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ALASKA PENINSULA SALMON CATCH AND ESCAPEMENT  
SAMPLING PROCEDURES

1995 OPERATIONAL PLANS

By

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Alaska Department of Fish and Game  
Commercial Fisheries management and Development Division  
211 Mission Road  
Kodiak, Alaska 99615

April 1995

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## INTRODUCTION

The Alaska Peninsula and Aleutian Islands Management Areas commercial fishing area encompasses the Aleutian Islands, the North Alaska Peninsula west of Cape Menshikof, and the South Alaska Peninsula west of Kupreanof Point (Figures 1-6). There are 335 known salmon producing streams in the Aleutian Islands Area and 247 salmon producing streams in the Alaska Peninsula Area (Murphy 1992).

Five species of salmon are commercially harvested in the Alaska Peninsula and Aleutian Islands Management Areas: chinook, sockeye, pink, chum, and coho. Within the Alaska Peninsula and Aleutian Islands Management Areas, the majority of the catch is from local stocks. However, there three major interception fisheries. The first is in the South Unimak (Unimak District) and the Shumagin Islands fishery, where the June sockeye catch is predominantly fish migrating to Bristol Bay. The second interception fishery occurs in the Southeast Mainland area where the majority of the sockeye are migrating to the Chignik River system. Lastly, the area from Harbor Point to Strogonof Point had significant numbers of Bristol Bay origin sockeye in the catches as determined from scale pattern analysis (Swanton and Murphy 1992).

Economically, sockeye and pink salmon are usually the primary species in the South Alaska Peninsula while sockeye and chum salmon are usually the primary species in the North Alaska Peninsula and the Aleutian Islands. In some North Peninsula fisheries, chinook and coho salmon may be more economically important than chum salmon.

A basic function of fisheries management is to allow effort on stocks with harvestable surpluses while protecting those with returning runs below escapement requirements. Assignment of catch to river system of origin is a prerequisite for forecasting and evaluating escapement goals. Analysis of sockeye scale patterns can provide us with stock of origin information. In 1985, an expanded chinook, sockeye, chum, and coho salmon commercial catch sampling operation was initiated in the Alaska Peninsula Management Area for establishing a data base for separating stocks, evaluating escapement goals, forecasting, and assessing inseason run timing. The current emphasis is on sockeye and chum salmon, with chinook and coho salmon being sampled also.

## OBJECTIVES

The objective of the sampling program is to determine sockeye and chum salmon age composition from the catch in the Alaska Peninsula fisheries with a level of precision necessary for the development of brood tables for those major systems. Chinook and coho salmon are also sampled to obtain baseline age composition data.

Long Term: Improve management of the salmon resources for the Alaska Peninsula and Aleutian Islands Management Areas through improved forecasting of runs, development of stock-recruitment relationships to assess escapement requirements, and accurate assessment of stock contribution levels for mixed stock fisheries.

Short Term: Develop catch brood tables for the major sockeye and chum stocks, and determine age composition for each species of all major stocks.

1. Determine salmon catch and effort by species and statistical area (Table 1).
2. Determine the sockeye and chum sex and length composition for the major terminal fisheries within standard levels of precision.
3. Determine the chinook, sockeye, chum, and coho weight-length relationships for the terminal fisheries.
4. Determine the age composition of chinook, sockeye, chum, and coho salmon for all major stocks.
5. Establish an archive of scales suitable for analysis of stock separation in interception and mixed stock fisheries.

## **SUPERVISION**

Bob Murphy, Area Management Biologist (AMB), will supervise the catch sampling crews at Port Moller and King Cove and escapement sampling at Bear Lake, Sandy River and Ilnik River. Staff will be in Port Moller from approximately 7 May to 15 September, and in King Cove if time permits for a short period to participate in and evaluate sampling operations. Escapement sampling at Nelson Lagoon, Orzinski River, Thinpoint and Middle Lagoons will be conducted and supervised by Cold Bay or Sand Point staff.

## **PERSONNEL**

Two person crews will be stationed to sample the commercial salmon catch for the Alaska Peninsula Management Area at Port Moller and King Cove.

### ***Dates of Sampling Events***

The Port Moller sampling crew is expected to begin collection of age composition data about 1 June, or when fish become available during the standard Monday through Thursday commercial fishing period, and complete sampling on approximately 5 September. The Port Moller crew will be responsible for catch sampling the commercial fisheries on the North Peninsula and possibly the South Peninsula commercial catch, if delivered to Port Moller and unavailable to the sampling crew in King Cove.

The King Cove sampling crew is expected to begin collection of age composition data on the first June South Peninsula opening around 10 June and complete sampling on 18 August. The King Cove crew will be responsible for catch sampling the commercial fisheries on the South Peninsula, primarily the South Unimak, Shumagin Islands, Southeast Mainland area, and Uria Bay areas. With the closure of the majority of South Peninsula during 1-19 July, the King Cove

crew will move to field projects outside of King Cove and report to duty in King Cove around 20 July.

## METHODS

Samples from the designated areas are to be representative. To ensure that this occurs, mixed loads from multiple areas will not be sampled nor will there be any pre-selection of fish for length, sex, or condition. The tender schedules and locations will allow the sampling of pure loads obtained from the separate areas. To ensure that samples are not missed the crews will begin sampling the first day the respective catches are delivered from the designated sampling areas for each week (Sunday to Saturday). Sampling usually will begin on Monday for catches from the previous day and end on Saturday. If the sampling crew believes that there is a high probability of collecting samples from the same area on more than one occasion during a week, the crew should try to collect the sample over the entire week. If it is doubtful as to whether or not another sample can be collected later in the week, the crew should collect all the samples when they are first available. Additional sampling may occur at Canoe and Uria Bay. It is important to determine where the tenders have loaded fish. With the set gill net fishery on the South Peninsula, the tenders run a circuit to the sites. On the South Peninsula, the tenders land in both Sand Point and King Cove, with the majority landing in King Cove. The accurate identification of area of catch for each tender will allow terminal purse seine chum (and one sockeye) catch area to possibly be used as escapement sampling.

Specific procedures for collecting and recording salmon age (scales) are in Appendix A and B. The accuracy of the data is the responsibility of the crew leaders. All questions concerning collection procedures should be brought to the attention of the supervisor at the first available opportunity.

Sample sizes are statistically derived to include necessary criteria to address problems that may affect the accuracy and precision of age composition work or stock composition methodologies. Catch sampling crews will be collecting 300 samples/period/area for chinook and coho salmon, 600 samples/period/area for sockeye, and 440 samples/period/area for chum salmon (Tables 2-5).

These sample sizes are the maximum. The maximum may not always be available, especially for small local runs and early and late in the season. Do not sample an area unless at least 75 fish can be sampled for a given species during a period. The exceptions to this rule would be for a run such as Thin Point Lake sockeye, or other areas where the Alaska Department of Fish and Game (ADF&G) has limited knowledge about the run. When deliveries are mixed between two or more fishing areas, it is best to wait for another tender with a pure load of salmon before sampling. Some areas may never have a pure load (i.e. Swanson Lagoon). For these areas, try to sample the fish when deliveries are 90% or more from one area (mark the percent of each fishing area on the top of each AWL form). Areas that will never be greater than 90% pure (i.e. Catherine's Cove), sample as time permits. Future analysis of the data will take the mixture into consideration.

