ALASKA DEPARTMENT OF FISH AND GAME

DIVISION OF COMMERCIAL FISHERIES

ANNUAL MANAGEMENT REPORT
UPPER COOK INLET

1985

Submitted By

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January
1987

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Joni Piercy	FT II	Kenai Sonar
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RosemaryCarroll	FT II	Escape. Sampler, Tyonek
Morris Lambdin	FT II	Crescent Sonar, Herring
Mark Vania	FT II	Crescent Sonar
Mark Clark	FB I	Susitna Sonar
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Ron Aldridge	FT II	Offshore Testfish
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Linda Soquet	FB I	Scale Reader
Sandra Kyle	FB I	Scale Reader
Gino Del Frate	FB I	Catch Sampling
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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 (Oncorhyncus sp.), razor clams (Siliqua patula), and Pacific herring (Clupea harengus pallasi) are subject to commercial harvest in Upper Cook Inlet.

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 1966 (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).

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 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 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.

1985 COMMERCIAL SALMON FISHERY

The 1985 Upper Cook Inlet commercial harvest of 5.3 million salmon ranked as the fourth highest on record (1954-85) and the second highest odd-numbered year. The harvest was comprised of near-record catches of sockeye and coho salmon, an above-average catch of chinook salmon, an average catch of chum salmon and a below-average (even for an odd-numbered year) catch of pink salmon. Exvessel prices paid for salmon were generally improved over the previous year, particularly for sockeye salmon which sold for $1.20 per pound, up $.20 from 1984. The estimated exvessel value of the salmon harvest was $33.8 million, second only to the 1982 season.
A total of 590 drift gill net and 731 set gill net permits were issued by the Commercial Fisheries Entry Commission for 1985, not significantly different from prior years (Appendix Table 11).

Season Parameters

In 1984, the first formal forecast of sockeye salmon run-strength was attempted using recruit/spawner relationships and average marine maturity schedules to estimate total return by river system. The results proved sufficiently accurate to warrant further use of the methodology. The 1985 forecast of harvest (3.6 million) came quite close to the actual harvest of 3.85 million. An adequate data base does not yet exist on which to base forecasts for other species, although a projection of harvest levels is issued yearly based on parent-year run-strength and some subjective evaluations of escapement (Table 1).

A number of regulatory changes affecting the commercial salmon fishery were adopted by the Alaska Board of Fisheries meeting in Anchorage in December, 1984. The Central District east side set gill net fishery season was returned to a uniform opening date of July 1 (or the first Monday or Friday thereafter) rather than the split dates of July 2 and 9 in effect in 1984. Provisions for an earlier opening date if given escapement levels were exceeded in either the Kasilof or Kenai Rivers were retained but did not affect the 1985 opening. The portion of the Kustatan Subdistrict from the Kustatan River to Drift River Terminal was opened to set gillnetting for the first time and produced fair catches of coho salmon for the few individuals who moved into the area but sockeye catches were poor. There were substantial problems in delineating closed waters areas around the mouths of the numerous salmon streams in the area and resulted in numerous complaints and several citations. The creation of a commercial fishery at the mouth of Fish Creek in Knik Arm to harvest surplus sockeye salmon returning to Big Lake was not implemented due to the 29 July cut-off date associated with any opening. The Fish Creek escapement, which totaled 68,000, did not exceed the 50,000 fish goal until 5 August. A change in standard fishing periods from 6:00 A.M. until 6:00 P.M. to 7:00 A.M. until 7:00 P.M. was accomplished smoothly and drew very little comment from fishermen.

As in the past, current fishery information and emergency order announcements were distributed through recorded phone messages, informational programs (Fishermen's Corner) and public service messages broadcast by local radio stations. The stations carrying Fishermen's Corner and emergency order announcements were KSRM (Kenai-Soldotna), KGTL (Homer), KBBI (Homer) and KCSY (Kenai-Soldotna).

Sockeye Salmon

The 1985 sockeye salmon harvest of 3.85 million was second only to the catch of 5.0 million in 1983 and slightly above the forecast estimate of 3.6 million. The exvessel value of the catch was $27.7 million or 82% of the total salmon fishery value.

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 separation, in-district test fishing, sonar escapement enumeration 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 to the appropriate run-timing profile (Waltemyer 1986). In 1985, 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 1985 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 (1984). 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 important 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. The program was activated on two occasions in 1985 - once using only two vessels to obtain a sample for stock identification purposes and once to monitor fish movement during a closed drift gill net period.

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 1985 with no significant problems observed (Table 3). The Susitna River was monitored by sonar in the Yentna River and by substrateless long range sonar on the east bank near Susitna Station. An experimental program was initiated in the mainstem Susitna to further quantify fish behavior patterns and provide information that may lead to developing a more accurate method of enumeration for all species in this important river system (King and Tarbox 1986).

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 1985 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.

The Crescent River sockeye salmon return is managed primarily through the use of comparative catch statistics, run-timing modeling and escapement. Scale pattern analysis has repeatedly shown that the set gill net fishery in the Western Subdistrict harvests almost exclusively Crescent River sockeye salmon and manipulation of this fishery is used to adjust escapement levels. Effort levels in the fishery are confirmed by aerial survey (Table 16). Although early season catches were unremarkable, by 6 July both catch and escapement had improved to the point that the Subdistrict was opened until further notice, a condition that prevailed until 6 August. Buoyed by the 31 days of continuous fishing, the Western Subdistrict catch of 185,000 sockeye salmon was the best on record for this area. The Crescent River escapement totaled 128,628, easily exceeding the 50-100,000 fish goal.

In the remaining areas of the Inlet, the season began quite normally with both catches and escapement remaining at average levels through the first week of July. Through 9 July, however, the escapement into the Kasilof River had accelerated considerably and an additional period was opened for the east side set nets south of mid-Kalifonsky Beach and for drift gear confined to the southeastern portion of the Central District.

Although compliance with the drift boundary was fairly good (not always the case in the past), the catch contained a high percentage on non-Kasilof stocks. When the Kasilof River escapement returned to relatively low levels, fishing returned to standard periods until Sunday, 14 July, when the lower east side beach set nets were opened once again as the escapement rate in the Kasilof increased dramatically (30,000 counted on 14 July) and remained open through the regular period on 15 July. Stock separation analysis from the earlier drift periods raised concern over the status of the Kenai and Susitna River sockeye salmon

returns and accordingly, the drift fleet was confined to the southern half of the Central District for the 15 July period to conserve those fish that had migrated to the northern portion. With the Kasilof escapement rate remaining at record levels, the lower east side set nets were extended through the regular period on Friday, 19 July. The Kasilof escapement dropped to very low levels by 20 July and the Kenai River escapement, which had been picking up through the week, also dropped back to very low levels. Continued concern over Kenai River run strength again prompted a restriction of the drift fleet to the southern half of the district on 19 July to protect the substantial accumulation of all stocks schooled north of Kalgin Island. When the Kasilof River escapement again began to build very rapidly, the lower east side set nets were once again opened on Sunday, 21 July, but restricted to within 1/2 mile of the shore to minimize the interception of Kenai River stocks. The regular period on Monday, 22 July, was closed to the remainder of the east side set nets and to drifting in all areas of the Central District to conserve Kenai River stocks. The restricted lower east side set net fishery was extended through the regular period on Friday, 26 July, to continue the harvest of Kasilof River stocks as the escapement goal there had already been exceeded by a wide margin.

During the period of 22-25 July, the Kenai River escapement built up rapidly and the remaining east side set nets were opened on the evening of Thursday, 25 July to slow the rate of entry. All areas were allowed to fish the regular period on Friday, 26 July. With the Kenai River escapement goal nearly satisfied and excellent numbers of sockeye salmon moving through the Northern District bound for the Susitna River and Fish Creek, the entire Central District except Chinitna Bay was opened on Saturday,27 July and Sunday, 28 July. The Northern District set nets were also opened on Sunday as initial escapement rates in the Susitna River and commercial catches both indicated a surplus to the escapement goal was available.

With escapement goals satisfied in both the Kenai and Kasilof Rivers, the east side set nets were extended through Wednesday, 31 July and the drift fleet permitted to fish along the east side on Tuesday, 30 July and in the southern half of the Central District on Wednesday, 31 July. The southerly restriction permitted the harvest of additional sockeye salmon while affording some measure of protection to an average chum salmon return that was at the peak of it's migration through the Central District. Fishing was extended for the east side set nets through 6 August and drift gillnetting was permitted daily along the east side of the Central District for the same time period. With sockeye salmon catches falling rapidly, management emphasis shifted to other species.

The Kasilof River escapement totaled 503,000, the highest on record and far in excess of the stated escapement goal of 150,000 (Appendix Table 12). Approximately 1/3 of the return was estimated to be of hatchery (Crooked Creek) origin. Although

excellent returns from large escapements have indicated a need to change the escapement goal to approximately double the present level, the anticipated return of substantially larger year-classes will require the development of a more effective stock-specific fishery to adequately harvest available surpluses.

The final Kenai River sockeye salmon escapement of 501,000 equals the maximum goal established for this system, very appropriate in light of the relatively poor escapement achieved the preceding year and the unequal distribution of spawners within the watershed. Approximately 40% of the 1985 escapement entered the Russian River, leaving barely adequate numbers of fish to utilize the remaining spawning areas.

The Susitna River escapement, which had appeared to be very strong in the early stages, dwindled rapidly and the actual sonar count reached only 130,000. Additional research conducted in the area beyond the range of the present counting equipment confirmed the presence of sockeye salmon in midstream. The magnitude of the offshore component proved impossible to quantify in-season. Post-season, the combination of Yentna River sonar counts with a mark/recapture population estimate generated at Sunshine on the mainstem appears to yield the best estimate of total escapement - 228,000.

Chum Salmon

The 1985 harvest of 714,310 chum salmon was slightly above the long-term average and contributed $2.4 million or 7% of the exvessel value of the salmon fishery. The principal chum salmon return overlaps considerably both in time and area with the sockeye salmon return. A fairly conservative fishing pattern imposed on the drift gill net fishery (two southerly restrictions on 15 and 19 July and total closure on 22 July) aimed at protecting specific sockeye salmon stocks provided for an adequate harvest of intermingled chum salmon. The strength of the chum salmon return, as measured by catch-per-unit-effort data in the drift gill net fishery, appeared to be slightly above average. Although no in-season estimate of chum salmon escapement into the Susitna River is possible with current techniques, the index obtained at various sonar locations would indicate an adequate number of spawners entered the system.

The return of local chum salmon stocks to Chinitna Bay is separated to a large degree both temporally and spatially from the chum salmon return to the Susitna River. Chinitna Bay chum salmon begin accumulating in the bay in significant numbers shortly after mid-July, reach peak abundance by early August, and begin ascending spawning streams on peak tidal cycles throughout August. Under a Board of Fisheries policy promulgated in 1982, drift gillnetting and seining are prohibited in Chinitna Bay after mid-July until adequate escapement of chum salmon has been achieved. Thereafter, the bay is open to all gear types to harvest remaining chum salmon and a significant coho salmon

return. Set gillnetting is permitted throughout the chum salmon return unless it appears this level of harvest will prevent adequate escapement.

In accordance with this policy, drift gillnetting was permitted on regular periods (by emergency order) from the beginning of the season through 15 July. Set gillnetting remained open on regular periods until 5 August when poor catches and low initial escapement rates provided indications of a poor return. A total closure of the Chinitna Bay Subdistrict for the remainder of the chum salmon return succeeded in attaining only 1/3 of the desired escapement level. The Chinitna Bay chum salmon harvest totaled only 6,884 (all gear combined), one of the poorest catches on record. Approximately 72% of the catch was taken by set gill net with the remainder taken by drift gill net. The Subdistrict was re-opened on 24 August to all gear types to provide for a coho salmon harvest.

Pink Salmon

The harvest of 83,548 pink salmon in 1985 was only about 2/3 of the average odd-year harvest for Upper Cook Inlet and contributed only $62,000 or 0.25% of the exvessel value of the salmon fishery. The weak return continues a trend of poor run strength begun in 1982. No escapement goals are established for odd-year pink salmon although a fairly good index was observed in the Susitna River. Pink salmon did not play a role in any management decisions in 1985.

Coho Salmon

The 1985 Upper Cook Inlet coho salmon harvest of 619,924 ranks as the second best catch on record and the fifth consecutive year of excellent returns. The catch was valued at $2.8 million and represented 8% of the exvessel value of the salmon fishery.

The commercial fishery harvests coho salmon stocks that can be divided into three broad groups. The first and largest group to appear in Cook Inlet are the fish bound for the Susitna River and other Northern District streams. These stocks are normally intercepted in the drift gill net and Northern District set gill net fisheries. Management concern for Kenai and Susitna River sockeye salmon stocks that resulted in a restricted drift fishery reduced drift interception of northern-bound coho salmon during the peak of the return. The Central District drift closure on 22 July is presumed to have coincided with the peak of abundance of coho salmon. Coho salmon run strength, as measured by CPUE data from preceding drift periods indicated a very strong return. Although in-season absolute measurement of escapement of coho salmon in the Susitna River is not currently available, indices from sonar counters and sport fishery catches indicated a good though not exceptional level of escapement.

The early run of coho salmon bound for the Kenai River first

appears along the east side beach in significant numbers in late July and peaks in abundance in early August. Commercial catches of these coho in the east side set gill net fishery were indicative of a very strong return but additional fishing periods necessary to harvest surplus Kenai and Kasilof River sockeye salmon increased interception of coho salmon to a level much higher than normally experienced during late July and the first week of August. Although sockeye salmon catches remained substantial well into August, additional periods were halted on 6 August out of concern for the overall harvest level being inflicted on coho salmon. The east side set net harvest of 69,735 coho salmon ranks as the second highest catch of that species on record.

The third general "stock" of coho salmon encompasses returns to a variety of streams in the Northern District and along the west side of the Central District. These returns experience peak abundance in late August and continue well into September. Substantially above-average catches of these late coho salmon in late August prompted the opening of all remaining open areas of Upper Cook Inlet except Chinitna Bay for one additional period each week beginning 21 August. The high effort level in Chinitna Bay adequately harvested coho salmon returns to that area during regular periods.

Chinook Salmon

The 1985 harvest of 23,297 chinook salmon represents the highest catch of this species observed under the present regulatory structure. A strong and slightly delayed Susitna River return led to above average commercial catches in the Northern District and along the west side of the Central District early in the season. The large catches in the Upper Subdistrict (east side) set net fishery can be attributed to a strong return of late-run Kenai River chinook salmon and in part to large blocks of additional fishing time permitted to harvest surplus sockeye salmon.

Management Review and Recommendations

The 1985 fishing season provided interesting information relating to fish behavior not experienced in prior years. The overall run-timing of sockeye salmon was the latest observed in recent years and other anomalies such as unusual entry patterns were also recorded. Several situations that developed during the 1985 season affected management of the fishery and merit further discussion.

Kasilof River Sockeye Salmon Management: The 1985 escapement of over 500,000 sockeye salmon into the Kasilof River drainage exceeded the maximum goal by a wide margin and was almost certainly far in excess to the level needed to achieve maximum production from this system. Providing for an adequate harvest was complicated by several factors. The initial entry pattern of

fish into the river was characteristic of past years with a very gradual building in daily counts. By July 14, however, the daily rate began to increase extremely rapidly, reaching 58,000 only two days later. Initiation of set net fishing periods came to late to take advantage of this major entry of fish and were made particularly ineffective by the entry of fish almost exclusively from the north side of the river, overwhelming gear in that area.

As quickly as it built up, the daily count dropped back to very low levels for several days before another rapid rise on July 20 and 21. Both sharp peaks were atypical and the management response came too late to be very effective.

Considering the anticipated increasing run strength of Kasilof River sockeye salmon in coming years, it has become more obvious that the existing fisheries and fisheries management will be unable to take full advantage of large surpluses. Experience from the past several years has shown that many factors such as high winds, unusual entry patterns, mixed stock concerns and lag time in management response all serve to hinder the successful harvest of this return. If all surplus fish are to be harvested from this return, a highly effective fishery such as a terminal harvest area will need to be in place.

Drift Gill Net Restrictions: It has become common practice in recent years to limit drift gill net exploitation during periods when overall sockeye salmon run strength has been a concern. Accomplished by restricting the drift fleet to the southern portion of the Central District, this tactic has no doubt been effective in controlling harvest. The results of the 1985 season, however, suggest that the strategy employed reduced harvest of the one stock most in need of additional harvest - the Kasilof River return. Although impossible to foresee, the concentration of Kasilof River fish in the northern Central District protected by closures of this area likely aggravated the excessive escapement ultimately experienced. Although valuable as a way of limiting exploitation, area drift restrictions must be used cautiously to avoid targeting effort on stocks requiring protection and affording protection to stocks in need of further harvest.

Prices and Quality

Prices paid per pound to fishermen for their catch were generally much improved over 1984 levels. Sockeye salmon, sold for $1.00 per pound in 1984, averaged $1.20 in 1985. Chinook, coho, pink and chum salmon sold for $1.20, $.70, $.20 and $.45, respectively (Appendix Table 13).

No significant problems were observed in maintaining quality of harvested fish. The record sockeye catches of 1982 and 1983 resulted in a considerable increase in the ice-making capabilities of local processors as well as improving the logistical procedures for prompt delivery of fish. A total of 25

firms purchased Upper Cook Inlet fishery products in 1985 (Table 17).

Minor System Escapement

Salmon escapement was monitored in several significant salmon streams in addition to the four major systems where side-scan sonar counters were employed. With funding provided by the Commercial Fisheries Division, the Fisheries Rehabilitation, Enhancement and Development (FRED) Division placed a weir across Fish Creek from July 10 to August 31. A total of 68,577 sockeye salmon were passed through the weir with the highest daily total (9,612) occurring on August 7 and the midpoint of the total escapement occurring on July 31. A total of 1,499 coho salmon passed through the weir and an additional 3,590 were counted downstream of the weir at the time of it's removal for a total escapement estimate of 5,089 (Table 18).

As part of a program to assess the affects of fertilization of Packer's Lake on Kalgin Island, the Cook Inlet Aquaculture Association (CIAA) placed a weir across Packer's Creek from May 29 through September 5. A total of 36,850 sockeye salmon were enumerated with the peak daily count (3,594) occurring on August 17, one day later than the midpoint of the total escapement (Table 19).

CIAA also installed a weir on Larson Creek in the Susitna River drainage as part of a pre-fertilization study of Larson Lake. With the weir in place from July 14 to August 29, 37,874 sockeye salmon were counted. The highest daily count (6,195) occurred on July 29, three days before the midpoint of the total escapement (Table 20).

1986 Outlook

Formal forecasts of coming year salmon returns are prepared only for sockeye salmon. Based on recruits-per-spawner averages and marine maturity schedules, the 1986 sockeye salmon return is expected to total 5.2 million. Escapement requirements are roughly 1 million leaving 4.2 million for harvest. Projected returns by river system are: Kenai River - 2.4 million, Susitna River - 1.2 million, Kasilof River - 1.5 million, and the Crescent River - 111,000 (Tarbox, 1986).

Based on a subjective review of parent-year run strength and fragmentary escapement information, coho, chinook and chum salmon returns are all expected to be above average. Weak pink salmon returns in 1982 and 1984 may indicate a poor return for 1986.

COMMERCIAL HERRING FISHERY

The 1985 Upper Cook Inlet herring fishery opened by regulation on 15 April with the first significant catches occurring in Tuxedni Bay on 28 April. Fishing success remained fairly constant through 5 May when the bay was closed by emergency order after the harvest of 140 tons. Age composition of harvested fish was consistent with past years with the bulk of the fish being six years or older (Table 21). Roe maturity fluctuated through time, exceeding 10% early in the fishery, dropping to 9% by 1 May and increasing to 11% at the time of the closure.

Effort shifted to Chinitna Bay on 7 May but inclement weather prevented any effective harvest until 10 May. The area was closed on 12 May following the harvest of 47 tons. Roe maturity was fair, averaging slightly less than 10%. The harvest was well spread over five age classes with 35% of the catch sampled being eight years or older (Table 22).

