In hindsight, however, certain adjustments in fishing patterns may have proven helpful in narrowing the gap between desired and actual escapement levels in both systems.

The continued use of the drift fleet east of the line from the East Foreland Light to Cape Ninilchik probably did not accomplish a great deal in altering the stock composition of the catch. Drift effort during these restrictions was concentrated right on the boundary line where the east rip intersected open fishing waters and harvests here were likely of similar stock composition to those which occurred throughout the Central District. The substantial illegal fishing that occurred beyond the line helped assure a significant harvest of Susitna-bound fish. Faced with a similar problem, it would probably be more satisfactory to hold drift effort closer to the eastern beaches and allow greater amounts of fishing time to counter loss of effectiveness that would occur in a smaller fishing area. Disregard for fishing boundaries has become so commonplace in the drift fishery that the availability of an enforcement vessel to constantly monitor the fishery is required for any limited opening. In 1987, this availability occasionally determined the frequency and length of limited-area drift openings.

Opening additional area at the mouth of the Kenai River proved very helpful in effecting a substantial harvest of Kenai-bound sockeye salmon and the prompt repetition of this strategy is probably sound practice. As noted earlier, this has the unfortunate side-effect of substantially increasing Kenai River chinook salmon interception and the status of this stock will play a significant role in determining if reducing closed waters is warranted. This strategy also generates a great deal of conflict between operators of set net sites near the river mouth and drifters as the set nets are often "corked off" from fish backing out of the river following each high tide. Drift nets also frequently hang up on set nets, tearing loose the anchors and allowing the set nets to flag, greatly reducing their effectiveness.

Observation of Northern District sockeye salmon catches provides a valuable indicator of abundance and greatly assists in estimating the likely range of subsequent escapement in the Susitna River. In hindsight, however, the goals of management would have been better served by the closure of this fishery at the first sign of weakness in the movement of sockeye salmon toward the Susitna. The apparent movement of Kenai-bound sockeye salmon onto the beaches of the Eastern Subdistrict on 20 July momentarily gave rise to unfounded optimism about Susitna run strength and contributed to the decision to keep this area open during regular fishing periods. If the Susitna River sockeye salmon return materializes at forecast levels in 1988, extended closure of the Northern District is indicated.

Minor System Escapement

A number of smaller systems or tributaries are monitored for escapement for a variety of purposes and this information has proven helpful in confirming general impressions of run-timing as well as tracking escapement trends in these significant streams. The Fisheries Rehabilitation, Enhancement and Development (FRED) Division of the Department of Fish and Game, as an aid in evaluating the Big Lake Hatchery sockeye salmon program, operated a counting weir on Fish Creek from 9 July to 27 August. A total of 91,215 sockeye salmon were enumerated, with the peak daily count of 11,404 occurring on 24 July and the midpoint of the escapement on 27 July. A total of 471 coho salmon passed through the weir with an additional 3,400 counted downstream of the weir at the time of removal for a total escapement estimate of 3,871 (Table 17).

The Cook Inlet Aquaculture Association (CIAA) placed a weir across Packers Creek on Kalgin Island as part of an ongoing lake fertilization evaluation of Packers Lake. With the weir in place from 25 May through 17 September, a total of 35,401 sockeye salmon were counted with the highest daily count of 2,183 occurring on 1 August and the midpoint on 4 August (Table 18).

CIAA also placed a counting weir on Larson Creek in the Susitna River watershed to assist in a Larson Lake fertilization feasibility project. With the weir in place from 22 July to 26 August, 16,753 sockeye salmon were counted with the highest daily count of 1,940 occurring on 29 July and the midpoint of the escapement occurring on 5 August (Table 19).

Prices, Average Weights and Quality

Prices paid to fishermen for their catch were generally improved over 1986 levels. Sockeye salmon sold for \$1.60 per pound during the initial half of the harvest, dropping to \$1.40 at mid-season. Chinook, coho, chum and pink salmon sold for \$1.50, \$.80, \$.45 and \$.22 per pound, respectively (Appendix Table 13).

Average weights of the various species, calculated from fish ticket data, were not notably divergent from the long-term averages. Chinook salmon averaged 28.99 pounds while sockeye, coho, pink and chum salmon averaged 6.76, 6.56, 3.50 and 7.10 pounds, respectively (Appendix Table 14).

The unprecedented and unexpected magnitude of the sockeye salmon harvest created substantial problems for processors. Following the heavy harvests on 18-20 July, nearly all processors were inundated with fish, both in an unprocessed state and frozen fish needing freezer vans. Many major firms suspended buying briefly, leaving fishermen without markets for their catch. Particularly affected were set netters along Salamatof Beach who were forced

to pull their nets or limit their catches until the backlog could be cleared. Actual suspension of buying lasted only a short time - twelve hours or less in most cases - but processors continued at full capacity for over a week. To relieve some of the pressure, many processors tendered or flew fish to facilities in Kodiak, King Salmon and even British Columbia. State seafood sanitarians noted some increase in condemned lots of fish due to spoilage but a reduction in spoilage if viewed as the percent of the total pack (Duane McIntire, Alaska Dept. Environmental Conservation, Soldotna, personal communication). A total of 32 firms purchased Upper Cook Inlet fishery products in 1987 (Table 20).

Outlook for 1988

The formal forecast of the Upper Cook Inlet sockeye salmon return for 1988 indicates a total return estimate of 6.8 million fish which, after subtracting 1.5 million for escapement, leaves 5.3 million fish for harvest. The forecast returns by river system are: Kenai River - 5.0 million, Kasilof River - 1.1 million, Susitna River - 400,000, the Crescent River - 200,000 and Fish Creek - 124,000. The record-breaking return in 1987 was largely due to a much stronger return than forecast to the Kenai River. The parent-year escapement for the 1988 Kenai return (630,000) is nearly identical to that for the 1987 return (620,000) and also exhibited a similarly well-balanced distribution of spawners throughout the drainage. If environmental conditions were similar for both year-classes, the 1988 Kenai River return may rival the 1987 return in strength.

Based solely on impressions of parent-year run strength, the expected harvest levels for chum, coho, pink and chinook salmon are 800,000, 400,000, 400,000 and 35,000, respectively. Harvest predictions for these species are based on relatively scarce data and are subject to large error. The pink salmon harvest projection is well below the even-year average, reflecting damage done to spawning areas within the Susitna River drainage by severe flooding in the fall of 1986.

COMMERCIAL HERRING FISHERY

The 1987 Upper Cook Inlet sac roe herring fishery opened on 22 April as a result of a regulatory change adopted by the Alaska Board of Fisheries in December of 1986. Mature herring were present in Tuxedni Bay upon opening with roe percentages of 12 - 14 percent observed during the first day of the fishery. Catch rates remained low and roe percentages declined rapidly. Harvest built very slowly over the next two weeks due to large numbers of immature herring. The first commercial halibut period (4-5 May) reduced effort and contributed to keeping catch rates low. Effort shifted south to Chinitna Bay on 4 May when mature herring appeared. Approximately 65 tons of sac roe herring averaging 10

- 11% were harvested by 12:00 noon, 7 May when an emergency order was issued closing Chinitna Bay. Analysis of samples taken from the catch revealed age 4 (21.2%), age 6 (30.5%), and age 7 (18.1%) fish comprised the bulk of the harvest (Table 21, Figure 9).

Following the closure of Chinitna Bay, effort shifted back to Tuxedni Bay which was still producing only marginal roe percentages. The first opening in Tuxedni Bay was closed at 6:00 p.m., 10 May by emergency order with the harvest at approximately 112 tons averaging 10% roe content. Herring samples taken during this opening indicated age 6, 7 and 8 fish comprised the majority (59.7%) of the harvest (Table 22, Figure 10). Male to female sex ratio was 0.87:1.

Tuxedni Bay was reopened to commercial herring fishing at 8:00 a.m., 20 May to allow additional harvest on the latter portion of the available herring. Approximately 40 tons of sac roe herring with roe percentage averaging between 10 - 11% were taken in four days. The age structure of the harvest was predominantly age 4 (29.4%), 6 (25.8%) and 7 (19.0%) with a relatively weak showing of age 5 (9.7%). Male to female sex ratio of 0.95:1 was observed for the second and final opening. Tuxedni Bay was closed by emergency order at 4:00 p.m., 24 May with a total harvest of 152 tons.

The bait herring fishery opened in Upper Cook Inlet on 15 April in the Eastern Subdistrict of the Northern District and the Upper Subdistrict of the Central District. Herring began to show on the southern beaches in the last week in April and peak harvest occurred during the first week in May. Catch rates generally declined during the remainder of the month showing some fluctuation with the tidal cycle. An emergency order closing the bait fishery along the east side beaches was issued effective 31 May. Total harvest reached 128 tons. Scale samples indicated the majority of the harvest (51.3%) was age 7 and 8 with a strong showing of age 4 (13.4%) (Table 23).

Ninety-one permit holders made deliveries during the two openings in Tuxedni Bay and 25 permit holders participated in the Chinitna Bay fishery. The east side bait fishery had 48 permit holders actively fishing. Sac roe herring prices reached \$1,100 dollars per ton for 10% roe content and bait herring brought \$500 per ton. Estimated exvessel value of the Upper Cook Inlet commercial herring fishery was \$300,000.

COMMERCIAL RAZOR CLAM FISHERY

The 1987 commercial razor clam fishery occurred from May through August and reached a total harvest level of 312,349 lbs. All the harvest came from 10 miles of certified beach on the west shore of Cook Inlet from Polly Creek to Crescent River. This season, the entire harvest was taken by shovel with no hydraulic or mechanical dredges operating. Approximately 95% of the harvest was sold for human consumption with only broken or damaged clams being directed into the bait market. Over 90 hand diggers from two companies participated in the harvest. Both the number of diggers and the poundage show a small increase over 1986.

SUBSISTENCE AND PERSONAL USE FISHERIES

There have been numerous regulatory changes in the subsistence category and the advent of a personal use category since the adoption of the subsistence priority law in 1977. Since further definition of subsistence uses came from the Alaska Legislature after the "Madison" case in 1985; these fisheries have stabilized in Upper Cook Inlet with set seasons, areas, allowable catches, gear restrictions and quotas. Harvest levels and participation have also stabilized in these fisheries.

Tyonek Subsistence Salmon Fishery

Monitoring of this fishery was halted after the 1985 season and harvest information was compiled by Subsistence Division from returned permits since that time. The 1987 season resulted in a total harvest of 1552 chinook, 161 sockeye, 149 coho, 10 pink and 24 chum salmon between May 15 and October 10 (Foster, 1987). Sixty-four permits were issued. Both the catch and number of permits showed a decrease from past years (Appendix Table 15).

Kasilof Personal Use Gill Net Fishery

The 1987 Kasilof River personal use gill net fishery opened on the fixed opening date of 21 June. This popular fishery, targeting on sockeye salmon, showed an increase in effort again this year with the expansion taking place in the offshore or small boat component. This season, with the opening date falling on a Sunday, both the highest catch and the highest number of nets occurred on the first day of the fishery (Table 24). Although harvest fluctuated due to weather, the effort generally declined throughout the week as participants achieved their allowable catch and left. A regulatory quota of 5 - 10,000 sockeye salmon was in effect for this fishery and after six days of fishing with the harvest at approximately 9,000, an emergency order was issued closing the fishery on Saturday, 27 June. The final harvest was estimated at 9,375 sockeye and 184 chinook salmon. Harvest estimates were generated by counting the total

number of nets fishing each day and calculating an average catch per net from interviewing participants departing the beach.

Central and Northern District Personal Use Coho Salmon Fishery

This fishery took place on the last three weekends in September from 12:00 noon, Saturday to 12:00 noon, Sunday. The open area was along the eastern shoreline of Cook Inlet from the Kasilof River northward to Point Possession. Legal gear was 10 fathom gill nets as in the other personal use fisheries. A total of 486 permits were issued between the Soldotna and Anchorage area offices. Permit holders were required to report their catches by phone following the weekend fishing period. Aerial surveys were flown each weekend to count the total number of nets. Average catch per net was calculated from the telephone reports and then expanded to estimate period catches. Total estimated harvest for the three weekends of fishing was 2,213 coho salmon (Table 25). In addition to coho salmon, negligible numbers of other species were taken. This was the first year of significant adult returns of steelhead (*Salmo gairdneri*) to the Kasilof Hatchery from a 1985 release and an estimated 38 steelhead were also taken in this fishery.

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Table 1. Commercial salmon harvest projections and subsequent harvest by species, Upper Cook Inlet, 1987.

| Species | Harvest Projection | Actual Harvest |
|---------|--------------------|----------------|
| Chinook | 30,000 | 39,661 |
| Sockeye | 4,800,000 | 9,500,186 |
| Coho | 500,000 | 451,404 |
| Pink | 150,000 | 109,801 |
| Chum | 1,000,000 | 349,132 |

Table 2. In-season sockeye salmon age 1.3 run composition estimates, Upper Cook Inlet, 1987.

| Model: | | 1986 Age 1.2 Susitna | 1986 Age 1.2 Kenai | | |
|------------|----------------|----------------------|--------------------|-----------|------|
| | | 1986 Age 1.2 Kasilof | | | |
| Fishery | Date | % Susitna | % Kenai | % Kasilof | |
| Drift | 6/24 | 0.0 | 3.7 | 96.3 | |
| | 6/26 | 12.7 | 9.4 | 77.9 | |
| | 6/29 | 7.2 | 5.3 | 87.5 | |
| | 7/03 | 17.5 | 41.5 | 41.0 | |
| | 7/06 | 6.0 | 63.5 | 30.5 | |
| | 7/10 | 12.9 | 56.6 | 30.5 | |
| | 7/13 | 35.5 | 53.1 | 11.4 | |
| | 7/17 | 30.4 | 57.5 | 20.4 | |
| | 7/19 | 24.7 | 75.3 | 0.0 | |
| | 7/20 | 20.5 | 79.5 | 0.0 | |
| | 7/22 | 37.9 | 62.1 | 0.0 | |
| | Coho/Ninilchik | 6/26 | 9.4 | 0.0 | 90.6 |
| 7/03 | | 0.0 | 5.0 | 95.0 | |
| 7/10 | | 0.0 | 5.0 | 95.0 | |
| 7/16 | | 0.0 | 70.6 | 29.4 | |
| Kalifonsky | 7/06 | 19.4 | 37.4 | 43.2 | |
| | 7/13 | 20.0 | 48.7 | 31.3 | |
| | 7/17 | 5.4 | 57.1 | 37.5 | |
| Model: | | 1987 Age 1.3 Susitna | 1987 Age 1.3 Kenai | | |
| | | 1987 Age 1.3 Kasilof | | | |
| Drift | 6/24 | 2.9 | 8.3 | 88.8 | |
| | 6/26 | 21.9 | 0.0 | 78.1 | |
| | 6/29 | 1.3 | 0.1 | 98.6 | |
| | 7/03 | 9.6 | 31.4 | 59.0 | |
| | 7/06 | 0.0 | 48.9 | 51.1 | |
| | 7/10 | 6.8 | 48.0 | 45.2 | |
| | 7/13 | 19.0 | 47.5 | 33.5 | |
| | 7/17 | 19.8 | 51.6 | 28.5 | |
| | 7/19 | 4.5 | 76.4 | 19.1 | |
| | 7/20 | 15.4 | 84.6 | 0.0 | |
| | 7/22 | 13.4 | 69.2 | 17.4 | |
| | 7/24 | 22.7 | 76.2 | 1.1 | |
| | 7/25 | 25.6 | 74.4 | 0.0 | |
| | 7/27 | 10.5 | 85.9 | 3.6 | |
| | 7/31 | 9.5 | 89.5 | 1.0 | |

Data Source: Waltemyer, pers. comm.

Table 3. Daily and cumulative sockeye salmon escapement for selected Upper Cook Inlet streams, 1987.

| DATE | Kasilof River | | Kenai River | | Yentna River | | Crescent River | |
|---------------|---------------|------------|-------------|------------|--------------|------------|----------------|------------|
| | Daily | Cumulative | Daily | Cumulative | Daily | Cumulative | Daily | Cumulative |
| prior to 6/13 | 11,044 | 11,044 | | | | | | |
| 06/13 | 1,738 | 12,782 | | | | | | |
| 06/14 | 2,572 | 15,354 | | | | | | |
| 06/15 | 2,937 | 18,291 | | | | | | |
| 06/16 | 4,486 | 22,777 | | | | | | |
| 06/17 | 3,753 | 26,530 | | | | | | |
| 06/18 | 3,266 | 29,796 | | | | | | |
| 06/19 | 6,584 | 36,380 | | | | | | |
| 06/20 | 6,191 | 42,571 | | | | | | |
| 06/21 | 4,739 | 47,310 | | | | | | |
| 06/22 | 1,919 | 49,229 | 1,553 | 1,553 | | | | |
| 06/23 | 931 | 50,160 | 1,041 | 2,594 | | | | |
| 06/24 | 1,076 | 51,236 | 658 | 3,252 | | | | |
| 06/25 | 1,638 | 52,874 | 702 | 3,954 | | | | |
| 06/26 | 1,450 | 54,324 | 1,128 | 5,082 | | | | |
| 06/27 | 1,015 | 55,339 | 1,521 | 6,603 | | | | |
| 06/28 | 1,148 | 56,487 | 1,763 | 8,366 | | | | |
| 06/29 | 2,895 | 59,382 | 1,374 | 9,740 | | | | |
| 06/30 | 2,654 | 62,036 | 1,318 | 11,058 | | | | |
| 07/01 | 4,558 | 66,594 | 710 | 11,768 | 20 | 20 | 1,401 | 1,401 |
| 07/02 | 7,314 | 73,908 | 577 | 12,345 | 25 | 45 | 520 | 1,921 |
| 07/03 | 5,125 | 79,033 | 450 | 12,795 | 33 | 78 | 461 | 2,382 |
| 07/04 | 4,267 | 83,300 | 550 | 13,345 | 34 | 112 | 386 | 2,768 |
| 07/05 | 5,721 | 89,021 | 585 | 13,930 | 34 | 146 | 384 | 3,152 |
| 07/06 | 6,956 | 95,977 | 474 | 14,404 | 33 | 179 | 3,788 | 6,940 |
| 07/07 | 4,363 | 100,340 | 618 | 15,022 | 31 | 210 | 3,025 | 9,965 |
| 07/08 | 4,744 | 105,084 | 489 | 15,511 | 35 | 245 | 3,348 | 13,313 |
| 07/09 | 4,124 | 109,208 | 404 | 15,915 | 31 | 276 | 5,726 | 19,039 |
| 07/10 | 2,891 | 112,099 | 411 | 16,326 | 25 | 301 | 3,888 | 22,927 |
| 07/11 | 1,684 | 113,783 | 382 | 16,708 | 40 | 341 | 5,967 | 28,894 |
| 07/12 | 5,995 | 119,778 | 1,001 | 17,709 | 17 | 358 | 3,111 | 32,005 |
| 07/13 | 6,774 | 126,552 | 5,504 | 23,213 | 16 | 374 | 4,302 | 36,307 |
| 07/14 | 2,966 | 129,518 | 4,700 | 27,913 | 81 | 455 | 3,325 | 39,632 |
| 07/15 | 16,787 | 146,305 | 24,190 | 52,103 | 92 | 547 | 4,346 | 43,978 |
| 07/16 | 3,220 | 149,525 | 16,936 | 69,039 | 108 | 655 | 1,925 | 45,903 |
| 07/17 | 2,038 | 151,563 | 14,026 | 83,065 | 268 | 923 | 2,315 | 48,218 |
| 07/18 | 2,831 | 154,394 | 9,362 | 92,427 | 370 | 1,293 | 5,078 | 53,296 |
| 07/19 | 19,834 | 174,228 | 18,341 | 110,768 | 500 | 1,793 | 7,650 | 60,946 |
| 07/20 | 7,853 | 182,081 | 113,852 | 224,620 | 459 | 2,252 | 4,209 | 65,155 |
| 07/21 | 8,647 | 190,728 | 150,293 | 374,913 | 819 | 3,071 | 5,333 | 70,488 |
| 07/22 | 11,014 | 201,742 | 134,519 | 509,432 | 777 | 3,848 | 9,263 | 79,751 |
| 07/23 | 10,442 | 212,184 | 138,255 | 647,687 | 3,165 | 7,013 | 12,151 | 91,902 |
| 07/24 | 5,322 | 217,506 | 132,238 | 779,925 | 7,340 | 14,353 | 5,528 | 97,430 |
| 07/25 | 3,884 | 221,390 | 130,564 | 910,489 | 7,422 | 21,775 | 4,332 | 101,762 |
| 07/26 | 2,075 | 223,465 | 111,678 | 1,022,167 | 7,344 | 29,119 | 2,521 | 104,283 |
| 07/27 | 2,293 | 225,758 | 85,986 | 1,108,153 | 5,634 | 34,753 | 1,915 | 106,198 |
| 07/28 | 2,557 | 228,315 | 73,679 | 1,181,832 | 3,870 | 38,623 | 1,357 | 107,555 |
| 07/29 | 2,229 | 230,544 | 42,109 | 1,223,941 | 2,512 | 41,135 | 1,228 | 108,783 |
| 07/30 | 3,619 | 234,163 | 37,757 | 1,261,698 | 1,984 | 43,119 | 579 | 109,362 |
| 07/31 | 5,608 | 239,771 | 65,875 | 1,327,573 | 2,032 | 45,151 | 2,161 | 111,523 |
| 08/01 | 3,302 | 243,073 | 62,906 | 1,390,479 | 1,508 | 46,659 | 2,615 | 114,138 |
| 08/02 | 1,590 | 244,663 | 44,765 | 1,435,244 | 2,713 | 49,372 | 1,745 | 115,883 |
| 08/03 | 1,050 | 245,713 | 29,070 | 1,464,314 | 2,598 | 51,970 | 1,265 | 117,148 |
| 08/04 | 1,021 | 246,734 | 21,320 | 1,485,634 | 2,365 | 54,335 | 983 | 118,131 |
| 08/05 | 920 | 247,654 | 20,194 | 1,505,828 | 2,110 | 56,445 | 306 | 118,437 |
| 08/06 | 825 | 248,479 | 15,529 | 1,521,357 | 1,144 | 57,589 | 460 | 118,897 |
| 08/07 | 771 | 249,250 | 14,127 | 1,535,484 | 936 | 58,525 | 1,322 | 120,219 |
| 08/08 | | | 7,976 | 1,543,460 | 725 | 59,250 | | |
| 08/09 | | | 8,872 | 1,552,332 | 2,096 | 61,346 | | |
| 08/10 | | | 11,277 | 1,563,609 | 1,998 | 63,344 | | |
| 08/11 | | | 8,651 | 1,572,260 | 1,570 | 64,914 | | |
| 08/12 | | | 6,171 | 1,578,431 | 664 | 65,578 | | |
| 08/13 | | | 3,779 | 1,582,210 | 271 | 65,849 | | |
| 08/14 | | | 10,895 | 1,593,105 | 171 | 66,020 | | |
| 08/15 | | | 3,766 | 1,596,871 | | | | |

Source: Bruce King, ADF&G, Commercial Fisheries, Soldotna. Personal Communication.

Table 4. Commercial salmon catch by area and gear type, Upper Cook Inlet, 1987.

| Area/Gear | Chinook | Sockeye | Coho | Pink | Chum | Total |
|---------------------|---------|-----------|---------|---------|---------|------------|
| <u>DRIFT</u> | 4,552 | 5,631,746 | 202,306 | 38,660 | 211,573 | 6,088,837 |
| <u>CENTRAL SET</u> | | | | | | |
| Upper | 21,379 | 3,495,802 | 74,977 | 47,707 | 16,608 | 3,656,473 |
| Kalgin Island | 514 | 87,036 | 31,889 | 1,998 | 3,849 | 125,286 |
| Kustatan | 175 | 16,414 | 10,807 | 475 | 213 | 28,084 |
| Western | 330 | 101,552 | 27,452 | 2,269 | 26,358 | 157,961 |
| Chinitna Bay | 10 | 3,034 | 4,782 | 487 | 23,138 | 31,451 |
| Subtotal | 22,408 | 3,703,838 | 149,907 | 52,936 | 70,166 | 3,999,255 |
| <u>NORTHERN SET</u> | | | | | | |
| Eastern | 1,926 | 67,513 | 34,838 | 4,990 | 14,021 | 123,288 |
| General | 10,775 | 97,089 | 64,082 | 13,215 | 53,159 | 238,320 |
| Subtotal | 12,701 | 164,602 | 98,920 | 18,205 | 67,180 | 361,608 |
| <u>SEINE</u> | | | | | | |
| | 0 | 0 | 271 | 0 | 213 | 484 |
| GRAND TOTAL | 39,661 | 9,500,186 | 451,404 | 109,801 | 349,132 | 10,450,184 |

Table 5. Commercial salmon catch by period and species by drift gill nets in the Central District, 1987.

| Date | Landings | Chinook | Sockeye | Coho | Pink | Chum | Total |
|-------|----------|---------|-----------|---------|--------|---------|-----------|
| 624 | 208 | 38 | 14,730 | 59 | 233 | 209 | 15,269 |
| 626 | 420 | 74 | 26,236 | 99 | 506 | 453 | 27,368 |
| 629 | 467 | 117 | 50,226 | 359 | 1,199 | 1,180 | 53,081 |
| 703 | 566 | 92 | 222,788 | 2,458 | 3,476 | 5,735 | 234,549 |
| 706 | 588 | 110 | 226,150 | 3,754 | 3,117 | 6,671 | 239,802 |
| 710 | 594 | 84 | 590,299 | 21,752 | 5,015 | 10,778 | 627,928 |
| 713 | 592 | 76 | 357,325 | 17,590 | 5,874 | 10,794 | 391,659 |
| 717 | 607 | 23 | 700,916 | 37,262 | 5,854 | 21,492 | 765,547 |
| 719 | 441 | 113 | 321,848 | 7,108 | 2,131 | 3,241 | 334,441 |
| 720 | 591 | 86 | 624,295 | 30,612 | 3,221 | 21,640 | 679,854 |
| 722 | 579 | 226 | 509,520 | 15,632 | 2,732 | 14,818 | 542,928 |
| 724 | 573 | 266 | 435,792 | 20,968 | 2,079 | 38,536 | 497,641 |
| 725 | 547 | 695 | 194,690 | 3,677 | 722 | 8,097 | 207,881 |
| 727 | 568 | 548 | 307,809 | 4,165 | 767 | 6,226 | 319,515 |
| 728 | 544 | 341 | 248,434 | 3,109 | 585 | 5,093 | 257,562 |
| 729 | 531 | 358 | 285,198 | 4,860 | 303 | 4,236 | 294,955 |
| 730 | 421 | 194 | 245,755 | 3,467 | 168 | 1,908 | 251,492 |
| 731 | 541 | 520 | 182,577 | 6,716 | 293 | 12,951 | 203,057 |
| 801 | 370 | 183 | 24,820 | 805 | 38 | 808 | 26,654 |
| 802 | 189 | 194 | 21,919 | 836 | 30 | 861 | 23,840 |
| 804 | 246 | 182 | 26,480 | 2,309 | 74 | 4,554 | 33,599 |
| 807 | 257 | 18 | 9,919 | 3,494 | 121 | 14,221 | 27,773 |
| 810 | 173 | 12 | 3,497 | 1,998 | 25 | 10,525 | 16,057 |
| 814 | 13 | 0 | 99 | 712 | 4 | 1,032 | 1,847 |
| 817 | 58 | 2 | 368 | 2,482 | 70 | 2,945 | 5,867 |
| 821 | 23 | 0 | 32 | 1,714 | 15 | 743 | 2,504 |
| 824 | 17 | 0 | 14 | 1,988 | 8 | 1,468 | 3,478 |
| 828 | 7 | 0 | 9 | 863 | 0 | 259 | 1,131 |
| 831 | 8 | 0 | 1 | 1,354 | 0 | 74 | 1,429 |
| 904 | 2 | 0 | 0 | 104 | 0 | 25 | 129 |
| Total | | 4,552 | 5,631,746 | 202,306 | 38,660 | 211,573 | 6,088,837 |

Table 6. Commercial salmon catch by period and species for set gill nets in the Upper Subdistrict, 1987.