Scale samples from catch and escapement sampling will be aged in Port Moller. Periodically, samples collected in King Cove, or elsewhere, will be sent pressed and with the appropriate paperwork to Port Moller. To ensure safe delivery of data, notify the crew leader before and following the sending of data. To ensure safe delivery notify the crew leader: 1) that the data is being mailed (use a secure moisture proof container); 2) what data is being sent; 3) when delivery is expected in Port Moller; and 4) who is transporting the data. The crew leader at King Cove will maintain a log book of all outgoing catch samples. It is imperative that every precaution be taken to ensure the safe delivery of the samples to Port Moller.

Sockeye and chum sampling are the top priorities during all periods from the specified fishing areas. Chinook and coho salmon will also be sampled as time allows. During the fall, coho salmon will be sampled as when possible.

The King Cove crew will be responsible for pressing all scales that are collected in King Cove, and the Port Moller crew will be responsible for pressing all scales collected in any other location, unless otherwise instructed differently. Trained staff will read all scales collected in-season.

All crews will sample the first day of each period as the salmon become available. For each AWL sample, scales from the preferred area will be taken and as defined in Appendix A and B.

Weight sampling of salmon will occur in fisheries when requested by the Area Management Biologists. Samples will be randomly selected so that they are representative of the harvest.

No length sampling will be conducted unless otherwise requested by ADF&G personnel.

All crews should report all fin clipped and tagged fish to the appropriate supervisor. For chinook salmon having a clipped adipose fin, the head should be sealed in plastic, frozen, and sent to Andy McGregor, ADF&G, Juneau, Alaska, 99824. Catch location, catch date, gear type, species, tag number, type of tag, length, weight, and several scales from the preferred area should be included with the catch report.

Crews are to anticipate supply shortages in-season and to notify staff in Port Moller before the supplies are exhausted. Each crew leader will keep a daily log book of activities. A report from each crew leader outlining problems encountered and solutions, as well as any suggestions for the project should be sent to Port Moller at the end of the season along with an equipment list and place of storage.

Appendix C contains general equipment, cabin maintenance, and crew policy.

Appendix D contains information on first aid and safety.

The responsibility of proper identification of catch area will be a necessary component of the dockside catch sampling crew.

### *King Cove June Sockeye Sampling*

The King Cove crew will send all sockeye scale samples collected from the June South Peninsula commercial fisheries to ADF&G in King Salmon for pressing and aging. The appropriate AWL forms will also be sent. The scales will be sent within one day of collection to the address below. An account has been setup with Reeve Aleutian Airways and Peninsula Airways from King Cove to Cold Bay, and Reeves from Cold Bay to Anchorage, and Peninsula Air from Anchorage to King Salmon to expedite the shipping process. All invoices should be sent to ADG&G in King Salmon. A log book should be kept of the date sent and invoice number, sample location (i.e. Cape Lutke), and how many scale samples from each area were sent. ADF&G in King Salmon will be notified when a package is sent by phoning Bev Cross @ 246-3341. The sockeye scales will be used by ADF&G in King Salmon as an inseason indicator of returning run composition.

Address scale packets to:

Alaska Department of Fish & Game  
CFMD Division  
P.O. Box 37  
King Salmon, AK 99613  
Attn: Bev Cross ph: 907-246-3341

### **DATA ANALYSIS AND REPORTING**

A Regional Information Report will be completed for the 1995 season by 1 May 1996.

ADF&G has used scale pattern analysis to separate sockeye stocks in mixed stock fisheries. North Peninsula sockeye fisheries from Harbor Point to Strogonof Point and escapement samples of sockeye scales and completed Opscan Forms will be returned to Kodiak for possible future scale pattern analysis studies. Presently, funding is not available for scale pattern analysis studies on the Alaska Peninsula.

## LITERATURE CITED

Murphy, R.L. 1992. Number of salmon systems and distribution of escapements in the Alaska Peninsula and Aleutian Islands Management Areas, 1986-91. Regional Information Report No. 4K92-15, Alaska Department of Fish and Game, Division of Commercial Fisheries, Region IV Report, Kodiak.

Table 1. Districts, sections, and statistical areas for the Alaska Peninsula and Aleutian Islands Management Areas, 1995.

| Fishing Area Location            | Statistical Areas   |
|----------------------------------|---|
| <b>SOUTH PENINSULA</b>           |   |
| Southeastern District            |   |
| Southeast District Mainland      | 281-15; 281-25; 281-30; 281-40;<br>281-50; 281-60; 281-70; 281-80;<br>281-90                                    |
| Shumagin Island Section          | 282-10; 282-11; 282-20; 282-25;<br>282-30; 282-35; 282-40; 282-42;<br>282-45; 282-65; 282-70; 282-75;<br>282-80 |
| South Central District           |   |
| Canoe Bay                        | 283-24  |
| Pavlof Bay                       | 283-21; 283-23; 283-25; 282-26  |
| Southwestern District            |   |
| Volcano Bay                      | 284-36  |
| Belkofski Bay                    | 284-42  |
| King Cove                        | 284-45  |
| Cold Bay                         | 284-62; 284-65; 284-67  |
| Deer Island                      | 284-55  |
| Thin Point                       | 284-75  |
| Morzhovoi Bay                    | 284-80  |
| Ikatan Peninsula to Cape Lazaref | 284-90; 285-20; 285-30  |
| Sanak Island                     | 285-10  |
| Unimak District                  |   |
| Cape Lutke                       | 285-40  |
| <b>ALEUTIAN ISLANDS AREA</b>     |   |
| Unalaska District                | 302-22  |
| <b>NORTH PENINSULA</b>           |   |
| Northwestern District            |   |
| Urilia Bay                       | 311-32  |
| Swanson Lagoon                   | 311-52  |
| Bechevin Bay                     | 311-60  |
| Izembek-Moffet Bay Section       | 312-10; 312-20; 312-40  |
| Northern District                |   |
| Black Hills Section              | 313-10  |
| Nelson Lagoon Section            | 313-30  |
| Herendeen Bay                    | 314-20  |
| Harbor Point to Cape Seniavin    | 314-12; 315-11; 315-20  |
| Cape Seniavin to Strogonof Point | 316-10; 316-20; 316-22; 316-25  |
| Outer Port Heiden Section        | 317-10  |
| Inner Port Heiden Section        | 317-20  |
| Cinder River Section             | 318-20  |

Table 2. Sockeye salmon catch sampling schedule for the Alaska Peninsula and Aleutian Islands Management Areas, 1994.