The Tuxedni Bay area was re-opened on 15 May and an additional 80 tons were taken before the final closure on 18 May. Roe maturity from these later fish proved to be excellent, averaging 12%. Unlike past years, the age composition did not shift to younger age classes during the second opening but remained very similar to that observed in the initial opening (Table 23). The bait fishery along the east side beaches began very slowly with the first significant catches occurring on 25 April. Catches peaked during the first week of May and dropped to very low levels by late May (Table 24). Decreasing catches and effort coupled with increasing incidental salmon catches prompted the closure of the fishery on 31 May.

Prices paid for herring differed substantially by buyer with roe herring selling for $500-$1,000 per ton and averaging about $700. Bait herring prices also varied widely ($350-$1,000 per ton) with the average being approximately $650 per ton.

Upper Cook Inlet herring stocks appear to be healthy and stable with the continued presence of older age classes in each year's harvest indicative of an acceptable exploitation rate at current harvest levels. Anticipated management practices for the near future include a continued gradual increase in harvest levels if relative abundance appears equal to current values. The inability to visually assess biomass or egg deposition will require a great deal of caution and patience in seeking the long-term allowable harvest level.

COMMERCIAL RAZOR CLAM FISHERY

The 1985 harvest of 280,621 pounds of razor clams came primarily from the Crescent River bar area with a small amount of bait clams harvested from Chinitna Bay. Approximately 95% of the harvest was directed to human consumption markets with the

remainder sold for crab bait. The 1985 harvest was approximately equal to the the amount taken in the two previous years with the overall harvest level controlled more by the availability of marketing opportunities than by availability of the resource. Although very little information is available concerning stock status, western Cook Inlet clam populations appear stable and likely capable of withstanding somewhat higher levels of exploitation. No season or size restrictions are currently in place nor is the yearly harvest controlled by quota. No restrictions of this nature are being contemplated.

SUBSISTENCE AND PERSONAL USE FISHERIES

The Alaska Supreme Court decision in favor of plaintiff in Madison et al. vs. Alaska Board of Fisheries qualified all Alaska residents as subsistence users and indirectly established a need to provide for a more liberal approach to permitted subsistence fisheries in Upper Cook Inlet pending further review and action by the Board. Under the guidance of the Department of Law, the Department of Fish and Game issued emergency regulations opening subsistence fisheries that had formerly existed under state regulations, had some record of prior use and did not represent a threat to the sustained yield of any stocks. Existing "personal use" fisheries remained in place unless superseded by subsistence fisheries. The following discussion includes a review of all personal use and subsistence gill net fisheries with the exception of the Knik Arm fishery monitored by Sport Fish Division personnel.

Tyonek Subsistence Fishery

This fishery remained relatively unchanged under the Madison decision with the only notable difference being the eligibility of all Alaska residents to participate. Prior regulations limited participation to individuals domiciled in Tyonek. The fishery consisted of three 16-hour periods each week from 15 May to 15 June and one 12-hour period each week for the remainder of the summer. The period scheduling made this predominantly a chinook salmon fishery for which a 4,200 fish quota was in place. Gear was limited to a single 10-fathom gill net per permit holder and mesh size was limited to a maximum of six inches. The fishery was monitored on-site through mid-June to assure that the chinook salmon quota was not exceeded (Table 25).

A total of 176 permits were issued - 73 to Tyonek residents, 82 to Anchorage residents and 21 to Kenai Peninsula residents. Very few non-village permit holders actually fished. Of the total harvest of 1,890 chinook salmon, 326 or 17% were estimated to be taken by non-Tyonek residents.

Northern/Central Districts Subsistence Fishery

Under the emergency regulations, this fishery was opened in all areas of the Northern and Central Districts normally open to commercial set gillnetting excluding the Tyonek Subdistrict and the Upper Subdistrict (the Kenai Peninsula shoreline south of Boulder Point). Fishing was permitted only on Saturdays from 7:00 am to 7:00 pm from 20 June to 15 August and on Mondays and Fridays from 7:00 am to 7:00 pm from 16 August to 23 September. Gear was limited to a single set gill net no longer than 35 fathoms, no more than 45 meshes deep and having a mesh size no greater than six inches. Each permit holder was allowed to take up to 25 salmon plus an additional 10 salmon for each member of his household. No funding was available for on-site monitoring of this fishery and tabulation of returned permits provides the only source for harvest estimation- 2,218 sockeye salmon, 117 chinook salmon, 1,427 coho salmon, 90 pink salmon and 121 chum salmon. A total of 638 permits were issued for this fishery. Effort appeared concentrated along the beach immediately north of Boulder Point with only scattered catches reported elsewhere.

Upper Subdistrict Subsistence Fishery

This gill net fishery was removed from the personal use category and re-established as a subsistence fishery under the emergency regulations. The fishery was open in all areas normally open to commercial set gillnetting along the Kenai Peninsula shoreline from Boulder Point to Ninilchik. Fishing was permitted from 16 August to 23 September on Mondays and Fridays from 7:00 am to 7:00 pm. Gear was limited to a single 35-fathom gill nets having a mesh size no greater than six inches and a depth of no more than 45 meshes. A total of 998 permits were issued, primarily to Kenai Peninsula residents. Because of the likelihood of greater impact occurring with this fishery due to targeting on a single stock (late-run Kenai River coho salmon), a mandatory call-in of catches following each fishing period was specified on the permits. The reported effort varied from 20%-80% of observed effort (obtained by aerial survey) and reported catches were expanded accordingly. The harvest peaked on 23 August but good catches were observed throughout the fishery. Both effort and catch was well spread over the length of the open fishing area. The total harvest was estimated at 11,265 coho, 805 sockeye, 108 pink, 53 chum and 50 chinook salmon (Table 26). An estimated 32 steelhead trout were taken.

Kasilof Personal Use Gill Net Fishery

The 1985 season marked the fourth year for this fishery located within the waters normally closed to commercial set netting surrounding the terminus of the Kasilof River. Fishing began on 21 June and continued daily through 28 June when the quota was attained. Using single 10-fathom gill nets, the 692 permit holders harvested a total of 10,746 sockeye and 203 chinook salmon (Table 27). As has been common in the past, the fishing

area was very congested with all available beach sites occupied. More effort offshore using small boats was observed.

LITERATURE CITED

Alaska Department of Fish and Game. 1966-1983. IBM fish ticket summaries. Unpublished data.

Browning, J. 1985. Alaska Department of Fish and Game, Commercial Fisheries Division, Soldotna, Alaska. (Memorandum)

Chlupach, R. Personal Communication. Alaska Department of Fish and Game, Fisheries Rehabilitation, Enhancement and Development Division, Big Lake, Alaska.

Cross, B.A. Personal Communication. Alaska Department of Fish and Game, Commercial Fisheries Division, Anchorage, Alaska.

King, B.E. and K. Tarbox. 1986. Upper Cook Inlet salmon escapement studies. Upper Cook Inlet Data Report 86-8. Alaska Department of Fish and Game. 152 pp.

Marcusen, P. 1986. Packers Lake Project Progress Report, 1985. Cook Inlet Aquaculture Association, Soldotna, Alaska. 17 pp.

_____. 1986. Larson Lake Project Progress Report, 1985. Cook Inlet Aquaculture Association, Soldotna, Alaska. 22 pp.

Nickerson, R.B. 1975. A critical analysis of some razor clam populations in Alaska. Alaska Department of Fish and Game Fisheries Rehabilitation, Enhancement and Development Division. 294 pp.

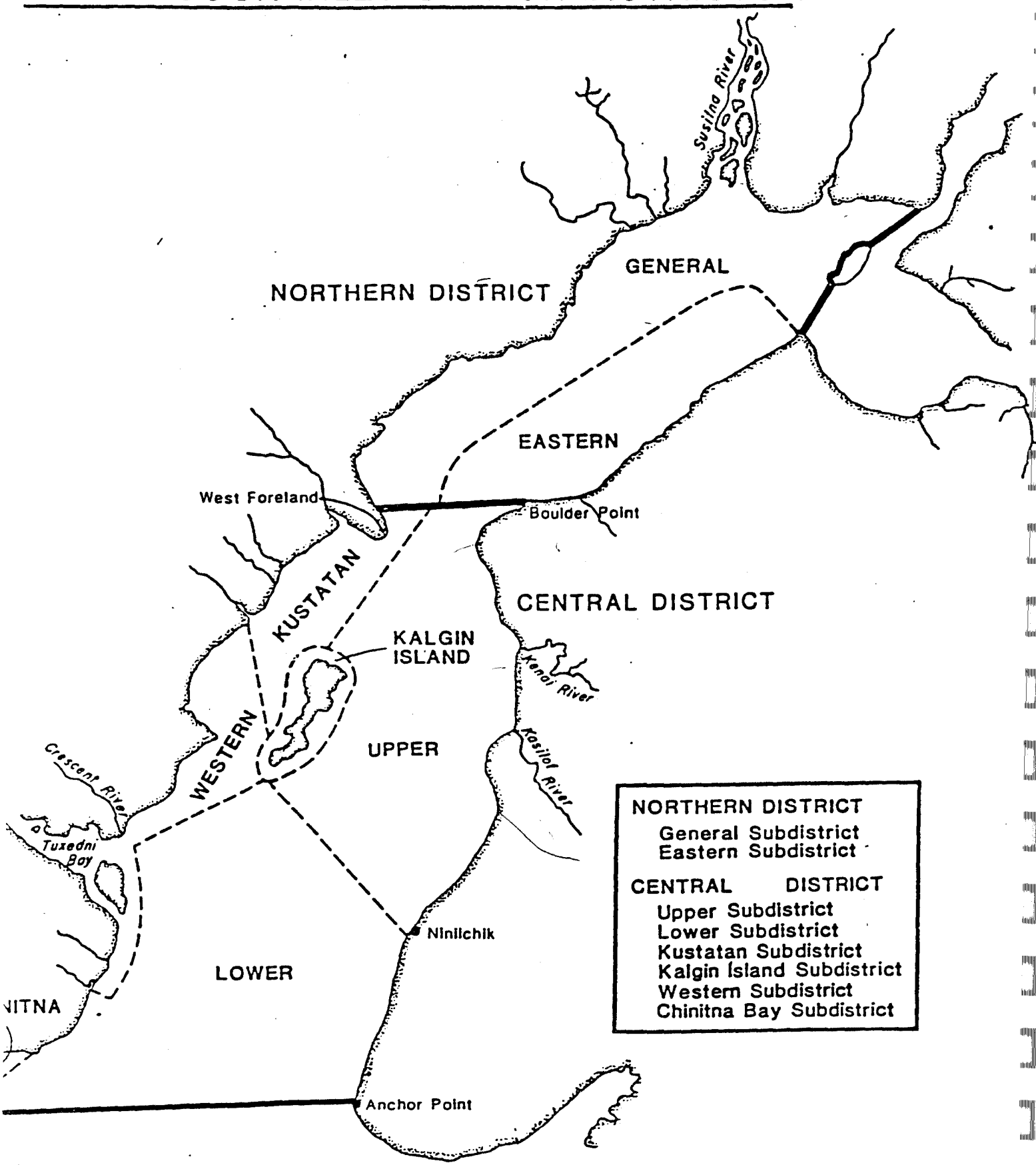
Ruesch, P. 1985. Upper Cook Inlet Management Report to the Alaska Board of Fisheries. Upper Cook Inlet Data Report 85-11. Alaska Department of Fish and Game. 37 pp.

_____. 1986. Annual Management Report, Upper Cook Inlet, 1984. Alaska Department of Fish and Game, Soldotna, Alaska. 68 pp.

Waltemyer, D. 1986. Run strength analysis of the 1985 sockeye salmon return to Upper Cook Inlet, Alaska based on a test fishery. Upper Cook Inlet Data Report 86-5. Alaska Department of Fish and Game, Commercial Fisheries Division, Soldotna, Alaska. 56 pp.

Figure 1.

UPPER COOK INLET SALMON DISTRICTS



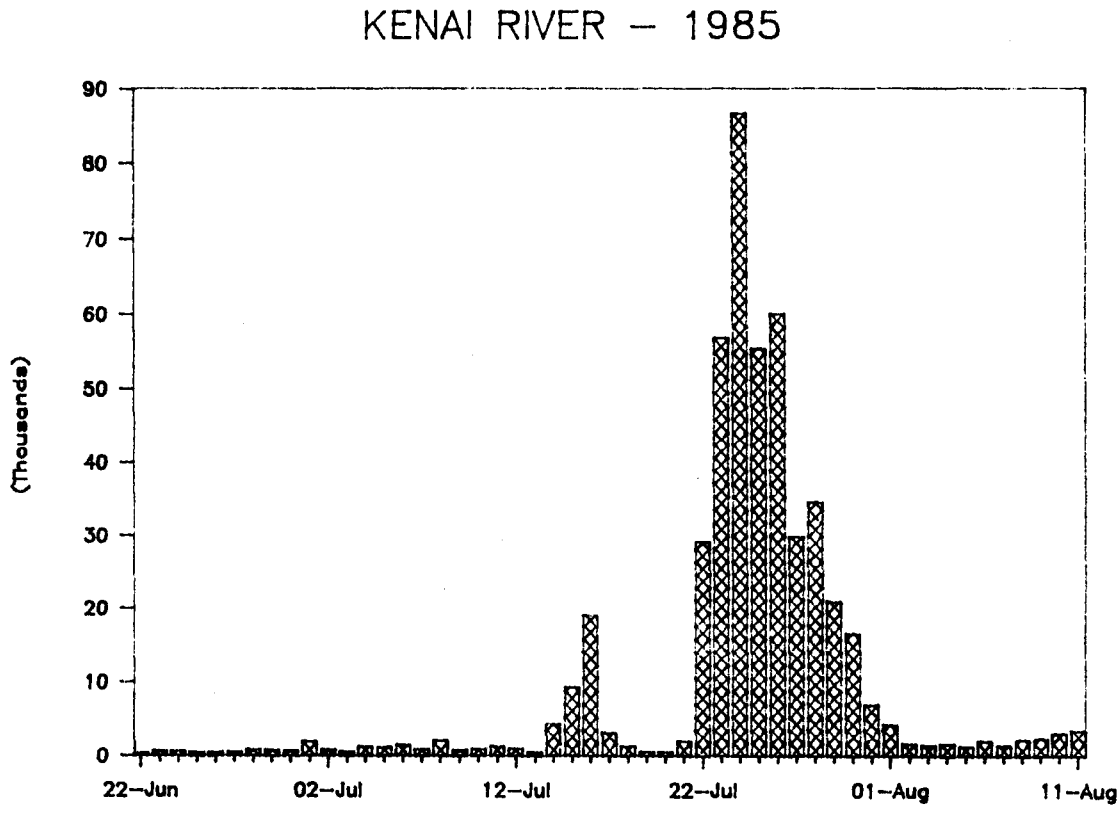


Figure 2. Daily sockeye salmon sonar counts, Kenai River, 1985.

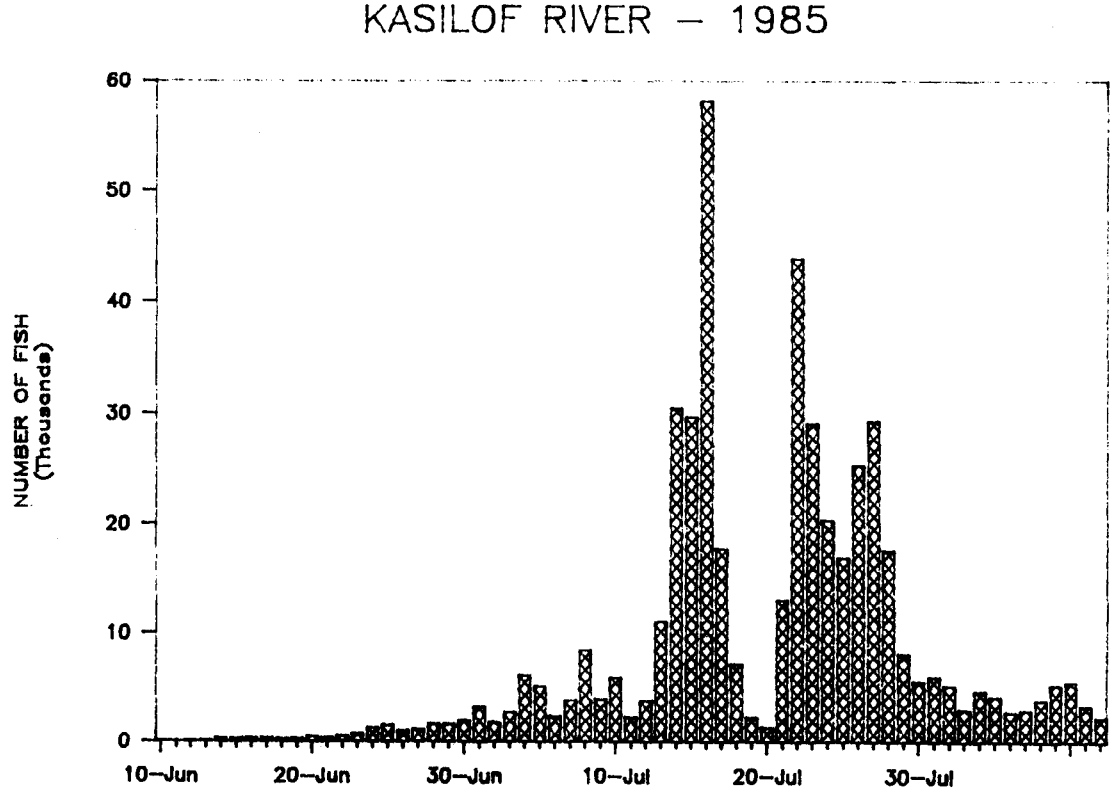


Figure 3. Daily sockeye salmon sonar counts, Kasilof River, 1985.

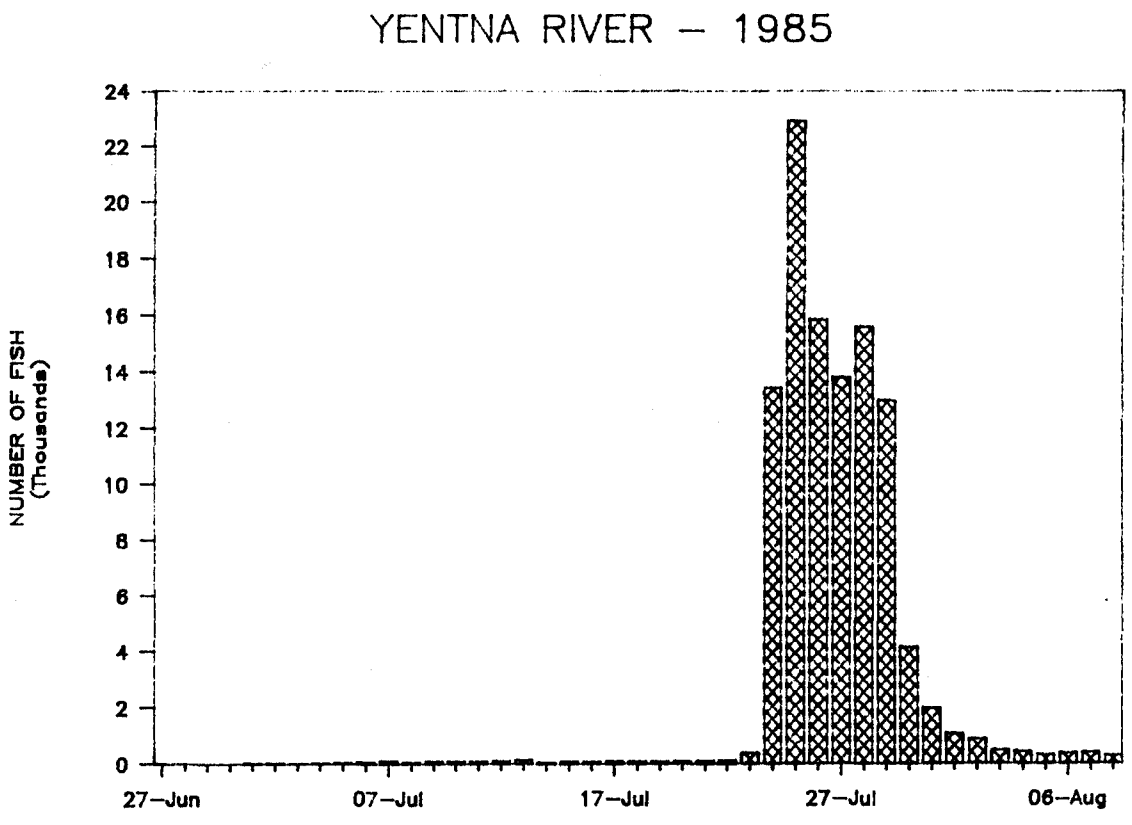


Figure 4. Daily sockeye salmon sonar counts, Yentna River, 1985.