| Date | Landings | Chinook | Sockeye | Coho | Pink | Chum | Total |
|-------|----------|---------|-----------|--------|--------|--------|-----------|
| 626 | 120 | 289 | 19,887 | 0 | 85 | 2 | 20,263 |
| 629 | 134 | 502 | 22,330 | 4 | 103 | 2 | 22,941 |
| 703 | 178 | 534 | 24,833 | 21 | 392 | 2 | 25,782 |
| 706 | 174 | 609 | 30,278 | 59 | 711 | 4 | 31,661 |
| 710 | 173 | 873 | 23,213 | 102 | 2,810 | 6 | 27,004 |
| 712 | 87 | 421 | 44,624 | 83 | 1,644 | 2 | 46,774 |
| 713 | 190 | 1,031 | 84,554 | 697 | 4,671 | 40 | 90,993 |
| 714 | 99 | 306 | 18,522 | 65 | 1,672 | 10 | 20,575 |
| 715 | 144 | 1,445 | 77,165 | 218 | 3,072 | 28 | 81,928 |
| 716 | 124 | 730 | 27,917 | 220 | 3,370 | 103 | 32,340 |
| 717 | 180 | 813 | 23,688 | 435 | 6,021 | 310 | 31,267 |
| 718 | 93 | 118 | 91,766 | 117 | 469 | 8 | 92,478 |
| 719 | 181 | 879 | 365,551 | 467 | 3,053 | 112 | 370,062 |
| 720 | 201 | 960 | 232,759 | 2,240 | 3,483 | 416 | 239,858 |
| 721 | 200 | 842 | 281,758 | 901 | 1,609 | 249 | 285,359 |
| 722 | 177 | 474 | 335,122 | 2,389 | 1,493 | 913 | 340,391 |
| 723 | 199 | 631 | 254,965 | 2,426 | 2,836 | 1,047 | 261,905 |
| 724 | 199 | 662 | 227,200 | 2,957 | 2,164 | 1,936 | 234,919 |
| 725 | 189 | 810 | 152,627 | 4,120 | 1,972 | 2,722 | 162,251 |
| 726 | 196 | 957 | 173,539 | 3,907 | 1,894 | 1,675 | 181,972 |
| 727 | 182 | 798 | 164,724 | 3,234 | 1,315 | 1,724 | 171,795 |
| 728 | 187 | 988 | 108,932 | 2,549 | 999 | 1,093 | 114,561 |
| 729 | 175 | 1,037 | 95,732 | 2,253 | 543 | 530 | 100,095 |
| 730 | 132 | 169 | 135,633 | 1,807 | 93 | 148 | 137,850 |
| 731 | 186 | 459 | 165,313 | 3,279 | 179 | 148 | 169,378 |
| 801 | 158 | 489 | 58,218 | 2,445 | 97 | 161 | 61,410 |
| 802 | 173 | 689 | 53,003 | 3,200 | 108 | 149 | 57,149 |
| 803 | 158 | 515 | 32,628 | 2,901 | 150 | 193 | 36,387 |
| 804 | 153 | 560 | 37,043 | 3,697 | 146 | 260 | 41,706 |
| 805 | 150 | 524 | 39,035 | 5,617 | 172 | 680 | 46,028 |
| 806 | 152 | 574 | 52,998 | 8,848 | 216 | 1,188 | 63,824 |
| 807 | 149 | 382 | 25,478 | 7,281 | 117 | 614 | 33,872 |
| 810 | 94 | 208 | 10,901 | 3,038 | 29 | 90 | 14,266 |
| 814 | 52 | 101 | 3,866 | 3,400 | 19 | 43 | 7,429 |
| Total | | 21,379 | 3,495,802 | 74,977 | 47,707 | 16,608 | 3,656,473 |

Table 7. Commercial salmon catch by period and species for set gill nets in the Kalgin Island Subdistrict, 1987.

| Date | Landings | Chinook | Sockeye | Coho | Pink | Chum | Total |
|-------|----------|---------|---------|--------|-------|-------|---------|
| 626 | 18 | 119 | 1,482 | 9 | 7 | 1 | 1,618 |
| 629 | 16 | 56 | 893 | 24 | 16 | 4 | 993 |
| 703 | 15 | 65 | 1,059 | 122 | 33 | 11 | 1,290 |
| 706 | 17 | 29 | 756 | 218 | 70 | 4 | 1,077 |
| 710 | 12 | 26 | 904 | 402 | 153 | 16 | 1,501 |
| 711 | 5 | 31 | 73 | 69 | 46 | 63 | 282 |
| 713 | 17 | 37 | 2,026 | 1,344 | 128 | 53 | 3,588 |
| 717 | 19 | 77 | 1,728 | 4,027 | 1,038 | 46 | 6,916 |
| 720 | 18 | 9 | 2,509 | 1,670 | 112 | 40 | 4,340 |
| 724 | 19 | 18 | 17,328 | 2,795 | 153 | 437 | 20,731 |
| 727 | 19 | 4 | 24,349 | 2,869 | 63 | 231 | 27,516 |
| 729 | 19 | 10 | 11,282 | 1,100 | 22 | 160 | 12,574 |
| 731 | 19 | 7 | 7,528 | 2,139 | 17 | 212 | 9,903 |
| 803 | 19 | 5 | 3,432 | 2,275 | 28 | 291 | 6,031 |
| 805 | 19 | 6 | 3,565 | 3,130 | 42 | 167 | 6,910 |
| 807 | 16 | 0 | 1,581 | 408 | 18 | 67 | 2,074 |
| 810 | 18 | 4 | 2,159 | 1,080 | 14 | 428 | 3,685 |
| 814 | 15 | 5 | 1,668 | 1,334 | 7 | 468 | 3,482 |
| 817 | 14 | 5 | 1,061 | 631 | 4 | 218 | 1,919 |
| 821 | 16 | 1 | 733 | 684 | 9 | 297 | 1,724 |
| 824 | 16 | 0 | 404 | 1,669 | 15 | 257 | 2,345 |
| 828 | 11 | 0 | 223 | 2,132 | 1 | 265 | 2,621 |
| 831 | 11 | 0 | 186 | 706 | 2 | 53 | 947 |
| 904 | 6 | 0 | 93 | 480 | 0 | 9 | 582 |
| 907 | 4 | 0 | 6 | 284 | 0 | 29 | 319 |
| 911 | 2 | 0 | 1 | 153 | 0 | 17 | 171 |
| 921 | 2 | 0 | 7 | 135 | 0 | 5 | 147 |
| Total | | 514 | 87,036 | 31,889 | 1,998 | 3,849 | 125,286 |

Table 8. Commercial salmon catch by period and species for set gill nets in the Kustatan Subdistrict, 1987.

| Date | Landings | Chinook | Sockeye | Coho | Pink | Chum | Total |
|-------|----------|---------|---------|--------|------|------|--------|
| 626 | 5 | 63 | 103 | 0 | 0 | 0 | 166 |
| 629 | 4 | 39 | 97 | 4 | 0 | 0 | 140 |
| 703 | 5 | 27 | 107 | 30 | 8 | 0 | 172 |
| 706 | 8 | 16 | 220 | 131 | 71 | 0 | 438 |
| 710 | 8 | 13 | 50 | 147 | 47 | 1 | 258 |
| 713 | 7 | 6 | 275 | 551 | 80 | 0 | 912 |
| 717 | 9 | 6 | 464 | 718 | 152 | 24 | 1,364 |
| 720 | 7 | 3 | 3,316 | 1,231 | 81 | 25 | 4,656 |
| 724 | 13 | 0 | 8,175 | 1,762 | 13 | 4 | 9,954 |
| 727 | 10 | 1 | 1,511 | 1,059 | 15 | 6 | 2,592 |
| 731 | 9 | 1 | 1,399 | 2,249 | 5 | 6 | 3,660 |
| 803 | 8 | 0 | 392 | 892 | 3 | 8 | 1,295 |
| 807 | 4 | 0 | 99 | 496 | 0 | 2 | 597 |
| 810 | 7 | 0 | 113 | 667 | 0 | 46 | 826 |
| 814 | 3 | 0 | 46 | 456 | 0 | 20 | 522 |
| 817 | 2 | 0 | 28 | 143 | 0 | 37 | 208 |
| 821 | 3 | 0 | 16 | 166 | 0 | 25 | 207 |
| 825 | 1 | 0 | 3 | 105 | 0 | 9 | 117 |
| Total | | 175 | 16,414 | 10,807 | 475 | 213 | 28,084 |

Table 9. Commercial salmon catch by period and species for set gill nets in the Western Subdistrict, 1987.

| Date | Landings | Chinook | Sockeye | Coho | Pink | Chum | Total |
|-------|----------|---------|---------|--------|-------|--------|---------|
| 619 | 23 | 10 | 495 | 0 | 0 | 1 | 506 |
| 622 | 21 | 12 | 550 | 0 | 0 | 0 | 562 |
| 626 | 21 | 13 | 1,748 | 2 | 0 | 1 | 1,764 |
| 629 | 20 | 22 | 3,201 | 1 | 0 | 3 | 3,227 |
| 703 | 29 | 39 | 1,864 | 12 | 17 | 17 | 1,949 |
| 706 | 30 | 39 | 2,949 | 52 | 94 | 87 | 3,221 |
| 710 | 33 | 34 | 4,479 | 282 | 176 | 177 | 5,148 |
| 713 | 30 | 17 | 3,298 | 209 | 157 | 72 | 3,753 |
| 717 | 34 | 32 | 4,894 | 476 | 247 | 235 | 5,884 |
| 720 | 33 | 19 | 4,542 | 743 | 181 | 475 | 5,960 |
| 721 | 30 | 17 | 10,687 | 1,080 | 180 | 664 | 12,628 |
| 722 | 30 | 9 | 8,022 | 790 | 175 | 712 | 9,708 |
| 723 | 20 | 9 | 6,109 | 737 | 155 | 765 | 7,775 |
| 724 | 35 | 8 | 11,142 | 1,570 | 185 | 1,143 | 14,048 |
| 725 | 10 | 11 | 4,415 | 601 | 124 | 443 | 5,594 |
| 726 | 31 | 8 | 5,748 | 776 | 97 | 1,099 | 7,728 |
| 727 | 24 | 2 | 3,132 | 637 | 57 | 466 | 4,294 |
| 728 | 22 | 4 | 4,153 | 970 | 63 | 890 | 6,080 |
| 729 | 26 | 3 | 3,273 | 729 | 33 | 797 | 4,835 |
| 730 | 6 | 0 | 1,903 | 393 | 12 | 212 | 2,520 |
| 731 | 29 | 7 | 6,253 | 1,752 | 58 | 2,368 | 10,438 |
| 801 | 21 | 3 | 1,532 | 854 | 33 | 1,232 | 3,654 |
| 802 | 24 | 4 | 2,441 | 969 | 42 | 1,956 | 5,412 |
| 803 | 16 | 3 | 1,260 | 626 | 21 | 1,505 | 3,415 |
| 804 | 12 | 0 | 581 | 407 | 15 | 908 | 1,911 |
| 805 | 30 | 1 | 1,437 | 1,264 | 23 | 1,834 | 4,559 |
| 807 | 19 | 0 | 485 | 522 | 18 | 1,067 | 2,092 |
| 810 | 20 | 2 | 517 | 1,137 | 13 | 1,610 | 3,279 |
| 814 | 18 | 0 | 95 | 1,321 | 22 | 981 | 2,419 |
| 817 | 17 | 1 | 135 | 1,397 | 40 | 1,865 | 3,438 |
| 821 | 14 | 1 | 72 | 1,945 | 18 | 794 | 2,830 |
| 824 | 14 | 0 | 49 | 1,447 | 3 | 679 | 2,178 |
| 828 | 11 | 0 | 66 | 2,158 | 3 | 774 | 3,001 |
| 831 | 8 | 0 | 18 | 696 | 6 | 387 | 1,107 |
| 904 | 6 | 0 | 1 | 726 | 0 | 118 | 845 |
| 907 | 4 | 0 | 6 | 171 | 1 | 21 | 199 |
| Total | | 330 | 101,552 | 27,452 | 2,269 | 26,358 | 157,961 |

Table 10. Commercial salmon catch by period and species for set gill nets in the Chinitna Bay Subdistrict, 1987.

| Date | Landings | Chinook | Sockeye | Coho | Pink | Chum | Total |
|-------|----------|---------|---------|-------|------|--------|--------|
| 626 | 2 | 0 | 238 | 0 | 0 | 5 | 243 |
| 629 | 2 | 0 | 439 | 1 | 0 | 5 | 445 |
| 703 | 2 | 0 | 157 | 2 | 9 | 47 | 215 |
| 706 | 2 | 1 | 168 | 4 | 10 | 88 | 271 |
| 710 | 3 | 1 | 382 | 5 | 50 | 411 | 849 |
| 713 | 2 | 0 | 855 | 48 | 38 | 552 | 1,493 |
| 717 | 2 | 0 | 99 | 53 | 87 | 435 | 674 |
| 720 | 3 | 5 | 353 | 203 | 81 | 879 | 1,521 |
| 724 | 2 | 0 | 104 | 120 | 50 | 1,423 | 1,697 |
| 727 | 2 | 1 | 55 | 24 | 37 | 1,194 | 1,311 |
| 731 | 2 | 0 | 67 | 189 | 31 | 1,054 | 1,341 |
| 803 | 2 | 0 | 56 | 310 | 38 | 1,530 | 1,934 |
| 807 | 3 | 0 | 15 | 554 | 12 | 1,272 | 1,853 |
| 810 | 3 | 0 | 6 | 436 | 6 | 5,924 | 6,372 |
| 814 | 3 | 0 | 3 | 349 | 9 | 4,153 | 4,514 |
| 817 | 3 | 0 | 24 | 327 | 21 | 1,142 | 1,514 |
| 821 | 3 | 0 | 2 | 213 | 8 | 413 | 636 |
| 824 | 2 | 1 | 3 | 368 | 0 | 776 | 1,148 |
| 828 | 3 | 1 | 7 | 370 | 0 | 789 | 1,167 |
| 831 | 4 | 0 | 1 | 658 | 0 | 560 | 1,219 |
| 904 | 2 | 0 | 0 | 424 | 0 | 415 | 839 |
| 907 | 2 | 0 | 0 | 124 | 0 | 71 | 195 |
| Total | | 10 | 3,034 | 4,782 | 487 | 23,138 | 31,451 |

Table 11. Commercial salmon catch by period and species for set gill nets in the Eastern Subdistrict (Northern District), 1987.

| Date | Landings | Chinook | Sockeye | Coho | Pink | Chum | Total |
|-------|----------|---------|---------|--------|-------|--------|---------|
| 601 | 22 | 608 | 182 | 0 | 0 | 0 | 790 |
| 608 | 16 | 288 | 111 | 0 | 0 | 0 | 399 |
| 615 | 25 | 520 | 536 | 0 | 1 | 0 | 1,057 |
| 622 | 22 | 248 | 60 | 0 | 4 | 0 | 312 |
| 626 | 22 | 152 | 145 | 0 | 31 | 0 | 328 |
| 629 | 18 | 40 | 105 | 3 | 44 | 0 | 192 |
| 703 | 25 | 27 | 399 | 3 | 519 | 1 | 949 |
| 706 | 22 | 6 | 217 | 20 | 429 | 0 | 672 |
| 710 | 28 | 3 | 175 | 23 | 308 | 0 | 509 |
| 713 | 31 | 3 | 1,951 | 286 | 584 | 6 | 2,830 |
| 717 | 36 | 3 | 3,522 | 979 | 967 | 228 | 5,699 |
| 720 | 37 | 0 | 29,042 | 2,421 | 925 | 226 | 32,614 |
| 724 | 40 | 2 | 18,097 | 3,428 | 843 | 1,835 | 24,205 |
| 727 | 35 | 1 | 5,601 | 2,661 | 198 | 1,365 | 9,826 |
| 731 | 34 | 0 | 4,516 | 2,572 | 83 | 2,676 | 9,847 |
| 803 | 31 | 1 | 919 | 2,560 | 18 | 3,566 | 7,064 |
| 807 | 30 | 1 | 529 | 2,470 | 22 | 2,630 | 5,652 |
| 810 | 28 | 0 | 466 | 1,799 | 5 | 463 | 2,733 |
| 814 | 29 | 11 | 421 | 3,720 | 2 | 177 | 4,331 |
| 817 | 21 | 1 | 224 | 3,939 | 2 | 249 | 4,415 |
| 821 | 25 | 5 | 142 | 2,891 | 2 | 112 | 3,152 |
| 824 | 11 | 4 | 42 | 970 | 1 | 135 | 1,152 |
| 828 | 17 | 2 | 95 | 2,661 | 0 | 116 | 2,874 |
| 831 | 9 | 0 | 5 | 349 | 1 | 27 | 382 |
| 904 | 14 | 0 | 9 | 721 | 1 | 134 | 865 |
| 907 | 8 | 0 | 1 | 165 | 0 | 55 | 221 |
| 911 | 6 | 0 | 1 | 89 | 0 | 6 | 96 |
| 914 | 4 | 0 | 0 | 45 | 0 | 8 | 53 |
| 918 | 1 | 0 | 0 | 43 | 0 | 3 | 46 |
| 921 | 1 | 0 | 0 | 20 | 0 | 3 | 23 |
| Total | | 1,926 | 67,513 | 34,838 | 4,990 | 14,021 | 123,288 |

Table 12. Commercial salmon catch by period and species for set gill nets in the General Subdistrict (Northern District), 1987.

| Date | Landings | Chinook | Sockeye | Coho | Pink | Chum | Total |
|-------|----------|---------|---------|--------|--------|--------|---------|
| 601 | 54 | 2,757 | 105 | 0 | 0 | 0 | 2,862 |
| 608 | 47 | 3,109 | 121 | 25 | 0 | 0 | 3,255 |
| 615 | 71 | 3,234 | 343 | 6 | 0 | 0 | 3,583 |
| 622 | 46 | 777 | 86 | 0 | 0 | 0 | 863 |
| 626 | 34 | 339 | 116 | 0 | 0 | 0 | 455 |
| 629 | 21 | 102 | 71 | 0 | 5 | 1 | 179 |
| 703 | 34 | 123 | 184 | 16 | 76 | 6 | 405 |
| 706 | 40 | 64 | 218 | 158 | 172 | 9 | 621 |
| 710 | 39 | 39 | 81 | 169 | 213 | 7 | 509 |
| 713 | 69 | 66 | 1,457 | 1,665 | 803 | 98 | 4,089 |
| 717 | 80 | 54 | 4,573 | 2,710 | 1,740 | 198 | 9,275 |
| 720 | 83 | 36 | 6,730 | 2,805 | 2,292 | 561 | 12,424 |
| 724 | 89 | 32 | 22,653 | 6,827 | 4,226 | 3,882 | 37,620 |
| 727 | 103 | 13 | 20,817 | 5,780 | 1,367 | 3,745 | 31,722 |
| 728 | 16 | 0 | 9,425 | 707 | 120 | 179 | 10,431 |
| 729 | 19 | 0 | 8,148 | 860 | 124 | 172 | 9,304 |
| 731 | 85 | 7 | 12,971 | 16,510 | 735 | 13,449 | 43,672 |
| 803 | 87 | 11 | 7,122 | 10,459 | 1,164 | 11,176 | 29,932 |
| 807 | 59 | 6 | 908 | 4,927 | 61 | 4,684 | 10,586 |
| 810 | 56 | 2 | 558 | 2,399 | 69 | 4,776 | 7,804 |
| 814 | 34 | 2 | 157 | 2,325 | 15 | 3,392 | 5,891 |
| 817 | 32 | 2 | 141 | 1,795 | 19 | 3,818 | 5,775 |
| 821 | 33 | 0 | 38 | 1,362 | 11 | 965 | 2,376 |
| 824 | 25 | 0 | 42 | 988 | 2 | 983 | 2,015 |
| 828 | 14 | 0 | 20 | 1,383 | 1 | 904 | 2,308 |
| 831 | 14 | 0 | 4 | 206 | 0 | 154 | 364 |
| Total | | 10,775 | 97,089 | 64,082 | 13,215 | 53,159 | 238,320 |

Table 13. Commercial salmon catch by period and species by all gear types in Upper Cook Inlet, 1987.

| Date | Landings | Chinook | Sockeye | Coho | Pink | Chum | Total |
|--------------|----------|---------------|------------------|----------------|----------------|----------------|-------------------|
| 601 | 76 | 3,365 | 287 | 0 | 0 | 0 | 3,652 |
| 608 | 63 | 3,397 | 232 | 25 | 0 | 0 | 3,654 |
| 615 | 96 | 3,754 | 879 | 6 | 1 | 0 | 4,640 |
| 619 | 23 | 10 | 495 | 0 | 0 | 1 | 506 |
| 622 | 89 | 1,037 | 696 | 0 | 4 | 0 | 1,737 |
| 624 | 208 | 38 | 14,730 | 59 | 233 | 209 | 15,269 |
| 626 | 642 | 1,049 | 49,955 | 110 | 629 | 462 | 52,205 |
| 629 | 682 | 878 | 77,362 | 396 | 1,367 | 1,195 | 81,198 |
| 703 | 854 | 907 | 251,391 | 2,664 | 4,530 | 5,819 | 265,311 |
| 706 | 881 | 874 | 260,956 | 4,396 | 4,674 | 6,863 | 277,763 |
| 710 | 890 | 1,073 | 619,583 | 22,882 | 8,772 | 11,396 | 663,706 |
| 711 | 5 | 31 | 73 | 69 | 46 | 63 | 282 |
| 712 | 87 | 421 | 44,624 | 83 | 1,644 | 2 | 46,774 |
| 713 | 938 | 1,236 | 451,741 | 22,390 | 12,335 | 11,615 | 499,317 |
| 714 | 99 | 306 | 18,522 | 65 | 1,672 | 10 | 20,575 |
| 715 | 144 | 1,445 | 77,165 | 218 | 3,072 | 28 | 81,928 |
| 716 | 124 | 730 | 27,917 | 220 | 3,370 | 103 | 32,340 |
| 717 | 967 | 1,008 | 739,884 | 46,660 | 16,106 | 22,968 | 826,626 |
| 718 | 93 | 118 | 91,766 | 117 | 469 | 8 | 92,478 |
| 719 | 622 | 992 | 687,399 | 7,575 | 5,184 | 3,353 | 704,503 |
| 720 | 973 | 1,118 | 903,546 | 41,925 | 10,376 | 24,262 | 981,227 |
| 721 | 230 | 859 | 292,445 | 1,981 | 1,789 | 913 | 297,987 |
| 722 | 786 | 709 | 852,664 | 18,811 | 4,400 | 16,443 | 893,027 |
| 723 | 219 | 640 | 261,074 | 3,163 | 2,991 | 1,812 | 269,680 |
| 724 | 970 | 988 | 740,491 | 40,427 | 9,713 | 49,196 | 840,815 |
| 725 | 746 | 1,516 | 351,732 | 8,398 | 2,818 | 11,262 | 375,726 |
| 726 | 227 | 965 | 179,287 | 4,683 | 1,991 | 2,774 | 189,700 |
| 727 | 943 | 1,368 | 527,998 | 20,429 | 3,819 | 14,957 | 568,571 |
| 728 | 769 | 1,333 | 370,944 | 7,335 | 1,767 | 7,255 | 388,634 |
| 729 | 770 | 1,408 | 403,633 | 9,802 | 1,025 | 5,895 | 421,763 |
| 730 | 559 | 363 | 383,291 | 5,667 | 2,273 | 2,268 | 391,862 |
| 731 | 905 | 1,001 | 380,624 | 35,406 | 1,401 | 32,864 | 451,296 |
| 801 | 549 | 675 | 84,570 | 4,104 | 168 | 2,201 | 491,718 |
| 802 | 386 | 887 | 77,363 | 5,005 | 180 | 2,966 | 401,058 |
| 803 | 321 | 535 | 45,809 | 20,023 | 1,422 | 18,269 | 86,058 |
| 804 | 411 | 742 | 64,104 | 6,413 | 235 | 5,722 | 77,216 |
| 805 | 199 | 531 | 44,037 | 10,011 | 237 | 2,681 | 57,497 |
| 806 | 152 | 574 | 52,998 | 8,848 | 216 | 1,188 | 63,824 |
| 807 | 537 | 407 | 39,014 | 20,152 | 369 | 24,557 | 84,499 |
| 810 | 399 | 228 | 18,217 | 12,554 | 161 | 23,862 | 55,022 |
| 814 | 167 | 119 | 6,355 | 13,617 | 78 | 10,266 | 30,025 |
| 817 | 148 | 11 | 1,981 | 10,736 | 156 | 10,314 | 23,198 |
| 821 | 117 | 7 | 1,035 | 8,975 | 63 | 3,349 | 13,429 |
| 824 | 86 | 5 | 554 | 7,679 | 29 | 4,471 | 12,738 |
| 825 | 1 | 0 | 3 | 105 | 0 | 9 | 117 |
| 828 | 63 | 3 | 420 | 9,567 | 5 | 3,107 | 13,102 |
| 831 | 54 | 0 | 215 | 3,969 | 9 | 1,255 | 5,255 |
| 904 | 30 | 0 | 103 | 2,455 | 1 | 701 | 3,260 |
| 907 | 18 | 0 | 13 | 744 | 1 | 176 | 934 |
| 911 | 8 | 0 | 2 | 242 | 0 | 23 | 267 |
| 914 | 4 | 0 | 0 | 45 | 0 | 8 | 53 |
| 918 | 1 | 0 | 0 | 43 | 0 | 3 | 46 |
| 921 | 3 | 0 | 7 | 155 | 0 | 8 | 170 |
| Total | | 39,661 | 9,500,186 | 451,404 | 109,801 | 349,132 | 10,450,184 |

Table 14. Emergency order summary, Upper Cook Inlet commercial salmon fishery, 1987.

| E.O. Number | Effective Date | Description | Reason |
|-------------|----------------|--|---|
| 2S-06-87 | 6/24 | Opened the Central District excluding the Chinitna Bay Subdistrict to drift gillnetting on June 24 from 7:00 A.M. to 7:00 P.M. | Early opening provision of 5 AAC 21.310 (Kasilof escapement had reached 50,000). |
| 2S-07-87 | 6/25 | Opened the Chinitna Bay Subdistrict to drifting and seining each regular period through July 17. | Board of Fisheries policy. |
| 2S-08-87 | 6/26 | Opened the season for set gillnetting in the Upper Subdistrict south of a regulatory marker located 4 1/2 miles north of the Kasilof River (hereafter, the Blanchard Line) on June 26. | Early opening provision of 5 AAC 21.310 (Kasilof escapement had reached 50,000). |
| 2S-09-87 | 7/10 | Closed drift gillnetting north of the latitude of Redoubt Pt. and set gillnetting on Kalgin Island between Light Pt. and Northwest Pt. on July 10. | Crude oil from spill of tanker likely to be encountered in these areas. |
| 2S-10-87 | 7/11 | Opened set gillnetting on Kalgin Island between Northwest Pt. and Light Pt. on July 11 from 7:00 A.M. to 7:00 P.M. | Diminished threat of crude oil in this area. |
| 2S-11-87 | 7/12 | Closed drift gillnetting north of the latitude of the southern tip of Kalgin Island on July 13. Opened set gillnetting south of Blanchard Line from 5:00 P.M. July 12 to 7:00 P.M. July 13. | Drift closure to avoid crude oil concentrations. Setnet opening to slow escapement rate into Kasilof. |
| 2S-12-87 | 7/13 | Opened set gillnetting in Upper Subdistrict south of Blanchard Line from 7:00 P.M. July 13 to 10:00 P.M. July 14. Opened drifting south of Blanchard Line and within 3 miles of shore from 10:00 A.M. to 10:00 P.M. July 14. | To slow the Kasilof River sockeye escapement rate. |
| 2S-13-87 | 7/14 | Rescinded EO 2S-12-87 effective at 7:00 A.M. July 14. | High incidence of oil-fouled gear and catch. |
| 2S-14-87 | 7/15 | Opened set gillnetting in Upper Subdistrict south of Blanchard Line from 1:00 A.M. to 9:00 P.M. July 15. | To slow the Kasilof River sockeye escapement rate. |
| 2S-15-87 | 7/15 | Extended set gillnetting in Upper Subdistrict south of Blanchard Line from 9:00 P.M. July 15 to 7:00 A.M. July 17. | Same as for 2S-14-87. |

Table 14, continued. Emergency Order summary, Upper Cook Inlet commercial salmon fishery, 1987.

| E.O. Number | Effective Date | Description | Reason |
|-------------|----------------|--|--|
| 2S-16-87 | 7/18 | Opened set gillnetting in Upper Subdistrict south of Blanchard Line from 5:00 P.M. July 18 until 7:00 A.M. July 20. Opened drift gillnetting south of Blanchard Line and within 3 miles of shore from 7:00 A.M. to 7:00 P.M. July 19. | Same as for 2S-14-87. |
| 2S-17-87 | 7/20 | Opened set gillnetting in Upper Subdistrict south of Blanchard Line and within 1/2 mile of shore from 7:00 P.M. July 20 until 7:00 P.M. July 21. Opened set gillnetting in the Western Subdistrict from 7:00 P.M. July 20 until 7:00 P.M. July 22. | To slow the sockeye escapement rate into the Kasilof and Crescent Rivers. |
| 2S-18-87 | 7/21 | Opened set gillnetting in the Upper Subdistrict from 4:00 P.M. July 21 through 7:00 P.M. July 22. Opened drift gillnetting east of a line from East Foreland Light to Cape Ninilchik from 7:00 A.M. to 7:00 P.M. July 22. | Slow the escapement rate of sockeyes into the Kasilof and Kenai Rivers. |
| 2S-19-87 | 7/22 | Opened set gillnetting in the Upper and Western Subdistricts from 7:00 P.M. July 22 through 7:00 A.M. July 24. | Harvest surplus sockeye salmon bound for the Kasilof, Kenai and Crescent Rivers. |
| 2S-20-87 | 7/24 | Opened set gillnetting in the Western Subdistrict until further notice effective at 7:00 P.M. July 24. Opened set gillnetting in the Upper Subdistrict from 7:00 P.M. July 24 until 7:00 A.M. July 27. Opened drift gillnetting east of a line from East Foreland Light to Cape Ninilchik on July 25 from 7:00 A.M. to 7:00 P.M. | Same as for 2S-19-87. |
| 2S-21-87 | 7/25 | Reduced the area closed to commercial fishing at the mouth of the Kenai River effective 7:00 A.M. July 25. | Increase the effective harvest rate on Kenai River sockeye salmon. |
| 2S-22-87 | 7/27 | Restricted drift gillnetting to those waters east of a line from the East Foreland Light to Cape Ninilchik on July 27 from 7:00 A.M. to 7:00 P.M. | Protect Susitna River chum and sockeye salmon. |
| 2S-23-87 | 7/27 | Opened the Fish Creek terminal harvest area from 7:00 A.M. July 27 through July 29. | Fish Creek sockeye salmon escapement goal achieved. |

Table 14, continued. Emergency order summary, Upper Cook Inlet commercial salmon fishery, 1987.