| Crew                   | SAMPLING AREA  |                                  |                                     | SAMPLE |        |          |          |
|------------------------|--|----------------------------------|-------------------------------------|--------|--------|----------|----------|
|                        | District/Section   | Geographic Area                  | Statistical Area(s)                 | Freq.  | Size   | Data     | Fishery  |
| Port Moller            | Northern District:   |                                  |                                     |        |        |          |          |
|                        | Nelson Lagoon Section                                      | Nelson Lagoon                    | 313-30                              | Weekly | 600    | Scales   | Terminal |
|                        | Bear River (prior to June 25)                              | Harbor Point to Cape Seniavin    | 314-12,315-11,20                    | Weekly | 600    | Scales   | Mixed    |
|                        | Bear River, Three Hills, and Ilnik Sections (post June 24) | Harbor Point to Strogonof Point  | 314-12,315-11,20<br>316-10,20,22,25 | Weekly | 1,200  | Scales   | Mixed    |
|                        | Ilnik Section (Lagoon)                                     | Ilnik Lagoon                     | 316-22                              | Weekly | 600    | Scales   | Terminal |
|                        | Outer Port Heiden Section                                  | Outer Port Heiden                | 317-10                              | Weekly | 600    | Scales   | Mixed    |
|                        | Inner Port Heiden Section                                  | Inner Port Heiden                | 317-20                              | Weekly | 600    | Scales   | Terminal |
| King Cove              | Northwestern District:                                     |                                  |                                     |        |        |          |          |
|                        |  | Urilia Bay                       | 311-32                              | Weekly | 600    | Scales   | Terminal |
|                        | Southeastern District:                                     |                                  |                                     |        |        |          |          |
|                        | Southeast District Mainland                                | Beaver and Balboa Bays, Stepovak | 281-90,80,30                        | Weekly | 600    | Scales   | Mixed    |
|                        | Shumagin Is. Section                                       | Shumagin Islands                 | 282's, see Table 1                  | Weekly | 600    | Scales   | Mixed    |
|                        | South Central District:                                    |                                  |                                     |        |        |          |          |
|                        |  | Long Beach                       | 283-26                              | Weekly | 600    | Scales   | Mixed    |
|                        |  | Cape Tolstoi                     | 283-21                              | Weekly | 600    | Scales   | Mixed    |
|                        |  | Canoe Bay                        | 283-24                              | Weekly | 600    | Scales   | Mixed    |
|                        |  | Pavlof Bay                       | 283-21,23,25,26                     | Weekly | 600    | Scales   | Mixed    |
| Southwestern District: |  |                                  |                                     |        |        |          |          |
| Thin Point Section     | Thin Point Lagoon  | 284-75                           | Weekly                              | 600    | Scales | Terminal |          |
|                        | Morzhovoi Bay  | 284-80                           | Weekly                              | 600    | Scales | Terminal |          |

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Table 2. (page 2 of 2)

| Crew         | SAMPLING AREA     |                                     |                     | SAMPLE |      |        |         |
|--------------|-------------------|-------------------------------------|---------------------|--------|------|--------|---------|
|              | District/Section  | Geographic Area                     | Statistical Area(s) | Freq.  | Size | Data   | Fishery |
| King<br>Cove | Unimak District:  | Cape Lutke                          | 285-40              | Weekly | 600  | Scales | Mixed   |
|              |                   | Ikatan Peninsula<br>to C. Lazaref   | 284-90,285-20,30    | Weekly | 600  | Scales | Mixed   |
|              | Unalaska District | Aleutian Islands<br>Management Area | 302-                | Weekly | 600  | Scales | Mixed   |

Table 3. Chum salmon catch sampling schedule for the Alaska Peninsula and Aleutian Islands Management Areas, 1994.

| Crew                   | SAMPLING AREA  |  |                                     | SAMPLE |        |          |          |
|------------------------|--|--|-------------------------------------|--------|--------|----------|----------|
|                        | District/Section   | Geographic Area                            | Statistical Area(s)                 | Freq.  | Size   | Data     | Fishery  |
| Port Moller            | Northern District:   |  |                                     |        |        |          |          |
|                        | Nelson Lagoon Section                                      | Nelson Lagoon                              | 313-30                              | Weekly | 440    | Scales   | Terminal |
|                        | Moller/Herendeen Bay Section                               | Herendeen Bay                              | 314-20                              | Weekly | 440    | Scales   | Terminal |
|                        | Bear River Section (prior to June 25)                      | Harbor Point to Cape Seniavin              | 314-12,315-11,20                    | Weekly | 440    | Scales   | Mixed    |
|                        | Bear River, Three Hills, and Ilnik Sections (post June 24) | Harbor Point to Strogonof Point            | 314-12,315-11,20<br>316-10,20,22,25 | Weekly | 440    | Scales   | Mixed    |
| King Cove              | Northwestern District:                                     |  |                                     |        |        |          |          |
|                        | Izembek-Moffet Bay Section                                 | Izembek-Moffet Bay                         | 312-10,20,40                        | Weekly | 440    | Scales   | Terminal |
|                        |  | Swanson Lagoon                             | 311-52                              | Weekly | 440    | Scales   | Mixed    |
|                        | Southeastern District:                                     |  |                                     |        |        |          |          |
|                        | Southeast District Mainland                                | Beaver and Balboa Bays, Stepovak           | 281-90,80,70                        | Weekly | 440    | Scales   | Mixed    |
|                        |  |  |                                     | Weekly | 440    | Scales   | Mixed    |
|                        | Shumagin Is. Section                                       | Shumagin Islands                           | 282-10,11,20,25,30,35,40,42         | Weekly | 440    | Scales   | Mixed    |
|                        | South Central District:                                    |  |                                     |        |        |          |          |
|                        |  | Coal Bay<br>Canoe Bay<br>Pavlof Bay        | 283-17<br>283-24<br>283-21,23,25,26 | Weekly | 440    | Scales   | Mixed    |
|                        |  |  |                                     | Weekly | 440    | Scales   | Mixed    |
| Weekly                 |  |  |                                     | 440    | Scales | Mixed    |          |
| Southwestern District: |  |  |                                     |        |        |          |          |
|                        | Volcano Bay<br>Belkofski Bay<br>Cold Bay<br>Morzhovoi Bay  | 284-36<br>284-42<br>284-62,65,67<br>284-80 | Weekly                              | 440    | Scales | Mixed    |          |
|                        |  |  | Weekly                              | 440    | Scales | Terminal |          |
|                        |  |  | Weekly                              | 440    | Scales | Mixed    |          |
|                        |  |  | Weekly                              | 440    | Scales | Both     |          |

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Table 3. (page 2 of 2)

| Crew         | SAMPLING AREA    |                                   |                     | SAMPLE |      |        |         |
|--------------|------------------|-----------------------------------|---------------------|--------|------|--------|---------|
|              | District/Section | Geographic Area                   | Statistical Area(s) | Freq.  | Size | Data   | Fishery |
| King<br>Cove | Unimak District: | Cape Lutke                        | 285-40              | Weekly | 440  | Scales | Mixed   |
|              |                  | Ikatan Peninsula<br>to C. Lazaref | 284-90,285-20,30    | Weekly | 440  | Scales | Mixed   |

Table 4. Coho salmon catch sampling schedule for the Alaska Peninsula Management Areas, 1994.<sup>a</sup>

| Crew                   | SAMPLING AREA                               |                                  |                                     | Freq.  | SAMPLE |          |          |
|------------------------|---|----------------------------------|-------------------------------------|--------|--------|----------|----------|
|                        | District/Section                            | Geographic Area                  | Statistical Area(s)                 |        | Size   | Data     | Fishery  |
| Port Moller            | Northern District:                          |                                  |                                     |        |        |          |          |
|                        | Nelson Lagoon Section                       | Nelson Lagoon                    | 313-30                              | Weekly | 300    | Scales   | Terminal |
|                        | Bear River, Three Hills, and Ilnik Sections | Harbor Point to Strogonof Point  | 314-12,315-11,20<br>316-10,20,22,25 | Weekly | 300    | Scales   | Terminal |
| King Cove              | Northwestern District:                      |                                  |                                     |        |        |          |          |
|                        | Izembek-Moffet Bay Section                  | Izembek-Moffet Bay               | 312-10,20,40                        | Weekly | 300    | Scales   | Terminal |
|                        |   | Swanson Lagoon                   | 311-52                              | Weekly | 300    | Scales   | Terminal |
|                        | Southeastern District:                      |                                  |                                     |        |        |          |          |
|                        | Southeast District Mainland                 | Beaver and Balboa Bays, Stepovak | 281-90,80,70                        | Weekly | 300    | Scales   | Mixed    |
|                        |   |                                  |                                     | Weekly | 300    | Scales   | Mixed    |
|                        | Shumagin Is. Section                        | Shumagin Islands                 | 282-10,11,20,25,<br>30,35,40,42     | Weekly | 300    | Scales   | Mixed    |
|                        | South Central District:                     |                                  |                                     |        |        |          |          |
|                        |   | Coal Bay                         | 283-17                              | Weekly | 300    | Scales   | Mixed    |
|                        |   | Canoe Bay                        | 283-24                              | Weekly | 300    | Scales   | Mixed    |
| Pavlof Bay             |   | 283-21,23,25,26                  | Weekly                              | 300    | Scales | Mixed    |          |
| Southwestern District: |   |                                  |                                     |        |        |          |          |
|                        | Volcano Bay                                 | 284-36                           | Weekly                              | 300    | Scales | Mixed    |          |
|                        | Belkofski Bay                               | 284-42                           | Weekly                              | 300    | Scales | Terminal |          |
|                        | Cold Bay                                    | 284-62,65,67                     | Weekly                              | 300    | Scales | Mixed    |          |
|                        | Morzhovoi Bay                               | 284-80                           | Weekly                              | 300    | Scales | Both     |          |