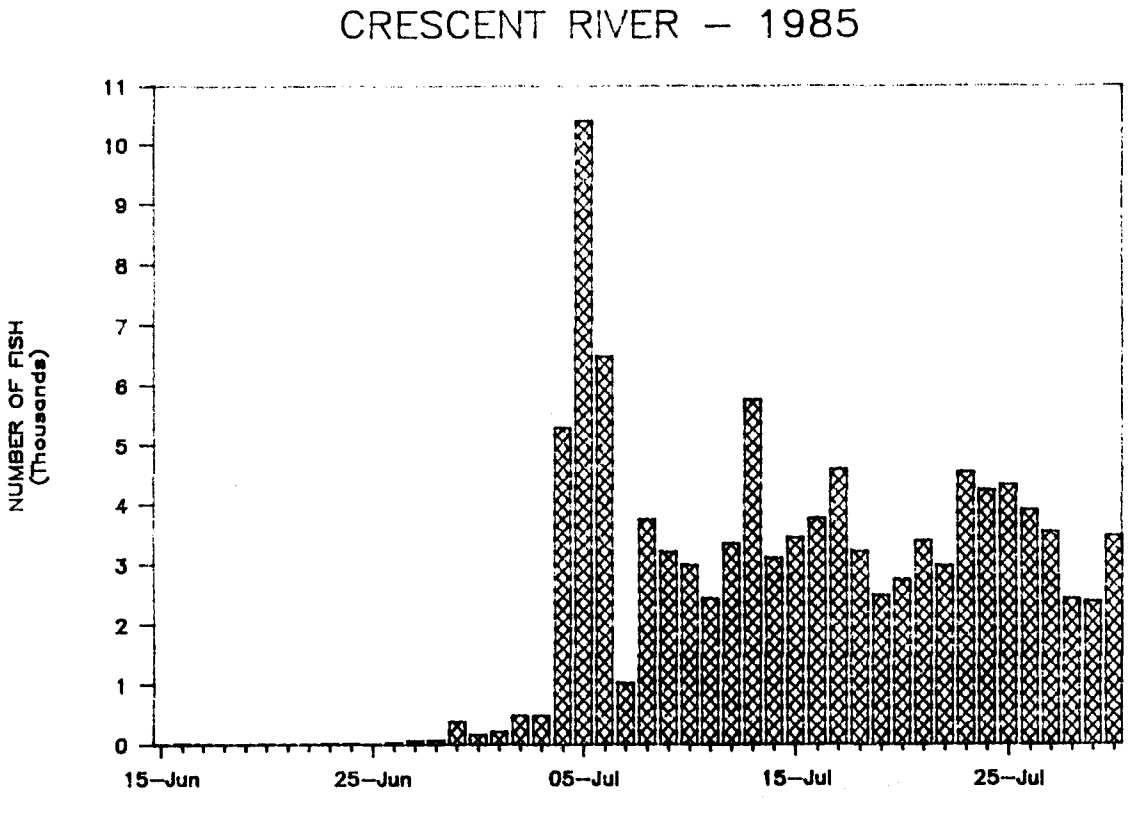


Figure 5. Daily sockeye salmon sonar counts, Crescent River, 1985.

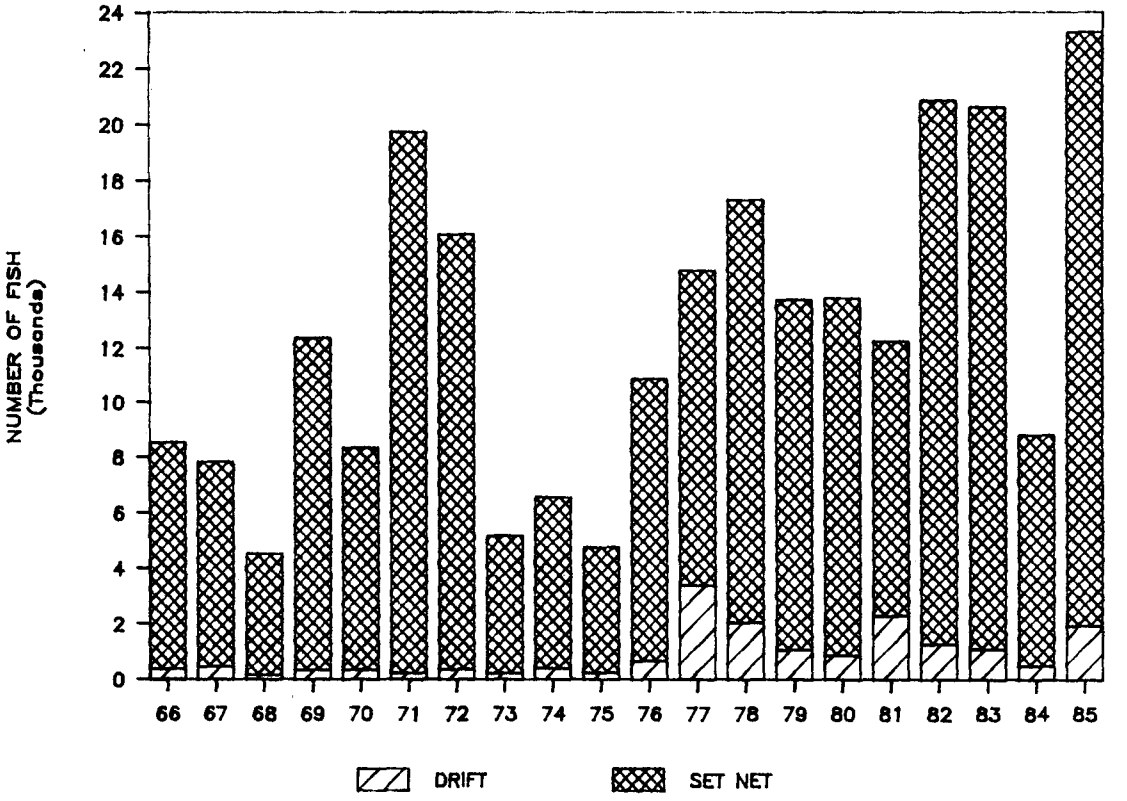


Figure 6. Chinook salmon catch by gear type, 1966-1985.

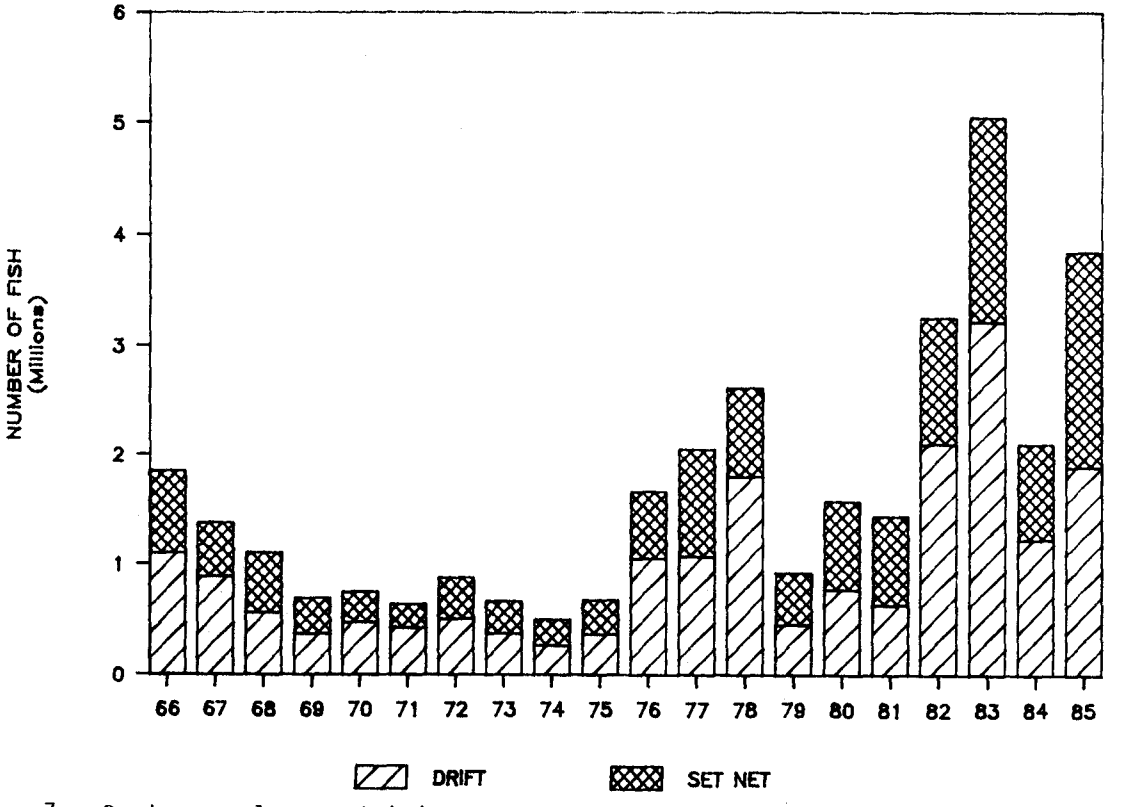


Figure 7. Sockeye salmon catch by gear type, 1966-1985.

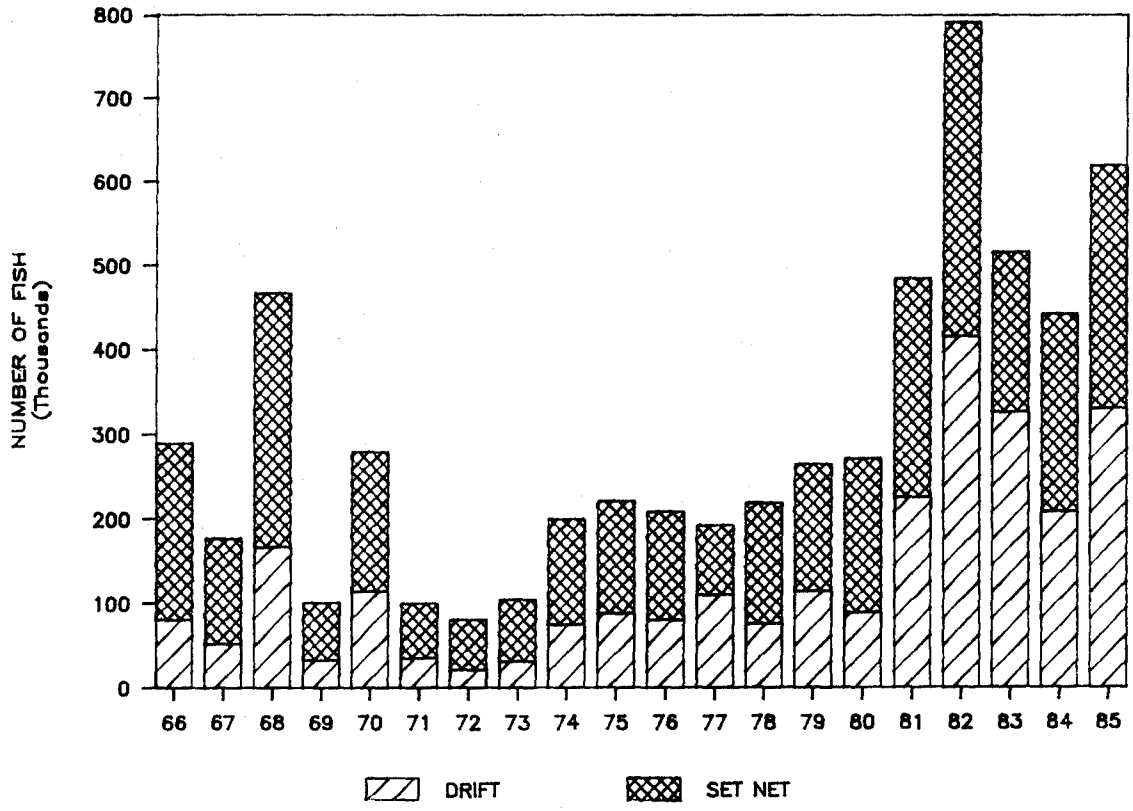


Figure 8. Coho salmon catch by gear type, 1966-1985.

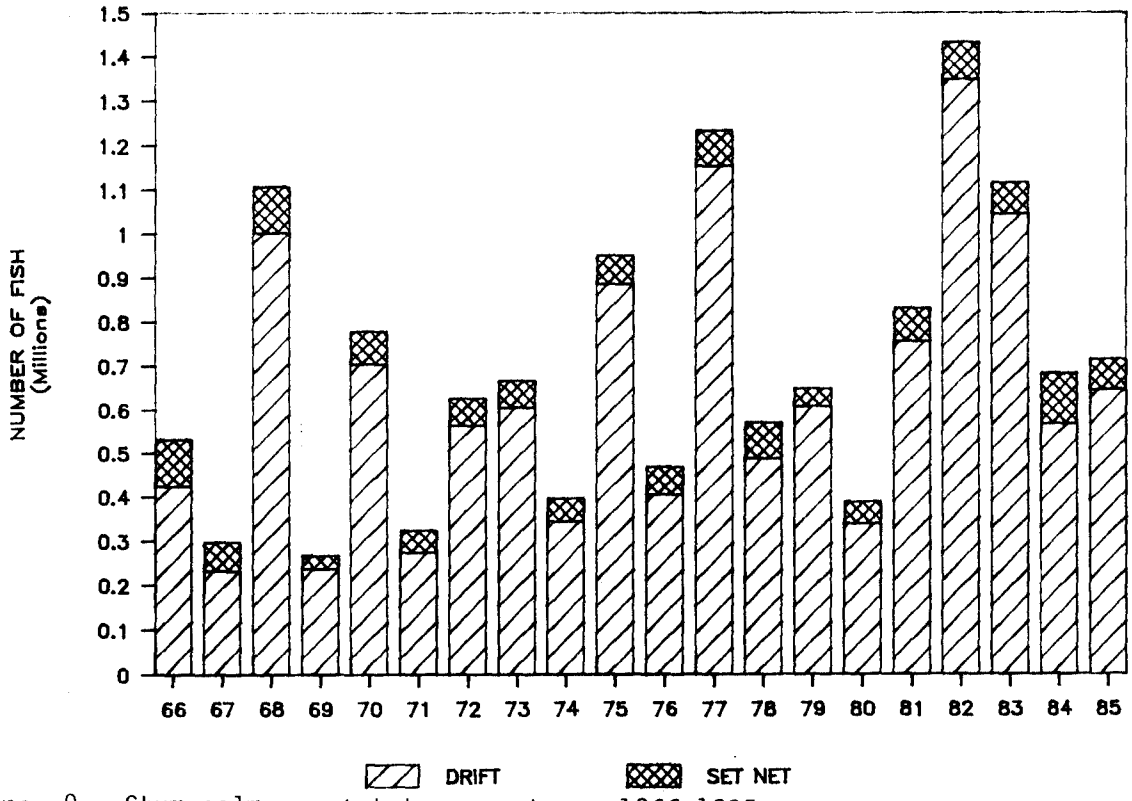


Figure 9. Chum salmon catch by gear type, 1966-1985.

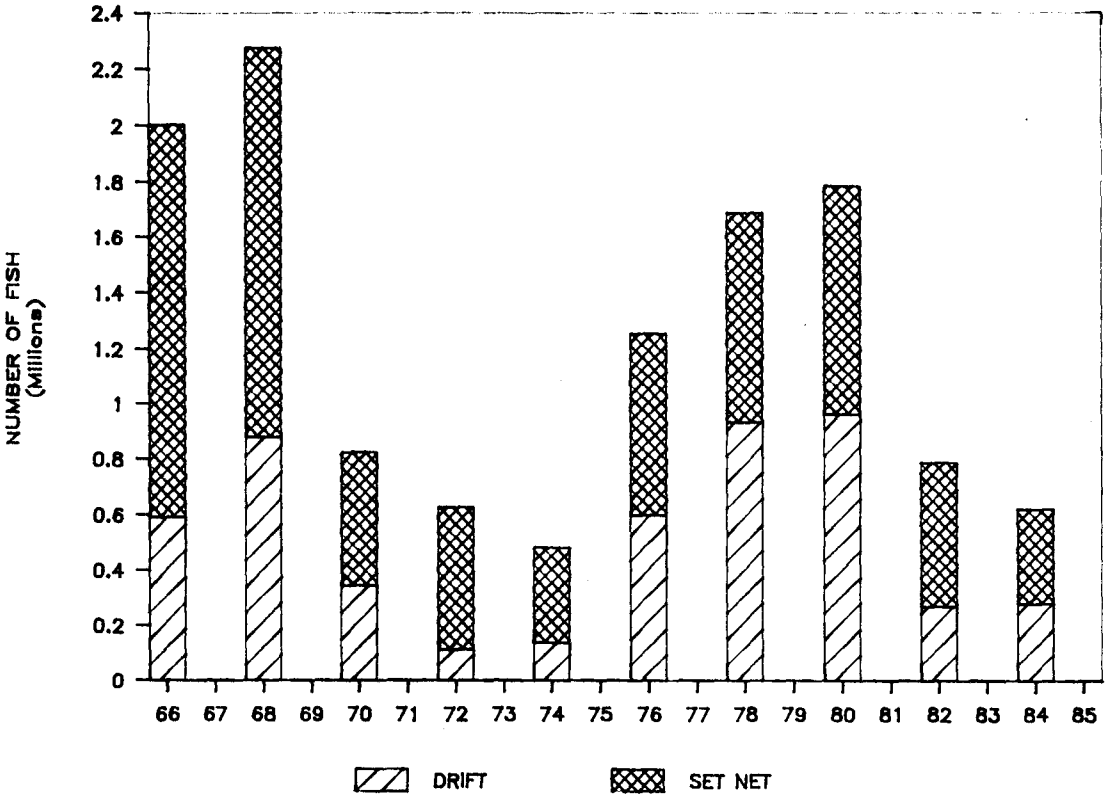


Figure 10. Even-year pink salmon catch by gear type, 1966-1985.