| E.O. Number | Effective Date | Description | Reason |
|-------------|----------------|--|---|
| 2S-24-87 | 7/27 | Opened set gillnetting in the Upper Sub-district from 7:00 P.M. July 27 until 7:00 P.M. July 29 and in the Kalgin Island Subdistrict on July 29 from 7:00 A.M. to 7:00 P.M. Opened drift gillnetting east of a line from the East Foreland Light to Cape Ninilchik on July 28 from 7:00 A.M. to 7:00 P.M. | Harvest surplus sockeye salmon bound for the Kasilof River, Kenai River, and Packers Creek. |
| 2S-25-87 | 7/29 | Opened drift gillnetting east of a line from the East Foreland Light to Cape Ninilchik on July 29 from 7:00 A.M. to 7:00 P.M. | Harvest surplus sockeye salmon bound for the Kenai and Kasilof Rivers. |
| 2S-26-87 | 7/29 | Opened set gillnetting in the Upper Sub-district north of the Clam Gulch Access Road from 7:00 P.M. July 29 until 7:00 A.M. July 31. Opened drift gillnetting east of a line from the East Foreland Light to Cape Ninilchik and north of the latitude of Clam Gulch Tower on July 30 from 7:00 A.M. to 7:00 P.M. | Harvest surplus sockeye salmon bound for the Kenai and Kasilof Rivers while providing protection for coho salmon bound for the Kenai River. |
| 2S-27-87 | 7/31 | Opened set gillnetting in the Upper Sub-district north of Clam Gulch from 7:00 P.M. July 31 until 7:00 A.M. August 3. Opened drift gillnetting east of a line from East Foreland Light to Cape Ninilchik and north of Clam Gulch Tower on August 1 from 9:00 A.M. to 5:00 P.M. | Harvest surplus sockeye salmon bound for Kenai and Kasilof Rivers. |
| 2S-28-87 | 8/01 | Opened the remainder of Upper Subdistrict to set gillnetting from 2:00 P.M. August 1 to 7:00 A.M. August 3. | Increased abundance of Kenai and Kasilof sockeye in the southern portion of the subdistrict. |
| 2S-29-87 | 8/02 | Opened drift gillnetting east of a line from East Foreland Light to Cape Ninilchik on August 2 from 9:00 A.M. to 5:00 P.M. | Harvest surplus Kenai and Kasilof River sockeye salmon. |
| 2S-30-87 | 8/03 | Closed the Central District to drift gillnetting on August 3. | Protect a weak chum salmon return to the Susitna River. |
| 2S-31-87 | 8/03 | Opened set gillnetting in the Upper Sub-district from 7:00 P.M. August 3 until 7:00 P.M. August 4. Opened drift gillnetting east of a line from East Foreland Light to Cape Ninilchik from 7:00 A.M. to 7:00 P.M. August 4. | Harvest surplus Kenai and Kasilof River sockeye salmon. |

Table 14, continued. Emergency order summary, Upper Cook Inlet commercial salmon fishery, 1987.

| E.O. Number | Effective Date | Description | Reason |
|-------------|----------------|---|---|
| 2S-32-87 | 8/04 | Opened set gillnetting in the Upper Sub-district from 7:00 P.M. August 4 until 7:00 P.M. August 5 and in the Kalgin Island Subdistrict from 7:00 A.M. to 7:00 P.M. August 5. Returned set gillnetting to regular Monday and Friday fishing periods effective at 7:00 P.M. August 5. | Harvest surplus Kenai, Kasilof and Packers Creek sockeye salmon. Sockeye catches had declined in Western Sub-district while coho and chum salmon catches were building. |
| 2S-33-87 | 8/05 | Opened set gillnetting in the Upper Sub-district from 7:00 P.M. August 5 through 7:00 A.M. August 7. | Harvest surplus Kenai and Kasilof Rivers' sockeye salmon. |
| 2S-34-87 | 8/05 | Returned the "closed waters" description at mouth of Kenai River to original wording. | Declining sockeye catches and rising coho salmon catches. |
| 2S-35-87 | 8/17 | Opened Chinitna Bay Subdistrict to drift gillnetting and seining on regular Monday and Friday periods beginning August 17. | Satisfactory chum salmon escapement into Clearwater Creek. |

Table 15. Commercial salmon fishing periods, Upper Cook Inlet, 1987.

| Date | Day | Time | Set Gill Net | Drift Gill Net |
|------|-----|-----------|--|---------------------------------|
| 6/01 | M | 0700-1300 | Northern District | |
| 6/08 | M | 0700-1300 | Northern District | |
| 6/15 | M | 0700-1300 | Northern District | |
| 6/19 | F | 0700-1900 | Western Subdistrict | |
| 6/22 | M | 0700-1300 | Northern District, Western | |
| | | 1300-1900 | Western | |
| 6/24 | W | 0700-1900 | | All except Chinitna |
| 6/26 | F | 0700-1900 | All except northern portion of Upper Subdistrict | All |
| 6/29 | M | 0700-1900 | All except northern portion of Upper Subdistrict | All |
| 7/03 | F | 0700-1900 | All | All |
| 7/06 | M | 0700-1900 | All | All |
| 7/10 | F | 0700-1900 | All except north face of Kalgin | South of Redoubt Point |
| 7/11 | Sa | 0700-1900 | North face of Kalgin | |
| 7/12 | Su | 1700-2400 | Upper south of mid K-Beach | |
| 7/13 | M | 0000-0700 | Upper south of mid K-Beach | |
| | | 0700-1900 | All | South of southern tip of Kalgin |
| | | 1900-2400 | Upper south of mid K-Beach | |
| 7/14 | Tu | 0000-0700 | Upper south of mid K-Beach | |
| 7/15 | W | 0100-2400 | Upper south of mid K-Beach | |
| 7/16 | Th | 0000-2400 | Upper south of mid K-Beach | |
| 7/17 | F | 0000-0700 | Upper south of mid K-Beach | |
| | | 0700-1900 | All | All |
| 7/18 | Sa | 1700-2400 | Upper south of mid K-Beach | |

- Continued -

Table 15, continued. Commercial salmon fishing periods, Upper Cook Inlet, 1987.

| Date | Day | Time | Set Gill Net | Drift Gill Net |
|------|-----|-----------|---|---|
| 7/19 | Su | 0000-0700 | Upper south of mid K-Beach | |
| | | 0700-1900 | Upper south of mid K-Beach | South of mid K-Beach and within 3 miles |
| | | 1900-2400 | Upper south of mid K-Beach | |
| 7/20 | M | 0000-0700 | Upper south of mid K-Beach | |
| | | 0700-1900 | All | All except Chinitna |
| | | 1900-2400 | Upper south of mid K-Beach and within 1/2 mile of shore, also Western | |
| 7/21 | Tu | 0000-1600 | Western, Upper south of mid K-Beach within 1/2 mile of shore | |
| | | 1600-2400 | Western, Upper | |
| 7/22 | W | 0000-0700 | Western, Upper | |
| | | 0700-1900 | Western, Upper | East of E. Foreland to Ninilchik |
| | | 1900-2400 | Western, Upper | |
| 7/23 | Th | 0000-2400 | Western, Upper | |
| 7/24 | F | 0000-0700 | Western, Upper | |
| | | 0700-1900 | All | All except Chinitna |
| | | 1900-2400 | Western, Upper | |
| 7/25 | Sa | 0000-0700 | Western, Upper | |
| | | 0700-1900 | Western, Upper | East of E. Foreland to Cape Ninilchik |
| | | 1900-2400 | Western, Upper | |
| 7/26 | Su | 0000-2400 | Western, Upper | |
| 7/27 | M | 0000-0700 | Western, Upper | |
| | | 0700-1900 | All (plus Knik) | East of E. Foreland to Cape Ninilchik |
| | | 1900-2400 | Western, Upper, Knik | |

- Continued -

Table 15, continued. Commercial salmon fishing periods, Upper Cook Inlet, 1987.

| Date | Day | Time | Set Gill Net | Drift Gill Net |
|------|-----|-----------|--|--|
| 7/28 | Tu | 0000-0700 | Western, Upper, Knik | |
| | | 0700-1900 | Western, Upper, Knik | East of E. Foreland to Cape Ninilchik |
| | | 1900-2400 | Western, Upper, Knik | |
| 7/29 | W | 0000-0700 | Western, Upper, Knik | |
| | | 0700-1900 | Western, Upper, Knik, Kalgin | East of E. Foreland to Cape Ninilchik |
| | | 1900-2400 | Western, Upper north of Clam Gulch Knik | |
| 7/30 | Th | 0000-0700 | Western, Upper north of Clam Gulch | |
| | | 0700-1900 | Western, Upper north of Clam Gulch | East of E. Foreland to Cape Ninilchik north of Clam Gulch |
| | | 1900-2400 | Western, Upper north of Clam Gulch | |
| 7/31 | F | 0000-0700 | Western, Upper north of Clam Gulch | |
| | | 0700-1900 | All | All except Chinitna |
| | | 1900-2400 | Western, Upper north of Clam Gulch | |
| 8/01 | Sa | 0000-0900 | Western, Upper north of Clam Gulch | |
| | | 0900-1400 | Western, Upper north of Clam Gulch | East of E. Foreland to Cape Ninilchik and north of Clam Gulch Tower |
| | | 1400-1700 | Western, Upper | East of E. Foreland to Cape Ninilchik and north of Clam Gulch Tower |
| | | 1700-2400 | Western, Upper | |
| 8/02 | Su | 0000-0900 | Upper, Western | |
| | | 0900-1700 | Upper, Western | East of E. Foreland to Cape Ninilchik |
| | | 1700-2400 | Upper, Western | |
| 8/03 | M | 0000-0700 | Upper, Western | |
| | | 0700-1900 | All | Closed |
| | | 1900-2400 | Upper, Western | |

- Continued -

Table 15, continued. Commercial salmon fishing periods, Upper Cook Inlet, 1987.

| Date | Day | Time | Set Gill Net | Drift Gill Net |
|-------|-----|-----------|------------------------|---------------------------------------|
| 8/04 | Tu | 0000-0700 | Upper, Western | |
| | | 0700-1900 | Upper, Western | East of E. Foreland to Cape Ninilchik |
| | | 1900-2400 | Upper, Western | |
| 8/05 | W | 0000-0700 | Upper, Western | |
| | | 0700-1900 | Upper, Western, Kalgin | |
| | | 1900-2400 | Upper | |
| 8/06 | Th | 0000-2400 | Upper | |
| 8/07 | F | 0000-0700 | Upper | |
| | | 0700-1900 | All | All except Chinitna |
| 8/10 | M | 0700-1900 | All | All except Chinitna |
| 8/14 | F | 0700-1900 | All | All |
| 8/17* | M | 0700-1900 | All except Upper | All except within 5 miles of eastside |
| 8/21* | F | 0700-1900 | All except Upper | All except within 5 miles of eastside |

* Fishing continued as described for 8/17 and 8/21 for the remainder of the season.

Table 16. Aerial survey set gill net counts by subdistrict, Upper Cook Inlet, 1987.

| Date | Central District | | | | Northern District | | |
|------|------------------|--------|----------|---------|-------------------|---------|---------|
| | Upper | Kalgin | Kustatan | Western | Chinitna | General | Eastern |
| 6/15 | | | | | | 97 | 37 |
| 7/10 | 853 | | 31 | | 147 | | |
| 7/23 | 895 | | | | | | |
| 7/27 | | 127 | | | | 134 | 140 |

Table 17. Daily sockeye and coho salmon weir counts, Fish Creek, 1987.

| Date | Sockeye | | Coho | |
|-------|---------|--------|-------|-------|
| | Daily | Accum | Daily | Accum |
| 07/09 | 18 | 18 | 0 | 0 |
| 07/10 | 299 | 317 | 0 | 0 |
| 07/11 | 32 | 349 | 0 | 0 |
| 07/12 | 104 | 453 | 0 | 0 |
| 07/13 | 52 | 505 | 0 | 0 |
| 07/14 | 0 | 505 | 0 | 0 |
| 07/15 | 341 | 846 | 2 | 2 |
| 07/16 | 747 | 1,593 | 2 | 4 |
| 07/17 | 1,385 | 2,978 | 1 | 5 |
| 07/18 | 596 | 3,574 | 1 | 6 |
| 07/19 | 1,647 | 5,221 | 4 | 10 |
| 07/20 | 3,327 | 8,548 | 1 | 11 |
| 07/21 | 6,596 | 15,144 | 0 | 11 |
| 07/22 | 2,368 | 17,512 | 0 | 11 |
| 07/23 | 4,596 | 22,108 | 1 | 12 |
| 07/24 | 11,404 | 33,512 | 5 | 17 |
| 07/25 | 10,676 | 44,188 | 5 | 22 |
| 07/26 | 6,874 | 51,062 | 2 | 24 |
| 07/27 | 6,187 | 57,249 | 1 | 25 |
| 07/28 | 2,442 | 59,691 | 1 | 26 |
| 07/29 | 867 | 60,558 | 0 | 26 |
| 07/30 | 2,115 | 62,673 | 0 | 26 |
| 07/31 | 5,541 | 68,214 | 29 | 55 |
| 08/01 | 3,880 | 72,094 | 17 | 72 |
| 08/02 | 846 | 72,940 | 9 | 81 |
| 08/03 | 3,674 | 76,614 | 28 | 109 |
| 08/04 | 1,846 | 79,460 | 56 | 165 |
| 08/05 | 2,748 | 81,208 | 38 | 203 |
| 08/06 | 2,551 | 83,759 | 25 | 228 |
| 08/07 | 1,303 | 85,062 | 16 | 244 |
| 08/08 | 1,455 | 86,517 | 23 | 267 |
| 08/09 | 767 | 87,284 | 13 | 280 |
| 08/10 | 1,000 | 88,284 | 20 | 300 |
| 08/11 | 600 | 88,884 | 14 | 314 |
| 08/12 | 333 | 89,217 | 21 | 335 |
| 08/13 | 276 | 89,493 | 9 | 344 |
| 08/14 | 99 | 89,592 | 5 | 349 |
| 08/15 | 259 | 89,851 | 3 | 352 |
| 08/16 | 241 | 90,092 | 26 | 378 |
| 08/17 | 49 | 90,141 | 16 | 394 |
| 08/18 | 247 | 90,388 | 11 | 405 |
| 08/19 | 251 | 90,639 | 8 | 413 |
| 08/20 | 201 | 90,840 | 4 | 417 |
| 08/21 | 81 | 90,921 | 9 | 426 |
| 08/22 | 59 | 90,980 | 9 | 435 |
| 08/23 | 71 | 91,051 | 13 | 448 |
| 08/24 | 12 | 91,063 | 6 | 454 |
| 08/25 | 20 | 91,083 | 6 | 460 |
| 08/26 | 0 | 91,083 | 0 | 460 |
| 08/27 | 132 | 91,215 | 11 | 471 |
| Total | | 91,215 | | 3,871 |

Coho total includes 3400 fish downstream of weir at time of removal.

Source: Chlupach, 1987

Table 18. Daily sockeye salmon weir counts, Packers Creek, 1987.

| Date | Daily | Accum | Date | Daily | Accum |
|-------|-------|-------|-------|-------|--------|
| 05/25 | 0 | 0 | 07/22 | 988 | 3,620 |
| 05/26 | 2 | 2 | 07/23 | 1551 | 5,171 |
| 05/27 | 0 | 2 | 07/24 | 1142 | 6,313 |
| 05/28 | 1 | 3 | 07/25 | 721 | 7,034 |
| 05/29 | 0 | 3 | 07/26 | 1253 | 8,287 |
| 05/30 | 2 | 5 | 07/27 | 340 | 8,627 |
| 05/31 | 5 | 6 | 07/28 | 708 | 9,335 |
| 06/01 | 1 | 11 | 07/29 | 2055 | 11,390 |
| 06/02 | 0 | 11 | 07/30 | 1017 | 12,407 |
| 06/03 | 5 | 16 | 07/31 | 1608 | 14,015 |
| 06/04 | 6 | 22 | 08/01 | 2183 | 16,198 |
| 06/05 | 1 | 23 | 08/02 | 693 | 16,891 |
| 06/06 | 2 | 25 | 08/03 | 491 | 17,382 |
| 06/07 | 1 | 26 | 08/04 | 249 | 17,631 |
| 06/08 | 1 | 27 | 08/05 | 667 | 18,298 |
| 06/09 | 6 | 33 | 08/06 | 2124 | 20,422 |
| 06/10 | 1 | 34 | 08/07 | 1265 | 21,687 |
| 06/11 | 2 | 36 | 08/08 | 1188 | 22,875 |
| 06/12 | 10 | 46 | 08/09 | 964 | 23,839 |
| 06/13 | 5 | 48 | 08/10 | 1122 | 24,961 |
| 06/14 | 5 | 53 | 08/11 | 846 | 25,807 |
| 06/15 | 10 | 63 | 08/12 | 546 | 26,353 |
| 06/16 | 7 | 70 | 08/13 | 880 | 27,233 |
| 06/17 | 5 | 75 | 08/14 | 630 | 27,863 |
| 06/18 | 3 | 78 | 08/15 | 397 | 28,260 |
| 06/19 | 1 | 79 | 08/16 | 608 | 28,868 |
| 06/20 | 39 | 118 | 08/17 | 579 | 29,447 |
| 06/21 | 21 | 139 | 08/18 | 522 | 29,969 |
| 06/22 | 142 | 281 | 08/19 | 689 | 30,658 |
| 06/23 | 5 | 286 | 08/20 | 256 | 30,914 |
| 06/24 | 1 | 287 | 08/21 | 168 | 31,082 |
| 06/25 | 43 | 330 | 08/22 | 46 | 31,128 |
| 06/26 | 19 | 349 | 08/23 | 325 | 31,453 |
| 06/27 | 127 | 476 | 08/24 | 234 | 31,687 |
| 06/28 | 16 | 492 | 08/25 | 134 | 31,821 |
| 06/29 | 38 | 530 | 08/26 | 540 | 32,361 |
| 06/30 | 0 | 530 | 08/27 | 462 | 32,823 |
| 07/01 | 12 | 542 | 08/28 | 158 | 32,981 |
| 07/02 | 10 | 552 | 08/29 | 382 | 33,363 |
| 07/03 | 2 | 554 | 08/30 | 211 | 33,574 |
| 07/04 | 1 | 555 | 08/31 | 105 | 33,679 |
| 07/05 | 38 | 593 | 09/01 | 222 | 33,901 |
| 07/06 | 18 | 611 | 09/02 | 158 | 34,059 |
| 07/07 | 1 | 612 | 09/03 | 123 | 34,182 |
| 07/08 | 31 | 643 | 09/04 | 223 | 34,405 |
| 07/09 | 18 | 661 | 09/05 | 107 | 34,512 |
| 07/10 | 13 | 674 | 09/06 | 40 | 34,552 |
| 07/11 | 2 | 676 | 09/07 | 349 | 34,901 |
| 07/12 | 1 | 677 | 09/08 | 120 | 35,021 |
| 07/13 | 2 | 679 | 09/09 | 83 | 35,104 |
| 07/14 | 3 | 682 | 09/10 | 31 | 35,135 |
| 07/15 | 22 | 704 | 09/11 | 52 | 35,187 |
| 07/16 | 74 | 778 | 09/12 | 54 | 35,241 |
| 07/17 | 114 | 892 | 09/13 | 75 | 35,316 |
| 07/18 | 34 | 926 | 09/14 | 23 | 35,339 |
| 07/19 | 525 | 1,451 | 09/15 | 11 | 35,350 |
| 07/20 | 633 | 2,084 | 09/16 | 20 | 35,370 |
| 07/21 | 548 | 2,632 | 09/17 | 25 | 35,395 |

Source: Marcuson, 1987a.

Table 19. Daily sockeye salmon weir counts, Larson Lake, 1987.

| Date | Daily | Accum |
|----------------|-------|--------|
| prior to 07/22 | 11 | 11 |
| 07/22 | 0 | 11 |
| 07/23 | 12 | 23 |
| 07/24 | 6 | 29 |
| 07/25 | 72 | 101 |
| 07/26 | 45 | 146 |
| 07/27 | 347 | 493 |
| 07/28 | 1,250 | 1,743 |
| 07/29 | 1,940 | 3,683 |
| 07/30 | 645 | 4,328 |
| 07/31 | 386 | 4,714 |
| 08/01 | 247 | 4,961 |
| 08/02 | 580 | 5,541 |
| 08/03 | 1,205 | 6,746 |
| 08/04 | 594 | 7,340 |
| 08/05 | 1,778 | 9,118 |
| 08/06 | 702 | 9,820 |
| 08/07 | 47 | 9,867 |
| 08/08 | 547 | 10,414 |
| 08/09 | 950 | 11,364 |
| 08/10 | 1,144 | 12,508 |
| 08/11 | 781 | 13,289 |
| 08/12 | 592 | 13,881 |
| 08/13 | 169 | 14,050 |
| 08/14 | 195 | 14,245 |
| 08/15 | 264 | 14,509 |
| 08/16 | 835 | 15,344 |
| 08/17 | 176 | 15,520 |
| 08/18 | 23 | 15,543 |
| 08/19 | 118 | 15,661 |
| 08/20 | 594 | 16,255 |
| 08/21 | 159 | 16,414 |
| 08/22 | 145 | 16,559 |
| 08/23 | 120 | 16,679 |
| 08/24 | 31 | 16,710 |
| 08/25 | 26 | 16,736 |
| 08/26 | 17 | 16,753 |

Source: Marcuson, 1987b

Table 20. Buyers and processors of Upper Cook Inlet fishery products, 1987.

| Buyer/Processor | Plant Site | Contact | Address | Product ¹ |
|----------------------------|--------------------|-----------------|---------------------------------------|----------------------|
| Alaska Sea Pack Inc. | Anchorage | Bill Nix | 1020 M St. Anchorage | S |
| Alaskan Gourmet, Inc. | Anchorage | Paul Schilling | Box 6733 Anchorage | S |
| All Alaskan Seafoods | Kodiak | Melvan Morris | 130 Nickerson St. Anchorage | S |
| Allied Processing | Kenai | Joe Nord Sr. | Box 5090 Kenai | S |
| Anpac, Inc. | Anchorage | Sarah Barber | Box 92520 Anchorage | S,H |
| Chignik Pride Fisheries | Chignik | Joseph Haugsven | 4241 21st Ave. W. Seattle | S |
| Chugach Alaska Fisheries | Port Graham | Larry Cambroner | 4241 21st Ave. W. Seattle | S |
| Columbia Wards Fisheries | Kenai | Ray Landry | Box C-5030 Seattle | S |
| Cook Inlet Processing | North Kenai | Paul Dale | 1035 W. Northern Lights, Anchorage | S |
| Dahmen Seafoods | Nikishka | Jerry Cartee | Box 7498 Nikishka | C,S |
| Dragnet Fisheries | Kenai | Jay Cherrier | Box 3992 Kenai | S,H |
| Ed's Kasilof Seafoods | Kasilof | Jim Trujillo | Box 18 Kasilof | S |
| Inlet Salmon Co. | Kenai & Kasilof | Vince Goddard | Box 3990 Soldotna | S |
| Hasco C-Foods | Homer | Howard Schelske | 4670 Homer Spit Rd., Homer | S |
| Seward Fisheries | Homer | Thomas King | 4019 21st Ave. W. Seattle | S,H |
| Int'l Seafoods of Alaska | Kodiak | Theodore Casten | Box 2997 Kodiak | S |
| John Cabot Trading Company | Anchorage | Roy Jones | 1200 E. 70th St. Anchorage | S |

¹ S - Salmon, H - Herring, C - Clams

Table 20. (cont'd) Buyers and processors of Upper Cook Inlet fishery products, 1987.

| Buyer/Processor | Plant Site | Contact | Address | Product |
|------------------------------------|------------|------------------|--------------------------------------|---------|
| Keener Packing Co. | Kenai | Michael Sawinski | SR 2, Box 738 | S, H |
| Kenai Packers | Kenai | Clyde Sterling | Soldotna Box 31179 Seattle | S |
| Little Fisherman Seafood Shoppe | Anchorage | Tom Reaves | 555 W. Northern Lights, Anchorage | S |
| Lobo's Local Seafood | Homer | John Wolfe | Box 2170 Homer | S, C |
| Nautilus Marine Inc. | Valdez | Tom Waterer | Box 727 Valdez | H |
| R & J Enterprises | Kasilof | Juanita Meier | 4821 E. 101st Anchorage | S |
| Rainier Seafoods, Inc. | Kodiak | Charles Miller | 520 112th Ave. N.E. Bellevue | S |
| Royal Pacific Fisheries | Kenai | Marvin Dragseth | Box 4609 Kenai | S, H |
| Salamatof Seafoods | Kenai | Wylie Reed | Box 5070 Kenai | S, H |
| Schenk, Dennis | Kasilof | Dennis Schenk | Box 3294 Kenai | S |
| Sea-Nik Seafoods | Ninilchik | James Garroute | Box 73 Ninilchik | S |
| Seafoods From Alaska | Sterling | Roland Schwanke | Box 307 Sterling | S |
| SilverTip Fish | Kasilof | Darrel Renner | Box 122 Kasilof | S |
| Western Alaska Fisheries | Kodiak | Julie Feckley | 1111 3rd Ave. Seattle | S |
| Whitney Foods | Anchorage | Bruce Mitchell | Box 190429 Anchorage | S |

Table 21. Age, weight, length and sex data for Pacific herring caught in commercial gill nets in Chinitna Bay, 1987.

| Sample Period | Age (years) | Sex | | | Percent of Total | Weight | | | Std. Length | | | |
|---------------|-------------|------|--------|---------|------------------|-----------|-----------|----------------|-------------|-----------|-----------------|-----|
| | | Male | Female | Unknown | | Mean (gm) | Std. Dev. | Number Weighed | Mean (mm) | Std. Dev. | Number Measured | |
| 5/ 3 | 1 | - | - | - | - | - | - | - | - | - | - | |
| | 2 | - | - | - | - | - | - | - | - | - | - | |
| | 3 | - | 3 | - | 3 | 1.8 | 125 | 11.8 | 3 | 206 | 3.6 | 3 |
| | 4 | 10 | 18 | - | 28 | 16.7 | 140 | 16.2 | 28 | 216 | 8.7 | 28 |
| | 5 | 7 | 2 | - | 9 | 5.4 | 156 | 10.3 | 9 | 223 | 5.4 | 9 |
| | 6 | 21 | 37 | - | 58 | 34.5 | 185 | 24.0 | 58 | 234 | 9.6 | 58 |
| | 7 | 12 | 18 | - | 30 | 17.9 | 205 | 29.9 | 30 | 239 | 9.5 | 30 |
| | 8 | 11 | 12 | - | 23 | 13.7 | 214 | 24.3 | 23 | 240 | 8.6 | 23 |
| | 9 | 3 | 1 | - | 4 | 2.4 | 245 | 46.7 | 4 | 248 | 14.0 | 4 |
| | 10 | 4 | 4 | - | 8 | 4.8 | 261 | 33.6 | 8 | 251 | 9.8 | 8 |
| | 11+ | 2 | 3 | - | 5 | 3.0 | 240 | 22.0 | 5 | 255 | 9.6 | 5 |
| Period total | | 70 | 98 | - | 168 | 100.0 | 189 | 40.6 | 168 | 233 | 14.0 | 168 |
| 5/ 7 | 1 | - | - | - | - | - | - | - | - | - | - | |
| | 2 | - | - | - | - | - | - | - | - | - | - | |
| | 3 | 1 | 2 | - | 3 | 1.6 | 94 | 25.1 | 3 | 191 | 10.7 | 3 |
| | 4 | 17 | 30 | - | 47 | 25.3 | 140 | 16.4 | 47 | 217 | 7.7 | 47 |
| | 5 | 4 | 6 | - | 10 | 5.4 | 156 | 21.4 | 10 | 225 | 9.0 | 10 |
| | 6 | 24 | 26 | - | 50 | 26.9 | 182 | 23.8 | 50 | 234 | 9.7 | 50 |
| | 7 | 16 | 18 | - | 34 | 18.3 | 196 | 28.4 | 34 | 237 | 9.6 | 34 |
| | 8 | 11 | 13 | - | 24 | 12.9 | 225 | 21.8 | 24 | 246 | 8.1 | 24 |
| | 9 | 5 | 5 | - | 10 | 5.4 | 215 | 23.3 | 10 | 243 | 3.9 | 10 |
| | 10 | 4 | 3 | - | 7 | 3.8 | 223 | 35.1 | 7 | 247 | 10.7 | 7 |
| | 11+ | - | 1 | - | 1 | .5 | 143 | - | 1 | 211 | - | 1 |
| Period total | | 82 | 104 | - | 186 | 100.0 | 180 | 39.1 | 186 | 231 | 14.6 | 186 |
| All periods | 1 | - | - | - | - | - | - | - | - | - | - | |
| | 2 | - | - | - | - | - | - | - | - | - | - | |
| | 3 | 1 | 5 | - | 6 | 1.7 | 110 | 24.4 | 6 | 198 | 11.0 | 6 |
| | 4 | 27 | 48 | - | 75 | 21.2 | 140 | 16.2 | 75 | 216 | 8.0 | 75 |
| | 5 | 11 | 8 | - | 19 | 5.4 | 156 | 16.7 | 19 | 224 | 7.4 | 19 |
| | 6 | 45 | 63 | - | 108 | 30.5 | 184 | 23.8 | 108 | 234 | 9.6 | 108 |
| | 7 | 28 | 36 | - | 64 | 18.1 | 200 | 29.3 | 64 | 238 | 9.5 | 64 |
| | 8 | 22 | 25 | - | 47 | 13.3 | 219 | 23.5 | 47 | 243 | 9.0 | 47 |
| | 9 | 8 | 6 | - | 14 | 4.0 | 224 | 32.8 | 14 | 244 | 7.9 | 14 |
| | 10 | 8 | 7 | - | 15 | 4.2 | 243 | 38.2 | 15 | 250 | 10.1 | 15 |
| | 11+ | 2 | 4 | - | 6 | 1.7 | 224 | 44.2 | 6 | 248 | 20.1 | 6 |
| Total | | 152 | 202 | - | 354 | 100.0 | 184 | 40.0 | 354 | 232 | 14.3 | 354 |