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Table 4. (page 2 of 2)

| Crew         | District/Section | SAMPLING AREA                     |                     | SAMPLE |      |        |         |
|--------------|------------------|-----------------------------------|---------------------|--------|------|--------|---------|
|              |                  | Geographic Area                   | Statistical Area(s) | Freq.  | Size | Data   | Fishery |
| King<br>Cove | Unimak District: | Cape Lutke                        | 285-40              | Weekly | 300  | Scales | Mixed   |
|              |                  | Ikatan Peninsula<br>to C. Lazaref | 284-90,285-20,30    | Weekly | 300  | Scales | Mixed   |

Table 5. Chinook salmon catch sampling schedule for the Alaska Peninsula Management Areas, 1994.<sup>a</sup>

| Crew           | SAMPLING AREA   |                                    |  | SAMPLE |      |        |          |
|----------------|---|------------------------------------|--|--------|------|--------|----------|
|                | District/Section  | Geographic Area                    | Statistical Area(s)                      | Freq.  | Size | Data   | Fishery  |
| Port<br>Moller | Northern District:  |                                    |  |        |      |        |          |
|                | Nelson Lagoon<br>Section                                    | Nelson Lagoon                      | 313-30                                   | Weekly | 300  | Scales | Terminal |
|                | Bear River Section<br>(prior to July 25)                    | Harbor Point to<br>Cape Seniavin   | 314-12, 315-11, 20                       | Weekly | 300  | Scales | Terminal |
|                | Bear River, Three Hills,<br>Ilnik Section<br>(post June 24) | Harbor Point to<br>Strogonof Point | 314-12, 315-11, 20<br>316-10, 20, 22, 25 | Weekly | 300  | Scales | Terminal |

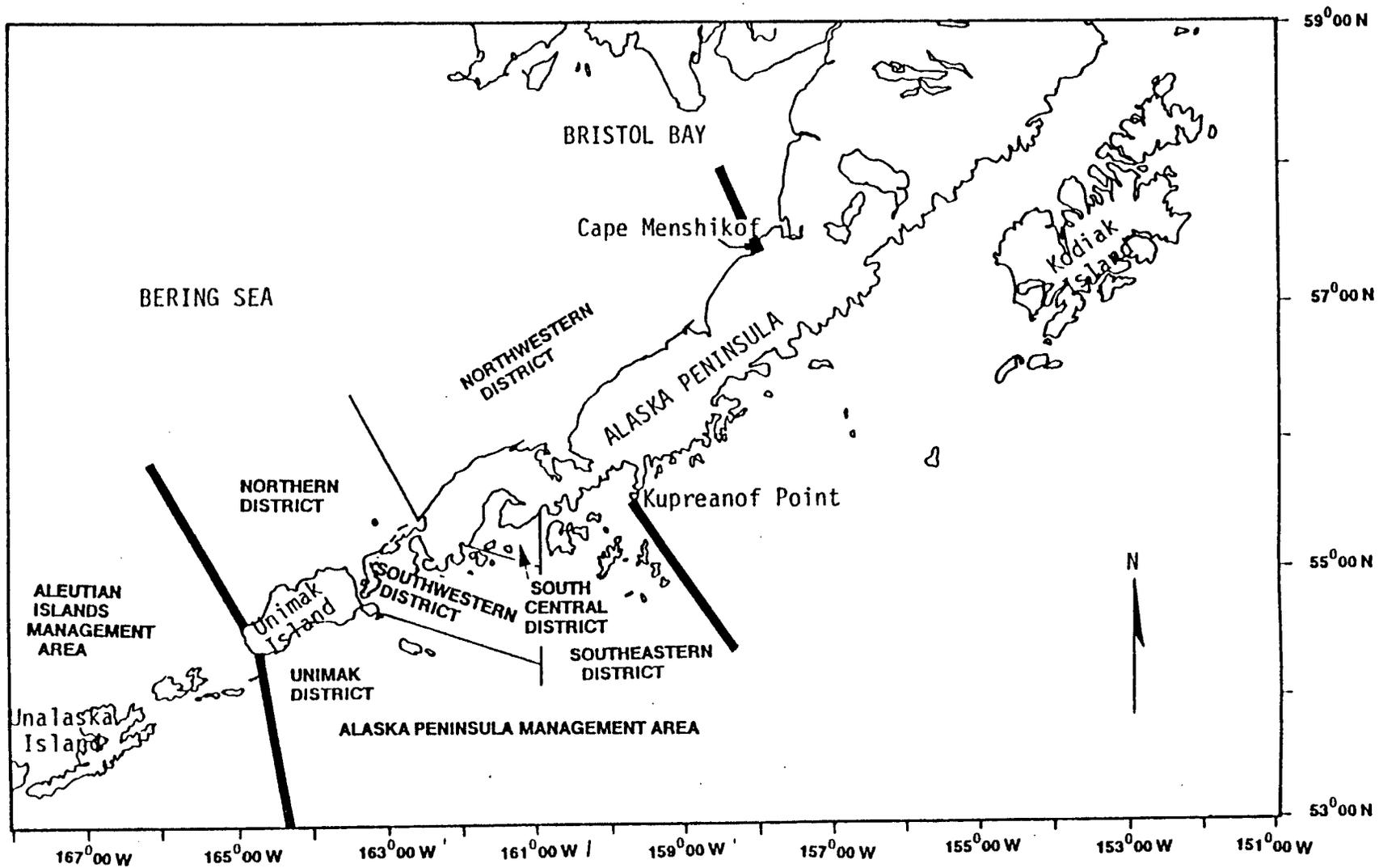


Figure 1. The Alaska Peninsula Management Area.