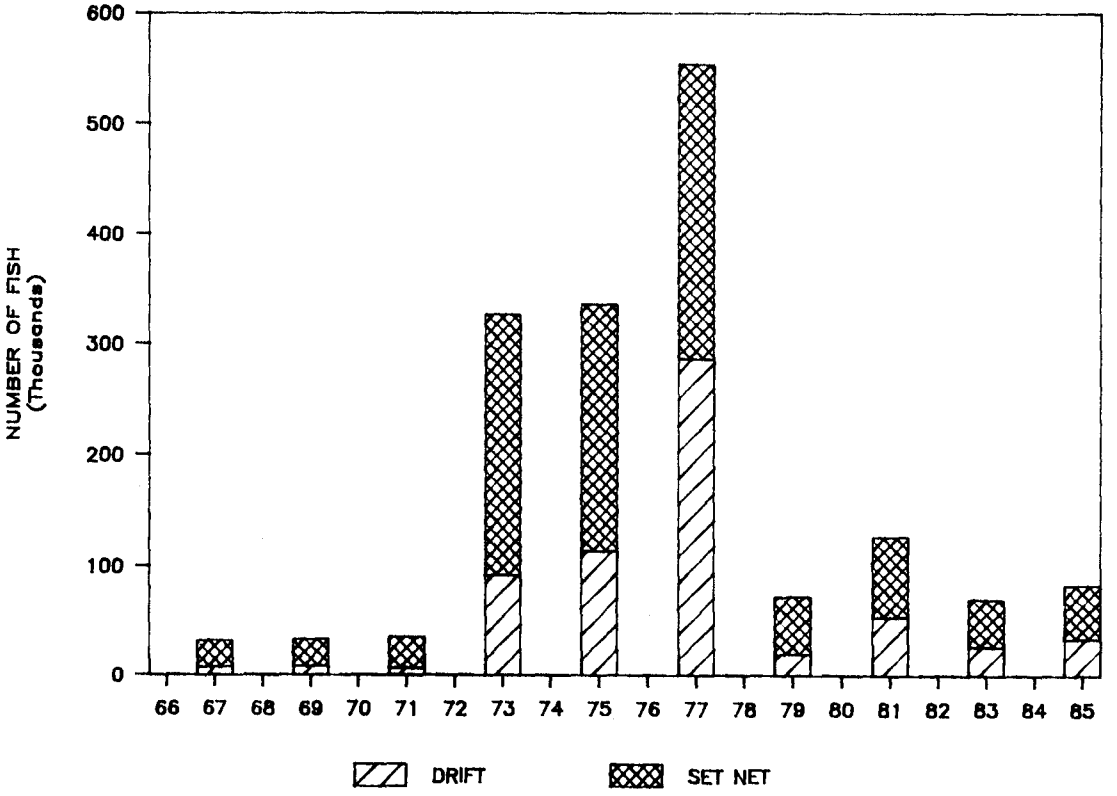


Figure 11. Odd-year pink salmon catch by gear type, 1966-1985.

Table 1. Commercial salmon harvest projections and subsequent harvest by species, Upper Cook Inlet, 1985.

Species	Harvest Projection	Actual Harvest
Chinook	15,000 - 20,000	23,297
Sockeye	3,600,000	3,852,141
Coho	200,000 - 300,000	619,924
Pink	75,000 - 150,000	83,548
Chum	600,000 - 800,000	714,130

Table 2. 1985 in-season sockeye salmon age 1.3 run composition estimates.

Model: 1985 Age 1.3 Susitna (n=205) 1985 Age 1.3 Kenai (n=210)
1985 Age 1.3 Kasilof (n=173) 1984 Age 1.2 Fish & Hidden

Fishery	Date	% Susitna	% Kenai	% Kasilof	% Fish & Hidden
Drift	6/28	11.0	40.0	45.0	4.0
	7/01	36.0	19.0	43.0	2.0
	7/05	43.0	25.0	28.0	4.0
	7/08	30.0	39.0	21.0	10.0
	7/10	28.0	40.0	28.0	4.0
	7/12	51.0	36.0	6.0	7.0
	7/15	56.0	41.0	0.0	3.0
	7/19	28.0	66.0	0.0	6.0
Coho/Ninilchik	7/01		21.0	76.0	3.0
	7/08		34.0	65.0	1.0
	7/10		28.0	69.0	3.0
	7/15		29.0	71.0	
Ninilchik	7/23		40.0	60.0	
Kalifonsky	7/18		50.5	49.5	
	7/23		65.4	34.6	
District Testfish	7/20	68.0	24.0	0.0	8.0

Data Source: Cross, pers. comm.

Table 3. Daily side-scan sonar estimates of sockeye salmon escapement for the Kenai, Kasilof, Yentna, and Crescent Rivers, 1985.[1]

Date	Kenai Daily	Kenai River Accum	Kasilof Daily	Kasilof River Accum	Yentna Daily	Yentna River Accum	Crescent Daily	Crescent River Accum
6/13	0	0	89	89				
6/14	0	0	261	350				
6/15	0	0	233	583			6	6
6/16	0	0	274	857			24	30
6/17	0	0	298	1,155			19	49
6/18	0	0	235	1,390			7	56
6/19	0	0	260	1,650			5	61
6/20	0	0	432	2,082			19	80
6/21	0	0	300	2,382			8	88
6/22	298	298	457	2,839			4	92
6/23	601	899	668	3,507			20	112
6/24	625	1,524	1,246	4,753			19	131
6/25	458	1,982	1,490	6,243			16	147
6/26	479	2,461	990	7,233			32	179
6/27	496	2,957	1,078	8,311			64	243
6/28	788	3,745	1,590	9,901			68	311
6/29	754	4,499	1,580	11,481			377	688
6/30	648	5,147	1,922	13,403			169	857
7/01	1,899	7,046	3,210	16,613	32	32	210	1,067
7/02	809	7,855	1,724	18,337	25	57	480	1,547
7/03	499	8,354	2,663	21,000	20	77	490	2,037
7/04	1,272	9,626	6,090	27,090	21	98	5,300	7,337
7/05	1,171	10,797	5,080	32,170	37	135	10,409	17,746
7/06	1,458	12,255	2,323	34,493	65	200	6,480	24,266
7/07	884	13,139	3,776	38,269	107	307	1,035	25,261
7/08	2,064	15,203	8,429	46,698	48	355	3,764	29,025
7/09	739	15,942	3,876	50,574	96	451	3,222	32,247
7/10	886	16,828	5,907	56,481	93	544	3,005	35,252
7/11	1,306	18,134	2,237	58,718	88	632	2,444	37,696
7/12	1,010	19,144	3,739	62,457	112	744	3,364	41,060
7/13	493	19,637	11,043	73,500	151	895	5,769	46,829
7/14	4,394	24,031	30,490	103,990	58	953	3,123	49,952
7/15	9,347	33,378	29,696	133,686	91	1,044	3,459	53,411
7/16	19,158	52,536	58,176	191,862	77	1,121	3,779	57,190
7/17	3,183	55,719	17,798	209,660	89	1,210	4,610	61,800

- Continued -

Table 3, continued. Daily side-scan sonar estimates of sockeye salmon escapement for the Kenai, Kasilof, Yentna, and Crescent Rivers, 1985.

Date	Kenai Daily	River Accum	Kasilof Daily	River Accum	Yentna Daily	River Accum	Crescent Daily	River Accum
7/18	1,363	57,082	7,135	216,795	82	1,292	3,235	65,035
7/19	538	57,620	2,199	218,994	72	1,364	2,491	67,526
7/20	539	58,159	1,301	220,295	83	1,447	2,761	70,287
7/21	2,009	60,168	13,033	233,328	106	1,553	3,407	73,694
7/22	29,268	89,436	43,931	277,259	113	1,666	2,986	76,680
7/23	56,866	146,302	29,132	306,391	384	2,050	4,554	81,234
7/24	86,723	233,025	20,353	326,744	13,451	15,501	4,246	85,480
7/25	55,433	288,458	16,929	343,673	22,954	38,455	4,339	89,819
7/26	60,097	348,555	25,334	369,007	15,857	54,312	3,925	93,744
7/27	29,947	378,502	29,354	398,361	13,815	68,127	3,554	97,298
7/28	34,658	413,160	17,604	415,965	15,618	83,745	2,428	99,726
7/29	21,056	434,216	8,068	424,033	12,996	96,741	2,386	102,112
7/30	16,633	450,849	5,530	429,563	4,148	100,889	3,483	105,595
7/31	7,048	457,897	5,955	435,518	1,982	102,871		
8/01	4,274	462,171	5,166	440,684	1,079	103,950		
8/02	1,652	463,823	2,935	443,619	870	104,820		
8/03	1,443	465,266	4,664	448,283	471	105,291		
8/04	1,686	466,952	4,097	452,380	437	105,728		
8/05	1,267	468,219	2,713	455,093	324	106,052		
8/06	2,016	470,235	2,893	457,986	381	106,433		
8/07	1,478	471,713	3,820	461,806	405	106,838		
8/08	2,220	473,933	5,268	467,074	286	107,124		
8/09	2,397	476,330	5,510	472,584				
8/10	3,069	479,399	3,262	475,846				
8/11	3,500	482,899	2,187	478,033				
Total		502,820[2]		505,049[3]		107,124		128,628[4]

[1] King and Tarbox (1986).
[2] 19.921 fish added for before and after sonar operation.
[3] 27,016 fish added for estimated entry after removal of counters.
[4] 23,033 fish added for time period after 30 July based on catch and exploitation rate.

Table 4. Commercial salmon catch by area and gear type, Upper Cook Inlet, 1985.[1]

Area/Gear	Chinook	Sockeye	Coho	Pink	Chum	Total
DRIFT	1,962	1,891,485	330,804	34,074	645,384	2,903,709
CENTRAL SET						
Upper	16,985	1,513,262	69,735	17,409	6,058	1,623,449
Kalgin Island	599	87,698	60,290	2,400	3,901	154,928
Kustatan	157	9,178	9,464	614	293	19,706
Western	1,717	185,375	65,404	2,276	22,366	277,138
Chinitna Bay	14	2,131	4,982	214	4,925	12,266
Subtotal	19,472	1,797,644	209,875	22,953	37,543	2,087,487
NORTHERN SET						
Eastern	402	67,600	22,494	2,664	3,992	97,152
General	1,461	95,412	56,751	23,857	27,211	204,692
Subtotal	1,863	163,012	79,245	26,521	31,203	301,844
SEINE	0	0	0	0	0	0
GRAND TOTAL	23,297	3,852,141	619,924	83,548	714,130	5,293,040

[1] Catches are preliminary in-season figures.

Table 5. 1985 Upper Cook Inlet commercial salmon catch by drift gillnet for the Central District.[1]

Date	# of Del.	Chinook	Sockeye	Coho	Pink	Chum
6/28	361	133	16,298	187	489	4,014
7/01	462	151	34,244	561	406	6,474
7/05	516	129	72,143	3,772	555	20,273
7/08	578	95	264,506	13,599	892	33,785
7/10	359	52	47,298	1,172	403	5,449
7/12	506	201	383,757	32,986	2,293	71,419
7/15	567	203	201,740	29,709	1,558	34,136
7/19	549	70	346,876	63,561	5,541	53,111
7/26	549	116	161,535	58,368	3,812	147,879
7/27	91	20	5,600	1,281	266	2,610
7/28	577	159	93,601	22,967	5,272	47,365
7/29	477	102	73,933	15,751	4,475	29,334
7/30	291	103	12,250	1,312	333	5,000
7/31	391	116	49,645	11,110	2,632	19,266
8/01	157	65	5,536	903	250	5,986
8/02	412	70	71,815	22,719	2,600	75,912
8/03	197	41	9,746	2,478	151	4,681
8/04	138	30	8,372	1,133	218	7,964
8/05	445	38	26,745	15,384	753	49,094
8/09	314	42	4,049	4,231	249	15,915
8/12	155	13	1,097	1,067	14	2,167
8/16	41	1	441	1,085	18	843
8/19	60		159	1,798	181	658
8/21	14	3	37	1,028	5	156
8/23	30		10	3,837	7	746
8/26	41	2	13	5,682	29	581
8/28	32		22	3,303	9	122
8/30	31	7	1	3,927	659	119
9/02	31		2	3,990	3	258
9/04	4			427		14
9/06	14		7	1.133	1	21
9/09	6		7	287		29
9/11	1			56		3
Total		1,962	1,891,485	330,804	34,074	645,384

[1] Data Source: Inseason preliminary summaries, ADF&G Soldotna.

Table 6. 1985 Upper Cook Inlet commercial salmon catch by set gillnet for the Upper Subdistrict.[1]

Date	# of Del.	Chinook	Sockeye	Coho	Pink	Chum
7/01	134	470	23,934	23	226	3
7/05	222	732	30,301	141	733	360
7/08	203	968	26,639	143	670	11
7/10	186	1,169	36,628	158	417	209
7/12	203	1,460	20,194	113	998	
7/15	315	1,142	150,034	743	1,206	5
7/16	148	699	35,463	147	922	
7/18	43	226	4,095	64	451	1
7/19	174	797	14,909	368	1,872	60
7/21	48	84	29,196	199	112	8
7/22	234	591	155,527	1,259	546	9
7/23	169	593	89,427	1,290	384	13
7/24	168	495	68,235	1,245	437	5
7/25	235	679	113,661	2,561	603	252
7/26	377	610	212,128	6,999	1,059	1,214
7/27	260	570	117,271	3,607	447	158
7/28	255	711	67,796	4,065	998	985
7/29	231	567	34,565	2,779	940	1,233
7/30	226	612	35,192	2,293	804	145
7/31	237	542	48,486	4,620	609	156
8/01	216	623	23,031	3,247	529	72
8/02	173	599	32,307	4,745	972	64
8/03	210	502	47,012	6,414	456	184
8/04	189	345	24,208	3,523	262	114
8/05	172	433	23,213	3,945	302	106
8/06	177	430	22,921	5,295	203	112
8/09	129	210	12,921	4,192	93	69
8/12	107	126	13,968	4,927	158	510
Total		16,985	1,513,262	69,735	17,409	6,058

[1] Data Source: Inseason preliminary summaries, ADF&G Soldotna.

Table 7. 1985 Upper Cook Inlet commercial salmon catch by set gillnet for the Kalgin Island Subdistrict.

Date	# of Del.	Chinook	Sockeye	Coho	Pink	Chum
6/28	13	111	4,651	47	24	30
7/01	20	92	2,714	96	40	20
7/05	19	88	4,818	654	51	64
7/07	1	3	132	36	8	
7/08	19	82	1,943	843	126	317
7/10	6	15	856	124	22	30
7/11	2		50	3		2
7/12	19	31	3,049	1,655	191	28
7/13	3		397	54	3	7
7/14	3		342	22	9	18
7/15	19	27	4,691	2,632	219	97
7/16	4		674	65	4	29
7/17	4		548	58	11	29
7/18	4	1	401	80	8	6
7/19	19	73	7,216	6,302	263	95
7/20	1		134	53	6	2
7/21	1		246	105	23	7
7/22	19	9	2,248	2,850	186	36
7/23	3		109	37	8	10
7/24	3	1	328	123	46	107
7/25	4		325	137	13	70
7/26	19	5	6,818	5,424	113	403
7/27	6	1	750	454	23	185
7/28	23	11	5,191	3,660	165	180
7/29	24	10	4,689	4,431	298	563
7/30	1		91	33	6	12
7/31	1		33	21	5	11
8/02	26	12	5,592	7,600	341	242
8/03	1		44	16	1	11
8/04	18	11	2,652	2,744	31	142
8/05	23	8	4,340	4,412	127	408
8/06	1		102	22	2	45
8/09	19		6,360	1,951	47	290
8/12	18		4,664	849	3	18
8/16	17	2	4,927	868	9	47

- Continued -

Table 7, continued. 1985 Upper Cook Inlet commercial salmon catch by set gillnet for the Kalgin Island Subdistrict.[1]

Date	# of Del.	Chinook	Sockeye	Coho	Pink	Chum
8/19	17		2,043	1,418	4	44
8/21	14	2	1,221	1,407	1	86
8/23	17	2	549	1,630	1	34
8/26	15	1	407	1,246		30
8/28	15	1	400	1,204	1	104
8/30	12		230	760	1	17
9/02	9		254	1,057		4
9/04	9		149	859		8
9/06	11		144	1,265		10
9/09	6		137	724		
9/11	4		39	259		3
Total		599	87,698	60,290	2,440	3,901

[1] Data Source: Inseason preliminary summaries, ADF&G Soldotna.

Table 8. 1985 Upper Cook Inlet commercial salmon catch by set gillnet for the Kustatan Subdistrict.[1]

Date	# of Del.	Chinook	Sockeye	Coho	Pink	Chum
6/28	3	100	118	10	1	
7/01	2	13	28	8		
7/05	2	13	57	20	3	
7/08	5	6	140	52	4	
7/12	3	4	88	12	21	
7/15	9	7	454	280	108	
7/19	4		27	56	9	
7/22	10	2	1,706	910	82	1
7/26	5		3,166	2,034	2	6
7/27	3	1	69	237	1	1
7/28	18	4	1,913	2,757	114	41
7/29	7	7	717	1,282	140	16
8/02	7		236	179	57	1
8/05	10		345	414	56	51
8/09	5		76	637	14	72
8/16	3		15	198	2	23
8/23	1		3	150		53
8/26	1		19			
8/28	1		1	89		8
9/02	1			139		20
Total		157	9,178	9,464	614	293

[1] Data Source: Inseason preliminary summaries, ADF&G Soldotna.

Table 9. 1985 Upper Cook Inlet commercial salmon catch by set gillnet for the Western Subdistrict.

Date	# of Del.	Chinook	Sockeye	Coho	Pink	Chum
6/17	31	468	879			1
6/21	32	218	1,848		5	1
6/24	29	44	1,544		9	5
6/28	31	177	3,123	25	61	5
7/01	36	143	6,352	25	66	3
7/05	38	108	5,385	218	93	19
7/07	26	80	3,724	110	39	34
7/08	39	98	7,156	431	91	85
7/09	28	27	7,150	188	76	90
7/10	38	30	6,003	356	128	110
7/11	29	18	4,635	315	117	41
7/12	43	51	9,624	835	234	66
7/13	19	19	5,256	457	25	70
7/14	32	24	10,539	660	88	102
7/15	30	23	7,665	1,027	121	114
7/16	26	18	7,368	1,508	119	120
7/17	26	9	5,937	1,145	52	140
7/18	25	14	6,845	1,239	66	131
7/19	33	16	4,904	1,461	111	217
7/20	16	4	2,150	630	20	153
7/21	30	16	6,513	1,805	51	343
7/22	29	5	2,806	1,036	34	279
7/23	28	6	4,236	2,728	39	386
7/24	30	7	4,101	2,010	44	447
7/25	25	8	4,935	1,945	40	443
7/26	35	6	7,736	2,138	53	936
7/27	17	3	2,694	1,061	16	451
7/28	26	12	5,593	1,728	49	932
7/29	31	5	5,463	2,120	75	1,036
7/30	34	9	4,463	2,826	67	950
7/31	27	6	3,793	1,582	61	1,109
8/01	16	3	1,647	2,199	15	267
8/02	32	9	5,919	2,931	78	1,276
8/03	17	5	3,678	1,781	18	1,002
8/04	33	10	5,936	2,477	21	1,226

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Table 9, continued. 1985 Upper Cook Inlet commercial salmon catch by set gillnet for the Western Subdistrict.[1]

Date	# of Del.	Chinook	Sockeye	Coho	Pink	Chum
8/05	31	5	3,872	3,335	45	1,811
8/06	27	5	1,876	1,364	15	1,338
8/09	26	5	1,093	1,888	10	2,944
8/12	21		329	974	8	2,057
8/16	16	1	268	2,071	5	501
8/21	17		86	2,524	6	477
8/23	19		49	1,572	1	173
8/26	17	1	44	2,112	1	151
8/28	16		57	2,097		91
8/30	11	1	35	1,377	1	69
9/02	9		15	868		27
9/04	11		6	1,266		63
9/06	12		13	1,262	2	51
9/09	9		6	763		13
9/11	8		24	820		3
9/13	3		2	114		7
Total		1,717	185,375	65,404	2,276	22,366

[1] Data Source: Inseason preliminary summaries, ADF&G Soldotna.

Table 10. 1985 Upper Cook Inlet commercial salmon catch by set gillnet for the Chinitna Bay Subdistrict.[1]

Date	# of Del.	Chinook	Sockeye	Coho	Pink	Chum
6/28	2	8	93	1	14	3
7/01	3	3	198		18	16
7/05	3	1	678	2	17	82
7/08	3	1	356	8	25	70
7/12	3		116	10	33	137
7/15	3		44	32	37	162
7/19	3		212	77	10	184
7/22	3		232	55	5	357
7/26	3		23	148	17	915
7/29	3		116	148	11	650
8/02	3		19	288	10	541
8/05	3		40	256	15	449
8/23	3	1		553		555
8/26	3			303	2	193
8/30	10		2	2,472		489
9/02	3			459		65
9/06	2		2	53		29
9/09	1			117		28
Total		14	2,131	4,982	214	4,925

[1] Data Source: Inseason preliminary summaries, ADF&G Soldotna.