Table 22. Age, weight, length and sex data for Pacific herring caught in the commercial gill net fishery in Tuxedni Bay, 1987.

| Sample Period | Age (years) | Sex | | | Percent of Total | | Weight | | | Std. Length | | |
|---------------|-------------|------|--------|---------|------------------|-------|-----------|-----------|----------------|-------------|-----------|-----------------|
| | | Male | Female | Unknown | Total | Total | Mean (gm) | Std. Dev. | Number Weighed | Mean (mm) | Std. Dev. | Number Measured |
| ----- | | | | | | | | | | | | |
| 4/28 | 1 | - | - | - | - | - | - | - | - | - | - | - |
| | 2 | - | - | - | - | - | - | - | - | - | - | - |
| | 3 | 2 | - | - | 2 | .6 | 87 | 6.4 | 2 | 189 | 4.2 | 2 |
| | 4 | 25 | 25 | - | 50 | 15.0 | 128 | 20.1 | 50 | 205 | 16.3 | 50 |
| | 5 | 9 | 12 | - | 21 | 6.3 | 150 | 34.9 | 21 | 214 | 27.0 | 21 |
| | 6 | 36 | 42 | - | 78 | 23.4 | 167 | 22.2 | 78 | 224 | 20.2 | 78 |
| | 7 | 35 | 32 | - | 67 | 20.1 | 184 | 23.1 | 67 | 230 | 14.3 | 67 |
| | 8 | 23 | 31 | - | 54 | 16.2 | 200 | 26.6 | 54 | 237 | 8.8 | 54 |
| | 9 | 4 | 4 | - | 8 | 2.4 | 209 | 28.9 | 8 | 239 | 9.2 | 8 |
| | 10 | 11 | 19 | - | 30 | 9.0 | 233 | 26.3 | 30 | 247 | 8.0 | 30 |
| | 11+ | 10 | 13 | - | 23 | 6.9 | 249 | 35.4 | 23 | 250 | 8.9 | 23 |
| ----- | | | | | | | | | | | | |
| Period total | | 155 | 178 | - | 333 | 100.0 | 181 | 43.1 | 333 | 228 | 20.8 | 333 |
| ----- | | | | | | | | | | | | |
| 5/20 | 1 | - | - | - | - | - | - | - | - | - | - | - |
| | 2 | - | - | - | - | - | - | - | - | - | - | - |
| | 3 | - | - | - | - | - | - | - | - | - | - | - |
| | 4 | 35 | 47 | - | 82 | 29.4 | 130 | 19.8 | 82 | 210 | 9.6 | 82 |
| | 5 | 8 | 19 | - | 27 | 9.7 | 143 | 18.1 | 27 | 217 | 9.9 | 27 |
| | 6 | 38 | 34 | - | 72 | 25.8 | 158 | 21.3 | 72 | 223 | 8.0 | 72 |
| | 7 | 30 | 23 | - | 53 | 19.0 | 171 | 26.2 | 53 | 228 | 8.9 | 53 |
| | 8 | 11 | 12 | - | 23 | 8.2 | 190 | 34.6 | 23 | 238 | 12.4 | 23 |
| | 9 | 8 | 4 | - | 12 | 4.3 | 185 | 46.3 | 12 | 231 | 16.2 | 12 |
| | 10 | 3 | 4 | - | 7 | 2.5 | 215 | 30.2 | 7 | 247 | 9.1 | 7 |
| | 11+ | 3 | - | - | 3 | 1.1 | 239 | 14.7 | 3 | 254 | 8.0 | 3 |
| ----- | | | | | | | | | | | | |
| Period total | | 136 | 143 | - | 279 | 100.0 | 157 | 33.8 | 279 | 222 | 14.1 | 279 |
| ----- | | | | | | | | | | | | |
| All periods | 1 | - | - | - | - | - | - | - | - | - | - | - |
| | 2 | - | - | - | - | - | - | - | - | - | - | - |
| | 3 | 2 | - | - | 2 | .3 | 87 | 6.4 | 2 | 189 | 4.2 | 2 |
| | 4 | 60 | 72 | - | 132 | 21.6 | 129 | 19.9 | 132 | 208 | 12.7 | 132 |
| | 5 | 17 | 31 | - | 48 | 7.8 | 146 | 26.7 | 48 | 215 | 19.2 | 48 |
| | 6 | 74 | 76 | - | 150 | 24.5 | 163 | 22.2 | 150 | 223 | 15.5 | 150 |
| | 7 | 65 | 55 | - | 120 | 19.6 | 178 | 25.4 | 120 | 229 | 12.2 | 120 |
| | 8 | 34 | 43 | - | 77 | 12.6 | 197 | 29.4 | 77 | 237 | 9.9 | 77 |
| | 9 | 12 | 8 | - | 20 | 3.3 | 195 | 41.2 | 20 | 234 | 14.2 | 20 |
| | 10 | 14 | 23 | - | 37 | 6.0 | 230 | 27.6 | 37 | 247 | 8.1 | 37 |
| | 11+ | 13 | 13 | - | 26 | 4.2 | 248 | 33.6 | 26 | 250 | 8.8 | 26 |
| ----- | | | | | | | | | | | | |
| Total | | 291 | 321 | - | 612 | 100.0 | 170 | 40.9 | 612 | 225 | 18.3 | 612 |

Table 23. Age, weight, length and sex data for Pacific herring caught in commercial gill nets along the east side of Upper Cook Inlet, 1987.

| Sample Period | Age (years) | Sex | | | Percent of Total | | Weight | | | Std. Length | | |
|---------------|-------------|------|--------|---------|------------------|-------|-----------|-----------|----------------|-------------|-----------|-----------------|
| | | Male | Female | Unknown | Total | Total | Mean (gm) | Std. Dev. | Number Weighed | Mean (mm) | Std. Dev. | Number Measured |
| ----- | | | | | | | | | | | | |
| 5/15 | 1 | - | - | - | - | - | - | - | - | - | - | - |
| | 2 | - | - | - | - | - | - | - | - | - | - | - |
| | 3 | - | - | - | - | - | - | - | - | - | - | - |
| | 4 | - | 2 | - | 2 | 2.2 | 124 | 15.6 | 2 | 203 | 2.8 | 2 |
| | 5 | 3 | 1 | - | 4 | 4.5 | 139 | 18.2 | 4 | 216 | 6.2 | 4 |
| | 6 | 6 | 5 | - | 11 | 12.4 | 146 | 19.0 | 11 | 218 | 5.5 | 11 |
| | 7 | 15 | 16 | - | 31 | 34.8 | 165 | 22.0 | 31 | 224 | 9.0 | 31 |
| | 8 | 19 | 8 | - | 27 | 30.3 | 172 | 28.6 | 27 | 228 | 10.0 | 27 |
| | 9 | 4 | 2 | - | 6 | 6.7 | 187 | 23.2 | 6 | 229 | 8.0 | 6 |
| | 10 | 6 | - | - | 6 | 6.7 | 186 | 20.4 | 6 | 235 | 7.1 | 6 |
| | 11+ | 2 | - | - | 2 | 2.2 | 192 | 47.4 | 2 | 238 | 14.1 | 2 |
| ----- | | | | | | | | | | | | |
| Period total | | 55 | 34 | - | 89 | 100.0 | 166 | 27.3 | 89 | 225 | 10.3 | 89 |
| ----- | | | | | | | | | | | | |
| 5/21 | 1 | - | - | - | - | - | - | - | - | - | - | - |
| | 2 | - | - | - | - | - | - | - | - | - | - | - |
| | 3 | 1 | 1 | - | 2 | 1.3 | 58 | 24.7 | 2 | 166 | 21.2 | 2 |
| | 4 | 7 | 23 | - | 30 | 20.1 | 128 | 23.3 | 30 | 205 | 11.3 | 30 |
| | 5 | - | 14 | - | 14 | 9.4 | 141 | 12.2 | 14 | 211 | 8.8 | 14 |
| | 6 | 7 | 5 | - | 12 | 8.1 | 152 | 14.6 | 12 | 219 | 6.1 | 12 |
| | 7 | 8 | 15 | - | 23 | 15.4 | 165 | 19.5 | 23 | 222 | 6.8 | 23 |
| | 8 | 19 | 22 | - | 41 | 27.5 | 176 | 26.5 | 41 | 226 | 9.9 | 41 |
| | 9 | 3 | 7 | - | 10 | 6.7 | 188 | 26.9 | 10 | 233 | 9.6 | 10 |
| | 10 | 4 | 7 | - | 11 | 7.4 | 207 | 41.3 | 11 | 240 | 12.9 | 11 |
| | 11+ | 2 | 4 | - | 6 | 4.0 | 208 | 71.6 | 6 | 236 | 17.5 | 6 |
| ----- | | | | | | | | | | | | |
| Period total | | 51 | 98 | - | 149 | 100.0 | 162 | 38.5 | 149 | 220 | 16.0 | 149 |
| ----- | | | | | | | | | | | | |
| All periods | 1 | - | - | - | - | - | - | - | - | - | - | - |
| | 2 | - | - | - | - | - | - | - | - | - | - | - |
| | 3 | 1 | 1 | - | 2 | .8 | 58 | 24.7 | 2 | 166 | 21.2 | 2 |
| | 4 | 7 | 25 | - | 32 | 13.4 | 128 | 22.8 | 32 | 205 | 11.0 | 32 |
| | 5 | 3 | 15 | - | 18 | 7.6 | 140 | 13.2 | 18 | 212 | 8.4 | 18 |
| | 6 | 13 | 10 | - | 23 | 9.7 | 149 | 16.7 | 23 | 219 | 5.7 | 23 |
| | 7 | 23 | 31 | - | 54 | 22.7 | 165 | 20.8 | 54 | 223 | 8.1 | 54 |
| | 8 | 38 | 30 | - | 68 | 28.6 | 174 | 27.2 | 68 | 227 | 9.9 | 68 |
| | 9 | 7 | 9 | - | 16 | 6.7 | 188 | 24.8 | 16 | 231 | 8.9 | 16 |
| | 10 | 10 | 7 | - | 17 | 7.1 | 200 | 36.2 | 17 | 238 | 11.2 | 17 |
| | 11+ | 4 | 4 | - | 8 | 3.4 | 204 | 63.5 | 8 | 237 | 15.8 | 8 |
| ----- | | | | | | | | | | | | |
| Total | | 106 | 132 | - | 238 | 100.0 | 164 | 34.8 | 238 | 222 | 14.2 | 238 |

Table 24. Kasilof River personal use gillnet fishery salmon harvest by period, 21 June-27 June 1987.

| Period Date | Total Nets | Sockeye Salmon | | Chinook Salmon | |
|-------------|------------|----------------|-------|----------------|-------|
| | | Period | Accum | Period | Accum |
| 6/21 | 157 | 2,835 | 2,835 | 35 | 35 |
| 6/22 | 151 | 856 | 3,691 | 38 | 73 |
| 6/23 | 128 | 1,626 | 5,317 | 29 | 102 |
| 6/24 | 118 | 1,161 | 6,478 | 37 | 139 |
| 6/25 | 99 | 1,723 | 8,201 | 22 | 161 |
| 6/26 | 96 | 594 | 8,795 | 7 | 168 |
| 6/27 | 70 | 580 | 9,375 | 16 | 184 |

Table 25. Central and Northern Districts personal use coho salmon fishery harvest by period, 1987.

| Date | Number of Nets | Catch |
|-------------|----------------|-------|
| Sept. 12-13 | 130 | 1,140 |
| Sept. 19-20 | 94 | 528 |
| Sept. 26-27 | 86 | 545 |
| Total | | 2,213 |

Table 26. Seldovia District tide tables, May-August, 1987.

HIGH Tides SELDOVIA District
MAY 1987

| DATE | MOON | TIME | A.M. | P.M. |
|---------|------|-------|------|------------|
| 1 Fri | ● | 4:41 | 18.3 | 5:47 18.0 |
| 2 Sat | ● | 5:15 | 17.1 | 6:32 14.7 |
| 3 SUN | ● | 5:50 | 15.7 | 7:25 13.4 |
| 4 Mon | ● | 6:35 | 14.3 | 8:28 12.5 |
| 5 Tues | ● | 7:35 | 13.0 | 9:40 12.3 |
| 6 Wed | ● | 8:55 | 12.1 | 10:49 12.9 |
| 7 Thur | ● | 10:24 | 12.1 | 11:41 13.9 |
| 8 Fri | ● | 11:40 | 13.0 | ... |
| 9 Sat | ● | 0:18 | 15.2 | 12:38 14.2 |
| 10 SUN | ● | 0:52 | 16.6 | 1:26 15.8 |
| 11 Mon | ● | 1:26 | 18.0 | 2:09 16.8 |
| 12 Tues | ● | 2:00 | 19.2 | 2:53 17.8 |
| 13 Wed | ● | 2:35 | 20.2 | 3:36 18.3 |
| 14 Thur | ● | 3:14 | 20.7 | 4:20 18.4 |
| 15 Fri | ● | 3:56 | 20.7 | 5:07 17.9 |
| 16 Sat | ● | 4:38 | 20.2 | 5:59 17.1 |
| 17 SUN | ● | 5:28 | 19.1 | 6:56 16.2 |
| 18 Mon | ● | 6:24 | 17.6 | 7:57 15.8 |
| 19 Tues | ● | 7:31 | 16.1 | 9:06 15.3 |
| 20 Wed | ● | 8:47 | 14.8 | 10:12 15.8 |
| 21 Thur | ● | 10:13 | 14.3 | 11:11 16.4 |
| 22 Fri | ● | 11:32 | 14.5 | ... |
| 23 Sat | ● | 0:02 | 17.2 | 12:38 15.1 |
| 24 SUN | ● | 0:46 | 18.0 | 1:32 15.8 |
| 25 Mon | ● | 1:26 | 18.5 | 2:19 16.5 |
| 26 Tues | ● | 2:00 | 18.8 | 3:01 16.9 |
| 27 Wed | ● | 2:37 | 18.9 | 3:42 17.0 |
| 28 Thur | ● | 3:09 | 18.7 | 4:18 16.8 |
| 29 Fri | ● | 3:44 | 18.3 | 4:56 16.4 |
| 30 Sat | ● | 4:19 | 17.7 | 5:36 15.8 |
| 31 SUN | ● | 4:57 | 16.8 | 6:19 15.1 |

* BIGGER THE DOT—BETTER THE FISHING

LOW Tides SELDOVIA District
MAY 1987

| DATE | MOON | TIME | A.M. | P.M. |
|---------|------|-------|------|------------|
| 1 Fri | ● | 11:17 | 1.2 | 11:21 4.8 |
| 2 Sat | ● | 11:55 | 0.1 | ... |
| 3 SUN | ● | 0:00 | 5.8 | 12:37 1.5 |
| 4 Mon | ● | 0:45 | 6.9 | 1:28 2.8 |
| 5 Tues | ● | 1:46 | 7.8 | 2:34 3.8 |
| 6 Wed | ● | 3:11 | 8.0 | 3:52 4.2 |
| 7 Thur | ● | 4:44 | 7.2 | 5:00 4.0 |
| 8 Fri | ● | 5:48 | 5.6 | 5:53 3.5 |
| 9 Sat | ● | 6:34 | 3.6 | 6:38 3.0 |
| 10 SUN | ● | 7:14 | 1.5 | 7:18 2.4 |
| 11 Mon | ● | 7:50 | 0.5 | 7:55 2.0 |
| 12 Tues | ● | 8:28 | 2.3 | 8:36 1.8 |
| 13 Wed | ● | 9:07 | 3.6 | 9:15 1.7 |
| 14 Thur | ● | 9:49 | 4.4 | 9:57 2.1 |
| 15 Fri | ● | 10:33 | 4.5 | 10:43 2.6 |
| 16 Sat | ● | 11:20 | 4.0 | 11:31 3.3 |
| 17 SUN | ● | ... | ... | 12:11 -2.9 |
| 18 Mon | ● | 0:27 | 4.1 | 1:09 -1.6 |
| 19 Tues | ● | 1:33 | 4.7 | 2:13 -0.2 |
| 20 Wed | ● | 2:51 | 4.7 | 3:24 0.9 |
| 21 Thur | ● | 4:14 | 3.9 | 4:33 1.6 |
| 22 Fri | ● | 5:26 | 2.4 | 5:35 2.0 |
| 23 Sat | ● | 6:25 | 0.8 | 6:28 2.3 |
| 24 SUN | ● | 7:14 | 0.7 | 7:13 2.5 |
| 25 Mon | ● | 7:56 | 1.7 | 7:55 2.8 |
| 26 Tues | ● | 8:35 | 2.4 | 8:33 3.1 |
| 27 Wed | ● | 9:12 | 2.6 | 9:12 3.4 |
| 28 Thur | ● | 9:46 | 2.5 | 9:50 3.8 |
| 29 Fri | ● | 10:23 | 2.0 | 10:27 4.3 |
| 30 Sat | ● | 10:59 | 1.3 | 11:05 4.9 |
| 31 SUN | ● | 11:36 | 0.5 | 11:47 5.5 |

ALASKA DAYLIGHT TIME

HIGH Tides SELDOVIA District
JUNE 1987

| DATE | MOON | TIME | A.M. | P.M. |
|---------|------|-------|------|------------|
| 1 Mon | ● | 5:38 | 15.8 | 7:01 14.4 |
| 2 Tues | ● | 6:21 | 14.7 | 7:51 13.9 |
| 3 Wed | ● | 7:13 | 13.6 | 8:39 13.7 |
| 4 Thur | ● | 8:15 | 12.6 | 9:32 13.9 |
| 5 Fri | ● | 9:31 | 12.2 | 10:21 14.5 |
| 6 Sat | ● | 10:45 | 12.4 | 11:06 15.4 |
| 7 SUN | ● | 11:56 | 13.2 | 11:51 16.5 |
| 8 Mon | ● | ... | ... | 12:54 14.4 |
| 9 Tues | ● | 0:36 | 17.7 | 1:48 15.6 |
| 10 Wed | ● | 1:21 | 18.9 | 2:38 16.8 |
| 11 Thur | ● | 2:06 | 19.9 | 3:24 17.6 |
| 12 Fri | ● | 2:53 | 20.6 | 4:12 18.1 |
| 13 Sat | ● | 3:40 | 20.8 | 5:01 18.2 |
| 14 SUN | ● | 4:33 | 20.5 | 5:52 18.0 |
| 15 Mon | ● | 5:25 | 19.6 | 6:42 17.7 |
| 16 Tues | ● | 6:21 | 18.2 | 7:35 17.3 |
| 17 Wed | ● | 7:22 | 16.6 | 8:29 17.0 |
| 18 Thur | ● | 8:29 | 15.1 | 9:24 16.8 |
| 19 Fri | ● | 9:45 | 14.0 | 10:21 16.7 |
| 20 Sat | ● | 11:03 | 13.5 | 11:14 16.8 |
| 21 SUN | ● | ... | ... | 12:17 13.7 |
| 22 Mon | ● | 0:04 | 16.9 | 1:21 14.3 |
| 23 Tues | ● | 0:52 | 17.1 | 2:10 15.0 |
| 24 Wed | ● | 1:31 | 17.3 | 2:53 15.6 |
| 25 Thur | ● | 2:14 | 17.6 | 3:33 16.0 |
| 26 Fri | ● | 2:52 | 17.7 | 4:08 16.3 |
| 27 Sat | ● | 3:30 | 17.8 | 4:44 16.4 |
| 28 SUN | ● | 4:06 | 17.7 | 5:20 16.3 |
| 29 Mon | ● | 4:45 | 17.3 | 5:55 16.1 |
| 30 Tues | ● | 5:23 | 16.6 | 6:32 15.9 |

* BIGGER THE DOT—BETTER THE FISHING

LOW Tides SELDOVIA District
JUNE 1987

| DATE | MOON | TIME | A.M. | P.M. |
|---------|------|-------|------|------------|
| 1 Mon | ● | ... | ... | 12:18 0.5 |
| 2 Tues | ● | 0:29 | 6.1 | 1:01 1.6 |
| 3 Wed | ● | 1:25 | 6.6 | 1:49 2.5 |
| 4 Thur | ● | 2:29 | 6.6 | 2:44 3.4 |
| 5 Fri | ● | 3:39 | 6.0 | 3:43 4.0 |
| 6 Sat | ● | 4:47 | 4.8 | 4:43 4.4 |
| 7 SUN | ● | 5:43 | 3.1 | 5:39 4.4 |
| 8 Mon | ● | 6:33 | 1.1 | 6:30 4.1 |
| 9 Tues | ● | 7:18 | 0.9 | 7:21 3.7 |
| 10 Wed | ● | 8:03 | 2.7 | 8:08 3.1 |
| 11 Thur | ● | 8:50 | 4.1 | 8:56 2.8 |
| 12 Fri | ● | 9:36 | 4.9 | 9:45 2.4 |
| 13 Sat | ● | 10:23 | 5.2 | 10:35 2.3 |
| 14 SUN | ● | 11:13 | 4.8 | 11:26 2.4 |
| 15 Mon | ● | ... | ... | 12:02 -3.8 |
| 16 Tues | ● | 0:24 | 2.6 | 12:53 -0.4 |
| 17 Wed | ● | 1:25 | 2.9 | 1:48 -2.7 |
| 18 Thur | ● | 2:29 | 2.9 | 2:47 1.0 |
| 19 Fri | ● | 3:43 | 2.6 | 3:46 2.6 |
| 20 Sat | ● | 4:54 | 1.9 | 4:49 3.8 |
| 21 SUN | ● | 5:59 | 1.0 | 5:48 4.6 |
| 22 Mon | ● | 6:52 | 0.1 | 6:44 5.0 |
| 23 Tues | ● | 7:37 | 0.6 | 7:31 5.0 |
| 24 Wed | ● | 8:19 | 1.2 | 8:16 4.8 |
| 25 Thur | ● | 8:57 | 1.5 | 8:56 4.7 |
| 26 Fri | ● | 9:33 | 1.7 | 9:35 4.5 |
| 27 Sat | ● | 10:09 | 1.7 | 10:14 4.4 |
| 28 SUN | ● | 10:44 | 1.5 | 10:51 4.4 |
| 29 Mon | ● | 11:18 | 1.0 | 11:30 4.6 |
| 30 Tues | ● | 11:55 | 0.3 | ... |

ALASKA DAYLIGHT TIME

HIGH Tides SELDOVIA District
JULY 1987

| DATE | MOON | TIME | A.M. | P.M. |
|---------|------|-------|------|------------|
| 1 Wed | ● | 6:05 | 15.7 | 7:04 15.8 |
| 2 Thur | ● | 6:50 | 14.6 | 7:44 15.4 |
| 3 Fri | ● | 7:38 | 13.6 | 8:23 15.4 |
| 4 Sat | ● | 8:42 | 12.7 | 9:08 15.5 |
| 5 SUN | ● | 9:57 | 12.3 | 10:01 15.8 |
| 6 Mon | ● | 11:16 | 12.6 | 10:55 16.4 |
| 7 Tues | ● | 12:31 | 13.5 | 11:56 17.3 |
| 8 Wed | ● | ... | ... | 1:34 14.9 |
| 9 Thur | ● | 0:55 | 18.5 | 2:27 16.3 |
| 10 Fri | ● | 1:50 | 19.7 | 3:15 17.8 |
| 11 Sat | ● | 2:43 | 20.7 | 4:03 18.8 |
| 12 SUN | ● | 3:36 | 21.3 | 4:48 19.2 |
| 13 Mon | ● | 4:27 | 21.2 | 5:31 19.5 |
| 14 Tues | ● | 5:17 | 20.4 | 6:16 19.4 |
| 15 Wed | ● | 6:10 | 19.0 | 6:59 19.0 |
| 16 Thur | ● | 7:04 | 17.3 | 7:44 18.3 |
| 17 Fri | ● | 8:05 | 15.4 | 8:31 17.4 |
| 18 Sat | ● | 9:10 | 13.4 | 9:23 16.5 |
| 19 SUN | ● | 10:33 | 12.8 | 10:23 15.8 |
| 20 Mon | ● | 12:01 | 12.8 | 11:24 15.5 |
| 21 Tues | ● | ... | ... | 1:15 13.4 |
| 22 Wed | ● | 0:23 | 15.6 | 2:08 14.3 |
| 23 Thur | ● | 1:15 | 16.1 | 3:50 15.2 |
| 24 Fri | ● | 2:01 | 16.8 | 2:50 16.0 |
| 25 Sat | ● | 2:43 | 17.5 | 3:52 16.7 |
| 26 SUN | ● | 3:19 | 18.1 | 4:22 17.2 |
| 27 Mon | ● | 3:55 | 18.4 | 4:51 17.5 |
| 28 Tues | ● | 4:32 | 18.3 | 5:21 17.7 |
| 29 Wed | ● | 5:07 | 17.8 | 5:50 17.6 |
| 30 Thur | ● | 5:44 | 16.9 | 6:19 17.4 |
| 31 Fri | ● | 6:21 | 15.8 | 6:51 17.1 |

* BIGGER THE DOT—BETTER THE FISHING

LOW Tides SELDOVIA District
JULY 1987

| DATE | MOON | TIME | A.M. | P.M. |
|---------|------|-------|------|------------|
| 1 Wed | ● | 0:11 | 4.8 | 12:31 0.7 |
| 2 Thur | ● | 0:56 | 5.0 | 1:08 1.8 |
| 3 Fri | ● | 1:43 | 5.0 | 1:48 3.0 |
| 4 Sat | ● | 2:41 | 4.7 | 2:38 4.2 |
| 5 SUN | ● | 3:46 | 4.1 | 3:39 5.2 |
| 6 Mon | ● | 4:52 | 2.9 | 4:46 5.8 |
| 7 Tues | ● | 5:57 | 1.3 | 5:54 5.7 |
| 8 Wed | ● | 6:55 | 0.6 | 6:56 5.0 |
| 9 Thur | ● | 7:47 | 2.4 | 7:52 4.1 |
| 10 Fri | ● | 8:37 | 3.9 | 8:45 2.9 |
| 11 Sat | ● | 9:26 | 5.0 | 9:35 1.9 |
| 12 SUN | ● | 10:13 | 5.4 | 10:25 1.1 |
| 13 Mon | ● | 10:57 | 5.1 | 11:15 0.8 |
| 14 Tues | ● | 11:42 | 4.0 | ... |
| 15 Wed | ● | 0:06 | 0.8 | 12:27 -2.3 |
| 16 Thur | ● | 0:59 | 1.1 | 1:14 -0.2 |
| 17 Fri | ● | 1:59 | 1.6 | 2:02 2.0 |
| 18 Sat | ● | 3:02 | 2.2 | 2:57 4.2 |
| 19 SUN | ● | 4:15 | 2.4 | 3:59 5.9 |
| 20 Mon | ● | 5:27 | 2.2 | 5:15 6.8 |
| 21 Tues | ● | 6:33 | 1.7 | 6:22 6.9 |
| 22 Wed | ● | 7:26 | 0.9 | 7:18 6.5 |
| 23 Thur | ● | 8:11 | 0.2 | 8:06 5.8 |
| 24 Fri | ● | 8:46 | -0.5 | 8:45 5.0 |
| 25 Sat | ● | 9:20 | -1.1 | 9:22 4.2 |
| 26 SUN | ● | 9:51 | -1.4 | 9:57 3.7 |
| 27 Mon | ● | 10:23 | -1.5 | 10:34 3.3 |
| 28 Tues | ● | 10:54 | -1.2 | 11:08 3.1 |
| 29 Wed | ● | 11:26 | -0.5 | 11:43 3.1 |
| 30 Thur | ● | 11:55 | 0.5 | ... |
| 31 Fri | ● | 0:21 | 3.1 | 12:27 1.9 |