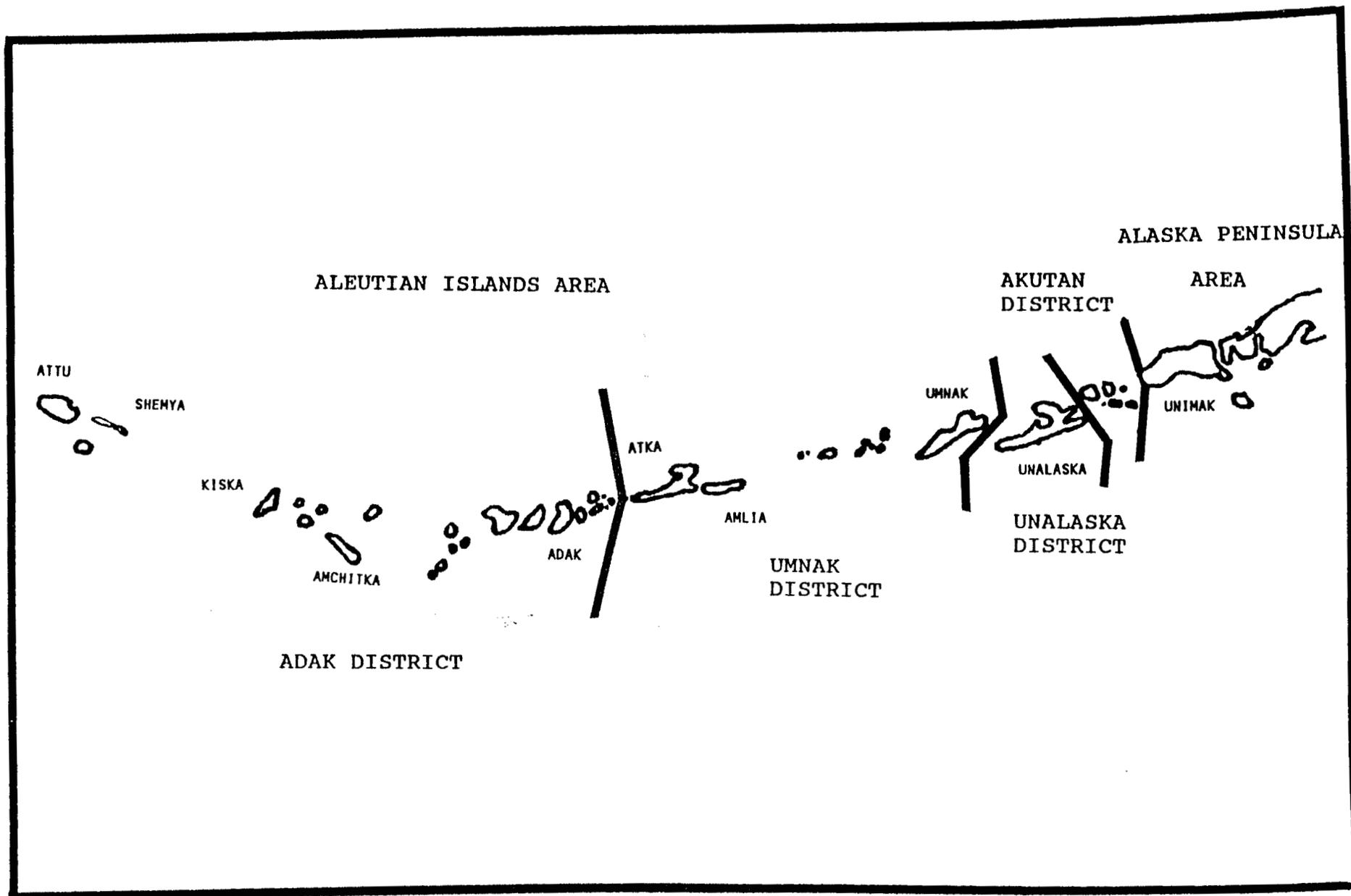


Figure 2. Aleutian Islands Management Area with districts shown.

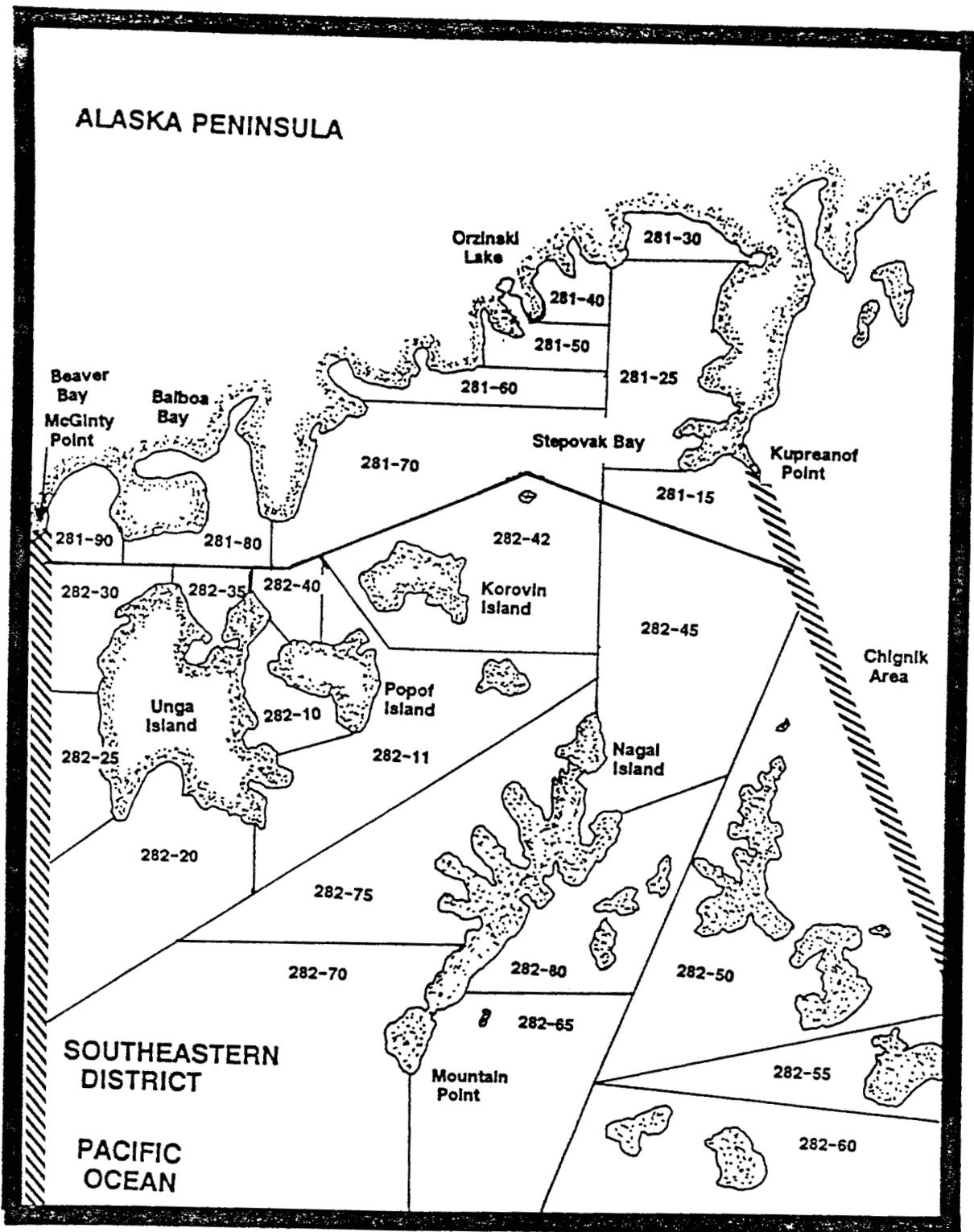


Figure 3. The Southeastern District with statistical areas shown.