Table 11. 1985 Upper Cook Inlet commercial salmon catch by set gillnet for the Eastern Subdistrict (Northern District).[1]

Date	# of Del.	Chinook	Sockeye	Coho	Pink	Chum
6/28	29	233	745	7	155	1
7/01	26	47	863	12	40	55
7/05	30	22	1,084	16	96	3
7/08	22	11	867	84	219	4
7/12	29	13	648	52	475	
7/15	50	28	12,210	852	282	8
7/19	30	2	370	22	184	1
7/22	57		19,910	3,302	471	432
7/26	55	1	18,503	2,255	211	587
7/28	36	2	4,828	1,968	165	841
7/29	37	25	2,567	870	181	1,068
8/02	27		721	90	52	8
8/05	20	1	411	56	12	5
8/09	25	3	1,494	2,054	38	181
8/12	22	1	1,136	1,784	52	451
8/16	24		728	2,006	14	81
8/19	13		218	627	2	38
8/21	9		45	250	1	52
8/23	18	12	127	1,251	4	58
8/26	18		35	1,088	4	13
8/28	18		36	717		7
8/30	14		12	406	6	56
9/02	12		12	453		5
9/04	16		14	825		9
9/06	16	1	7	455		11
9/09	18		5	523		2
9/11	14		1	362		10
9/13	3			53		1
9/16	3		3	54		4
Total		402	67,600	22,494	2,664	3,992

[1] Data Source: Inseason preliminary summaries, ADF&G Soldotna.

Table 12. 1985 Upper Cook Inlet commercial salmon catch by set gillnet for the General Subdistrict (Northern District).[1]

Date	# of Del.	Chinook	Sockeye	Coho	Pink	Chum
6/28	47	838	162	6	18	4
7/01	6	81	34	8		
7/05	41	224	880	74	63	19
7/08	54	112	1,087	269	176	64
7/12	39	35	399	171	273	4
7/15	80	60	2,144	1,507	1,801	14
7/19	13	6	64	92	62	
7/22	152	43	24,402	13,174	3,585	1,343
7/26	130	13	29,348	12,317	4,497	7,886
7/28	123	19	21,472	15,179	6,099	9,008
7/29	105	10	9,931	5,767	3,614	3,330
8/02	52	14	1,433	638	778	150
8/05	51	6	2,864	1,423	1,859	766
8/09	49		848	2,701	862	2,917
8/12	29		226	881	107	538
8/16	18		85	728	11	270
8/21	7		10	156	8	49
8/23	11		6	279	15	241
8/26	7		4	385	11	148
8/28	8		6	323	3	137
8/30	9		1	220	4	99
9/02	3			111	1	12
9/04	6		2	149		47
9/09	2			61		10
9/11	3			71		151
9/13	1		4	61		14
Total		1,461	95,412	56,751	23,847	27,221

[1] Data Source: Inseason preliminary summaries, ADF&G Soldotna.

Table 13. 1985 Upper Cook Inlet commercial salmon catch by all gear types by period.[1]

Date	# of Del.	Chinook	Sockeye	Coho	Pink	Chum
6/17	31	468	879			1
6/21	32	218	1,848		5	1
6/24	29	44	1,544		9	5
6/28	486	1,600	25,190	283	762	4,057
7/01	689	1,000	68,367	733	796	6,571
7/05	871	1,317	115,346	4,897	1,611	20,820
7/07	27	83	3,856	146	47	34
7/08	923	1,373	302,694	15,429	2,203	34,336
7/09	28	27	7,150	188	76	90
7/10	589	1,266	90,785	1,810	970	5,798
7/11	31	18	4,685	318	117	43
7/12	845	1,795	417,875	35,834	4,518	71,654
7/13	22	19	5,653	511	28	77
7/14	35	24	10,881	682	97	120
7/15	1,073	1,490	378,982	36,782	5,332	34,536
7/16	178	717	43,505	1,720	1,045	149
7/17	30	9	6,485	1,203	63	169
7/18	72	241	11,341	1,383	525	138
7/19	825	964	374,578	71,939	8,052	53,668
7/20	17	4	2,284	683	26	155
7/21	79	100	35,955	2,109	186	358
7/22	504	650	206,831	22,586	4,909	2,457
7/23	200	599	93,772	4,055	431	409
7/24	201	503	72,664	3,378	527	559
7/25	264	687	118,921	4,643	656	765
7/26	1,173	751	439,257	89,683	9,764	159,826
7/27	377	595	126,384	6,640	753	3,405
7/28	1,058	918	200,394	52,324	12,862	59,352
7/29	915	726	131,981	33,148	9,734	37,230
7/30	552	724	51,996	7,094	1,210	6,107
7/31	656	664	101,957	17,333	3,307	20,542
8/01	389	691	30,214	6,349	794	6,325
8/02	732	704	118,042	39,190	4,888	78,194
8/03	425	548	60,480	10,689	626	5,878
8/04	378	396	41,168	9,877	532	9,446

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Table 13, continued. 1985 Upper Cook Inlet commercial salmon catch by all gear types by period.[1]

Date	# of Del.	Chinook	Sockeye	Coho	Pink	Chum
8/05	755	491	61,830	29,225	3,169	52,690
8/06	205	435	24,899	6,681	220	1,495
8/09	567	260	26,841	17,654	1,313	22,388
8/12	352	140	21,420	10,482	342	5,741
8/16	119	4	6,464	6,956	59	1,765
8/19	90		2,420	3,843	187	740
8/21	61	5	1,399	5,365	21	820
8/23	99	15	744	9,272	28	1,860
8/26	102	4	522	10,816	47	1,116
8/28	90	1	522	7,733	13	469
8/30	87	8	281	9,162	671	849
9/02	68		283	7,077	4	391
9/04	46		171	3,526		141
9/06	55	1	173	4,168	3	122
9/09	42		155	2,475		82
9/11	30		64	1,568		170
9/13	7		6	228		22
9/16	3		3	54		4
Total		23,297	3,852,141	619,924	83,538	714,140

[1] Data Source: Inseason preliminary summaries, ADF&G Soldotna.

Table 14. Emergency order summary, Upper Cook Inlet commercial salmon fishery, 1985.

Emergency Order Number	Effective Date	Description	Reason
2S-05-85	6/25	Opened Chinitna Bay to drift gill nets and seines on regular periods through July 15.	Board of Fisheries' policy allowing the use of all gear types prior to arrival of local chum salmon stocks.
2S-06-85	7/07	Opened the Western Subdistrict to set gill netting at 7:00 A.M. and remaining open until further notice.	High rate of sockeye salmon escapement into Crescent River.
2S-07-85	7/10	Opened set gill netting in that portion of Upper Subdistrict south of mid-Kalifonsky Beach from 4:00 A.M. to 7:00 P.M. Opened drift gill netting east of a line from East Foreland to Cape Ninilchik and south of Cape Kasilof from 7:00 A.M. until 7:00 P.M.	A rapid buildup in the escapement rate of sockeye salmon in the Kasilof River.
2S-08-85	7/14	Opened set gill netting in that portion of Upper Subdistrict south of mid-Kalifonsky Beach and within 1 1/2 miles of Kenai Peninsula shoreline from 8:00 P.M. 7/14 until 7:00 A.M. 7/15. Restricted drift gill netting to that portion of the Central District south of a line from Cape Kasilof to the southernmost tip of Kalgin Island to Harriet Point for the regular period on July 15.	Set gill netting opened to reduce the sockeye salmon escapement rate in the Kasilof River. Drifting restricted to reduce interception of Kenai and Susitna River sockeye salmon.
2S-09-85	7/15	Opened set gill netting south of mid-Kalifonsky Beach and within 1 1/2 miles of Kenai Peninsula shoreline from 7:00 P.M. 7/15 to 7:00 P.M. 7/16.	Continued high rate of escapement into the Kasilof River.

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Table 14, continued. Emergency order summary, Upper Cook Inlet commercial salmon fishery, 1985.

Emergency Order Number	Effective Date	Description	Reason
2S-10-85	7/17	Opened set gill netting south of mid-Kalifonsky Beach to Kasilof River and within 1 1/2 miles of Kenai Peninsula shoreline from 7:00 P.M. 7/17 to 7:00 P.M. 7/18.	Continued high rate of escapement into the Kasilof River.
2S-11-85	7/19	Restricted drift gill netting to area south of a line from Clam Gulch Tower to the southernmost tip of Kalgin Island to Harriet Point for the regular period on 7/19.	Reduce interception of Kenai and Susitna River sockeye salmon.
2S-12-85	7/21	Opened set gill netting between mid-Kalifonsky Beach and the Clam Gulch Public Access Road and within 1 1/2 miles of the Kenai Peninsula shoreline from 3:00 P.M. 7/21 to 10:00 A.M. 7/22. Closed set gill netting in the remainder of the Upper Subdistrict for the regular period on 7/22. Closed drift gill netting in Central District for the regular period on 7/22.	Set net opening to reduce the escapement rate into the Kasilof River. Set net and drift closure to reduce catch of Kenai River sockeye salmon.
2S-13-85	7/22	Extended set gill netting south of mid-Kalifonsky Beach and within 1/2 mile of the Kenai Peninsula shoreline from 10:00 A.M. to 10:00 P.M. on 7/22.	Continued high rate of sockeye salmon escapement into the Kasilof River.
2S-14-85	7/22	Extended set gill netting in area described in 2S-13-85 from 10:00 P.M. 7/22 to 7:00 P.M. 7/23.	Same

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Table 14, continued. Emergency order summary, Upper Cook Inlet commercial salmon fishery, 1985.

Emergency Order Number	Effective Date	Description	Reason
2S-15-85	7/23	Extended set gill netting in area described in 2S-13-85 from 7:00 P.M. 7/23 to 7:00 P.M. 7/24.	Same
2S-16-85	7/24	Extended set gill netting in area described in 2S-13-85 from 7:00 P.M. 7/24 to 7:00 P.M. 7/25.	Same
2S-17-85	7/25	Opened set gill netting in the Upper Subdistrict within 1 1/2 miles of Kenai Peninsula shoreline from 7:00 P.M. 7/25 through regular period on 7/26.	Continued high escapement into the Kasilof River and rapid increase in the Kenai River.
2S-18-85	7/26	Extended set gill netting in area described in 2S-13-85 from 7:00 P.M. 7/26 to 7:00 P.M. 7/27.	Continued high escapement into the Kasilof River.
2S-19-85	7/27	Opened set gill netting in all areas of Central District except Chinitna Bay from 12:00 Noon 7/27 to 7:00 A.M. 7/29. Opened drift gill netting in all areas of Central District except Chinitna Bay from 5:00 P.M. 7/27 to 7:00 P.M. 7/28.	Identified surplus of all Central District sockeye salmon stocks.
2S-20-85	7/28	Opened set gill netting in the Northern District from 7:00 A.M. to 7:00 P.M. 7/28.	High rate of escapement of sockeye salmon into the Susitna River.
2S-21-85	7/29	Opened set gill netting in Upper Subdistrict within 1 1/2 miles of Kenai Peninsula shoreline from 7:00 P.M. 7/29 to 7:00 P.M. 7/30. Opened drift gill netting east of a line from the East Foreland to Cape Ninilchik from 7:00 A.M. to 7:00 P.M. 7/30.	To harvest surplus sockeye salmon bound for the Kenai and Kasilof Rivers.

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Table 14, continued. Emergency order summary, Upper Cook Inlet commercial salmon fishery, 1985.

Emergency Order Number	Effective Date	Description	Reason
2S-22-85	7/30	Opened set gill netting in Upper Subdistrict within 1 1/2 miles of Kenai Peninsula shoreline from 7:00 P.M. 7/30 to 7:00 P.M. 7/31. Opened drift gill netting south of line from Cape Kasilof to the southernmost tip of Kalgin Island to Harriet Point from 7:00 A.M. to 7:00 P.M. 7/31.	Same
2S-23-85	7/31	Opened set gill netting in Upper Subdistrict within 1 1/2 miles of Kenai Peninsula shoreline from 7:00 P.M. 7/31 to 7:00 A.M. 8/2. Opened drift gill netting east of a line from the East Foreland to Cape Ninilchik from 7:00 A.M. to 7:00 P.M. 8/1.	Same
2S-24-85	8/02	Opened set gill netting in Upper Subdistrict within 1 1/2 miles of Kenai Peninsula shoreline from 7:00 P.M. 8/2 to 7:00 P.M. 8/3. Opened drift gill netting east of a line from the East Foreland to Cape Ninilchik from 7:00 A.M. to 7:00 P.M. 8/3.	Same
2S-25-85	8/03	Opened set gill netting in Upper Subdistrict from 7:00 P.M. 8/3 to 7:00 A.M. 8/5. Opened drift gill netting east of a line from the East Foreland to Cape Ninilchik from 7:00 A.M. to 7:00 P.M. 8/4.	Same

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Table 14, continued. Emergency order summary, Upper Cook Inlet commercial salmon fishery, 1985.

Emergency Order Number	Effective Date	Description	Reason
2S-26-85	8/05	Opened set gill netting in the Upper Subdistrict within 1 1/2 miles of the Kenai Peninsula shoreline from 7:00 P.M. 8/5 to 7:00 P.M. 8/6. Returned set gill netting in the Western Subdistrict to regular periods effective 7:00 P.M. 8/6.	Same for Upper Subdistrict. Increasing occurrence of coho and chum salmon in Western Subdistrict catches.
2S-27-85	8/06	Closed set gill netting in the Chinitna Bay Subdistrict until further notice.	Poor chum salmon catches and escapement in Chinitna Bay.
2S-28-85	8/21	Opened set gill netting in the Northern District and the Western, Kustatan and Kalgin Island Subdistricts of the Central District and drift gill netting in all areas of the Central District except the Chinitna Bay Subdistrict or within 5 miles of the eastern shore each Wednesday from 7:00 A.M. to 7:00 P.M. for the remainder of the season.	Declining effort and strong catches of late coho salmon stocks.
2S-29-85	8/23	Opened set gill netting, drift gill netting and seining in the Chinitna Bay Subdistrict each Monday and Friday from 7:00 A.M. to 7:00 P.M.	Chum salmon return was completed and coho salmon remained for harvest.

Table 15. Commercial salmon fishing periods, Upper Cook Inlet, 1985.

Date	Day	Hours	Set	Drift
6/17	M	0700 - 1900	Western only	
6/21	F	0700 - 1900	Western only	
6/24	M	0700 - 1900	Western only	
6/28	F	0700 - 1900	All except Upper	All
7/01	M	0700 - 1900	All	All
7/05	F	0700 - 1900	All	All
7/07	Su	0700 - 2400	Western	
7/08	M	0000 - 0700	Western	
		0700 - 1900	All	All
		1900 - 2400	Western	
7/09	Tu	0000 - 2400	Western	
7/10	W	0000 - 0400	Western	
		0400 - 0700	Western, Upper south of mid K-Beach	
		0700 - 1900	Western, Upper south of mid K-Beach	East of E. Foreland to Ninilchik and south of Cape Kasilof
		1900 - 2400	Western	
7/11	Th	0000 - 2400	Western	

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Table 15, continued. Commercial salmon fishing periods, Upper Cook Inlet, 1985.

Date	Day	Hours	Set	Drift
7/12	F	0000 - 0700	Western	
		0700 - 1900	All	All
		1900 - 2400	Western	
7/13	Sa	0000 - 2400	Western	
7/14	Su	0000 - 2000	Western	
		2000 - 2400	Western, Upper south of mid K-Beach within 1 1/2 miles	
7/15	M	0000 - 0700	Western, Upper south of mid K-Beach within 1 1/2 miles	
		0700 - 1900	All	South of Cape Kasilof to south Kalgin
		1900 - 2400	Western, Upper south of mid K-Beach within 1 1/2 miles	
7/16	Tu	0000 - 1900	Western, Upper south of mid K-Beach within 1 1/2 miles	
		1900 - 2400	Western	
7/17	W	0000 - 1800	Western	
		1800 - 2400	Western, Upper south of mid K-Beach within 1 1/2 miles	north of Kasilof River

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Table 15, continued. Commercial salmon fishing periods, Upper Cook Inlet, 1985.

Date	Day	Hours	Set	Drift
7/18	Th	0000 - 1800	Western, Upper south of mid K-Beach + North of Kasilof R. within 1 1/2 miles	
		1800 - 2400	Western	
7/19	F	0000 - 0700	Western	
		0700 - 1900	All	South of Cape Kasilof to south Kalgin Island except Chinitna Bay
		1900 - 2400	Western	
7/20	Sa	0000 - 2400	Western	
7/21	Su	0000 - 1500	Western	
		1500 - 2400	Western, Upper from Clam Gulch to mid K-Beach and within 1/2 mile of mean high water mark	
7/22	M	0000 - 0700	Western, Upper from Clam Gulch to mid K-Beach and within 1/2 mile	
		0700 - 1900	All except that portion of the Upper north of mid K-Beach or beyond 1/2 mile	Closed
		1900 - 2400	Western, Upper south of mid K-Beach within 1/2 mile	
7/23	T	0000 - 2400	Western, Upper south of mid K-Beach within 1/2 mile	

- Continued -

Table 15, continued. Commercial salmon fishing periods, Upper Cook Inlet, 1985.

Date	Day	Hours	Set	Drift
7/24	W	0000 - 2400	Western, Upper south of mid K-Beach within 1/2 mile	
7/25	Th	0000 - 1900	Western, Upper south of mid K-Beach within 1/2 mile	
		1900 - 2400	Western, Upper within 1 1/2 miles of mean high tide mark	
7/26	F	0000 - 0700	Western, Upper within 1 1/2 miles of mean high tide mark	
		0700 - 1900	All	All except Chinitna Bay
		1900 - 2400	Western, Upper south of mid K-Beach and within 1/2 mile of mean high tide mark	
7/27	Sa	0000 - 1200	Western, Upper south of mid K-Beach and within 1/2 mile of mean high tide mark	
		1200 - 1700	Central District except Chinitna Bay	
		1700 - 2400	Central District except Chinitna Bay	All except Chinitna Bay
7/28	Su	0000 - 0700	Central District except Chinitna Bay	All except Chinitna Bay
		0700 - 1900	All except Chinitna Bay	All except Chinitna Bay
		1900 - 2400	Central District except Chinitna Bay	
7/29	M	0000 - 0700	Central District except Chinitna Bay	
		0700 - 1900	All	All except Chinitna Bay
		1900 - 2400	Western, Upper within 1 1/2 miles of mean high tide mark	

- Continued -

Table 15, continued. Commercial salmon fishing periods, Upper Cook Inlet, 1985.

Date	Day	Hours	Set	Drift
7/30	Tu	0000 - 0700	Western, Upper within 1 1/2 miles of mean high tide mark	
		0700 - 1900	Western, Upper within 1 1/2 miles of mean high tide mark	East of E. Foreland to Cape Ninilchik
		1900 - 2400	Western, Upper within 1 1/2 miles of mean high tide mark	
7/31	W	0000 - 0700	Western, Upper within 1 1/2 miles of mean high tide mark	
		0700 - 1900	Western, Upper within 1 1/2 miles of mean high tide mark	South of C. Kasilof to south Kalgin not including Chinitna Bay
		1900 - 2400	Western, Upper within 1 1/2 miles of mean high tide mark	
8/01	Th	0000 - 0700	Western, Upper within 1 1/2 miles of mean high tide mark	
		0700 - 1900	Western, Upper within 1 1/2 miles of mean high tide mark	East of E. Foreland to Cape Ninilchik
		1900 - 2400	Western, Upper within 1 1/2 miles of mean high tide mark	
8/02	F	0000 - 0700	Western, Upper within 1 1/2 miles of mean high tide mark	
		0700 - 1900	All	All except Chinitna Bay
		1900 - 2400	Western, Upper within 1 1/2 miles of mean high tide mark	

- Continued -

Table 15, continued. Commercial salmon fishing periods, Upper Cook Inlet, 1985.