ALASKA DAYLIGHT TIME

HIGH Tides SELDOVIA District
AUGUST 1987

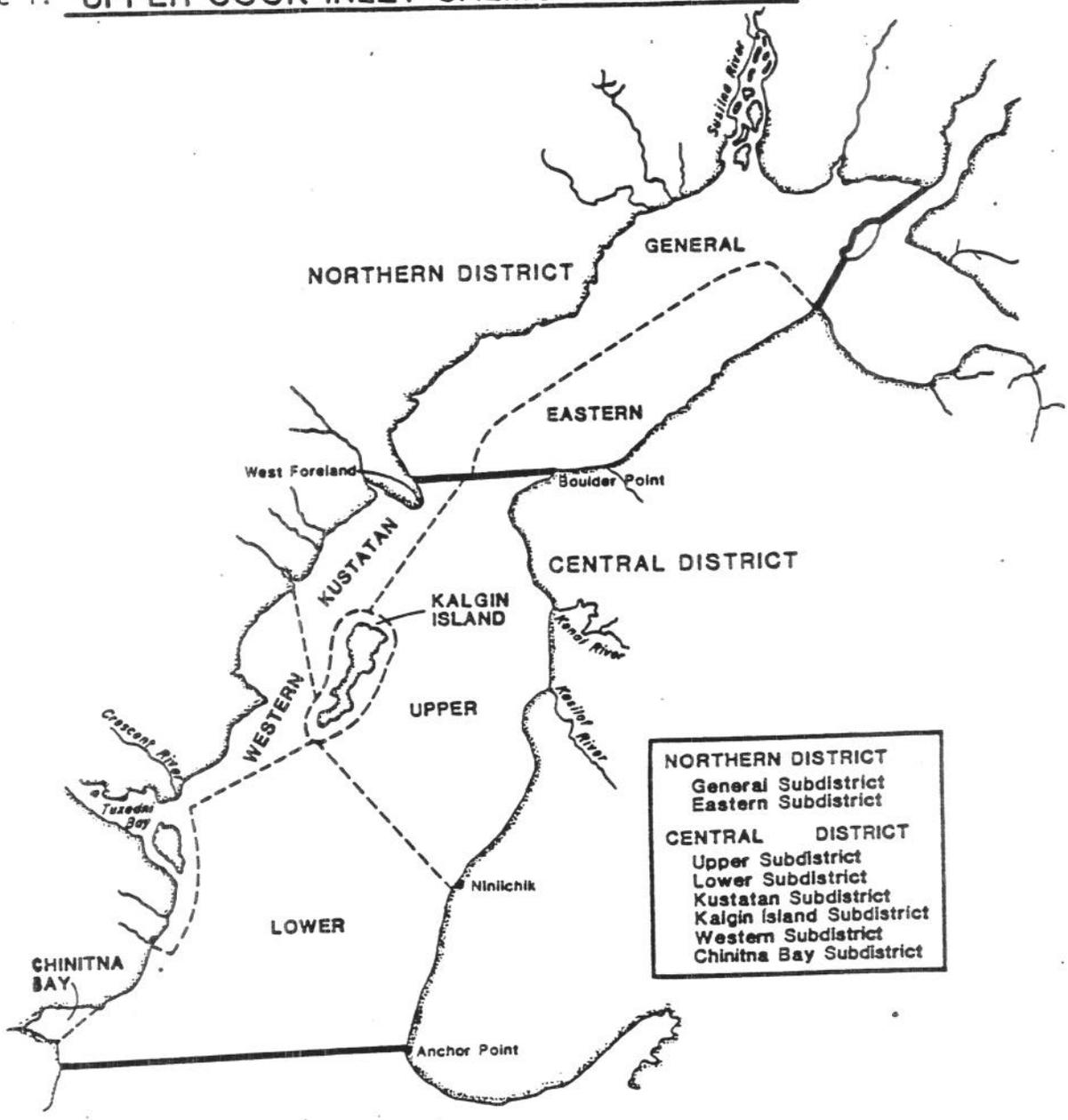
| DATE | MOON | TIME | A.M. | P.M. |
|---------|------|-------|------|------------|
| 1 Sat | ● | 7:09 | 14.6 | 7:25 16.7 |
| 2 SUN | ● | 8:05 | 13.3 | 8:08 16.3 |
| 3 Mon | ● | 9:21 | 12.4 | 9:08 16.0 |
| 4 Tues | ● | 10:53 | 12.3 | 10:18 16.1 |
| 5 Wed | ● | 12:22 | 13.3 | 11:32 16.8 |
| 6 Thur | ● | ... | ... | 1:27 14.9 |
| 7 Fri | ● | 0:44 | 18.2 | 2:21 18.7 |
| 8 Sat | ● | 1:45 | 19.7 | 3:03 18.4 |
| 9 SUN | ● | 2:38 | 21.1 | 3:42 19.7 |
| 10 Mon | ● | 3:30 | 21.9 | 4:22 20.7 |
| 11 Tues | ● | 4:16 | 21.9 | 5:02 21.1 |
| 12 Wed | ● | 5:04 | 21.1 | 5:39 20.9 |
| 13 Thur | ● | 5:50 | 19.6 | 6:16 20.2 |
| 14 Fri | ● | 6:39 | 17.7 | 6:56 19.0 |
| 15 Sat | ● | 7:33 | 15.6 | 7:38 17.5 |
| 16 SUN | ● | 8:34 | 13.7 | 8:25 15.9 |
| 17 Mon | ● | 9:59 | 12.4 | 9:26 14.7 |
| 18 Tues | ● | 11:48 | 12.4 | 10:48 14.1 |
| 19 Wed | ● | ... | ... | 1:07 13.3 |
| 20 Thur | ● | 0:12 | 14.5 | 1:55 14.4 |
| 21 Fri | ● | 1:10 | 15.5 | 2:28 15.5 |
| 22 Sat | ● | 1:52 | 16.7 | 2:58 16.5 |
| 23 SUN | ● | 2:31 | 17.8 | 3:23 17.5 |
| 24 Mon | ● | 3:04 | 18.7 | 3:50 18.4 |
| 25 Tues | ● | 3:38 | 19.1 | 4:15 19.0 |
| 26 Wed | ● | 4:12 | 19.2 | 4:41 19.3 |
| 27 Thur | ● | 4:46 | 18.8 | 5:05 19.3 |
| 28 Fri | ● | 5:23 | 18.0 | 5:34 19.0 |
| 29 Sat | ● | 6:00 | 16.8 | 6:03 18.5 |
| 30 SUN | ● | 6:43 | 15.4 | 6:37 17.7 |
| 31 Mon | ● | 7:41 | 13.8 | 7:22 16.8 |

* BIGGER THE DOT—BETTER THE FISHING

LOW Tides SELDOVIA District
AUGUST 1987

| DATE | MOON | TIME | A.M. | P.M. |
|---------|------|------|------|----------|
| 1 Sat | ● | 1:03 | 3.3 | 1:08 3.3 |
| 2 SUN | ● | 1:49 | 3.4 | 1:49 4.9 |
| 3 Mon | ● | 2:52 | 3.4 | 2:50 6.3 |
| 4 Tues | ● | 4:10 | 3.0 | 4:09 7.1 |
| 5 Wed | ● | 5:32 | 1.8 | 5:35 6.9 |
| 6 Thur | ● | 6:41 | 0.0 | 6:44 5.7 |
| 7 Fri</ | | | | |

Figure 1. UPPER COOK INLET SALMON DISTRICTS



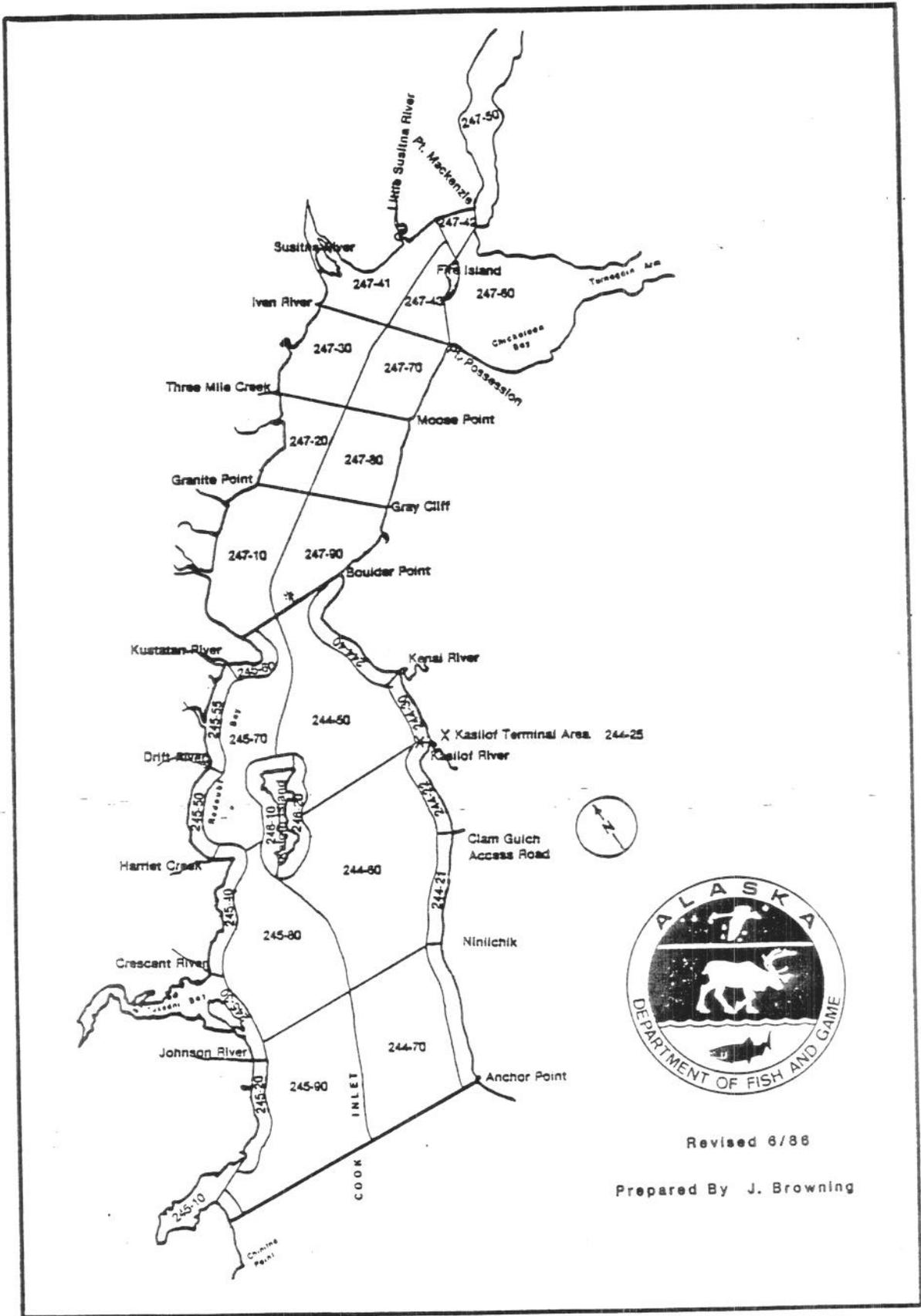


Figure 2. Upper Cook Inlet statistical areas.

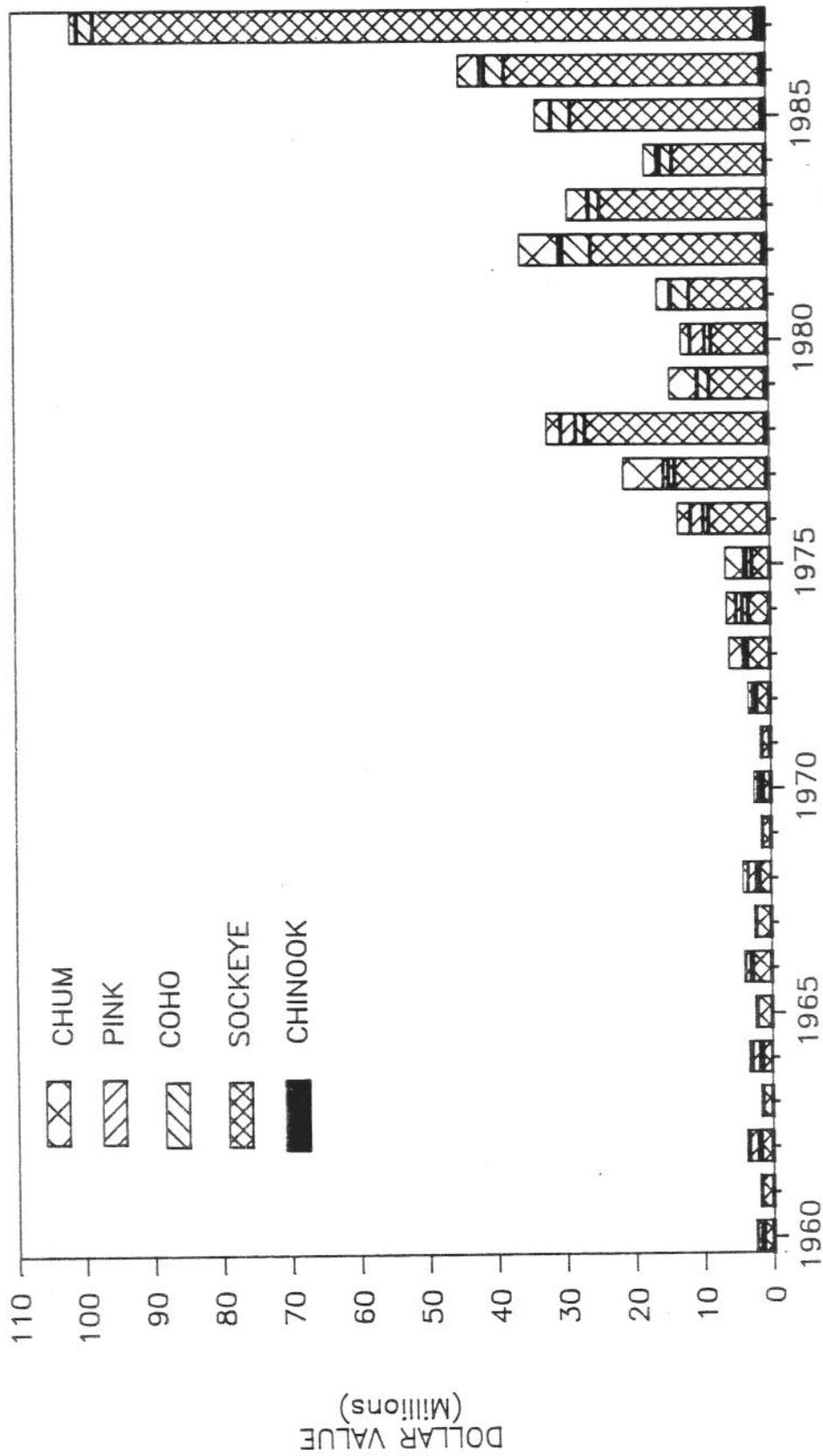


Figure 3. Exvessel value by species, 1960–1987.

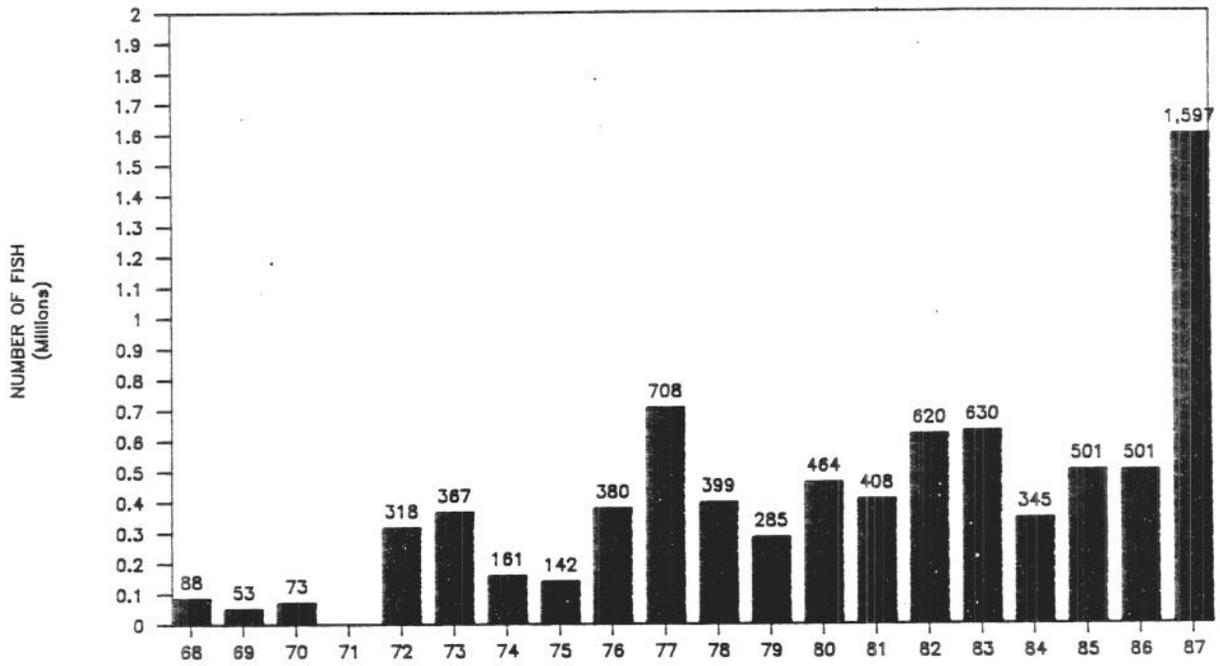


Figure 4. Kenai River sockeye salmon escapement estimates by year.

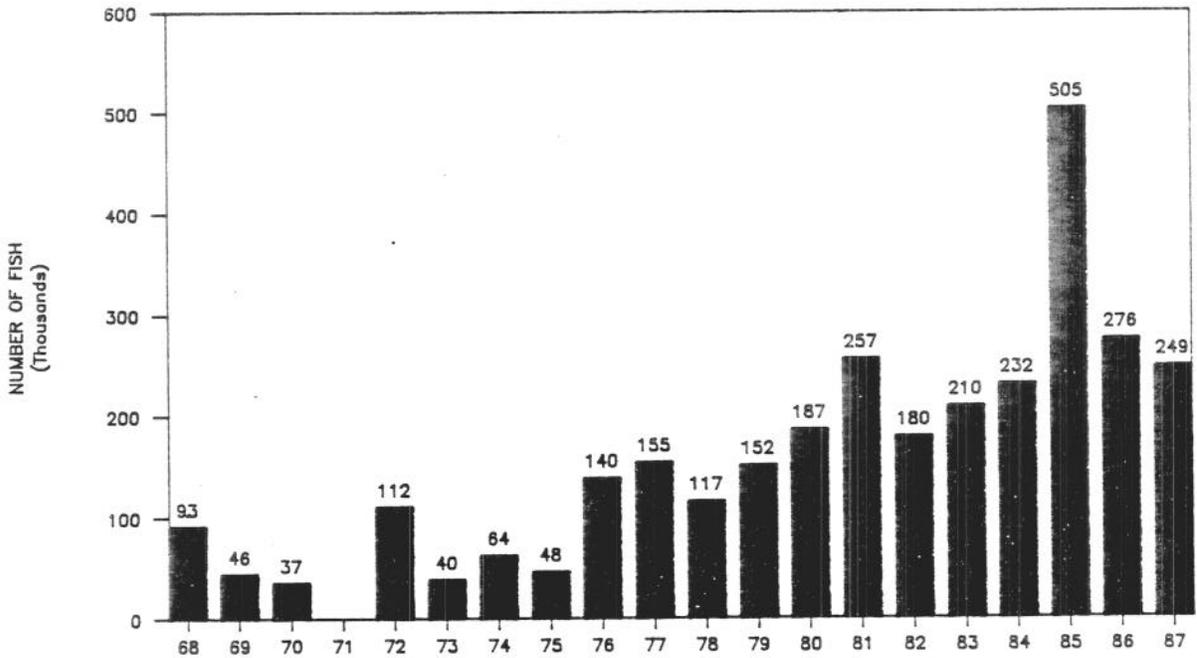


Figure 5. Kaslof River sockeye salmon escapement estimates by year.

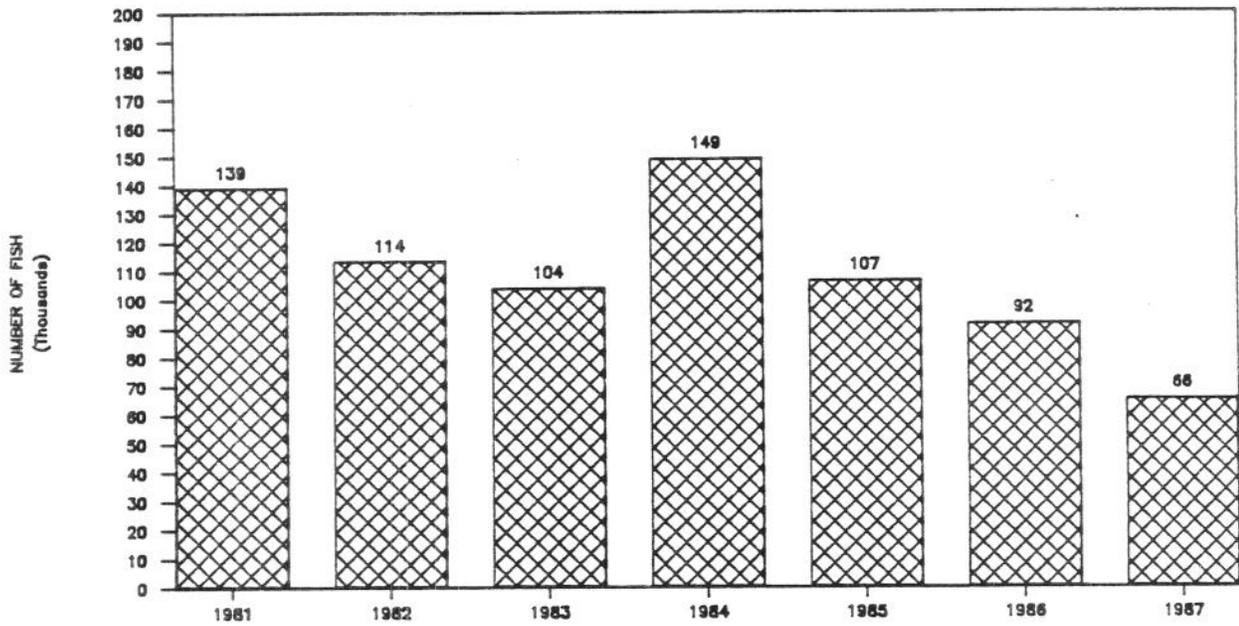


Figure 6. Yentna River sockeye salmon escapement estimates by year.

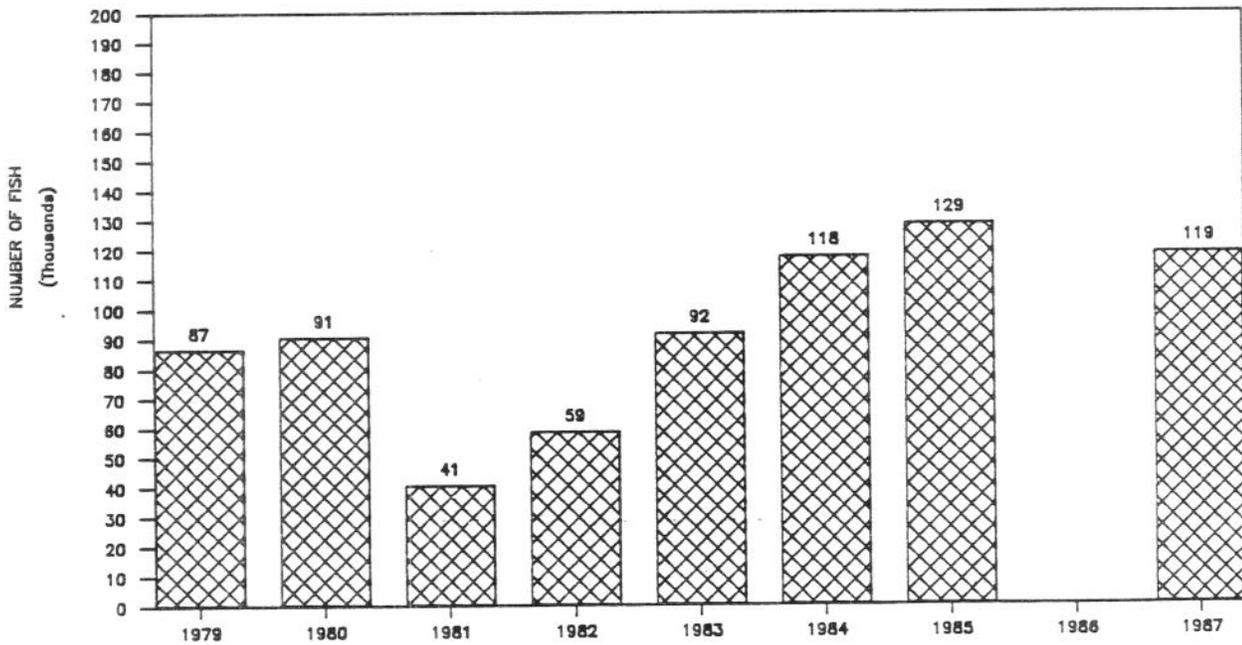


Figure 7. Crescent River sockeye salmon escapement by year.

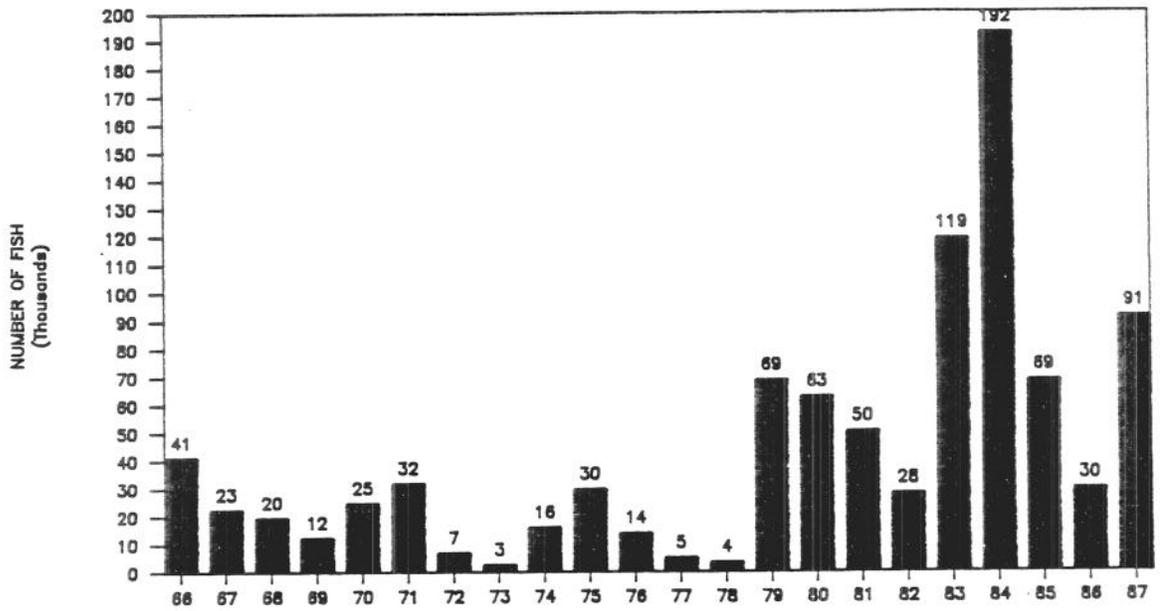


Figure 8. Fish Creek sockeye salmon escapement estimates by year.

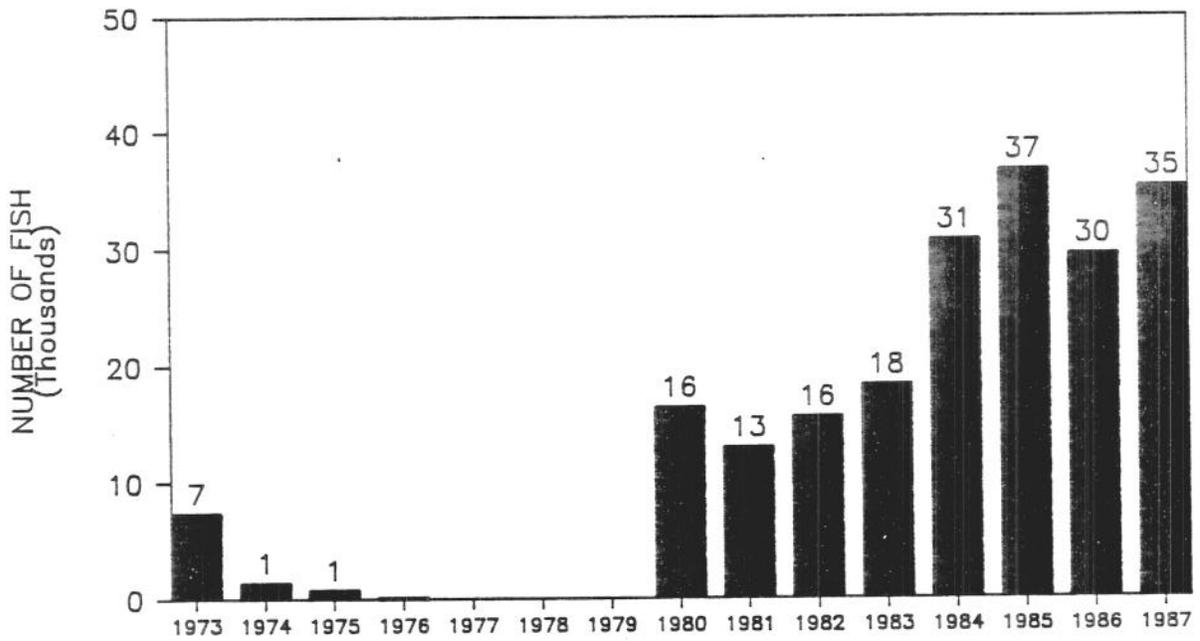


Figure 9. Packers Creek sockeye salmon escapement by year.