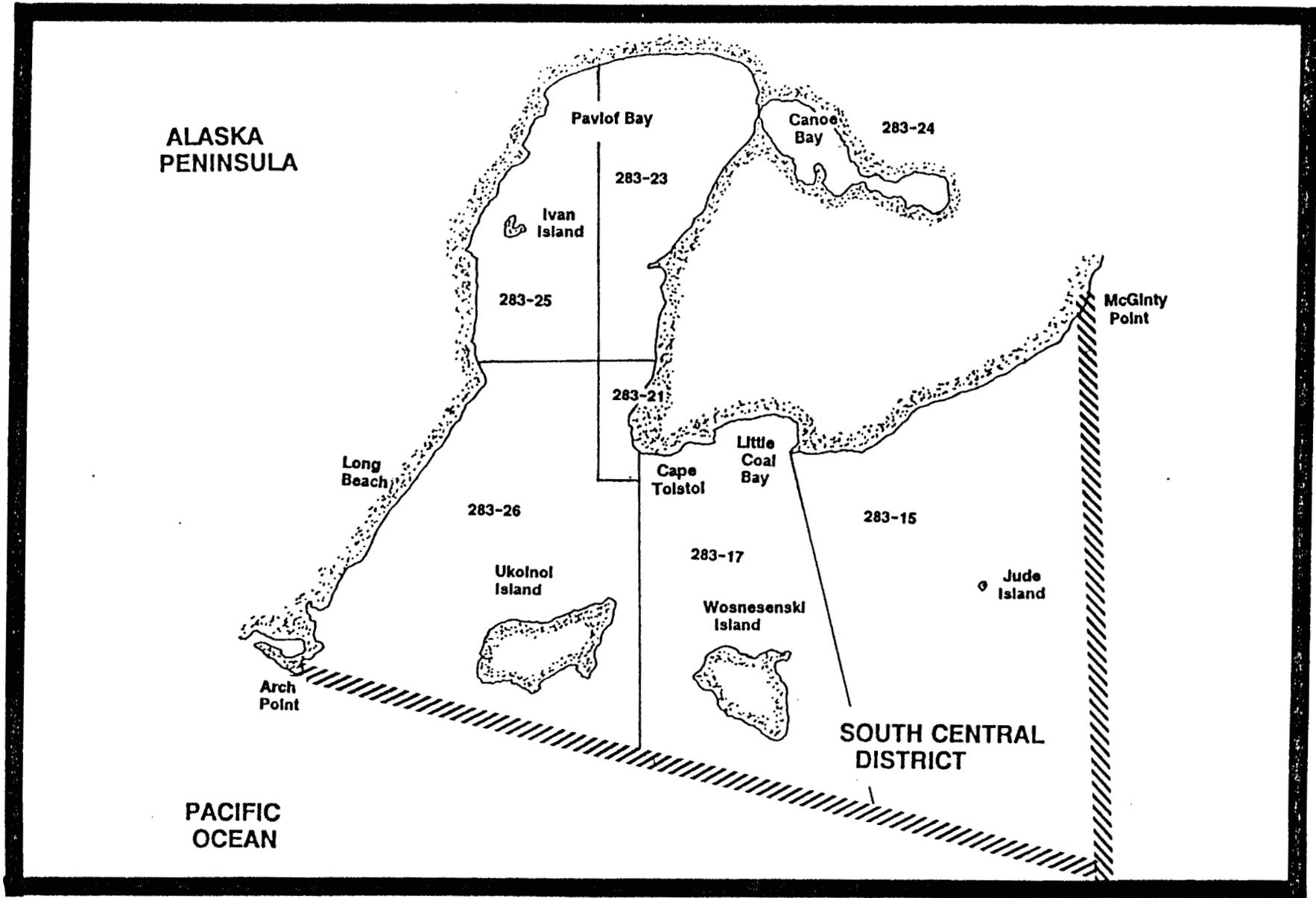


Figure 4. The South Central District with statistical areas shown.

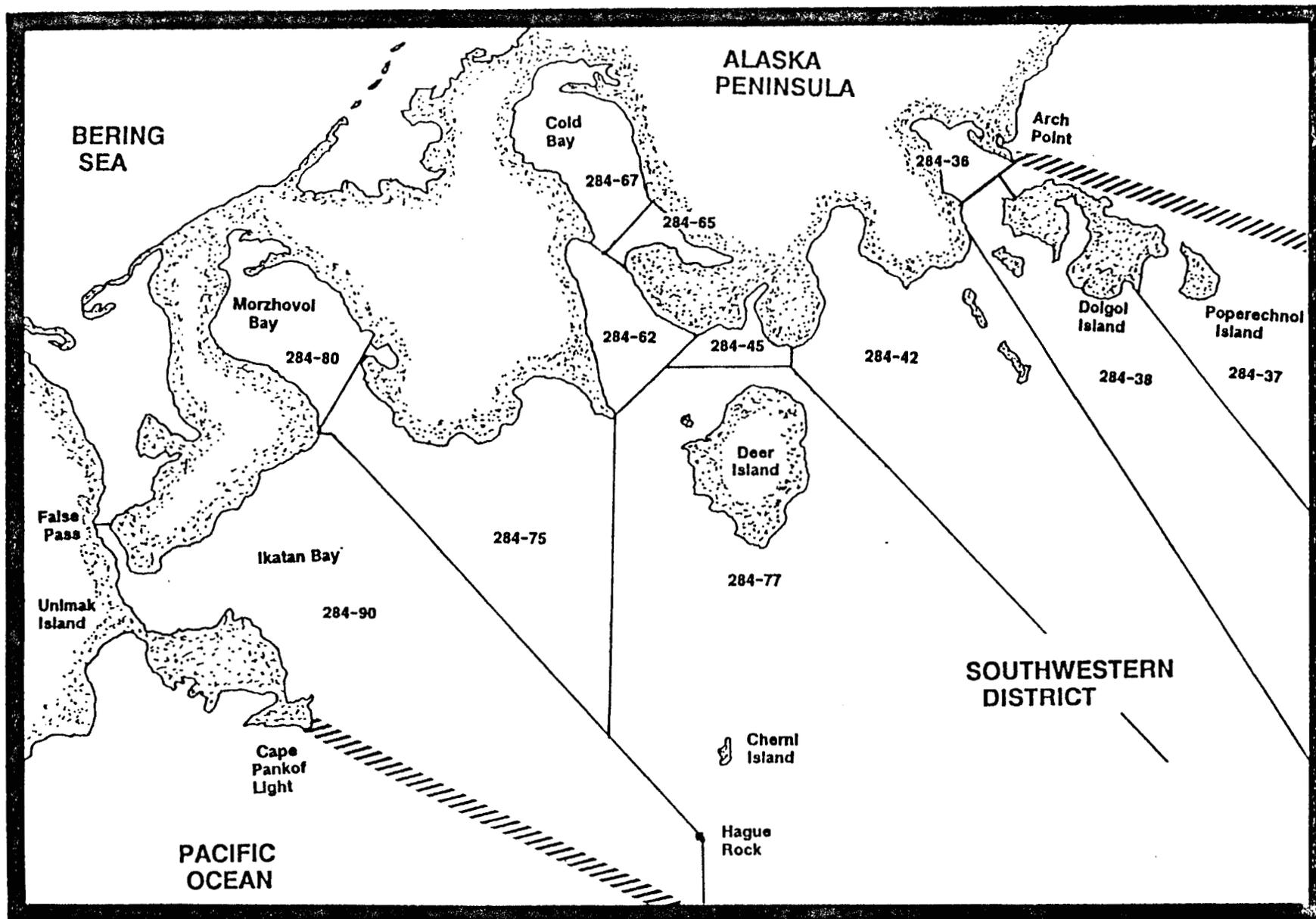
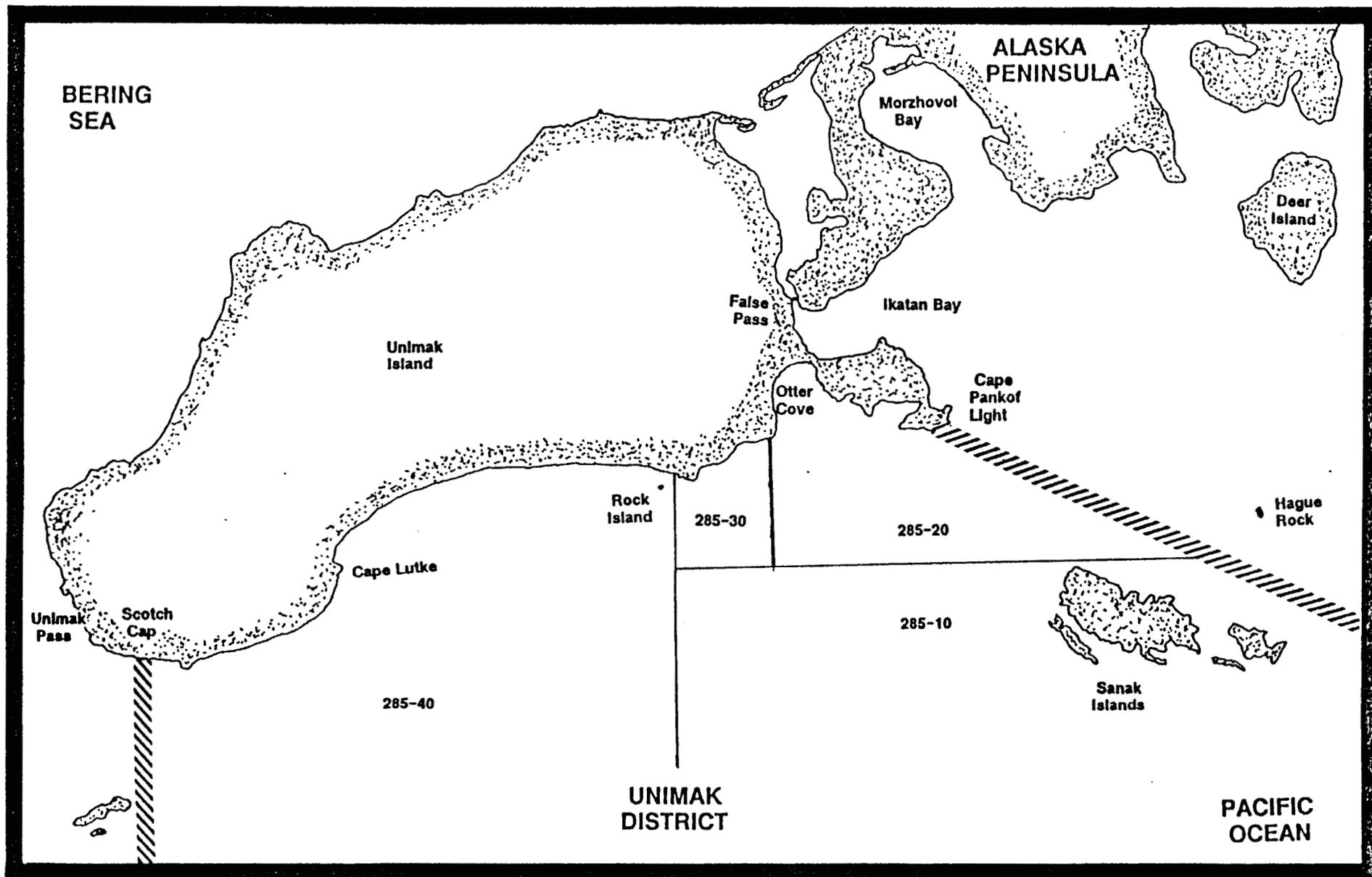