Date	Day	Hours	Set	Drift
8/03	Sa	0000 - 0700	Western, Upper within 1 1/2 miles of mean high tide mark	
		0700 - 1900	Western, Upper within 1 1/2 miles of mean high tide mark	East of E. Foreland to Cape Ninilchik
		1900 - 2400	Western, Upper	
8/04	Su	0000 - 0700	Western, Upper	
		0700 - 1900	Western, Upper	East of E. Foreland to Cape Ninilchik
		1900 - 2400	Western, Upper	
8/05	M	0000 - 0700	Western, Upper	
		0700 - 1900	All	All except Chinitna Bay
		1900 - 2400	Western, Upper within 1 1/2 miles of mean high tide mark	
8/06	Tu	0000 - 1900	Western, Upper within 1 1/2 miles of mean high tide mark	
8/09	F	0700 - 1900	All except Chinitna Bay	All except Chinitna Bay
8/12	M	0700 - 1900	All except Chinitna Bay	All except Chinitna Bay
8/16	F	0700 - 1900	All except Chinitna Bay, Upper	All except Chinitna Bay or within 5 miles of eastern shore
8/19	M	0700 - 1900	All except Chinitna Bay, Upper	All except Chinitna Bay or within 5 miles of eastern shore

- Continued -

Table 15, continued. Commercial salmon fishing periods, Upper Cook Inlet, 1985.

Date	Day	Hours	Set	Drift
8/21	W	0700 - 1900	All except Chinitna Bay, Upper	All except Chinitna Bay or within 5 miles of eastern shore
8/23	F	0700 - 1900	All except Upper	All except within 5 miles of eastern shore
8/26	M	0700 - 1900	All except Upper	All except within 5 miles of eastern shore
8/28	W	0700 - 1900	All except Chinitna Bay, Upper	All except Chinitna Bay or within 5 miles of eastern shore
8/30[1]	F	0700 - 1900	All except Upper	All except within 5 miles of eastern shore

[1] Fishing continued each Monday, Wednesday and Friday as described for 8/26, 8/28 and 8/30 for the remainder of the year.

Table 16. Aerial survey set gill net counts by subdistrict, Upper Cook Inlet, 1985.

	Central District					Northern District	
Date	Upper	Kalgin	Kustatan	Western	Chinitna	General	Eastern
7/08	770	129	24	166			
7/10	628[1]						
7/12	786						
7/15		129	34	173	15		
7/19						88	115
7/22	230[2]						
7/26			34			251	123
7/29	785						

[1] South of mid-Kalifonsky Beach only.
[2] From mid-Kalifonsky Beach to Clam Gulch Access Road only.

Table 17. Buyers and processors of Upper Cook Inlet fishery products, 1985.

Buyer/Processor	Plant Site	Contact	Address	Product Type[1]
Alaska Ocean Products	Kasilof	Fran Osmar	Box 288 Clam Gulch, AK	S, H
Alaska Razor Clam Harvesters	Arch I	Carl DeBoard	328 Boniface, #2087 Anchorage, AK	C
All Alaskan Seafoods	Kodiak	Melvan Morris	2009 Minor Avenue East Seattle, WA	C
American Salmon Company	Seldovia	Royal Devaney	Drawer E Seldovia, AK	S, H
Anpac, Inc.	Anchorage	Sarah Gadwill	Box 92520 Anchorage, AK	S
Chugach Alaska Fisheries	Port Graham	G.R. Anderson	4241 21st Ave. West #204 Seattle, WA	S
Columbia Wards Fisheries	Kenai	James Peterson	Box C-5030 University Station Seattle, WA	S
Cook Inlet Processing	Kenai	Norman Anderson	1035 W. Northern Lights Anchorage, AK	S, H
Dahmen Seafoods	Kenai	Jerry Cartee	Box 7498 Nikiski, AK	S, C
Dragnet Fisheries	Kenai	Jay Cherrier	Box 3992 Kenai, AK	S
Ed's Kasilof Seafoods	Kasilof	James Trujillo	Box 18 Kasilof, AK	S
Fisherman's Packing Inc.	Kenai	Lottie Edelman	Drawer 2601 Kenai, AK	S, H
Icicle Seafoods	Homer	Thomas King	4019 21st Avenue West Seattle, WA	S, C
Keener Packing	Soldotna	Michael Sawinski	SR 2, Box 738 Soldotna, AK	S
Kenai Packers	Kenai	Clyde Sterling	Box 31179 Seattle, WA	S
Lobo's Local Seafood	Homer	John Wolfe	Box 2170 Homer, AK	S

- Continued -

Table 17, continued. Buyers and processors of Upper Cook Inlet fishery products, 1985.

Buyer/Processor	Plant Site	Contact	Address	Product Type[1]
Pacific Princess Seafoods	Kenai	Joe Nord	Box 4080 Kenai, AK	S
Royal Pacific Fisheries	Kenai	Marvin Dragseth	Box 4100 Kenai, AK	S, H
Salamatof Seafoods	Kenai	Wylie Reed	Box 5070 Kenai, AK	S, H
Schenk, Terrell	Kasilof	Terrell Schenk	Rt. 2, Box 720 Kasilof, AK	S
Sea-Nik Foods	Ninilchik	James Garroute	Box 73 Ninilchik, AK	S
Seafoods from Alaska	Sterling	Roland Schwanke	Box 307 Sterling, AK	S
Seasonal Seafoods	Kasilof	Bailey Wharton	2815 N.W. 59th Seattle, WA	S
Tenth and M Seafoods	Anchorage	Bill Nix	1020 M Street Anchorage, AK	S
Whitney Fidalgo Seafoods	Anchorage	Malcolm Wyer	Box C-99308 Seattle, WA	S

[1] S - salmon, H - herring, C - clams.

Table 18. Fish Creek (Knik Arm) daily sockeye and coho salmon weir counts, 8 July-29 August 1985.[1]

Date	Sockeye		Coho	
	Daily	Cum	Daily	Cum
7/08	0	0		
7/09	0	0		
7/10	10	10		
7/11	120	130		
7/12	25	155		
7/13	35	190		
7/14	100	290		
7/15	73	363		
7/16	87	450		
7/17	76	526		
7/18	27	553		
7/19	3	556		
7/20	13	569		
7/21	86	655		
7/22	1,083	1,738		
7/23	1,211	2,949		
7/24	1,401	4,350		
7/25	1,270	5,620	42	42
7/26	2,063	7,683	51	93
7/27	1,446	9,129	37	130
7/28	7,458	16,587	127	257
7/29	8,411	24,998	63	320
7/30	3,969	28,967	44	364
7/31	5,302	34,269	50	414
8/01	3,154	37,423	38	452
8/02	2,600	40,023	13	465
8/03	5,142	45,165	43	508
8/04	3,020	48,185	11	519
8/05	2,513	50,698	28	547
8/06	2,145	52,843	28	575
8/07	9,612	62,455	154	729
8/08	672	63,172	6	735
8/09	37	63,164	0	735
8/10	91	63,255	6	741
8/11	845	64,100	0	741

- Continued -

Table 18, continued. Fish Creek (Knik Arm) daily sockeye and coho salmon weir counts, 8 July-29 August 1985.[1]

Date	Sockeye		Coho	
	Daily	Cum	Daily	Cum
8/12	562	64,662	42	783
8/13	1,717	66,379	385	1,168
8/14	1,233	67,612	44	1,212
8/15	403	68,015	9	1,221
8/16	33	68,048	0	1,221
8/17	184	68,232	7	1,228
8/18	72	68,304	8	1,236
8/19	144	68,448	11	1,247
8/20	0	68,448	0	1,247
8/21	46	68,494	22	1,269
8/22	28	68,522	32	1,301
8/23	18	68,540	51	1.352
8/24	4	68,544	5	1,357
8/25	4	68,548	11	1,368
8/26	6	68,554	29	1,397
8/27	11	68,565	56	1,453
8/28	9	68,574	11	1,464
8/29	3	68,577	35	1,499
Total		68,577		5,089[2]

[1] Source: Chlupach 1985.
[2] Includes an additional 3,590 coho salmon downstream at the time of weir removal.

Table 19. Sockeye salmon daily weir counts, Packers Creek (Kalgin Island), 1985.

Date	Daily Count	Cumulative Count	Date	Daily Count	Cumulative Count
5/29	0	0	7/03	163	2,359
5/30	13	13	7/04	20	2,379
5/31	2	15	7/05	59	2,438
6/01	1	16	7/06	36	2,474
6/02	0	16	7/07	142	2,616
6/03	11	27	7/08	41	2,657
6/04	2	29	7/09	29	2,686
6/05	2	31	7/10	55	2,741
6/06	0	31	7/11	13	2,754
6/07	2	33	7/12	4	2,758
6/08	1	34	7/13	9	2,767
6/09	4	38	7/14	73	2,840
6/10	1	39	7/15	28	2,868
6/11	41	80	7/16	4	2,872
6/12	7	87	7/17	237	3,109
6/13	98	185	7/18	29	3,138
6/14	5	190	7/19	5	3,143
6/15	41	231	7/20	295	3,438
6/16	96	327	7/21	970	4,408
6/17	45	372	7/22	18	4,426
6/18	67	439	7/23	102	4,528
6/19	401	840	7/24	330	4,858
6/20	36	876	7/25	359	5,217
6/21	36	912	7/26	338	5,555
6/22	79	991	7/27	729	6,284
6/23	254	1,245	7/28	477	6,761
6/24	94	1,339	7/29	761	7,522
6/25	44	1,383	7/30	1,269	8,791
6/26	9	1,392	7/31	406	9,197
6/27	15	1,407	8/01	649	9,846
6/28	137	1,544	8/02	542	10,388
6/29	427	1,971	8/03	307	10,695
6/30	98	2,069	8/04	390	11,085
7/01	7	2,076	8/05	796	11,881
7/02	120	2,196	8/06	259	12,140

- Continued -

Table 19, continued. Sockeye salmon daily weir counts, Packers Creek (Kalgin Island), 1985.

Date	Daily Count	Cumulative Count	Date	Daily Count	Cumulative Count
8/07	394	12,534	8/22	947	31,319
8/08	196	12,730	8/23	1,212	32,531
8/09	144	12,874	8/24	689	33,220
8/10	670	13,544	8/25	600	33,820
8/11	296	13,840	8/26	252	34,072
8/12	583	14,423	8/27	311	34,383
8/13	1,894	16,317	8/28	383	34,766
8/14	1,493	17,810	8/29	538	35,304
8/15	337	18,147	8/30	332	35,636
8/16	3,246	21,393	8/31	287	35,923
8/17	3,594	24,987	9/01	644	36,567
8/18	2,105	27,092	9/02	173	36,740
8/19	826	27,918	9/03	103	36,843
8/20	765	28,683	9/04	7	36,850
8/21	1,689	30,372	9/05	0	36,850

Table 20. Daily log of escapement of sockeye salmon into Larson Lake, 1985.

Date	Daily Total	Cumulative Total
7/14	0	0
7/15	40	40
7/16	19	59
7/17	5	64
7/18	52	116
7/19	27	143
7/20	0	143
7/21	91	234
7/22	31	265
7/23	0	265
7/24	0	265
7/25	149	414
7/26	0	414
7/27	30	444
7/28	3,371	3,815
7/29	6,195	10,010
7/30	3,198	13,208
7/31	3,978	17,186
8/01	3,801	20,987
8/02	3,974	24,961
8/03	3,526	28,487
8/04	2,495	30,982
8/05	1,610	32,592
8/06	1,102	33,694
8/07	737	34,431
8/08	581	35,012
8/09	417	35,429
8/10	218	35,647
8/11	329	35,976
8/12	266	36,242
8/13	121	36,363
8/14	134	36,497
8/15	106	36,603
8/16	114	36,717
8/17	196	36,913

- Continued -

Table 20, continued. Daily log of escapement of sockeye salmon into Larson Lake, 1985.

Date	Daily Total	Cumulative Total
8/18	174	37,087
8/19	164	37,251
8/20	126	37,377
8/21	82	37,459
8/22	103	37,562
8/23	67	37,629
8/24	79	37,708
8/25	51	37,759
8/26	73	37,832
8/27	29	37,861
8/28	13	37,874
8/29	0	37,874

Table 21. Age, weight and length composition of commercially harvested herring, Tuxekan Bay, 15 April - 5 May, 1985.

Sample Period	Age (years)	Sex: Male	Sex: Female	Sex: Unknown	Total	Percent of Total	Weight: Mean (mm)	Weight: Std. Dev.	Weight: Number Weighed	Std. Length: Mean (mm)	Std. Length: Std. Dev.	Std. Length: Number measured
	1	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-
	4	1	2	-	3	.9	138	11.8	3	239	8.3	3
4/15- 5/ 5	5	15	17	-	32	9.6	150	20.7	32	241	9.5	32
	6	57	90	-	147	44.0	167	23.2	147	247	9.3	147
	7	32	19	-	51	15.3	182	29.0	51	254	12.6	51
	8	19	40	-	59	17.7	197	23.6	59	257	10.0	55
	9+	18	24	-	42	12.6	213	21.1	42	265	10.3	42
Period total		142	192	-	334	100.0	179	30.3	334	251	12.2	334

Table 22. Age, weight and length composition of commercially harvested herring, Chinitna Bay, 1985.

Sample Period	Age (years)	Sex			Total	Percent of Total	Weight			Std. Length		
		Male	Female	Unknown			Mean (gm)	Std. Dev.	Number Weighed	Mean (mm)	Std. Dev.	Number Measured
	1	–	–	–	–	–	–	–	–	–	–	–
	2	–	–	–	–	–	–	–	–	–	–	–
	3	–	–	–	–	–	–	–	–	–	–	–
	4	5	3	–	8	2.3	150	21.7	8	243	13.6	8
5/ 9- 5/10	5	15	29	–	44	12.7	163	16.1	44	247	8.9	44
	6	60	51	–	111	32.0	178	30.3	111	253	11.4	111
	7	33	28	–	61	17.6	184	24.9	61	255	9.5	61
	8	36	31	–	67	19.3	200	29.0	67	261	11.1	67
	9+	26	30	–	56	16.1	214	32.7	56	265	10.0	56
Period total		175	172	–	347	100.0	187	32.4	347	256	12.1	347

Table 24. Age, weight and length composition of commercially harvested herring, Eastside beach, 1983.

Sample Period	Age (years)	Sex			Total	Percent of Total	Weight			Std. Length		
		Male	Female	Unknown			Mean (gm)	Std. Dev.	Number weighed	Mean (mm)	Std. Dev.	Number Measured
	1	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-
	4	1	2	-	3	.5	142	15.5	3	228	10.6	3
5/ 3- 5/24	5	22	27	-	49	7.5	146	18.8	49	231	9.5	49
	6	58	135	-	193	29.4	159	21.7	193	239	10.0	193
	7	48	48	-	96	14.6	166	21.1	96	242	10.1	96
	8	106	148	-	254	38.7	172	23.7	254	246	10.4	254
	9+	30	31	-	61	9.3	185	26.2	61	251	9.2	61
Period total		265	391	-	656	100.0	166	24.6	656	243	11.3	656

Table 25. Tyonek Subdistrict subsistence salmon harvest by period and species, 1985.

Date	# Nets	Chinook	Sockeye	Coho	Pink	Chum
5/16	6	15	0	0	0	0
5/17	5	21	1	0	0	0
5/21	18	78	1	0	0	0
5/23	10	32	2	0	0	0
5/24	12	26	2	0	0	0
5/28	11	99	8	0	0	0
5/30	9	123	6	0	0	0
5/31	2	4	0	0	0	0
6/04	20	285	12	0	0	0
6/06	17	120	4	0	0	0
6/07	20	242	6	0	0	0
6/11	24	99	1	0	0	0
6/13	28	317	7	0	0	0
6/14	23	429	1	0	0	0
6/22	3	77	0	0	0	0
6/29	0	0	0	0	0	0
7/06	0	0	0	0	0	0
7/13	0	0	0	0	0	0
7/20	1	0	10	15	0	0
7/27	3	0	100	20	0	0
8/03	0	0	0	0	0	0
8/10	1	0	0	20	0	0
8/17	1	0	2	14	0	6
8/24	1	0	0	7	0	4
8/31	0	0	0	0	0	0
9/07	0	0	0	0	0	0
9/14	1	0	0	5	0	0
9/21	0	0	0	0	0	0
9/28	0	0	0	0	0	0
10/05	1	0	0	10	0	0
Total		1,967	163	91	0	10

Table 26. Upper Subdistrict subsistence salmon harvest by period and species, 1985.

Period	Nets	Sockeye	Chinook	Coho	Pinks	Chums	Steelhead
8/16	45	173	18	312	2	2	0
8/19	50	228	8	1,134	38	3	0
8/23	92	249	3	2,003	51	3	0
8/26	80	60	8	901	6	2	5
8/30	95	61	11	1,417	0	4	0
9/02	39	23	0	501	6	0	0
9/06	31	6	0	945	0	7	8
9/09	62	0	0	961	0	0	0
9/13	67	3	0	1,341	0	0	6
9/16	18	0	0	522	1	0	0
9/20	26	0	0	757	0	30	7
9/23	38	2	2	471	4	2	6
Total	643	805	50	11,265	108	53	32

Table 27. Kasilof River personal use gillnet fishery salmon harvest by period, 21 June-28 June 1985.

Period Date	Total Nets	Sockeye Salmon		Chinook Salmon	
		Period	Accum	Period	Accum
6/21	112	946	946	27	27
6/22	141	1,215	2,161	63	90
6/23	135	1,115	3,276	38	128
6/24	104	1,053	4,329	37	165
6/25	98	1,439	5,768	29	194
6/26	93	1,542	7,310	7	181
6/27	100	1,948	9,258	12	193
6/28	94	1,488	10,746	10	203

Table 28. Seldovia District tide tables, April-September, 1985.

HIGH Tides SELDOVIA District

APRIL 1985

DATE DAY	DOT'S GUIDE	A.M. TIME	A.M. FT	P.M. TIME	P.M. FT
1 Mon	●	11:02	15.0	.....	...
2 Tues	●	0:18	15.8	12:03	16.9
3 Wed	●	0:55	17.8	12:55	18.8
4 Thur	●	1:28	19.7	1:43	20.3
5 Fri	●	2:04	21.3	2:28	21.2
6 Sat	●	2:40	22.3	3:14	21.2
7 SUN	●	3:17	22.5	4:00	20.5
8 Mon	•	3:57	21.9	4:50	19.0
9 Tues	•	4:36	20.6	5:43	17.2
10 Wed	•	5:23	18.7	6:43	15.2
11 Thur	•	6:14	16.6	8:02	13.8
12 Fri	·	7:26	14.6	9:39	13.4
13 Sat	·	9:00	13.5	11:01	14.1
14 SUN	·	10:35	13.7	11:54	15.2
15 Mon	·	11:45	14.6	.....	...
16 Tues	·	0:34	16.2	12:31	15.7
17 Wed	•	1:03	17.2	1:11	16.7
18 Thur	•	1:30	18.0	1:45	17.4
19 Fri	•	1:54	18.7	2:17	17.9
20 Sat	•	2:17	19.1	2:51	18.1
21 SUN	●	2:44	19.3	3:24	17.9
22 Mon	●	3:10	19.0	3:58	17.2
23 Tues	●	3:38	18.4	4:36	16.2
24 Wed	●	4:07	17.6	5:16	15.0
25 Thur	●	4:39	16.5	6:04	13.7
26 Fri	●	5:18	15.4	7:06	12.7
27 Sat	●	6:14	14.2	8:24	12.5
DAYLIGHT TIME STARTS 2 A.M.					
28 SUN	●	8:36	13.4	10:42	13.2
29 Mon	●	10:13	13.5	11:43	14.6
30 Tues	●	11:37	14.6	.....	...