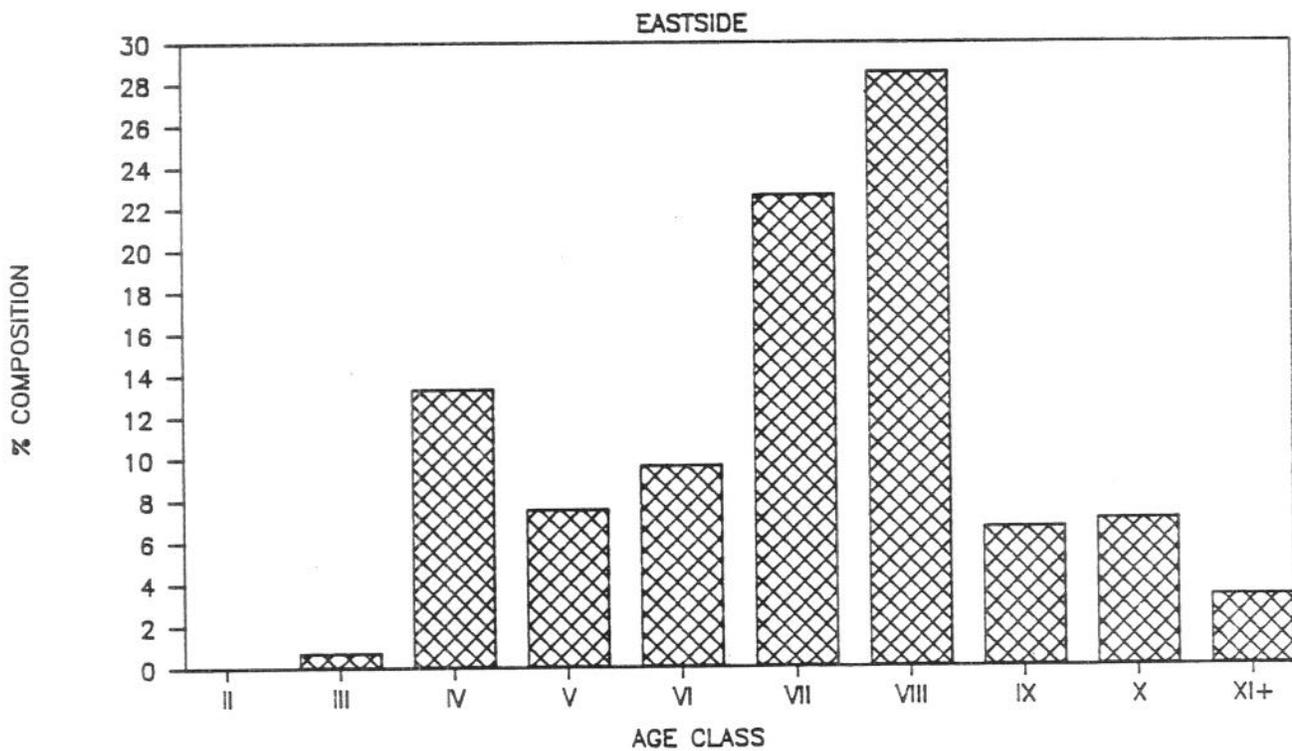
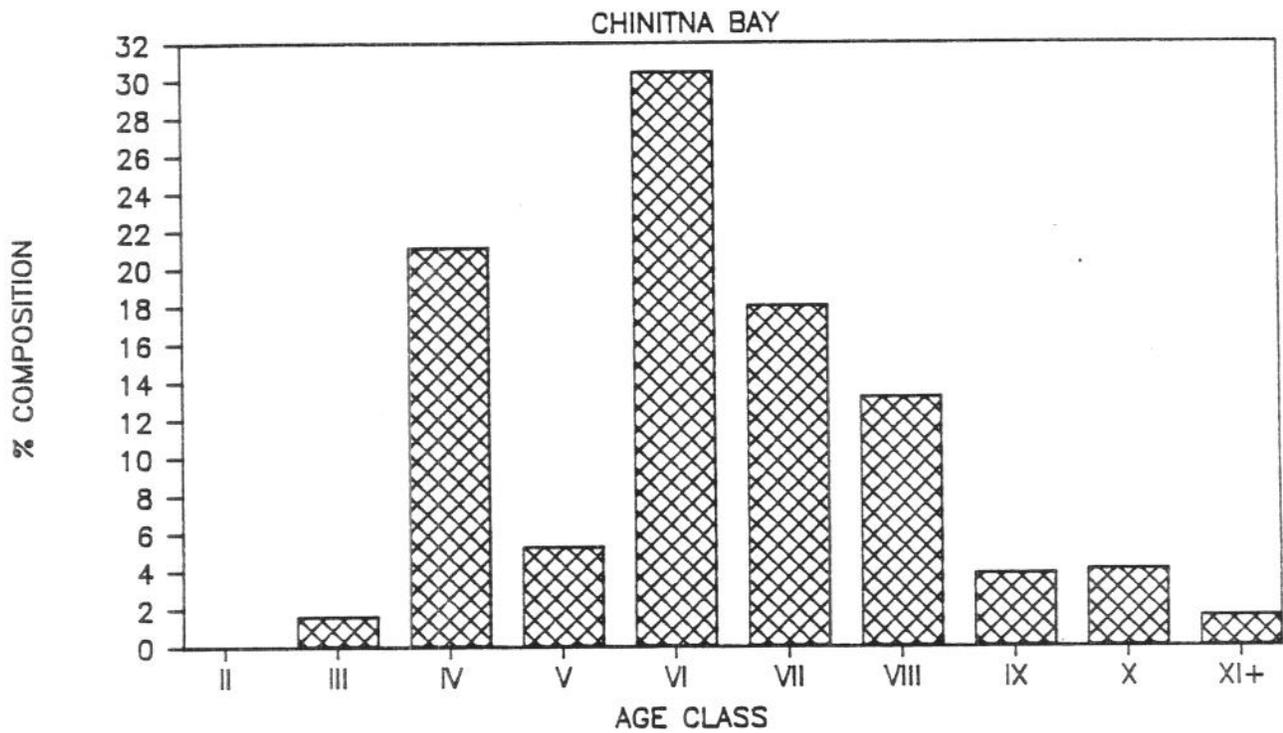


Figure 10. Commercial herring catch age composition for Chinitna Bay and the Central District east side, 1987.

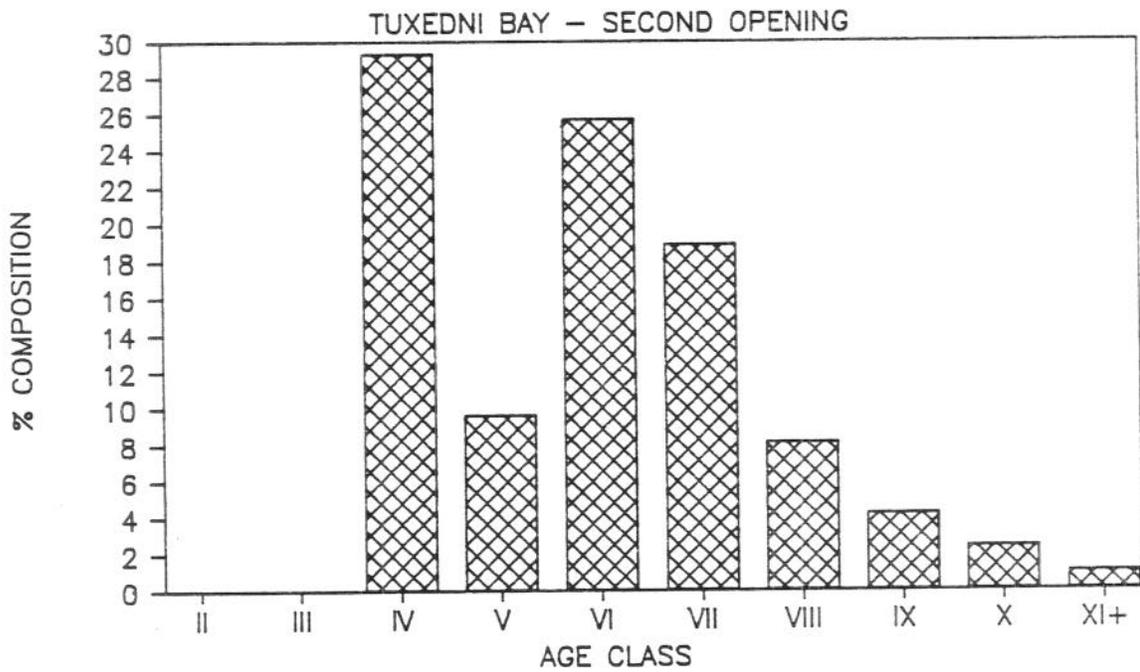
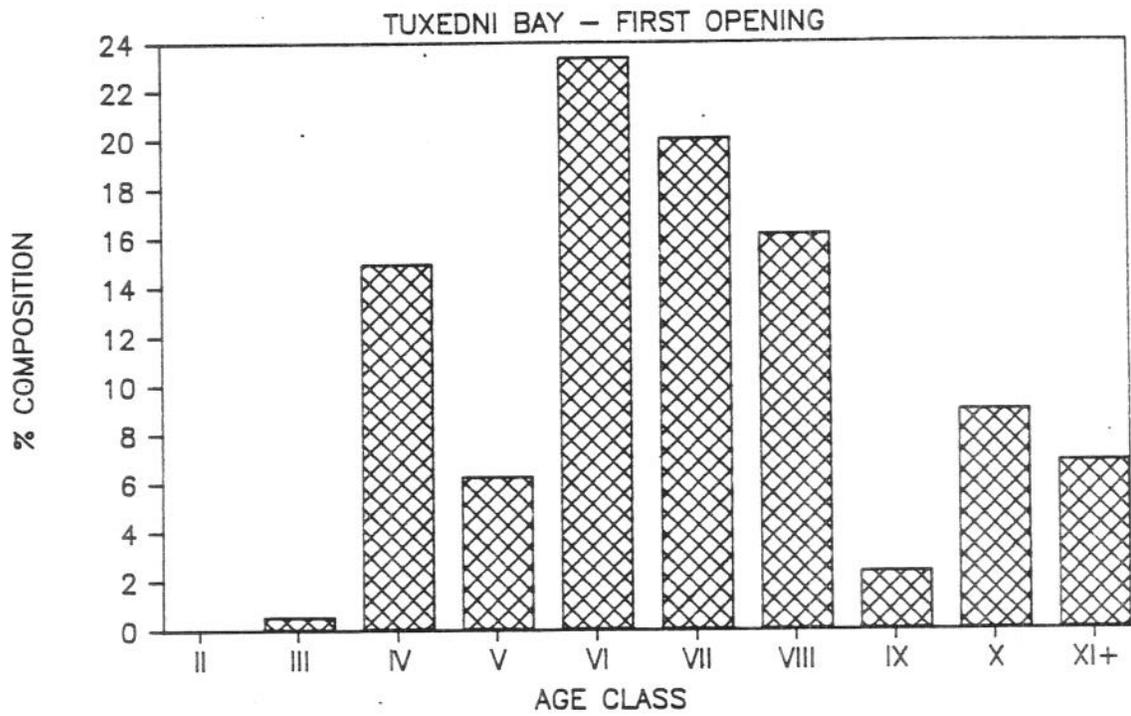


Figure 11. Commercial herring catch age composition for Tuxedni Bay, 1987.

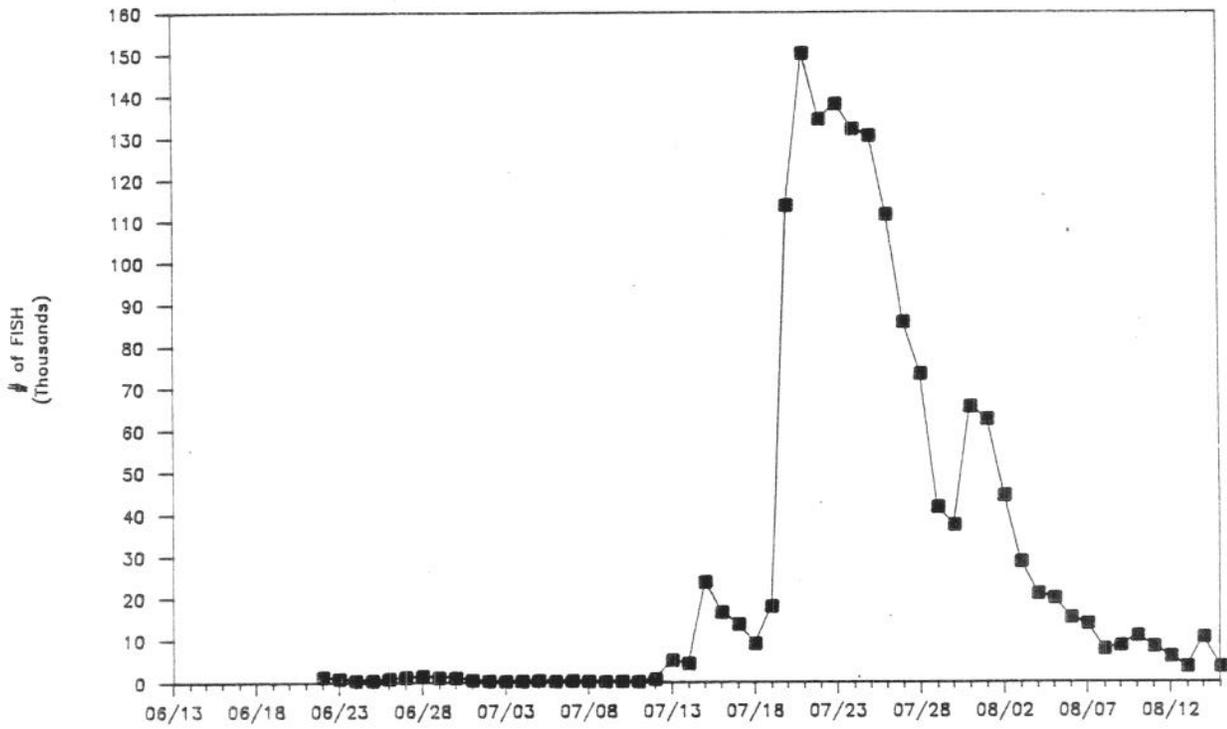


Figure 12. Kenai River daily sockeye salmon counts, 1987.

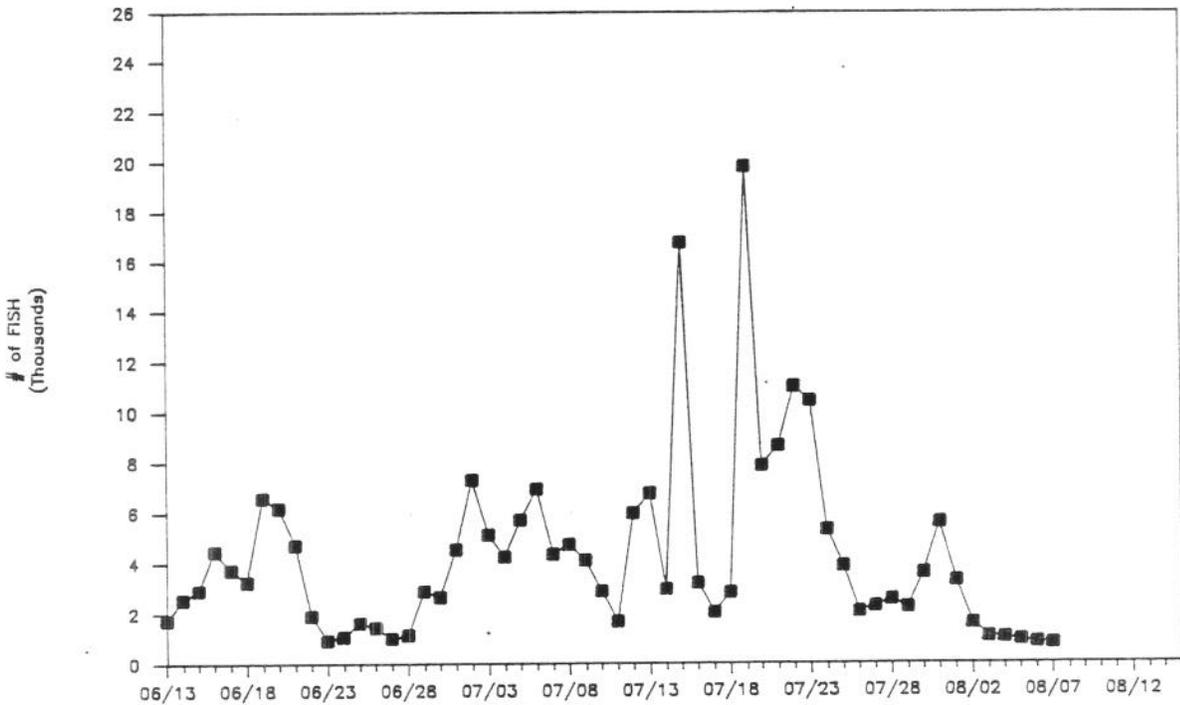


Figure 13. Kaslof River daily sockeye salmon counts, 1987.

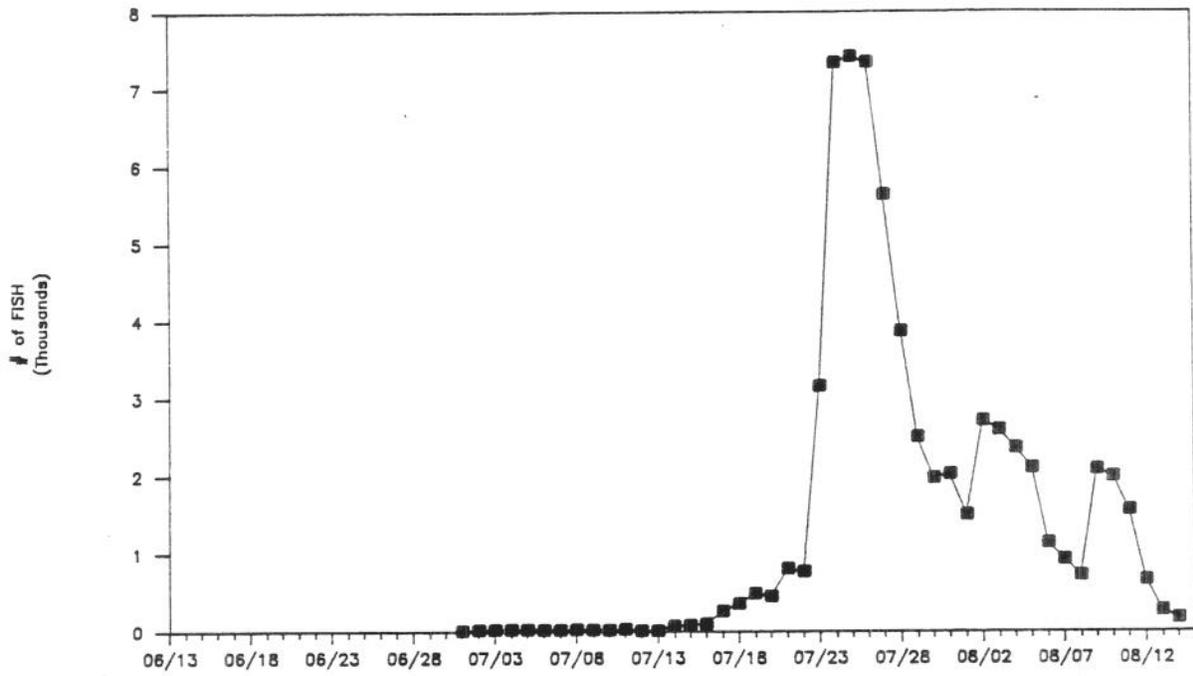


Figure 14. Yentna River daily sockeye salmon counts, 1987.

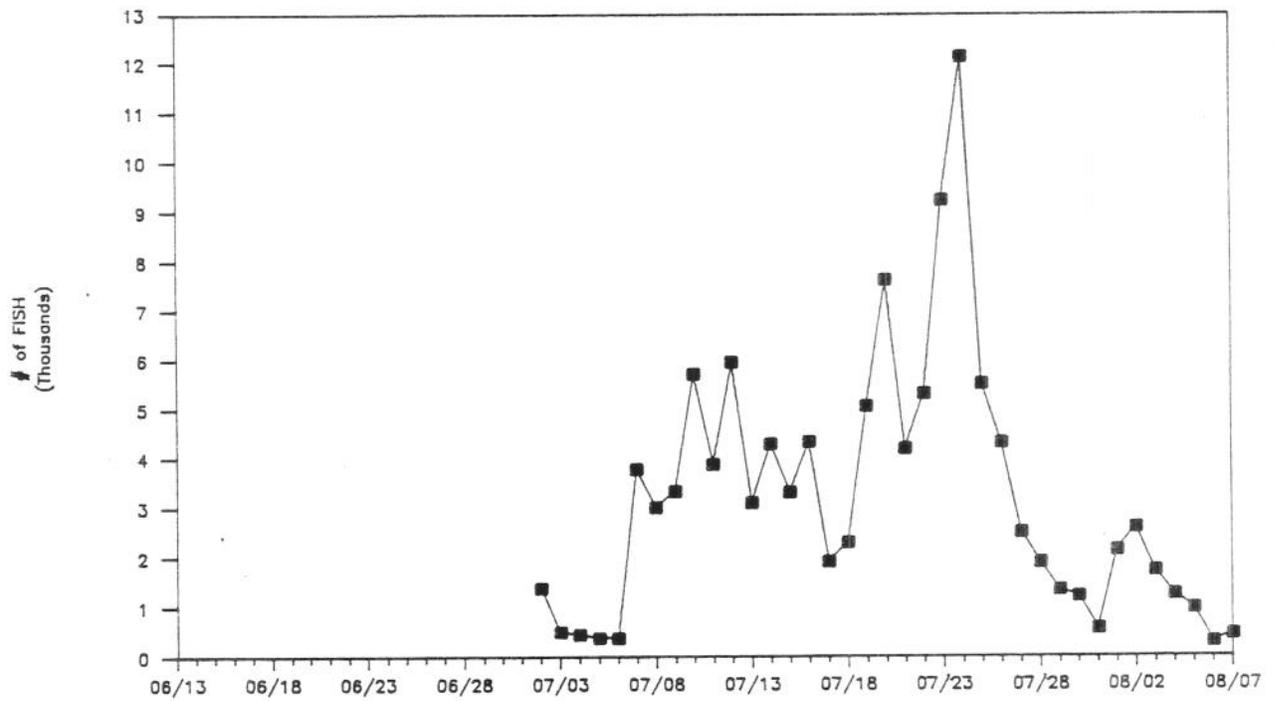


Figure 15. Crescent River daily sockeye salmon counts, 1987.

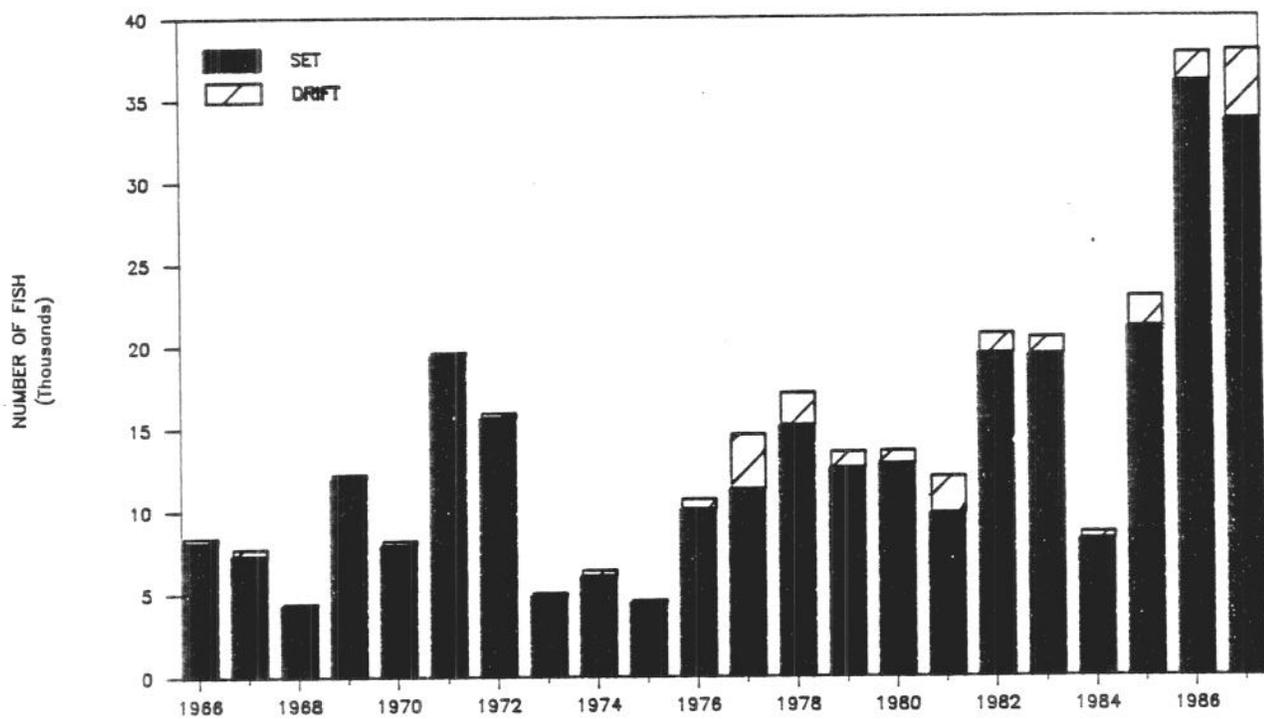


Figure 16. Chinook salmon catch by gear type, 1966-87.

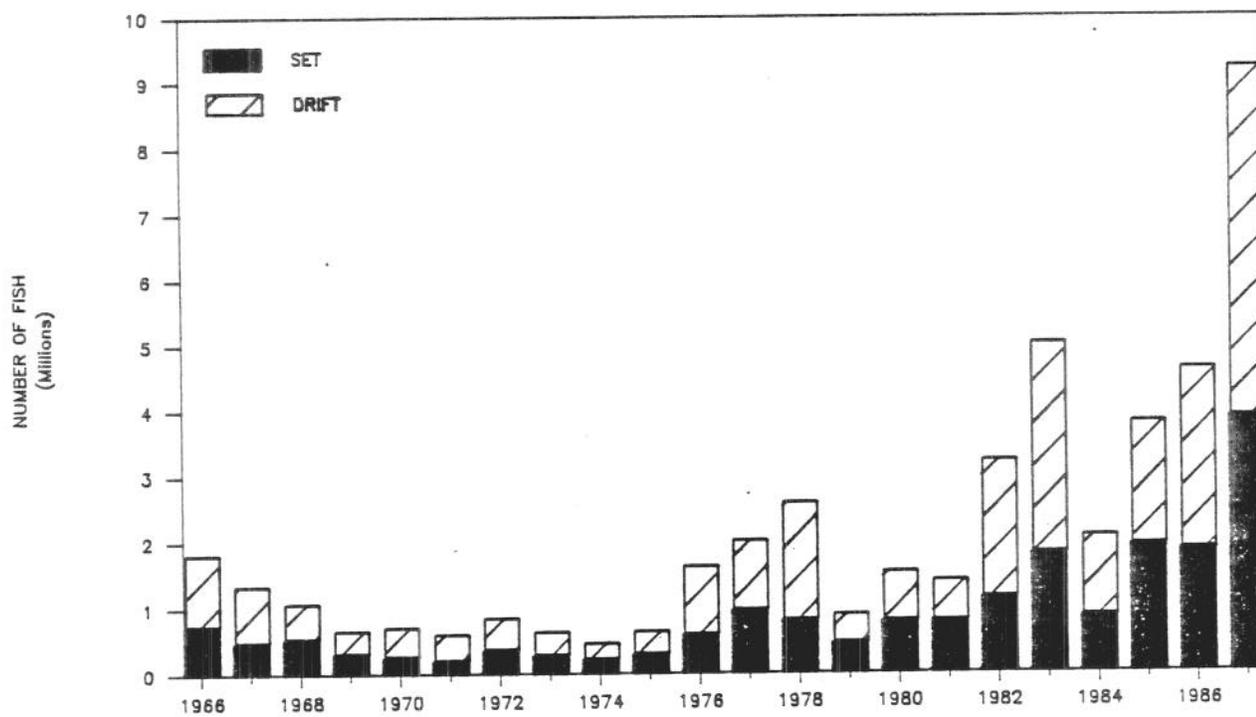


Figure 17. Sockeye salmon catch by gear type, 1966-87.

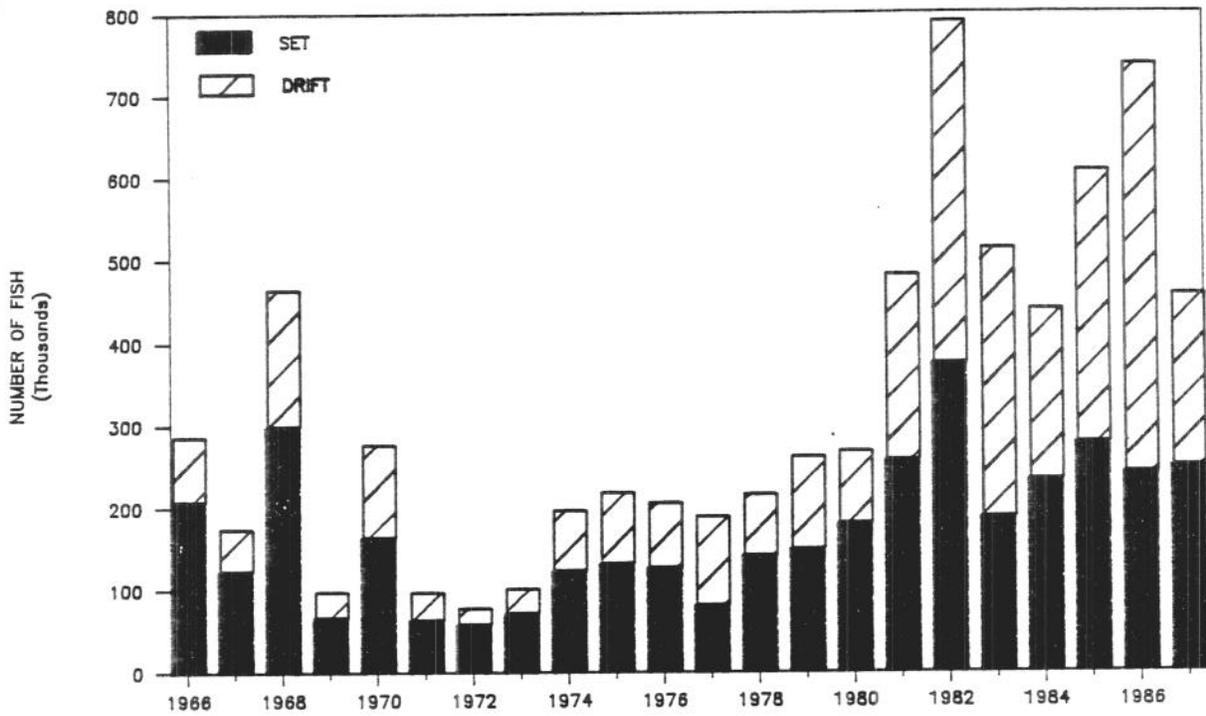


Figure 18. Coho salmon catch by gear type, 1966-87.