Figure 5. The Southwestern District with statistical areas shown.



20

Figure 6. The Unimak District with statistical areas shown.

APPENDIX A

Alaska Peninsula Scale Sampling Technique

## ALASKA PENINSULA SCALE SAMPLING TECHNIQUE

If you have not taken scales before or if you have any questions ask somebody who has prior experience in the sampling procedure. Scales must be readable to be useful, so follow proper techniques when sampling.

### Gum Cards

A scale card is a gum-backed sheet numbered 1 through 40. Samples are placed on the cards with no attempt to separate the fish by their sex.

It is important to keep the gum card dry at all times. If weather does not allow you to do this it is best to suspend sampling until dryer conditions prevail. A wet gum card is useless as the scales will fall-off before a readable impression can be made.

A new scale card is started for each day. Even if a card is not filled a new card is still to be started for each day. Also, a different card is to be used for each location, i.e. Nelson Lagoon vs. Herendeen Bay. It is important that scale cards and numbers match the corresponding AWL sheet.

### Scales

1. Clean the scale by wetting it and rubbing it between your fingers. Make sure no dirt, slime and skin (no silver color) remain on the scale.
2. Mount the scale on the gum card with the ridged side up. The ridged side is the same side that is exposed on the salmon.
3. One scale will be taken from sockeye and chum. Three scales will be taken from chinook salmon, and four scales from coho salmon.
4. Take the preferred scale if it is available, if not available take a scale but note on the AWL form that it is not preferred.
5. Scales should be neat, clean, and orderly.

### Age-Weight-Length (AWL) Sampling Form

Age - Scale samples are taken for age.  
Weight - Taken to nearest tenth of a kilogram on any adult fish not being returned live to the water (if required).  
Length - Taken with the fish laying flat from the mid-eye point to the fork of the tail (if required). Measure to the nearest millimeter.

\*\* Fill in all information on the AWL form.

\*\* Each AWL form should match up with the appropriate scale card.

APPENDIX B

Completion of Mark-Sense AWL Forms

## **Length, Sex, and Scale Sampling Procedure for Sampling: Using Mark-Sense Forms**

### **INTRODUCTION**

Salmon from terminal catches are sampled for length, sex, and scales annually. This data base is essentially used to provide sound management of the salmon resources. This information is used by management and research biologists for: (1) forecasting run strengths; (2) setting escapement goals; (3) examining the productivity of each system; (4) salmon growth analysis; (5) catch apportionment (based on age composition and/or scale pattern analysis); (6) in-season run estimation; and (7) to gain a better understanding of the biology of each stock.

To be useful, data must be recorded on the mark-sense forms neatly and accurately. The following procedures are to be followed when sampling for length, sex, and scales using mark-sense AWL forms.

### **COMPLETING THE FORMS:**

Information needed to complete as well as examples of completed mark-sense AWL forms and accompanying gum cards for sampling commercial salmon catches from chinook, sockeye, and coho salmon are shown in Appendix B.1-B.5.

Complete each section of the left side of the mark-sense form using a soft No. 2 pencil and darken the corresponding blocks as shown in the figures. Make every effort to darken the entire block as partially filled blocks are often missed by the optical scanner which reads and records the data from the mark-sense AWL forms. If the blocks are not darkened properly, considerable time will be required to edit these forms during the winter. Label only one form at a time to avoid "the carbon paper effect" and resulting stray marks.

#### **Description:**

For catch sampling: Area/Samplers (names)

#### **Gum Card:**

The AWL forms and corresponding gum card(s) are numbered sequentially by date throughout the season starting with 001 for each fishery. A separate numbering sequence will be used for each species, gear type, district, and geographic location. Consult your crew leader for the current card number. Sockeye and chum samples will have only 1 card per AWL form as shown in Appendix B.4. Coho and chinook samples will contain up to four cards per AWL form as shown in Appendix B.2 and B.5.

#### **Species:**

Refer to the reverse side of the AWL form for the correct digit.

#### **Day, Month, Year:**

Use appropriate digits for the date the fish are caught, not the date that they are processed.

**District:**

List only one district. Consult project leader for appropriate district and subdistrict numbers.

**Subdistrict:**

List a single subdistrict if it is known and all the fish sampled were from that single subdistrict. Leave it blank if more than one subdistrict is involved or if the subdistrict is unknown.

**Stream:**

Leave blank for catch sampling.