• BIGGER THE DOT – BETTER THE FISHING

LOW Tides SELDOVIA District

APRIL 1985

DATE DAY	DOT'S GUIDE	A.M. TIME	A.M. FT	P.M. TIME	P.M. FT
1 Mon	●	5:07	6.4	5:44	0.9
2 Tues	●	6:03	4.0	6:29	-0.7
3 Wed	●	6:47	1.3	7:11	-2.0
4 Thur	●	7:31	-1.2	7:49	-2.6
5 Fri	●	8:13	-3.2	8:29	-2.7
6 Sat	●	8:55	-4.5	9:10	-2.0
7 SUN	●	9:37	-4.9	9:50	-0.7
8 Mon	•	10:23	-4.3	10:34	1.0
9 Tues	•	11:11	-2.9	11:21	3.0
10 Wed	•	.....	...	12:04	-1.1
11 Thur	•	0:16	5.0	1:07	1.0
12 Fri	·	1:28	6.6	2:35	2.4
13 Sat	·	3:06	7.0	4:09	2.6
14 SUN	·	4:43	6.1	5:18	2.2
15 Mon	·	5:44	4.6	6:07	1.6
16 Tues	·	6:27	3.0	6:42	1.2
17 Wed	·	7:04	1.5	7:12	1.0
18 Thur	·	7:34	0.3	7:40	0.9
19 Fri	•	8:06	-0.7	8:09	1.1
20 Sat	•	8:35	-1.3	8:38	1.6
21 SUN	●	9:05	-1.6	9:09	2.2
22 Mon	●	9:36	-1.4	9:41	3.1
23 Tues	●	10:09	-0.9	10:13	4.2
24 Wed	●	10:42	-0.1	10:47	5.3
25 Thur	●	11:24	0.9	11:27	6.4
26 Fri	●	.....	...	12:13	1.9
27 Sat	●	0:25	7.4	1:19	2.7
DAYLIGHT TIME STARTS 2 A.M.					
28 SUN	●	1:47	7.7	3:43	2.8
29 Mon	●	4:23	6.9	4:58	2.2
30 Tues	●	5:38	4.9	6:01	1.2

STANDARD TIME THRU APRIL 27

HIGH Tides SELDOVIA District

MAY 1985

DATE DAY	DOT'S GUIDE	A.M. TIME	A.M. FT	P.M. TIME	P.M. FT
1 Wed	●	0:30	16.5	12:41	16.3
2 Thur	●	1:10	18.4	1:37	17.9
3 Fri	●	1:50	20.1	2:27	19.2
4 Sat	●	2:28	21.4	3:15	20.0
5 SUN	•	3:08	22.1	4:02	20.1
6 Mon	•	3:50	22.1	4:51	19.5
7 Tues	•	4:32	21.3	5:39	18.4
8 Wed	•	5:15	19.9	6:35	16.9
9 Thur	•	6:06	18.0	7:33	15.5
10 Fri	·	6:59	16.0	8:42	14.4
11 Sat	·	8:05	14.1	9:59	14.0
12 SUN	·	9:31	13.0	11:08	14.3
13 Mon	·	11:00	12.9	.....	...
14 Tues	•	0:02	15.0	12:09	13.4
15 Wed	•	0:41	15.8	1:02	14.3
16 Thur	•	1:15	16.6	1:43	15.2
17 Fri	●	1:42	17.3	2:22	16.0
18 Sat	●	2:10	18.0	2:57	16.6
19 SUN	●	2:37	18.5	3:33	17.0
20 Mon	●	3:09	18.7	4:09	17.0
21 Tues	●	3:39	18.6	4:45	16.6
22 Wed	●	4:13	18.2	5:27	16.0
23 Thur	●	4:49	17.5	6:08	15.3
24 Fri	●	5:29	16.7	6:58	14.6
25 Sat	●	6:14	15.7	7:53	14.1
26 SUN	●	7:12	14.6	8:52	14.1
27 Mon	●	8:26	13.8	9:51	14.7
28 Tues	●	9:50	13.6	10:47	15.8
29 Wed	●	11:08	14.2	11:40	17.2
30 Thur	●	.....	...	12:18	15.4
31 Fri	●	0:28	18.6	1:18	16.7

• BIGGER THE DOT – BETTER THE FISHING

LOW Tides SELDOVIA District

MAY 1985

DATE DAY	DOT'S GUIDE	A.M. TIME	A.M. FT	P.M. TIME	P.M. FT
1 Wed	●	6:33	2.3	6:50	0.2
2 Thur	●	7:23	-0.4	7:35	-0.5
3 Fri	●	8:08	-2.8	8:20	-0.8
4 Sat	●	8:51	-4.6	9:03	-0.7
5 SUN	•	9:36	-5.6	9:46	-0.1
6 Mon	•	10:20	-5.6	10:31	0.9
7 Tues	•	11:07	-4.8	11:18	2.2
8 Wed	•	11:55	-3.4	.....	...
9 Thur	•	0:08	3.6	12:48	-1.4
10 Fri	·	1:04	5.0	1:49	0.5
11 Sat	·	2:18	6.0	3:00	2.0
12 SUN	·	3:43	6.2	4:17	2.8
13 Mon	•	5:06	5.4	5:25	3.1
14 Tues	•	6:09	4.0	6:15	3.1
15 Wed	•	6:55	2.6	6:57	3.0
16 Thur	•	7:31	1.2	7:31	3.0
17 Fri	●	8:06	0.0	8:04	3.0
18 Sat	●	8:37	-0.9	8:35	3.0
19 SUN	●	9:09	-1.6	9:10	3.2
20 Mon	●	9:41	-1.9	9:44	3.5
21 Tues	●	10:15	-1.9	10:20	4.0
22 Wed	●	10:51	-1.6	10:57	4.6
23 Thur	●	11:30	-1.1	11:39	5.3
24 Fri	●	.....	...	12:11	-0.4
25 Sat	●	0:24	5.9	12:59	0.4
26 SUN	●	1:22	6.3	1:59	1.2
27 Mon	●	2:34	6.1	3:03	1.7
28 Tues	●	3:54	5.1	4:09	2.0
29 Wed	●	5:06	3.2	5:12	1.9
30 Thur	●	6:05	0.9	6:12	1.7
31 Fri	●	6:58	-1.4	7:03	1.5

DAYLIGHT ALASKA TIME

HIGH Tides SELDOVIA District

JUNE 1985

DATE DAY	DOT'S GUIDE	A.M. TIME	A.M. FT	P.M. TIME	P.M. FT
1 Sat	•	1:13	19.9	2:14	17.8
2 SUN	•	1:58	20.8	3:04	18.5
3 Mon	•	2:44	21.3	3:53	18.8
4 Tues	•	3:29	21.1	4:41	18.6
5 Wed	•	4:15	20.4	5:31	18.0
6 Thur	•	5:02	19.2	6:21	17.1
7 Fri	·	5:51	17.7	7:12	16.2
8 Sat	·	6:43	16.0	8:07	15.4
9 SUN	·	7:44	14.4	9:03	14.9
10 Mon	•	8:48	13.1	9:59	14.7
11 Tues	•	10:02	12.4	10:50	14.8
12 Wed	•	11:16	12.4	11:35	15.2
13 Thur	●	.....	...	12:22	13.0
14 Fri	●	0:15	15.8	1:15	13.8
15 Sat	●	0:52	16.4	1:59	14.7
16 SUN	●	1:29	17.1	2:41	15.5
17 Mon	●	2:06	17.7	3:18	16.1
18 Tues	●	2:43	18.1	3:57	16.4
19 Wed	●	3:20	18.4	4:36	16.6
20 Thur	●	4:01	18.4	5:15	16.5
21 Fri	●	4:40	18.1	5:57	16.4
22 Sat	●	5:23	17.5	6:39	16.2
23 SUN	●	6:11	16.6	7:25	16.1
24 Mon	●	7:06	15.6	8:13	16.1
25 Tues	●	8:10	14.6	9:03	16.4
26 Wed	●	9:26	13.9	9:58	16.8
27 Thur	●	10:45	13.9	10:55	17.5
28 Fri	●	12:01	14.5	11:51	18.3
29 Sat	●	.....	...	1:10	15.5
30 SUN	•	0:46	19.1	2:08	16.6

• BIGGER THE DOT – BETTER THE FISHING

LOW Tides SELDOVIA District

JUNE 1985

DATE DAY	DOT'S GUIDE	A.M. TIME	A.M. FT	P.M. TIME	P.M. FT
1 Sat	●	7:47	-3.4	7:55	1.3
2 SUN	•	8:35	-4.8	8:40	1.3
3 Mon	•	9:21	-5.4	9:30	1.5
4 Tues	•	10:07	-5.3	10:16	2.0
5 Wed	•	10:54	-4.5	11:05	2.7
6 Thur	•	11:42	-3.2	11:55	3.5
7 Fri	·	.....	...	12:29	-1.6
8 Sat	·	0:50	4.4	1:20	0.1
9 SUN	·	1:54	5.1	2:15	1.7
10 Mon	•	3:02	5.3	3:14	3.0
11 Tues	•	4:17	4.9	4:13	4.0
12 Wed	•	5:20	4.1	5:11	4.6
13 Thur	●	6:12	2.9	6:01	5.0
14 Fri	●	6:57	1.7	6:44	5.0
15 Sat	●	7:35	0.6	7:29	4.9
16 SUN	●	8:11	-0.4	8:08	4.7
17 Mon	●	8:47	-1.3	8:46	4.5
18 Tues	●	9:23	-1.9	9:25	4.3
19 Wed	●	10:00	-2.3	10:05	4.2
20 Thur	●	10:38	-2.3	10:46	4.2
21 Fri	●	11:18	-2.2	11:29	4.3
22 Sat	●	.....	...	NOON	-1.7
23 SUN	●	0:16	4.4	12:43	-0.9
24 Mon	●	1:10	4.4	1:33	0.2
25 Tues	●	2:12	4.0	2:26	1.3
26 Wed	●	3:21	3.3	3:28	2.4
27 Thur	●	4:31	2.0	4:34	3.2
28 Fri	●	5:40	0.4	5:38	3.6
29 Sat	●	6:39	-1.3	6:41	3.5
30 SUN	•	7:34	-2.8	7:37	3.2

DAYLIGHT ALASKA TIME

HIGH Tides SELDOVIA District

JULY 1985

DATE DAY	DOT'S GUIDE	A.M. TIME	A.M. FT	P.M. TIME	P.M. FT
1 Mon	•	1:39	19.8	3:02	17.5
2 Tues	•	2:30	20.2	3:48	18.1
3 Wed	•	3:19	20.3	4:33	18.3
4 Thur	•	4:05	19.9	5:15	18.2
5 Fri	·	4:51	19.1	5:57	17.8
6 Sat	·	5:36	18.0	6:40	17.2
7 SUN	·	6:21	16.6	7:22	16.5
8 Mon	•	7:09	15.1	8:02	15.8
9 Tues	•	8:02	13.7	8:44	15.3
10 Wed	•	9:06	12.5	9:29	14.9
11 Thur	●	10:18	11.9	10:21	14.8
12 Fri	●	11:37	12.1	11:14	15.0
13 Sat	●	.....	...	12:48	12.8
14 SUN	●	0:04	15.5	1:45	13.8
15 Mon	●	0:54	16.2	2:27	14.9
16 Tues	●	1:40	17.1	3:04	15.8
17 Wed	●	2:26	18.0	3:42	16.7
18 Thur	●	3:07	18.8	4:18	17.4
19 Fri	●	3:49	19.3	4:54	17.9
20 Sat	●	4:31	19.3	5:31	18.2
21 SUN	●	5:13	18.9	6:08	18.3
22 Mon	●	6:03	18.1	6:48	18.3
23 Tues	●	6:53	16.8	7:32	18.0
24 Wed	●	7:54	15.4	8:18	17.7
25 Thur	●	9:06	14.2	9:14	17.4
26 Fri	•	10:30	13.6	10:19	17.2
27 Sat	•	11:56	13.9	11:27	17.4
28 SUN	•	.....	...	1:10	15.0
29 Mon	•	0:33	18.0	2:08	16.2
30 Tues	•	1:34	18.8	2:57	17.4
31 Wed	•	2:25	19.5	3:36	18.2

• BIGGER THE DOT – BETTER THE FISHING

LOW Tides SELDOVIA District

JULY 1985

DATE DAY	DOT'S GUIDE	A.M. TIME	A.M. FT	P.M. TIME	P.M. FT
1 Mon	•	8:24	-3.9	8:28	2.8
2 Tues	•	9:12	-4.4	9:18	2.4
3 Wed	•	9:57	-4.4	10:05	2.3
4 Thur	•	10:41	-3.9	10:52	2.3
5 Fri	•	11:23	-3.0	11:39	2.8
6 Sat	·	.....	...	12:05	-1.6
7 SUN	·	0:24	3.4	12:43	0.0
8 Mon	•	1:15	4.0	1:25	1.7
9 Tues	•	2:09	4.4	2:09	3.4
10 Wed	•	3:08	4.6	2:58	4.8
11 Thur	●	4:14	4.5	3:56	6.1
12 Fri	●	5:19	3.8	5:01	6.8
13 Sat	●	6:17	2.8	6:04	6.9
14 SUN	●	7:07	1.7	6:57	6.5
15 Mon	●	7:50	0.5	7:45	5.8
16 Tues	●	8:30	-0.7	8:28	5.0
17 Wed	●	9:08	-1.8	9:10	4.2
18 Thur	●	9:45	-2.6	9:51	3.5
19 Fri	●	10:22	-3.0	10:32	2.9
20 Sat	●	11:00	-3.0	11:15	2.5
21 SUN	●	11:39	-2.4	.....	...
22 Mon	●	0:00	2.2	12:21	-1.3
23 Tues	●	0:50	2.1	1:04	0.2
24 Wed	●	1:43	2.0	1:54	1.9
25 Thur	●	2:49	2.0	2:54	3.7
26 Fri	•	4:02	1.6	4:03	5.0
27 Sat	•	5:20	0.8	5:19	5.5
28 SUN	•	6:30	-0.3	6:30	5.2
29 Mon	•	7:29	-1.6	7:31	4.3
30 Tues	•	8:19	-2.6	8:22	3.3
31 Wed	•	9:04	-3.2	9:09	2.5

DAYLIGHT ALASKA TIME

Table 28, continued. Seldovia District tide tables, April-September, 1985.

HIGH Tides SELDOVIA District

AUGUST 1985

DATE DAY	DOT'S GUIDE	A.M. TIME	A.M. FT	P.M. TIME	P.M. FT
1 Thur	•	3:12	19.9	4:16	18.7
2 Fri	•	3:56	19.9	4:51	18.9
3 Sat	•	4:35	19.5	5:26	18.8
4 SUN	•	5:13	18.6	5:58	18.3
5 Mon	•	5:54	17.5	6:29	17.6
6 Tues	●	6:35	16.0	7:01	16.8
7 Wed	●	7:20	14.5	7:36	16.0
8 Thur	●	8:13	13.1	8:15	15.1
9 Fri	●	9:22	12.0	9:06	14.5
10 Sat	●	10:53	11.7	10:12	14.2
11 SUN	●	12:28	12.4	11:26	14.6
12 Mon	●	.....	...	1:26	13.6
13 Tues	●	0:33	15.6	2:08	15.0
14 Wed	●	1:24	17.0	2:45	16.3
15 Thur	●	2:11	18.4	3:17	17.7
16 Fri	●	2:53	19.7	3:49	18.8
17 Sat	●	3:36	20.5	4:24	19.7
18 SUN	●	4:19	20.8	4:57	20.3
19 Mon	●	5:02	20.4	5:33	20.5
20 Tues	●	5:47	19.3	6:11	20.2
21 Wed	●	6:39	17.8	6:51	19.4
22 Thur	•	7:38	16.0	7:40	18.3
23 Fri	•	8:49	14.3	8:39	17.2
24 Sat	•	10:21	13.5	9:53	16.3
25 SUN	•	12:01	14.0	11:19	16.3
26 Mon	•	.....	...	1:10	15.3
27 Tues	•	0:36	17.0	2:03	16.6
28 Wed	•	1:34	18.1	2:41	17.9
29 Thur	•	2:23	19.1	3:17	18.8
30 Fri	•	3:04	19.7	3:48	19.4
31 Sat	•	3:41	20.0	4:16	19.7

• BIGGER THE DOT – BETTER THE FISHING

LOW Tides SELDOVIA District

AUGUST 1985

DATE DAY	DOT'S GUIDE	A.M. TIME	A.M. FT	P.M. TIME	P.M. FT
1 Thur	•	9:43	-3.4	9:54	1.9
2 Fri	•	10:22	-3.0	10:35	1.7
3 Sat	•	10:57	-2.2	11:13	1.8
4 SUN	•	11:31	-1.0	11:52	2.2
5 Mon	•	.....	...	12:05	0.5
6 Tues	●	0:31	2.8	12:37	2.3
7 Wed	●	1:13	3.5	1:12	4.1
8 Thur	●	2:02	4.2	1:53	5.8
9 Fri	●	3:03	4.8	2:47	7.4
10 Sat	●	4:17	4.8	4:05	8.3
11 SUN	●	5:40	4.1	5:32	8.3
12 Mon	●	6:44	2.9	6:38	7.5
13 Tues	●	7:31	1.3	7:31	6.2
14 Wed	●	8:11	-0.2	8:11	4.7
15 Thur	●	8:46	-1.6	8:53	3.3
16 Fri	●	9:24	-2.7	9:33	1.9
17 Sat	●	9:57	-3.2	10:12	0.8
18 SUN	●	10:36	-3.1	10:54	0.0
19 Mon	●	11:13	-2.2	11:39	-0.3
20 Tues	●	11:52	-0.8	.....	...
21 Wed	●	0:26	-0.1	12:35	1.1
22 Thur	•	1:17	0.5	1:25	3.2
23 Fri	•	2:20	1.3	2:25	5.3
24 Sat	•	3:38	1.9	3:45	6.6
25 SUN	•	5:08	1.7	5:14	6.8
26 Mon	•	6:25	0.8	6:33	5.8
27 Tues	•	7:26	-0.3	7:31	4.4
28 Wed	•	8:11	-1.3	8:19	2.9
29 Thur	•	8:48	-1.9	8:59	1.8
30 Fri	•	9:24	-2.0	9:34	1.0
31 Sat	•	9:56	-1.7	10:11	0.6

DAYLIGHT ALASKA TIME

HIGH Tides SELDOVIA District

SEPTEMBER 1985

DATE DAY	DOT'S GUIDE	A.M. TIME	A.M. FT	P.M. TIME	P.M. FT
1 SUN	•	4:16	19.8	4:43	19.7
2 Mon	•	4:51	19.1	5:11	19.3
3 Tues	●	5:26	18.1	5:38	18.6
4 Wed	●	6:03	16.8	6:06	17.7
5 Thur	●	6:40	15.3	6:34	16.6
6 Fri	●	7:30	13.7	7:06	15.4
7 Sat	●	8:34	12.3	7:57	14.3
8 SUN	●	10:19	11.7	9:14	13.6
9 Mon	●	12:07	12.4	10:55	13.9
10 Tues	●	.....	...	1:05	13.9
11 Wed	●	0:13	15.2	1:39	15.5
12 Thur	●	1:09	17.0	2:11	17.2
13 Fri	●	1:55	18.8	2:43	18.9
14 Sat	●	2:37	20.3	3:13	20.4
15 SUN	●	3:20	21.3	3:46	21.5
16 Mon	●	4:03	21.6	4:22	22.1
17 Tues	●	4:46	21.2	4:57	22.1
18 Wed	●	5:34	20.0	5:36	21.3
19 Thur	•	6:26	18.2	6:18	20.0
20 Fri	•	7:25	16.2	7:09	18.3
21 Sat	•	8:42	14.5	8:12	16.4
22 SUN	•	10:20	13.9	9:42	15.2
23 Mon	•	11:53	14.6	11:21	15.3
24 Tues	•	.....	...	12:57	15.9
25 Wed	•	0:38	16.3	1:42	17.2
26 Thur	•	1:31	17.5	2:16	18.4
27 Fri	•	2:11	18.5	2:45	19.3
28 Sat	•	2:48	19.2	3:13	19.9
29 SUN	•	3:22	19.6	3:37	20.2
30 Mon	•	3:55	19.5	4:02	20.2

• BIGGER THE DOT – BETTER THE FISHING

LOW Tides SELDOVIA District

SEPTEMBER 1985

DATE DAY	DOT'S GUIDE	A.M. TIME	A.M. FT	P.M. TIME	P.M. FT
1 SUN	•	10:25	-1.0	10:45	0.6
2 Mon	•	10:56	0.2	11:17	0.9
3 Tues	●	11:25	1.6	11:52	1.6
4 Wed	●	11:55	3.3	.....	...
5 Thur	●	0:27	2.5	12:27	5.0
6 Fri	●	1:06	3.5	1:01	6.7
7 Sat	●	1:57	4.6	1:53	8.2
8 SUN	●	3:14	5.3	3:16	9.3
9 Mon	●	5:00	5.0	5:08	9.1
10 Tues	●	6:12	3.6	6:22	7.7
11 Wed	●	7:03	1.9	7:10	5.8
12 Thur	●	7:42	0.2	7:52	3.7
13 Fri	●	8:19	-1.3	8:33	1.6
14 Sat	●	8:55	-2.3	9:12	-0.3
15 SUN	●	9:31	-2.6	9:51	-1.7
16 Mon	●	10:09	-2.3	10:33	-2.5
17 Tues	●	10:46	-1.2	11:15	-2.6
18 Wed	●	11:27	0.4	.....	...
19 Thur	•	0:00	-1.9	12:12	2.5
20 Fri	•	0:53	-0.6	1:04	4.6
21 Sat	•	1:57	1.0	2:07	6.5
22 SUN	•	3:21	2.3	3:40	7.5
23 Mon	•	4:58	2.5	5:22	7.0
24 Tues	•	6:17	1.7	6:33	5.4
25 Wed	•	7:10	0.7	7:26	3.7
26 Thur	•	7:51	0.0	8:06	2.2
27 Fri	•	8:24	-0.3	8:40	0.9
28 Sat	•	8:55	-0.3	9:12	0.0
29 SUN	•	9:23	0.0	9:44	-0.5
30 Mon	•	9:52	0.7	10:15	-0.6

DAYLIGHT ALASKA TIME

Appendix Table 1. Upper Cook Inlet commercial chinook salmon harvest by gear type and area, 1966-1985.