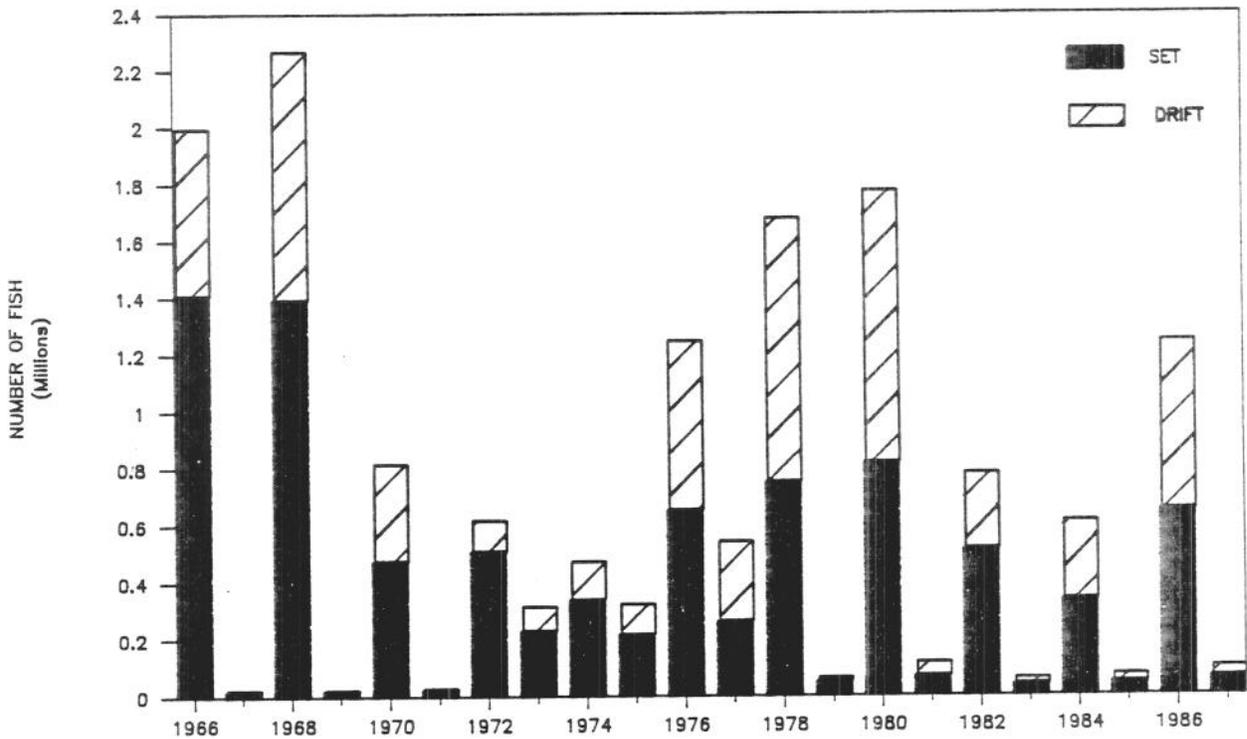


Figure 19. Pink salmon catch by gear type, 1966-1987

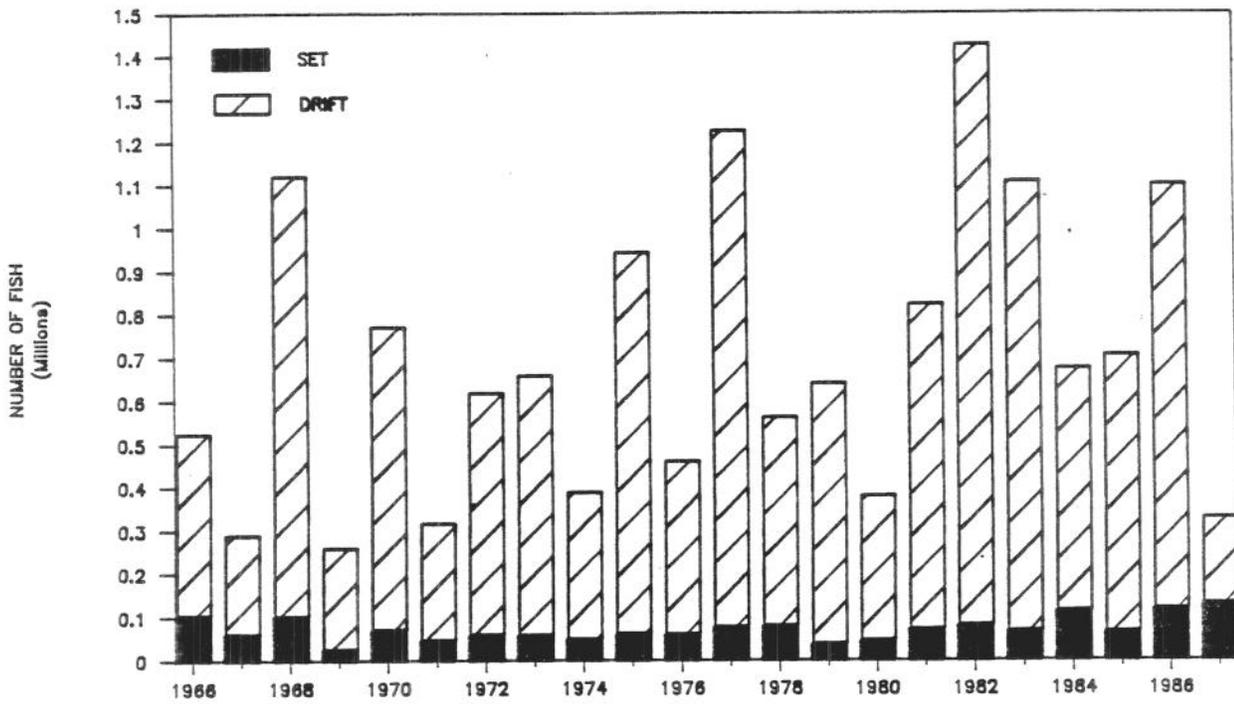


Figure 20. Chum salmon catch by gear type, 1966-87.

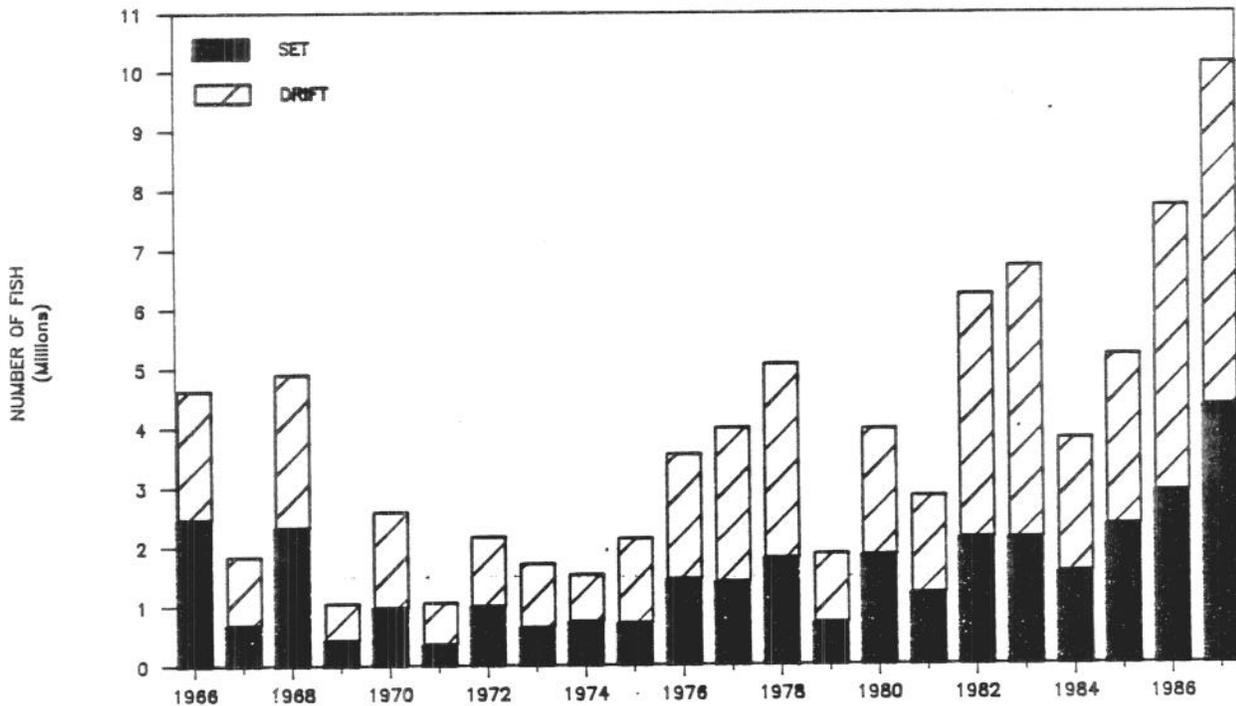


Figure 21. All species salmon catch by gear type, 1966-87.

Appendix Table 1. Upper Cook Inlet commercial chinook salmon harvest by gear type and area, 1966-1987.

| Year | Central District Drift Gill Net | | Central District Set Gill Net | | Northern District Set Gill Net | | Total |
|---------|---------------------------------|------|-------------------------------|------|--------------------------------|------|--------|
| | Number | % | Number | % | Number | % | |
| 1966 | 392 | 4.6 | 7,329 | 85.8 | 401 | 4.7 | 8,544 |
| 1967 | 489 | 6.2 | 6,686 | 85.1 | 500 | 6.4 | 7,859 |
| 1968 | 182 | 4.0 | 3,304 | 72.8 | 579 | 12.8 | 4,536 |
| 1969 | 363 | 2.9 | 5,834 | 47.0 | 3,295 | 26.6 | 12,407 |
| 1970 | 367 | 4.4 | 5,366 | 64.2 | 1,165 | 13.9 | 8,358 |
| 1971 | 237 | 1.2 | 7,055 | 35.7 | 2,875 | 14.5 | 19,765 |
| 1972 | 375 | 2.3 | 8,600 | 53.5 | 2,199 | 13.7 | 16,086 |
| 1973 | 244 | 4.7 | 4,411 | 84.9 | 369 | 7.1 | 5,194 |
| 1974 | 422 | 6.4 | 5,570 | 84.6 | 425 | 6.5 | 6,586 |
| 1975 | 250 | 5.2 | 3,678 | 77.1 | 716 | 15.0 | 4,773 |
| 1976 | 692 | 6.4 | 8,249 | 75.9 | 1,469 | 13.5 | 10,867 |
| 1977 | 3,411 | 23.1 | 9,732 | 65.8 | 1,084 | 7.3 | 14,792 |
| 1978 | 2,072 | 12.0 | 12,468 | 72.1 | 2,093 | 12.1 | 17,302 |
| 1979 | 1,089 | 7.9 | 8,671 | 63.1 | 2,264 | 16.5 | 13,738 |
| 1980 | 889 | 6.4 | 9,643 | 69.9 | 2,273 | 16.5 | 13,795 |
| 1981 | 2,319 | 18.9 | 8,359 | 68.3 | 837 | 6.8 | 12,240 |
| 1982 | 1,293 | 6.2 | 13,658 | 65.4 | 3,203 | 15.3 | 20,870 |
| 1983 | 1,124 | 5.4 | 15,043 | 72.9 | 3,534 | 17.1 | 20,634 |
| *1984 | 509 | 5.8 | 5,805 | 65.8 | 1,620 | 18.4 | 8,819 |
| *1985 | 1,962 | 8.4 | 16,985 | 72.9 | 2,330 | 10.0 | 23,297 |
| 1986 | 1,816 | 4.8 | 18,507 | 48.8 | 2,087 | 5.5 | 37,898 |
| 1987 | 4,552 | 11.5 | 21,379 | 53.9 | 1,029 | 2.6 | 39,661 |
| Average | 1,139 | 7.6 | 9,379 | 67.5 | 1,652 | 11.9 | 14,910 |

*Preliminary

Appendix Table 2. Upper Cook Inlet commercial sockeye salmon harvest by gear type and area, 1966-1987.

| Year | Central District | | | | Central District Set Gill Net | | | | Northern District | | | |
|---------|------------------|------|-----------|------|-------------------------------|------|---------|------|-------------------|---|--------|---|
| | Drift Gill Net | | | | Set Gill Net | | | | Set Gill Net | | | |
| | Number | % | Number | % | Number | % | Number | % | Number | % | Number | % |
| 1966 | 1,103,261 | 59.6 | 485,330 | 26.2 | 132,443 | 7.2 | 131,080 | 7.1 | 1,852,114 | | | |
| 1967 | 890,152 | 64.5 | 305,431 | 22.1 | 66,414 | 4.8 | 118,065 | 8.6 | 1,380,062 | | | |
| 1968 | 561,737 | 50.8 | 317,535 | 28.7 | 85,049 | 7.7 | 140,575 | 12.7 | 1,104,904 | | | |
| 1969 | 371,751 | 53.7 | 210,877 | 30.5 | 71,191 | 10.3 | 38,065 | 5.5 | 692,244 | | | |
| 1970 | 474,718 | 63.6 | 142,701 | 19.1 | 62,724 | 8.4 | 66,458 | 8.9 | 746,634 | | | |
| 1971 | 423,107 | 66.4 | 111,505 | 17.5 | 61,639 | 9.7 | 40,533 | 6.4 | 636,798 | | | |
| 1972 | 505,935 | 57.5 | 204,617 | 23.3 | 83,422 | 9.5 | 85,737 | 9.7 | 879,724 | | | |
| 1973 | 375,695 | 56.1 | 188,743 | 28.2 | 59,973 | 9.0 | 45,614 | 6.8 | 670,025 | | | |
| 1974 | 265,751 | 53.5 | 136,889 | 27.5 | 52,957 | 10.7 | 41,563 | 8.4 | 497,160 | | | |
| 1975 | 368,116 | 54.2 | 177,336 | 26.1 | 67,758 | 10.0 | 65,526 | 9.7 | 678,736 | | | |
| 1976 | 1,055,767 | 63.4 | 476,376 | 28.6 | 62,338 | 3.7 | 69,649 | 4.2 | 1,664,131 | | | |
| 1977 | 1,073,098 | 52.3 | 751,368 | 36.6 | 104,265 | 5.1 | 123,780 | 6.0 | 2,052,511 | | | |
| 1978 | 1,803,358 | 68.8 | 660,918 | 25.2 | 105,767 | 4.0 | 51,624 | 2.0 | 2,621,667 | | | |
| 1979 | 454,707 | 49.2 | 248,828 | 26.9 | 108,422 | 11.7 | 112,449 | 12.2 | 924,415 | | | |
| 1980 | 770,247 | 48.9 | 559,812 | 35.6 | 137,922 | 8.8 | 105,647 | 6.7 | 1,573,637 | | | |
| 1981 | 633,145 | 44.0 | 496,193 | 34.5 | 60,220 | 4.2 | 249,662 | 17.3 | 1,439,235 | | | |
| 1982 | 2,103,429 | 64.5 | 971,423 | 29.8 | 66,952 | 2.1 | 118,060 | 3.6 | 3,259,864 | | | |
| 1983 | 3,222,007 | 63.8 | 1,508,963 | 29.9 | 134,544 | 2.7 | 184,219 | 3.6 | 5,049,733 | | | |
| *1984 | 1,228,600 | 58.4 | 495,788 | 23.6 | 167,432 | 8.0 | 210,947 | 10.0 | 2,102,767 | | | |
| *1985 | 1,891,485 | 49.1 | 1,513,262 | 39.3 | 275,204 | 7.1 | 163,012 | 4.2 | 3,852,141 | | | |
| 1986 | 2,780,357 | 59.7 | 1,582,959 | 34.0 | 149,566 | 3.2 | 141,818 | 3.0 | 4,654,700 | | | |
| 1987 | 5,631,746 | 59.3 | 3,495,802 | 36.8 | 208,036 | 2.2 | 164,602 | 1.7 | 9,500,186 | | | |
| Average | 1,272,190 | 58.5 | 683,757 | 28.6 | 105,647 | 6.8 | 112,213 | 7.2 | 2,174,245 | | | |

*Preliminary

Appendix Table 3. Upper Cook Inlet commercial coho salmon harvest by gear type and area, 1966-1987.

| Year | Central District Set Gill Net | | | | Northern District Set Gill Net | | | |
|---------|---------------------------------|------|-----------|------|--------------------------------|------|--------------------------------|---------|
| | Central District Drift Gill Net | | East Side | | Kalgin/West Side | | Northern District Set Gill Net | |
| | Number | % | Number | % | Number | % | Number | % |
| 1966 | 80,901 | 27.9 | 68,877 | 23.8 | 59,509 | 20.5 | 80,550 | 27.8 |
| 1967 | 53,071 | 29.9 | 40,738 | 22.9 | 40,066 | 22.5 | 43,854 | 24.7 |
| 1968 | 167,383 | 35.8 | 80,828 | 17.3 | 63,301 | 13.5 | 156,648 | 33.5 |
| 1969 | 33,064 | 32.8 | 18,988 | 18.8 | 28,392 | 28.1 | 20,425 | 20.2 |
| 1970 | 114,392 | 40.9 | 30,318 | 10.8 | 52,363 | 18.7 | 82,722 | 29.6 |
| 1971 | 35,491 | 35.4 | 16,589 | 16.5 | 26,188 | 26.1 | 22,094 | 22.0 |
| 1972 | 21,578 | 26.7 | 24,673 | 30.5 | 15,319 | 18.9 | 19,346 | 23.9 |
| 1973 | 31,784 | 30.5 | 23,901 | 22.9 | 24,744 | 23.7 | 23,944 | 22.9 |
| 1974 | 75,640 | 37.8 | 36,837 | 18.4 | 40,610 | 20.3 | 47,038 | 23.5 |
| 1975 | 88,569 | 39.9 | 46,209 | 20.8 | 53,910 | 24.3 | 33,051 | 14.9 |
| 1976 | 80,731 | 38.7 | 47,873 | 22.9 | 42,224 | 20.2 | 37,850 | 18.1 |
| 1977 | 110,184 | 57.2 | 23,693 | 12.3 | 38,093 | 19.8 | 20,623 | 10.7 |
| 1978 | 76,252 | 34.8 | 34,141 | 15.6 | 61,711 | 28.1 | 47,256 | 21.5 |
| 1979 | 114,496 | 43.2 | 29,727 | 11.2 | 68,306 | 25.8 | 52,635 | 19.8 |
| 1980 | 89,510 | 33.0 | 40,281 | 14.8 | 51,487 | 19.0 | 90,098 | 33.2 |
| 1981 | 226,257 | 46.6 | 36,031 | 7.4 | 88,492 | 18.2 | 134,362 | 27.7 |
| 1982 | 416,274 | 52.5 | 108,393 | 13.7 | 182,205 | 23.0 | 85,352 | 10.8 |
| 1983 | 326,962 | 63.3 | 37,666 | 7.3 | 97,827 | 18.9 | 53,867 | 10.4 |
| *1984 | 208,450 | 47.1 | 36,530 | 8.3 | 87,421 | 19.8 | 110,218 | 24.9 |
| *1985 | 330,804 | 54.2 | 69,735 | 11.4 | 130,676 | 21.4 | 79,245 | 13.0 |
| 1986 | 496,545 | 67.2 | 71,858 | 9.7 | 82,782 | 11.2 | 88,107 | 11.9 |
| 1987 | 202,306 | 44.8 | 74,977 | 16.6 | 74,930 | 16.6 | 98,920 | 21.9 |
| Average | 153,666 | 46.8 | 45,403 | 16.1 | 64,116 | 20.9 | 64,918 | 21.2 |
| | | | | | | | | 328,103 |

Appendix Table 4. Upper Cook Inlet commercial pink salmon harvest by gear type and area, 1966-1987.

| Year | Central District Set Gill Net | | | | | | Northern District Set Gill Net | | | Total |
|---------|---------------------------------|------|---------|-------------------------------|--------|------|--------------------------------|------|-----------|-------|
| | Central District Drift Gill Net | | | Central District Set Gill Net | | | Northern District Set Gill Net | | | |
| | Number | % | | Number | % | | Number | % | | |
| 1966 | 593,654 | 29.6 | 969,624 | 48.3 | 70,507 | 3.5 | 371,960 | 18.5 | 2,005,745 | |
| 1967 | 7,475 | 23.2 | 13,038 | 40.5 | 3,256 | 10.1 | 8,460 | 26.2 | 32,229 | |
| 1968 | 880,512 | 38.7 | 785,887 | 34.5 | 75,755 | 3.3 | 534,839 | 23.5 | 2,276,993 | |
| 1969 | 8,336 | 25.1 | 11,416 | 34.4 | 5,714 | 17.2 | 7,680 | 23.2 | 33,146 | |
| 1970 | 346,485 | 41.9 | 281,067 | 34.0 | 24,763 | 3.0 | 174,193 | 21.1 | 826,508 | |
| 1971 | 6,433 | 18.1 | 18,097 | 50.8 | 2,637 | 7.4 | 8,423 | 23.7 | 35,590 | |
| 1972 | 115,096 | 18.3 | 403,706 | 64.2 | 18,936 | 3.0 | 90,830 | 14.5 | 628,568 | |
| 1973 | 91,901 | 28.2 | 80,596 | 24.7 | 16,437 | 5.0 | 137,249 | 42.1 | 326,183 | |
| 1974 | 140,734 | 29.1 | 291,408 | 60.2 | 9,014 | 1.9 | 42,879 | 8.9 | 484,035 | |
| 1975 | 113,868 | 33.9 | 112,423 | 33.5 | 18,385 | 5.5 | 90,953 | 27.1 | 335,629 | |
| 1976 | 599,600 | 47.7 | 479,009 | 38.1 | 30,044 | 2.4 | 148,090 | 11.8 | 1,256,743 | |
| 1977 | 286,308 | 51.7 | 125,817 | 22.7 | 25,212 | 4.6 | 116,518 | 21.0 | 553,855 | |
| 1978 | 934,178 | 55.3 | 372,865 | 22.1 | 54,785 | 3.2 | 327,270 | 19.4 | 1,689,098 | |
| 1979 | 19,554 | 26.8 | 20,033 | 27.4 | 7,061 | 9.7 | 26,332 | 36.1 | 72,980 | |
| 1980 | 964,526 | 54.0 | 299,444 | 16.8 | 47,963 | 2.7 | 474,488 | 26.6 | 1,786,421 | |
| 1981 | 53,888 | 42.4 | 15,659 | 12.3 | 4,276 | 3.4 | 53,325 | 41.9 | 127,148 | |
| 1982 | 270,380 | 34.2 | 432,715 | 54.7 | 14,242 | 1.8 | 73,307 | 9.3 | 790,644 | |
| 1983 | 26,628 | 37.9 | 18,310 | 26.0 | 3,785 | 5.4 | 21,604 | 30.7 | 70,327 | |
| *1984 | 279,820 | 45.0 | 222,026 | 35.7 | 16,723 | 2.7 | 103,941 | 16.7 | 622,510 | |
| *1985 | 34,074 | 41.1 | 17,409 | 21.0 | 4,930 | 5.9 | 26,511 | 32.0 | 82,924 | |
| 1986 | 600,266 | 47.8 | 500,855 | 39.9 | 15,061 | 1.2 | 139,002 | 11.1 | 1,255,184 | |
| 1987 | 38,660 | 35.2 | 47,707 | 43.4 | 5,229 | 4.8 | 18,205 | 16.6 | 109,801 | |
| Average | 291,472 | 41.6 | 250,869 | 35.7 | 21,578 | 4.9 | 136,185 | 22.8 | 700,103 | |

*Preliminary

Appendix Table 5. Upper Cook Inlet commercial chum salmon harvest by gear type and area, 1966-1987.

| Year | Central District Set Gill Net | | | | Northern District Set Gill Net | | | | Total |
|---------|---------------------------------|------|----------------------------|-----|--------------------------------|------|--------------------------------|------|-----------|
| | Central District Drift Gill Net | | Central District East Side | | Kalgin/West Side | | Northern District Set Gill Net | | |
| | Number | % | Number | % | Number | % | Number | % | |
| 1966 | 424,972 | 79.8 | 7,461 | 1.4 | 64,725 | 12.1 | 35,598 | 6.7 | 532,756 |
| 1967 | 233,041 | 78.5 | 399 | 0.1 | 25,013 | 8.4 | 38,384 | 12.9 | 296,837 |
| 1968 | 1,022,900 | 90.7 | 1,563 | 0.1 | 44,986 | 4.0 | 58,454 | 5.2 | 1,127,903 |
| 1969 | 238,497 | 89.2 | 399 | 0.1 | 16,949 | 6.3 | 11,386 | 4.3 | 267,231 |
| 1970 | 705,467 | 90.4 | 1,228 | 0.2 | 48,783 | 6.3 | 24,507 | 3.1 | 779,985 |
| 1971 | 274,567 | 84.8 | 128 | 0.0 | 32,647 | 10.1 | 16,603 | 5.1 | 323,945 |
| 1972 | 564,253 | 90.1 | 1,727 | 0.3 | 40,567 | 6.5 | 19,780 | 3.2 | 626,327 |
| 1973 | 605,730 | 90.7 | 1,965 | 0.3 | 29,019 | 4.3 | 30,847 | 4.6 | 667,561 |
| 1974 | 344,594 | 86.8 | 506 | 0.1 | 15,346 | 3.9 | 36,492 | 9.2 | 396,938 |
| 1975 | 886,474 | 93.2 | 979 | 0.1 | 32,741 | 3.4 | 30,787 | 3.2 | 950,981 |
| 1976 | 405,773 | 86.5 | 1,484 | 0.3 | 47,877 | 10.2 | 14,050 | 3.0 | 469,184 |
| 1977 | 1,153,454 | 93.5 | 1,413 | 0.1 | 54,708 | 4.4 | 23,861 | 1.9 | 1,233,436 |
| 1978 | 489,065 | 85.5 | 4,617 | 0.8 | 40,946 | 7.2 | 37,331 | 6.5 | 571,959 |
| 1979 | 609,239 | 93.8 | 907 | 0.1 | 30,342 | 4.7 | 9,270 | 1.4 | 649,758 |
| 1980 | 339,970 | 87.4 | 2,147 | 0.6 | 30,105 | 7.7 | 16,728 | 4.3 | 388,950 |
| 1981 | 756,848 | 91.0 | 2,415 | 0.3 | 26,513 | 3.2 | 46,208 | 5.6 | 831,984 |
| 1982 | 1,348,510 | 94.1 | 4,777 | 0.3 | 36,647 | 2.6 | 43,006 | 3.0 | 1,432,940 |
| 1983 | 1,044,644 | 93.7 | 2,764 | 0.2 | 38,129 | 3.4 | 29,321 | 2.6 | 1,114,858 |
| *1984 | 567,452 | 82.9 | 4,219 | 0.6 | 36,607 | 5.4 | 75,846 | 11.1 | 684,124 |
| *1985 | 645,384 | 90.4 | 6,058 | 0.8 | 31,192 | 4.4 | 31,203 | 4.4 | 713,837 |
| 1986 | 987,789 | 89.0 | 6,771 | 0.6 | 38,776 | 3.5 | 75,935 | 6.8 | 1,109,271 |
| 1987 | 211,573 | 60.6 | 16,608 | 4.8 | 53,558 | 15.3 | 67,180 | 19.3 | 348,919 |
| Average | 630,009 | 89.3 | 3,206 | 0.6 | 37,099 | 6.2 | 35,126 | 5.8 | 705,440 |

*Preliminary

Appendix Table 6. Upper Cook Inlet commercial salmon harvest by gear type and area, 1966-1987.

| Year | Central District | | | Central District Set Gill Net | | | Northern District | | |
|---------|------------------|------|-----------|-------------------------------|---------|------|-------------------|------|------------|
| | Drift Gill Net | | | Set Gill Net | | | Set Gill Net | | |
| | Number | % | | Number | % | | Number | % | Total |
| 1966 | 2,203,180 | 47.0 | 1,538,621 | 32.8 | 327,585 | 7.0 | 619,610 | 13.2 | 4,688,996 |
| 1967 | 1,184,228 | 62.5 | 366,292 | 19.3 | 135,249 | 7.1 | 208,947 | 11.0 | 1,894,716 |
| 1968 | 2,612,714 | 52.6 | 1,189,117 | 24.0 | 269,670 | 5.4 | 890,987 | 18.0 | 4,962,488 |
| 1969 | 652,011 | 59.0 | 247,514 | 22.4 | 125,541 | 11.4 | 80,910 | 7.3 | 1,105,976 |
| 1970 | 1,641,429 | 62.1 | 460,680 | 17.4 | 189,798 | 6.1 | 349,340 | 13.2 | 2,641,247 |
| 1971 | 739,835 | 66.3 | 153,374 | 13.7 | 125,986 | 11.7 | 97,251 | 8.7 | 1,116,446 |
| 1972 | 1,207,217 | 54.1 | 643,323 | 28.8 | 160,443 | 5.3 | 220,605 | 9.9 | 2,231,588 |
| 1973 | 1,105,354 | 62.3 | 299,616 | 16.9 | 130,542 | 9.8 | 237,824 | 13.4 | 1,773,336 |
| 1974 | 827,141 | 52.2 | 471,210 | 29.7 | 118,352 | 11.6 | 168,141 | 10.6 | 1,584,844 |
| 1975 | 1,457,277 | 66.5 | 340,625 | 15.5 | 173,510 | 10.2 | 220,446 | 10.1 | 2,191,858 |
| 1976 | 2,142,563 | 59.4 | 1,012,991 | 28.1 | 183,952 | 7.3 | 270,096 | 7.5 | 3,609,602 |
| 1977 | 2,626,455 | 64.9 | 912,023 | 22.5 | 223,362 | 5.3 | 285,347 | 7.1 | 4,047,187 |
| 1978 | 3,304,925 | 64.6 | 1,085,009 | 21.2 | 265,302 | 5.3 | 464,150 | 9.1 | 5,119,386 |
| 1979 | 1,199,085 | 62.3 | 308,166 | 16.0 | 216,395 | 9.4 | 202,400 | 10.5 | 1,926,046 |
| 1980 | 2,165,142 | 53.7 | 911,327 | 22.6 | 269,750 | 7.5 | 687,951 | 17.1 | 4,034,170 |
| 1981 | 1,672,457 | 57.8 | 558,657 | 19.3 | 180,338 | 9.6 | 484,282 | 16.7 | 2,895,734 |
| 1982 | 4,139,886 | 65.7 | 1,530,966 | 24.3 | 303,249 | 4.9 | 322,441 | 5.1 | 6,296,542 |
| 1983 | 4,621,365 | 68.2 | 1,582,746 | 23.4 | 277,819 | 6.6 | 289,944 | 4.3 | 6,771,874 |
| *1984 | 2,284,831 | 59.2 | 764,638 | 19.8 | 309,803 | 7.5 | 501,837 | 13.0 | 3,861,109 |
| *1985 | 2,903,709 | 55.1 | 1,623,449 | 30.8 | 444,332 | 6.5 | 301,834 | 5.7 | 5,273,324 |
| 1986 | 4,844,773 | 62.3 | 2,180,980 | 28.1 | 288,272 | 3.7 | 460,350 | 5.9 | 7,774,375 |
| 1987 | 6,088,837 | 58.3 | 3,656,473 | 35.0 | 342,782 | 3.3 | 361,608 | 3.5 | 10,449,700 |
| Average | 2,346,564 | 59.9 | 992,627 | 23.3 | 230,092 | 7.4 | 351,196 | 10.0 | 3,920,479 |

*Preliminary

Appendix Table 7. Upper Cook Inlet commercial salmon harvest by species, 1954-1987.

| Year | Chinook | Sockeye | Coho | Pink | Chum | Total |
|---------|---------|-----------|---------|-----------|-----------|------------|
| 1954 | 63,780 | 1,207,046 | 321,525 | 2,189,207 | 510,068 | 4,291,726 |
| 1955 | 45,926 | 1,027,528 | 170,777 | 101,680 | 248,343 | 1,594,254 |
| 1956 | 64,977 | 1,258,789 | 198,189 | 1,595,375 | 782,051 | 3,899,381 |
| 1957 | 42,158 | 643,712 | 125,434 | 21,228 | 1,001,470 | 1,834,002 |
| 1958 | 22,727 | 477,392 | 239,765 | 1,648,548 | 471,697 | 2,860,129 |
| 1959 | 32,651 | 612,676 | 106,312 | 12,527 | 300,319 | 1,064,485 |
| 1960 | 27,512 | 923,314 | 311,461 | 1,411,605 | 659,997 | 3,333,889 |
| 1961 | 19,737 | 1,162,303 | 117,778 | 34,017 | 349,628 | 1,683,463 |
| 1962 | 20,210 | 1,147,573 | 350,324 | 2,711,689 | 970,582 | 5,200,378 |
| 1963 | 17,536 | 942,980 | 197,140 | 30,436 | 387,027 | 1,575,119 |
| 1964 | 4,531 | 970,055 | 452,654 | 3,231,961 | 1,079,084 | 5,738,285 |
| 1965 | 9,741 | 1,412,350 | 153,619 | 23,963 | 316,444 | 1,916,117 |
| 1966 | 8,544 | 1,852,114 | 289,837 | 2,005,745 | 532,756 | 4,688,996 |
| 1967 | 7,859 | 1,380,062 | 177,729 | 32,229 | 296,837 | 1,894,716 |
| 1968 | 4,536 | 1,104,904 | 469,850 | 2,278,197 | 1,119,114 | 4,976,601 |
| 1969 | 12,407 | 692,244 | 100,962 | 34,030 | 269,842 | 1,109,485 |
| 1970 | 8,358 | 746,634 | 279,989 | 826,639 | 800,829 | 2,662,449 |
| 1971 | 19,765 | 636,798 | 100,636 | 35,624 | 327,029 | 1,119,852 |
| 1972 | 16,086 | 879,724 | 80,933 | 628,576 | 630,016 | 2,235,335 |
| 1973 | 5,194 | 670,025 | 104,373 | 326,183 | 667,561 | 1,773,336 |
| 1974 | 6,586 | 497,160 | 200,125 | 484,035 | 396,938 | 1,584,844 |
| 1975 | 4,773 | 678,736 | 221,739 | 335,629 | 950,981 | 2,191,858 |
| 1976 | 10,867 | 1,664,131 | 208,710 | 1,256,743 | 469,806 | 3,610,257 |
| 1977 | 14,792 | 2,052,511 | 192,599 | 553,855 | 1,233,722 | 4,047,479 |
| 1978 | 17,302 | 2,621,667 | 219,360 | 1,689,098 | 571,959 | 5,119,386 |
| 1979 | 13,738 | 924,415 | 265,166 | 72,982 | 650,357 | 1,926,658 |
| 1980 | 13,795 | 1,573,637 | 271,378 | 1,786,430 | 390,810 | 4,036,050 |
| 1981 | 12,240 | 1,439,235 | 485,148 | 127,169 | 833,549 | 2,897,341 |
| 1982 | 20,870 | 3,259,864 | 793,937 | 790,648 | 1,433,866 | 6,299,185 |
| 1983 | 20,634 | 5,049,733 | 516,322 | 70,327 | 1,114,858 | 6,771,874 |
| *1984 | 8,819 | 2,102,767 | 442,619 | 622,510 | 684,124 | 3,860,839 |
| *1985 | 23,297 | 3,852,141 | 619,924 | 83,538 | 714,140 | 5,293,040 |
| 1986 | 37,898 | 4,654,700 | 739,292 | 1,255,214 | 1,109,271 | 7,796,375 |
| 1987 | 39,661 | 9,500,186 | 451,404 | 109,801 | 349,132 | 10,450,184 |
| Average | 20,574 | 1,753,503 | 293,441 | 835,807 | 665,418 | 3,568,746 |

* Preliminary

Appendix Table 8. Approximate exvessel value (in dollars) of the Upper Cook Inlet commercial salmon harvest by species, 1960-1987.

| Year | Chinook | % | Sockeye | % | Coho | % | Pink | % | Chum | % | Total |
|---------|-----------|------|------------|------|-----------|------|-----------|------|-----------|------|-------------|
| 1960 | 140,000 | 5.0 | 1,334,000 | 47.9 | 307,000 | 11.0 | 663,000 | 23.8 | 343,000 | 12.3 | 2,787,088 |
| 1961 | 100,000 | 4.7 | 1,687,000 | 79.4 | 118,000 | 5.6 | 16,000 | 0.8 | 204,000 | 9.6 | 2,125,090 |
| 1962 | 100,000 | 2.5 | 1,683,000 | 42.3 | 342,000 | 8.6 | 1,274,000 | 32.0 | 582,000 | 14.6 | 3,981,085 |
| 1963 | 89,000 | 4.6 | 1,388,000 | 72.3 | 193,000 | 10.1 | 13,000 | 0.7 | 236,000 | 12.3 | 1,919,088 |
| 1964 | 20,000 | 0.5 | 1,430,000 | 38.9 | 451,000 | 12.3 | 1,131,000 | 30.7 | 646,000 | 17.6 | 3,678,082 |
| 1965 | 50,000 | 2.0 | 2,099,000 | 82.1 | 109,000 | 4.3 | 70,000 | 2.7 | 230,000 | 9.0 | 2,558,091 |
| 1966 | 50,000 | 1.2 | 2,727,000 | 64.4 | 295,000 | 7.0 | 823,000 | 19.4 | 338,000 | 8.0 | 4,233,092 |
| 1967 | 49,000 | 1.9 | 2,135,000 | 82.6 | 187,000 | 7.2 | 13,000 | 0.5 | 202,000 | 7.8 | 2,586,092 |
| 1968 | 30,000 | 0.7 | 1,758,000 | 40.4 | 515,000 | 11.8 | 1,209,000 | 27.8 | 843,000 | 19.4 | 4,355,081 |
| 1969 | 70,000 | 4.3 | 1,231,000 | 75.2 | 109,000 | 6.7 | 23,000 | 1.4 | 204,000 | 12.5 | 1,637,088 |
| 1970 | 49,000 | 1.8 | 1,135,000 | 42.5 | 354,000 | 13.3 | 387,000 | 14.5 | 745,000 | 27.9 | 2,670,072 |
| 1971 | 189,000 | 10.7 | 1,102,000 | 62.2 | 143,000 | 8.1 | 22,000 | 1.2 | 316,000 | 17.8 | 1,772,082 |
| 1972 | 217,000 | 6.3 | 1,795,000 | 52.0 | 135,000 | 3.9 | 473,000 | 13.7 | 834,000 | 24.1 | 3,454,076 |
| 1973 | 122,000 | 2.0 | 3,214,000 | 52.2 | 320,000 | 5.2 | 363,000 | 5.9 | 2,134,000 | 34.7 | 6,153,065 |
| 1974 | 210,000 | 3.2 | 3,058,000 | 46.5 | 843,000 | 12.8 | 946,000 | 14.4 | 1,521,000 | 23.1 | 6,578,077 |
| 1975 | 65,000 | 1.0 | 2,596,000 | 39.0 | 821,000 | 12.3 | 423,000 | 6.4 | 2,753,000 | 41.3 | 6,658,059 |
| 1976 | 276,000 | 2.0 | 8,626,000 | 63.2 | 818,000 | 6.0 | 1,879,000 | 13.8 | 2,040,000 | 15.0 | 13,639,085 |
| 1977 | 525,000 | 2.4 | 13,274,000 | 61.8 | 933,000 | 4.3 | 772,000 | 3.6 | 5,991,000 | 27.9 | 21,495,072 |
| 1978 | 667,000 | 2.0 | 26,128,000 | 80.3 | 1,388,000 | 4.3 | 2,154,000 | 6.6 | 2,217,000 | 6.8 | 32,554,093 |
| 1979 | 625,000 | 4.3 | 8,094,000 | 55.2 | 1,658,000 | 11.3 | 89,000 | 0.6 | 4,201,000 | 28.6 | 14,667,071 |
| 1980 | 417,000 | 3.2 | 7,932,000 | 61.6 | 902,000 | 7.0 | 2,114,000 | 16.4 | 1,516,000 | 11.8 | 12,881,088 |
| 1981 | 422,000 | 2.6 | 11,071,000 | 67.9 | 2,638,000 | 16.2 | 179,000 | 1.1 | 2,005,000 | 12.3 | 16,315,088 |
| 1982 | 753,000 | 2.1 | 25,029,000 | 69.0 | 4,139,000 | 11.4 | 515,000 | 1.4 | 5,851,000 | 16.1 | 36,287,084 |
| 1983 | 585,000 | 2.0 | 23,841,000 | 81.5 | 1,603,000 | 5.5 | 38,000 | 0.1 | 3,195,000 | 10.9 | 29,262,089 |
| 1984 | 281,000 | 1.6 | 13,458,000 | 74.8 | 1,813,000 | 10.1 | 471,000 | 2.6 | 1,974,000 | 11.0 | 17,997,089 |
| 1985 | 824,000 | 2.4 | 27,735,000 | 82.0 | 2,790,000 | 8.3 | 62,000 | 0.2 | 2,404,000 | 7.1 | 33,815,093 |
| 1986 | 972,000 | 2.2 | 37,159,000 | 82.8 | 2,903,000 | 6.5 | 684,000 | 1.5 | 3,183,000 | 7.1 | 44,901,093 |
| 1987 | 1,610,000 | 1.6 | 96,364,000 | 94.9 | 2,378,000 | 2.3 | 84,000 | 0.1 | 1,126,000 | 1.1 | 101,562,099 |
| Average | | 2.9 | | 64.1 | | 8.3 | | 8.7 | | 16.0 | |

Appendix Table 9. Commercial herring harvest, Upper Cook Inlet, 1973-1987.

| Year | Harvest (Pounds) | | | Total |
|-------------------|------------------|--------------|-------------|---------|
| | Eastside | Chinitna Bay | Tuxedni Bay | |
| 1973 | 27,704 | 0 | 0 | 27,704 |
| 1974 | 73,386 | 0 | 0 | 73,386 |
| 1975 | 12,483 | 0 | 0 | 12,483 |
| 1976 | 11,625 | 0 | 0 | 11,625 |
| 1977 | 34,618 | 0 | 0 | 34,618 |
| 1978 | 16,548 | 110,693 | 0 | 127,241 |
| 1979 | 134,625 | 192,350 | 49,679 | 376,654 |
| 1980 | 74,766 | 40,012 | 172,994 | 287,772 |
| 1981 | 172,408 | 100,989 | 169,905 | 443,302 |
| 1982 | 120,378 | 183,616 | 100,426 | 404,420 |
| 1983 | 330,563 | 98,356 | 476,364 | 905,283 |
| 1984 ¹ | 235,108 | 181,260 | 318,027 | 734,395 |
| 1985 ¹ | 243,460 | 94,720 | 440,920 | 779,100 |
| 1986 | 357,712 | 222,118 | 383,765 | 963,595 |
| 1987 | 261,073 | 130,251 | 305,022 | 696,346 |

¹ Preliminary data.

Appendix Table 10. Commercial harvest of razor clams in Cook Inlet, 1919-1987.

| Year | Pounds | Year | Pounds |
|------|-----------|------|---------|
| 1919 | 76,963 | 1954 | 0 |
| 1920 | 11,952 | 1955 | 0 |
| 1921 | 72,000 | 1956 | 0 |
| 1922 | 510,432 | 1957 | 0 |
| 1923 | 470,280 | 1958 | 0 |
| 1924 | 156,768 | 1959 | 0 |
| 1925 | 0 | 1960 | 372,872 |
| 1926 | 0 | 1961 | 277,830 |
| 1927 | 25,248 | 1962 | 195,650 |
| 1928 | 0 | 1963 | 0 |
| 1929 | 0 | 1964 | 0 |
| 1930 | 0 | 1965 | 0 |
| 1931 | No Record | 1966 | 0 |
| 1932 | 93,840 | 1967 | 0 |
| 1933 | No Record | 1968 | 0 |
| 1934 | No Record | 1969 | 0 |
| 1935 | No Record | 1970 | 0 |
| 1936 | No Record | 1971 | 14,755 |
| 1937 | 8,328 | 1972 | 31,360 |
| 1938 | No Record | 1973 | 34,415 |
| 1939 | No Record | 1974 | 0 |
| 1940 | No Record | 1975 | 10,020 |
| 1941 | 0 | 1976 | 0 |
| 1942 | 0 | 1977 | 1,762 |
| 1943 | 0 | 1978 | 45,931 |
| 1944 | 0 | 1979 | 144,358 |
| 1945 | 15,000 | 1980 | 140,420 |
| 1946 | 11,424 | 1981 | 441,949 |
| 1947 | 11,976 | 1982 | 460,639 |
| 1948 | 2,160 | 1983 | 269,618 |
| 1949 | 9,672 | 1984 | 261,742 |
| 1950 | 304,073 | 1985 | 319,034 |
| 1951 | 112,320 | 1986 | 258,632 |
| 1952 | 0 | 1987 | 312,349 |
| 1953 | 0 | | |

Data from 1919-68 from Nickerson (1975).
 Remaining years from ADF&G computer summaries.

Appendix Table 11. Registered units of gillnet fishing effort by gear type in Cook Inlet, 1960-1987.¹

| Year | Drift | | | Set | | | Sub- total | Sub- total | Total |
|------|----------|------------------|---------------|----------|------------------|---------------|---------------|---------------|-------|
| | Resident | Non- Resident | Sub- total | Resident | Non- Resident | Sub- total | | | |
| 1960 | 221 | 67 | 288 | 511 | 59 | 570 | 858 | | |
| 1961 | 279 | 93 | 372 | 564 | 22 | 586 | 958 | | |
| 1962 | 260 | 112 | 372 | 589 | 28 | 617 | 989 | | |
| 1963 | 333 | 139 | 472 | 626 | 34 | 660 | 1,132 | | |
| 1964 | 323 | 145 | 468 | 596 | 35 | 631 | 1,099 | | |
| 1965 | 329 | 145 | 474 | 556 | 34 | 590 | 1,064 | | |
| 1966 | 328 | 176 | 504 | 580 | 48 | 628 | 1,132 | | |
| 1967 | 350 | 186 | 536 | 554 | 50 | 604 | 1,140 | | |
| 1968 | 407 | 204 | 611 | 638 | 43 | 681 | 1,292 | | |
| 1969 | 497 | 208 | 687 | 686 | 42 | 728 | 1,415 | | |
| 1970 | 537 | 220 | 757 | 707 | 65 | 772 | 1,529 | | |
| 1971 | 519 | 191 | 710 | 693 | 38 | 731 | 1,441 | | |
| 1972 | 419 | 152 | 571 | 672 | 35 | 701 | 1,272 | | |
| 1973 | 516 | 146 | 662 | 632 | 43 | 775 | 1,437 | | |
| 1974 | 458 | 150 | 608 | 764 | 39 | 803 | 1,411 | | |
| 1975 | 291 | 162 | 453 | 613 | 44 | 657 | 1,110 | | |
| 1976 | 343 | 171 | 514 | 669 | 42 | 711 | 1,225 | | |
| 1977 | 360 | 179 | 539 | 690 | 41 | 731 | 1,270 | | |
| 1978 | 366 | 183 | 549 | 698 | 44 | 742 | 1,291 | | |
| 1979 | 372 | 182 | 554 | 700 | 44 | 744 | 1,298 | | |
| 1980 | 373 | 179 | 554 | 697 | 47 | 744 | 1,298 | | |
| 1981 | 414 | 185 | 599 | 688 | 59 | 747 | 1,346 | | |
| 1982 | 416 | 175 | 591 | 697 | 51 | 748 | 1,339 | | |
| 1983 | 417 | 170 | 587 | 685 | 60 | 745 | 1,332 | | |
| 1984 | 426 | 162 | 588 | 672 | 72 | 744 | 1,332 | | |
| 1985 | 420 | 170 | 590 | 666 | 65 | 731 | 1,321 | | |
| 1986 | 436 | 178 | 614 | 682 | 76 | 758 | 1,372 | | |
| 1987 | 422 | 164 | 586 | 666 | 77 | 743 | 1,329 | | |

¹ Data Source: 1960-1974 ADF&G unpublished reports.
1975-1987 Commercial Fisheries Entry Commission.

Appendix Table 12. Escapement goals and counts of sockeye salmon in selected streams of Upper Cook Inlet, 1968-1987.

| Year | Kenai River | | Kasilof River | | Fish Creek | |
|------|-----------------|----------------------------------|-----------------|----------------------------------|-----------------|----------------------------------|
| | Escapement Goal | Escapement Estimate ¹ | Escapement Goal | Escapement Estimate ¹ | Escapement Goal | Escapement Estimate ² |
| 1968 | 0 | 88,000 | 0 | 93,000 | 0 | 19,616 |
| 1969 | 150,000 | 53,000 | 75,000 | 46,000 | 0 | 12,456 |
| 1970 | 150,000 | 73,000 | 75,000 | 37,000 | 0 | 25,000 |
| 1971 | 150,000 | -- | 75,000 | -- | 0 | 31,900 |
| 1972 | 150,000-250,000 | 318,000 | 75,000-150,000 | 112,000 | 0 | 6,981 |
| 1973 | 150,000-250,000 | 367,000 | 75,000-150,000 | 40,000 | 0 | 2,705 |
| 1974 | 150,000-250,000 | 161,000 | 75,000-150,000 | 64,000 | 0 | 16,225 |
| 1975 | 150,000-250,000 | 142,000 | 75,000-150,000 | 48,000 | 0 | 29,882 |
| 1976 | 150,000-250,000 | 380,000 | 75,000-150,000 | 140,000 | 0 | 14,032 |
| 1977 | 150,000-250,000 | 708,000 | 75,000-150,000 | 155,000 | 0 | 5,183 |
| 1978 | 350,000-500,000 | 399,000 | 75,000-150,000 | 117,000 | 0 | 3,555 |
| 1979 | 350,000-500,000 | 285,000 | 75,000-150,000 | 152,000 | 0 | 68,739 |
| 1980 | 350,000-500,000 | 464,000 | 75,000-150,000 | 187,000 | 0 | 62,828 |
| 1981 | 350,000-500,000 | 408,000 | 75,000-150,000 | 257,000 | 0 | 50,479 |
| 1982 | 350,000-500,000 | 620,000 | 75,000-150,000 | 180,000 | 50,000 | 28,164 |
| 1983 | 350,000-500,000 | 630,000 | 75,000-150,000 | 210,000 | 50,000 | 118,797 |
| 1984 | 350,000-500,000 | 345,000 | 75,000-150,000 | 232,000 | 50,000 | 192,352 |
| 1985 | 350,000-500,000 | 501,000 | 75,000-150,000 | 503,000 | 50,000 | 68,577 |
| 1986 | 350,000-500,000 | 501,000 | 150,000-250,000 | 276,000 | 50,000 | 29,800 |
| 1987 | 400,000-700,000 | 1,597,000 | 150,000-250,000 | 249,000 | 50,000 | 91,215 |

| Year | Susitna River | | Crescent River | | Packers Creek | |
|------|-----------------|----------------------------------|-----------------|----------------------------------|-----------------|----------------------------------|
| | Escapement Goal | Escapement Estimate ¹ | Escapement Goal | Escapement Estimate ¹ | Escapement Goal | Escapement Estimate ² |
| 1978 | 200,000 | 94,000 | 0 | N/C | 0 | N/C |
| 1979 | 200,000 | 157,000 | 50,000 | 87,000 | 0 | N/C |
| 1980 | 200,000 | 191,000 | 50,000 | 91,000 | 0 | 16,477 |
| 1981 | 200,000 | 340,000 | 50,000 | 41,000 | 0 | 13,024 |
| 1982 | 200,000 | 216,000 ³ | 50,000 | 59,000 | 0 | 15,687 |
| 1983 | 200,000 | 112,000 ⁴ | 50,000 | 92,000 | 0 | 18,403 |
| 1984 | 200,000 | 194,000 ⁵ | 50,000 | 118,000 | 0 | 30,684 |
| 1985 | 200,000 | 228,000 ⁵ | 50,000 | 129,000 | 0 | 36,850 |
| 1986 | 200,000 | 92,000 ⁶ | 50,000-100,000 | N/A | 0 | 29,604 |
| 1987 | 200,000 | 66,000 ⁶ | 50,000-100,000 | 119,000 | 0 | 35,401 |

¹ Derived from sonar counters unless otherwise noted.

² Weir counts.

³ Poor field conditions make this a minimum estimate; mark/recapture estimate from Su-Hydro studies was 265,000.

⁴ Minimum estimate. Combining Yentna sonar with Sunshine Station mark/recapture estimate yields 176,000.

⁵ Yentna River sonar count combined with Sunshine Station mark/recapture estimate.

⁶ Yentna River only.

Appendix Table 13. Average price paid for commercially harvested salmon, Upper Cook Inlet, 1969-1987.¹

| Year | Chinook | Sockeye | Coho | Pink | Chum |
|------|---------|---------|------|------|------|
| 1969 | 0.38 | 0.28 | 0.19 | 0.14 | 0.12 |
| 1970 | 0.40 | 0.28 | 0.25 | 0.14 | 0.14 |
| 1971 | 0.37 | 0.30 | 0.21 | 0.15 | 0.15 |
| 1972 | 0.47 | 0.34 | 0.27 | 0.19 | 0.20 |
| 1973 | 0.62 | 0.65 | 0.50 | 0.30 | 0.42 |
| 1974 | 0.88 | 0.91 | 0.66 | 0.46 | 0.53 |
| 1975 | 0.54 | 0.63 | 0.54 | 0.35 | 0.41 |
| 1976 | 0.92 | 0.76 | 0.61 | 0.37 | 0.54 |
| 1977 | 1.26 | 0.86 | 0.72 | 0.38 | 0.61 |
| 1978 | 1.16 | 1.32 | 0.99 | 0.34 | 0.51 |
| 1979 | 1.63 | 1.41 | 0.98 | 0.34 | 0.88 |
| 1980 | 1.15 | 0.85 | 0.57 | 0.34 | 0.53 |
| 1981 | 1.46 | 1.20 | 0.83 | 0.38 | 0.65 |
| 1982 | 1.27 | 1.10 | 0.72 | 0.18 | 0.49 |
| 1983 | 0.97 | 0.74 | 0.45 | 0.18 | 0.36 |
| 1984 | 1.08 | 1.00 | 0.64 | 0.21 | 0.39 |
| 1985 | 1.20 | 1.20 | 0.70 | 0.20 | 0.45 |
| 1986 | 0.90 | 1.40 | 0.60 | 0.15 | 0.38 |
| 1987 | 1.40 | 1.50 | 0.80 | 0.22 | 0.45 |

¹ Expressed as dollars paid per pound.
 Data Source: 1969-1983 - Commercial Fisheries Entry Commission.
 1984-1987 - Fish ticket averages.

Appendix Table 14. Average weight of commercially harvested salmon, Upper Cook Inlet, 1972-1987.*

| Year | Chinook | Sockeye | Coho | Pink | Chum |
|---------|---------|---------|------|------|------|
| 1972 | 28.76 | 6.00 | 6.18 | 3.96 | 6.62 |
| 1973 | 37.85 | 7.38 | 6.13 | 3.71 | 7.61 |
| 1974 | 36.20 | 6.76 | 6.39 | 4.25 | 7.21 |
| 1975 | 25.14 | 6.07 | 6.86 | 3.60 | 7.06 |
| 1976 | 27.63 | 6.82 | 6.43 | 4.04 | 8.04 |
| 1977 | 28.19 | 7.52 | 6.73 | 3.67 | 7.96 |
| 1978 | 33.24 | 7.55 | 6.39 | 3.75 | 7.60 |
| 1979 | 27.93 | 6.21 | 6.38 | 3.58 | 7.34 |
| 1980 | 26.29 | 5.93 | 5.83 | 3.48 | 7.32 |
| 1981 | 23.64 | 6.41 | 6.55 | 3.70 | 7.66 |
| 1982 | 28.42 | 6.98 | 7.24 | 3.62 | 8.33 |
| 1983 | 29.64 | 6.38 | 6.90 | 3.04 | 7.96 |
| 1984 | N/A | N/A | N/A | N/A | N/A |
| 1985 | N/A | N/A | N/A | N/A | N/A |
| 1986 | 25.84 | 5.78 | 6.40 | 3.71 | 7.41 |
| 1987 | 28.99 | 6.76 | 6.56 | 3.50 | 7.10 |
| Average | 29.13 | 6.61 | 6.50 | 3.69 | 7.52 |

* Total poundage divided by numbers of fish from fish ticket totals.

Appendix Table 15. Subsistence and personal use salmon harvest, Upper Cook Inlet, 1980-1987.

| Fishery | No. of Permits | Chinook | Sockeye | Coho | Pink | Chum |
|---|----------------|---------|---------|--------|------|------|
| <u>Tyonek Subsistence</u> | | | | | | |
| 1980 | 67 | 1,927 | 261 | 0 | 0 | 0 |
| 1981 | 70 | 2,002 | 269 | 62 | 32 | 13 |
| 1982 | 69 | 1,574 | 274 | 113 | 15 | 4 |
| 1983 | 73 | 2,755 | 251 | 78 | 0 | 6 |
| 1984 | 70 | 2,364 | 310 | 66 | 3 | 23 |
| 1985 | 176 | 1,967 | 163 | 91 | 0 | 10 |
| 1986 | 101 | 1,674 | 198 | 210 | 45 | 44 |
| 1987 | 97 | 1,552 | 161 | 149 | 10 | 24 |
| <u>Non-Commercial Gillnet</u> | | | | | | |
| 1981 | 1,108 | 68 | 466 | 12,713 | 149 | 305 |
| <u>Kasilof Personal Use</u> | | | | | | |
| 1982 | 649 | 372 | 7,543 | 24 | 17 | 0 |
| 1983 | 684 | 307 | 8,846 | 0 | 0 | 0 |
| 1984 | 698 | 165 | 12,926 | 0 | 0 | 0 |
| 1985 | 692 | 203 | 10,746 | 0 | 0 | 0 |
| 1986 | N/A | 168 | 9,609 | 0 | 0 | 0 |
| 1987 | N/A | 184 | 9,375 | 0 | 0 | 0 |
| <u>Central and Northern Districts Personal Use Coho</u> | | | | | | |
| 1983 | 295 | 0 | 0 | 712 | 0 | 0 |
| 1984 | 309 | 1 | 2 | 2,261 | 10 | 7 |
| 1985 | 998 | 50 | 805 | 11,265 | 108 | 53 |
| 1986 | 892 | 0 | 0 | 2,422 | 0 | 0 |
| 1987 | 486 | 8 | 9 | 2,213 | 2 | 37 |
| <u>Northern/Central Districts Subsistence</u> | | | | | | |
| 1985 | 638 | 117 | 2,218 | 1,427 | 90 | 121 |
| <u>Knik Arm Subsistence</u> | | | | | | |
| 1985 | 405 | 4 | 1,649 | 2,055 | 48 | 212 |