Year	Central District Drift Gillnet		Central District Set Gillnet				Northern District Set Gillnet	
			Eastside		Kalgin/Westside			
	Number	%	Number	%	Number	%	Number	%
1966	392	5	7,329	86	401	4	422	5
1967	489	6	6,686	84	500	7	184	2
1968	182	4	3,304	73	579	13	471	10
1969	363	3	5,834	47	3,295	27	2,904	23
1970	367	4	5,366	64	1,165	14	1,460	17
1971	237	1	7,055	36	2,875	14	9,598	49
1972	375	1	8,600	53	2,199	14	4,912	31
1973	244	5	4,411	85	369	7	170	3
1974	422	6	5,570	85	425	6	169	3
1975	250	5	3,678	77	716	15	129	3
1976	692	6	8,249	76	1,469	13	457	5
1977	3,411	23	9,732	66	1,084	7	565	4
1978	2,072	12	12,468	72	2,093	12	669	4
1979	1,089	8	8,671	63	2,264	17	1,714	12
1980	889	6	9,643	70	2,273	16	990	7
1981	2,319	19	8,359	68	837	7	725	6
1982	1,293	6	13,658	65	3,203	15	2,716	13
1983	1,124	5	15,043	73	3,534	17	933	5
1984[1]	509	6	5,805	66	1,620	18	885	10
Ave.	880	7	7,866	69	1,626	13	1,583	11
1985	1,962	8	16,985	73	2,330	10	1,863	8

[1] Preliminary data.

Data Source: Soldotna ADF&G Honeywell computer files.

Appendix Table 2. Upper Cook Inlet commercial sockeye salmon harvest by gear type and area, 1966-1985.

Year	Central District Drift Gillnet		Central District Set Gillnet				Northern District Set Gillnet	
			Eastside		Kalgin/Westside			
	Number	%	Number	%	Number	%	Number	%
1966	1,103,261	60	485,330	26	132,443	7	131,080	7
1967	890,152	65	305,431	22	66,414	5	118,065	8
1968	561,737	51	317,535	29	85,049	7	140,575	13
1969	371,751	54	210,877	31	71,191	10	38,065	5
1970	474,718	64	142,701	19	62,724	9	66,458	9
1971	423,107	66	111,505	17	61,639	10	40,533	6
1972	505,935	57	204,617	23	83,422	10	85,737	10
1973	375,695	56	188,743	28	59,973	9	45,614	7
1974	265,751	53	136,889	27	52,957	11	41,563	8
1975	368,116	54	177,336	26	67,758	10	65,526	10
1976	1,055,767	63	476,376	28	62,338	4	69,649	5
1977	1,073,098	52	751,368	37	104,265	5	123,780	6
1978	1,803,358	69	660,918	25	105,767	4	51,624	2
1979	454,707	49	248,828	27	108,422	12	112,449	12
1980	770,247	49	559,812	35	137,922	9	105,647	7
1981	633,145	44	496,193	35	60,220	4	249,662	17
1982	2,103,429	65	971,423	30	66,952	2	118,060	4
1983	3,222,007	64	1,508,963	30	134,544	3	184,219	4
1984[1]	1,228,600	58	495,788	24	167,432	8	210,947	10
Ave.	930,767	57	444,770	28	89,023	7	105,224	8
1985	1,891,485	49	1,513,262	39	275,204	7	163,012	4

[1] Preliminary data.

Data Source: Soldotna ADF&G Honeywell computer files.

Appendix Table 3. Upper Cook Inlet commercial coho salmon harvest by gear type and area, 1966-1985.

Year	Central District Drift Gillnet		Central District Set Gillnet				Northern District Set Gillnet	
			Eastside		Kalgin/Westside			
	Number	%	Number	%	Number	%	Number	%
1966	80,901	28	68,877	24	59,509	20	80,550	28
1967	53,071	30	40,738	23	40,066	22	43,854	25
1968	167,383	36	80,828	17	63,301	14	156,648	33
1969	33,064	33	18,988	19	28,392	28	20,425	20
1970	114,392	41	30,318	10	52,363	19	82,722	30
1971	35,491	35	16,589	17	26,188	26	22,094	22
1972	21,578	27	24,673	30	15,319	19	19,346	24
1973	31,784	30	23,901	23	24,744	24	23,944	23
1974	75,640	38	36,837	19	40,610	20	47,038	23
1975	88,569	40	46,209	21	53,910	24	33,051	15
1976	80,731	39	47,873	23	42,224	20	37,850	18
1977	110,184	57	23,693	12	38,093	20	20,623	11
1978	76,252	35	34,141	16	61,711	28	47,256	21
1979	114,496	43	29,727	11	68,306	26	52,635	20
1980	89,510	33	40,281	15	51,487	19	90,098	33
1981	226,257	47	36,031	8	88,492	18	134,362	28
1982	416,274	53	108,393	14	182,205	23	85,352	11
1983	326,962	64	37,666	8	97,827	18	53,867	10
1984[1]	208,450	47	36,530	8	87,421	20	110,218	25
Ave.	123,735	39	41,173	17	59,061	22	61,154	22
1985	330,804	54	69,735	11	130,676	21	79,245	13

[1] Preliminary data.

Data Source: Soldotna ADF&G Honeywell computer files.

Appendix Table 4. Upper Cook Inlet commercial pink salmon harvest by gear type and area, 1966-1985.

Year	Central District Drift Gillnet		Central District Set Gillnet				Northern District Set Gillnet	
			Eastside		Kalgin/Westside			
	Number	%	Number	%	Number	%	Number	%
1966	593,654	30	969,624	48	70,507	4	371,960	18
1967	7,475	23	13,038	40	3,256	10	8,460	27
1968	880,512	39	785,887	35	75,755	3	534,839	23
1969	8,336	25	11,416	35	5,714	17	7,680	23
1970	346,485	42	281,067	34	24,763	3	174,193	21
1971	6,433	18	18,097	51	2,637	7	8,423	24
1972	115,096	18	403,706	64	18,936	3	90,830	15
1973	91,901	28	80,596	25	16,437	5	137,249	42
1974	140,734	29	291,408	60	9,014	2	42,879	9
1975	113,868	34	112,423	34	18,385	5	90,953	27
1976	599,600	48	479,009	38	30,044	2	148,090	12
1977	286,308	52	125,817	23	25,212	4	116,518	21
1978	934,178	55	372,865	22	54,785	3	327,270	20
1979	19,554	27	20,033	27	7,061	10	26,332	36
1980	964,526	54	299,444	17	47,963	2	474,488	27
1981	53,888	42	15,659	12	4,276	4	53,325	42
1982	270,380	35	432,715	55	14,242	2	73,307	8
1983	26,628	40	18,310	25	3,785	5	21,604	30
1984[1]	279,820	45	222,026	36	16,723	3	103,941	17
Even Yr	512,499	41	453,775	37	36,273	3	234,180	19
Odd Yr	68,266	39	46,154	26	9,640	5	52,283	30
1985	34,074	41	17,409	21	4,930	6	26,511	32

[1] Preliminary data.

Data Source: Soldotna ADF&G Honeywell computer files.

Appendix Table 5. Upper Cook Inlet commercial chum salmon harvest by gear type and area, 1966-1985.

Year	Central District Drift Gillnet		Central District Set Gillnet				Northern District Set Gillnet	
			Eastside		Kalgin/Westside			
	Number	%	Number	%	Number	%	Number	%
1966	424,972	80	7,461	1	64,725	12	35,598	7
1967	233,041	79	399	0	25,013	8	38,384	13
1968	1,022,900	91	1,563	0	44,986	4	58,454	5
1969	238,497	89	399	0	16,949	6	11,836	5
1970	705,467	90	1,228	0	48,783	6	24,507	3
1971	274,567	85	128	0	32,647	10	16,603	5
1972	564,253	90	1,727	0	40,567	7	19,780	3
1973	605,730	90	1,965	0	29,019	5	30,847	5
1974	344,594	87	506	0	15,346	4	36,492	9
1975	886,474	93	979	0	32,741	4	30,787	3
1976	405,773	86	1,484	0	47,877	11	14,050	3
1977	1,153,454	93	1,413	0	54,708	5	23,861	2
1978	489,065	86	4,617	1	40,946	7	37,331	6
1979	609,239	94	907	0	30,342	5	9,270	1
1980	339,970	88	2,147	0	30,105	8	16,728	4
1981	756,848	91	2,415	0	26,513	3	46,208	6
1982	1,348,510	94	4,777	0	36,647	3	43,006	3
1983	1,044,644	94	2,764	0	38,129	3	29,321	3
1984[1]	567,452	83	4,219	1	36,607	5	75,846	11
Ave.	631,339	89	2,163	0	36,455	6	31,522	5
1985[1]	645,384	90	6,058	1	31,192	4	31,203	4

[1] Preliminary data.

Data Source: Soldotna ADF&G Honeywell computer files.

Appendix Table 6. Upper Cook Inlet commercial salmon harvest by gear type and area, 1966-1985.

Year	Central District Drift Gillnet		Central District Set Gillnet				Northern District Set Gillnet	
			Eastside		Kalgin/Westside			
	Number	%	Number	%	Number	%	Number	%
1966	2,203,180	47	1,538,621	33	327,585	7	619,610	13
1967	1,184,228	63	366,292	19	135,249	7	208,947	11
1968	2,612,714	53	1,189,117	24	269,670	5	890,987	18
1969	652,011	59	247,514	23	125,541	11	80,910	7
1970	1,641,429	62	460,680	18	189,798	7	349,340	13
1971	739,835	66	153,374	14	125,986	11	97,251	9
1972	1,207,217	54	643,323	29	160,443	7	220,605	10
1973	1,105,354	62	299,616	17	130,542	7	237,824	14
1974	827,141	52	471,210	30	118,352	7	168,141	11
1975	1,457,277	66	340,625	15	173,510	8	220,446	11
1976	2,142,563	59	1,012,991	28	183,952	5	270,096	8
1977	2,626,455	65	912,023	22	223,362	6	285,347	7
1978	3,304,925	65	1,085,009	21	265,302	5	464,150	9
1979	1,199,085	62	308,166	16	216,395	11	202,400	11
1980	2,165,142	54	911,327	23	269,750	6	687,951	17
1981	1,672,457	58	558,657	19	180,338	6	484,282	17
1982	4,139,886	66	1,530,966	25	303,249	4	322,441	5
1983	4,621,365	70	1,582,746	24	277,819	4	289,944	4
1984[1]	2,284,831	59	764,638	20	309,803	8	501,837	13
Ave.	1,988,794	60	756,664	22	209,823	7	347,500	11
1985[1]	2,903,709	55	1,623,449	31	444,332	8	301,834	6

[1] Preliminary data.

Data Source: Soldotna ADF&G Honeywell computer files.

Appendix Table 7. Commercial catch of Upper Cook Inlet salmon in numbers of fish by species, 1954-1985.[1]

Year	King	Sockeye	Coho	Pink	Chum	Total
1954	63,780	1,207,046	321,525	2,189,307	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	9,541	1,851,990	289,690	2,006,580	531,825	4,689,626
1967	7,859	1,380,062	177,729	32,229	269,037	1,894,716
1968	4,536	1,104,904	470,450	2,278,197	1,119,114	4,977,201
1969	12,398	692,254	100,952	33,422	269,855	1,108,881
1970	8,348	731,214	275,296	813,895	775,167	2,603,920
1971	19,765	636,303	100,636	35,624	327,029	1,119,357
1972	16,086	879,824	80,933	628,580	630,148	2,235,571
1973	5,194	670,025	104,420	326,184	667,573	1,773,396
1974	6,596	497,185	200,125	483,730	396,840	1,584,476
1975	4,790	684,818	227,372	336,359	951,796	2,205,135
1976	10,867	1,664,150	208,710	1,256,744	469,807	3,610,278
1977	14,792	2,054,020	192,975	554,184	1,233,733	4,049,704
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	13,798	1,573,597	271,418	1,786,430	389,113	4,034,356
1981	12,240	1,439,235	485,148	127,169	833,549	2,897,341
1982	20,870	3,259,864	793,937	790,864	1,433,562	6,298,917
1983	20,634	5,049,733	516,322	70,327	1,114,858	6,771,874
1984[2]	8,819	2,102,767	442,619	622,510	684,124	3,860,889
1985[2]	23,297	3,852,141	619,924	83,548	714,130	5,293,040
Ave.	19,467	1,420,496	274,630	Even- 1,571,570 Odd- 118,492	659,696	3,217,320

[1] Preliminary data.
[2] Data source: ADF&G, Commercial Fisheries Division, Soldotna computer records.

Appendix Table 8. Approximate exvessel value of the Upper Cook Inlet commercial salmon catch, 1960-1985.[1]

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1960	140	1,334	307	663	343	2,787
1961	100	1,687	118	16	204	2,125
1962	100	1,683	342	1,274	582	3,981
1963	89	1,388	193	13	236	1,919
1964	20	1,430	451	1,131	646	3,678
1965	50	2,099	109	70	230	2,558
1966	50	2,727	295	823	338	4,233
1967	49	2,135	187	13	202	2,586
1968	30	1,758	515	1,209	843	4,355
1969	70	1,231	109	23	204	1,637
1970	49	1,135	354	387	745	2,670
1971	189	1,102	143	22	316	1,772
1972	217	1,795	135	473	834	3,454
1973	122	3,214	320	363	2,134	6,153
1974	210	3,058	843	946	1,521	6,578
1975	65	2,596	821	423	2,753	6,658
1976	276	8,626	818	1,879	2,040	13,639
1977	525	13,274	933	772	5,991	21,495
1978	667	26,128	1,388	2,154	2,217	32,554
1979	625	8,094	1,658	89	4,201	14,667
1980	417	7,932	902	2,114	1,516	12,881
1981	422	11,071	2,638	179	2,005	16,315
1982	753	25,029	4,139	515	5,851	36,287
1983	585	23,841	1,603	38	3,195	29,362
1984[2]	281	13,458	1,813	471	1,974	17,997
1985[2]	824	27,735	2,790	62	2,404	33,815

[1] Expressed in thousands of dollars.
[2] Preliminary data.

Data Source: 1960-1971 - Unpublished ADF&G files.
1972-1985 - Average weight x average price per pound x catch (all from CFEC and ADF&G computer files).

Appendix Table 9. Commercial herring catch, Upper Cook Inlet, 1973-1985.

Year	Harvest (Pounds)			
	Eastside	Chinitna Bay	Tuxedni Bay	Total
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

[1] Preliminary data.

Appendix Table 10. Commercial harvest of razor clams in Cook Inlet, 1919-1985.[1]

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

[1] Data for 1919-1968 from Nickerson (1975). Data for 1969-1983 from IBM fish ticket summaries (ADF&G, Division of Commercial Fisheries, Computer Services).
[2] Preliminary.

Appendix Table 11. Registered units of gillnet fishing effort by gear type in Cook Inlet, 1960-1985.[1]

	Drift			Set			
Year	Resident	Non-Resident	Sub-total	Resident	Non-Resident	Sub-total	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

[1] Data Source: 1960-1974 ADF&G unpublished reports.
1975-1984 Commercial Fisheries Entry Commission.

Appendix Table 12. Escapement goals and counts of sockeye salmon in selected streams of Upper Cook Inlet, 1968-1985.

Year	Kenai River Escapement Goal	Kenai River Escapement Estimate[1]	Kasilof River Escapement Goal	Kasilof River Escapement Estimate[1]	Fish Creek Escapement Goal	Fish Creek 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

Year	Susitna River Escapement Goal	Susitna River Escapement Estimate[1]	Crescent River Escapement Goal	Crescent River Escapement Estimate[1]	Packers Creek Escapement Goal	Packers Creek 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[3]	50,000	41,000	0	13,024
1982	200,000	216,000[4]	50,000	59,000	0	15,687
1983	200,000	112,000[5]	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

[1]
[2] Derived from sonar counters unless otherwise noted.
[3] Weir counts.
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.

Appendix Table 13. Average price paid for commercially harvested salmon, Upper Cook Inlet, 1969-1985.[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

[1] Expressed as dollars paid per pound.
Data Source: 1969-1983 - Commercial Fisheries Entry Commission.
1984-1985 - Preliminary fish ticket averages.

Appendix Table 14. Average weights of commercially harvested salmon, Upper Cook Inlet, 1972-1984.[1]

	Average Weight (lbs)				
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	29.24	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
Average	29.47	6.65	6.43	3.71	7.48

[1] Data Source: Final IBM stat runs of fish ticket data, ADF&G, Juneau. 1984 and 1985 data not available as of this writing.

Appendix Table 15. Subsistence and personal use salmon harvest, Upper Cook Inlet, 1980-1985.

Fishery	No. of Permits	Chinook	Sockeye	Coho	Pink	Chum
Tyonek Subsistence						
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
Non-Commercial Gillnet						
1981	1,108	68	466	12,713	149	305
Kasilof Personal Use						
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
Fall Coho Personal Use/Subsistence						
1983	295	0	0	712	0	0
1984	309	1	2	2,261	10	7
1985	998	50	805	11,265	108	53
Northern/Central Districts Subsistence						
1985	638	117	2,218	1,427	90	121
Knik Arm Subsistence						
1985	405	4	1,649	2,055	48	212