**Location:**

For catch sampling list the appropriate port code (Appendix B.1).

**Period:**

Refers to the calendar dates when sample was harvested (not the sample date) as found in Appendix B.3.

**Project:**

Refer to the reverse side of the AWL form for the correct code.

**Gear:**

Refer to the reverse side of the AWL form.

**Mesh:**

Leave blank unless specifically instructed by supervisor to do otherwise.

**Type of length measurement:**

Use (2) mid-eye to fork-of-tail (unless specifically instructed to do otherwise).

**# of cards:**

Mark 1 when sampling sockeye and chum salmon (Appendix B). Mark 1A, 1B, 1C, or 1D when sampling chinook and coho salmon and write the card numbers perpendicular to the left of the fish # column as shown in Appendix B.

It is extremely important to keep the mark-sense forms flat, dry, and clean. Fish slime and water curling will cause data to be misinterpreted by the optical scanning reader machine. If unnecessary pencil marks, dark spots, etc. are visible, they need to be erased or else the machine will misinterpret the mark. It is necessary to completely fill in all information and darken the boxes (if needed) after each day.

Additional data columns are available on the reverse of the AWL for individual project use. If you take weights, you need to transfer the dark boxes on the front left margin of the form to the left margin on the back. This code needs to be exactly as it appears on the front.

GUM CARD(S):

Fill out the gum cards as shown in Appendices B.2, B.4, and B.5.

**Species:**

Write out completely (i.e., chinook, sockeye, etc.).

**Locality:**

For catch sampling, write down area in which fish were caught followed by the word catch (e.e., Herendeen Bay Catch).

**Statistical code and Sampling date:**

Transfer the appropriate digits from the AWL form.

**Gear:**

Write out completely.

**Collector(s):**

Record the last name or initials of the person(s) sampling.

**Remarks:**

Record any pertinent information such as; number of scales per fish sampled, vessel/tender name, etc. Transfer this same information to the top margin of the AWL.

SAMPLING:

A. GENERAL

1. (WHEN REQUESTED BY AN AMB): Sex the fish and darken M or F in the sex columns. If any difficulty was encountered in this procedure, write "I had trouble sexing these fish" on the top margin of the AWL and ask your supervisor for help as soon as possible before sexing additional fish.
2. (WHEN REQUESTED BY AN AMB): Measure all species length in millimeters from the middle of the eye to the fork of the tail, refer to Appendix B. Record length by blackening the appropriate column blocks on the AWL form. Column 3 on the AWL form is used for fish over 999 millimeters long. Measure all species of salmon to the nearest mm. Check the calipers daily before use to ensure the accuracy of the measurements.
3. Pluck the "preferred scale" from the fish using forceps. Remove all slime, grit, and skin from the scale by moistening and rubbing between fingers. The "preferred scale" is located on the left side of the fish, two rows above the lateral line on the diagonal from the posterior insertion of the dorsal fin to the anterior insertion of the anal fin. Refer to Appendix B. If the "preferred scale" is missing, select a scale within the preferred area on either the left or right side of the fish. If no scales are present in the "preferred area" on both sides of the fish, sample a scale as close to the preferred area as possible and darken the 8 under "age error code" on the AWL form.

4. Clean, moisten and mount scale on gum card directly over number 1 as shown in Appendix B. The side of the scale facing up on the gum card is the same as the side facing up when it was adhered to the fish. The exposed facing side is referred to as the "sculptured" side of the scale. The ridges on this sculpture side can be felt with a fingernail or forceps. Mount scale with anterior end oriented toward top of gum card.
5. When sampling sockeye and chum salmon repeat steps 1 through 4 for up to 40 fish on each AWL form.
6. When taking three scales per fish as with chinook or four scales per fish as with coho salmon sample the "preferred scale" and scale #2 and scale #3 as shown in Appendix B. Scale #2 is one inch to the left of the "preferred scale," scale #3 is located one inch to the right, and scale #4 is located between next to any of the other three preferred scales. All are two rows above the lateral line. Mount the three scales from fish #1 over 1, 11, and 21, or 31 if four scales are taken (coho), on the gum card as shown in Appendix B.5. Continuing, mount the 3 scales from fish #2 over 2, 12, and 22, etc.
7. Use plastic scale card holders to hold individual scale cards during sampling and cover the completed gum card with wax paper for storage.
8. Miscellaneous:
  - a. When scales are sampled in wet conditions it is difficult to mount scales in a fashion so as to result in a good scale impression being made. Glue often obscures scale features and scales frequently adhere poorly to the card. Try to keep all the paperwork dry during this time. If the gumcard does get wet, the scales should be remounted.
  - b. For adipose clipped fish record the head tag number on the corresponding row in the first five columns on the reverse side of the AWL.
  - c. Look down the form from two angles after the data has been recorded to pick up any glaring mistakes. A common error occurs, for instance, in placing both the 4 and 7 of a 475 mm fish in the 100's column with nothing in the 10's column.
  - d. Keep all fish slime off forms and erase any stray marks on the forms before turning them in to your supervisor.
  - e. Write in all comments explicitly and completely under remarks, transfer remarks to top margin of AWL.
  - f. Responsibility for accuracy lies first with the primary data collector(s). The port supervisor will return sloppy or incomplete data to individual collectors. After editing a form, place your initials next to card #, but not in left margin. Editing these forms will save valuable time during the winter, and is an extremely important part of your job duties.

9. As soon as possible after completion send the samples and mark-sense forms to Port Moller. During scheduled radio calls before and following the sending of data, the crew leader will notify staff in Port Moller: (1) that the data is being mailed (use a moisture-proof container); (2) what data is being sent; (3) when delivery is expected in Port Moller; and (4) who is transporting the data. It is important that these steps are followed to ensure delivery.

### SCALE SAMPLING CHECKLIST

|                            |                   |                             |
|----------------------------|-------------------|-----------------------------|
| Clipboard                  | Pencils (No. 2)   | Gloves                      |
| Gum Cards                  | Forceps           | Measuring board or calipers |
| AWL's                      | Wax paper inserts | Sampling Manual             |
| Plastic scale card holders |                   |                             |

### SOME REMINDERS

1. For greater efficiency in scale reading and digitizing, mount scales with anterior end toward top of scale card.
2. AWL's should be carefully edited before submitting. This is extremely important, and cannot be emphasized enough. Re-check header information on AWL's; make sure all available information is filled in. Take extra care to use the catch date and not sample date. Page numbers should not be repeated; a frequent error is to begin a week's sample with the last page number used the week before. This is particularly important if the data regularly is sent to town; it is easy to forget which numbers were used. Crew leaders should take time to ensure that the boxes are being blackened correctly, if the boxes are not darkened properly or sloppily marked the optical scanner records the information incorrectly or misses it entirely. Keep marks within each rectangle and completely fill them. Do not go outside the rectangle. After the AWL's are edited, place editor's initial next to page number, but not in left margin.
3. Check to make sure error codes (listed on back) are being used correctly, i.e. error code 7 is wrong species, error code 8 is non-preferred. Error code 6 is for the use of the scale reader, it refers to the reabsorption of the scale.
4. Transfer important comments from scale cards to AWL's. After pressing scales, the cards are seldom referred to again, and important remarks can be lost. Write comments in the top margin (not on the left side) or on the reverse of the AWL. If no room is available on the AWL to completely explain the remarks, use a separate piece of paper.

5. Never put data from different dates on one AWL or one scale card. Even if only one scale is collected that day, begin a new card and AWL for the next day.
6. If weights are requested to be taken, they may be noted in the right margin of the AWL during sampling, but be sure to transfer the weights to the appropriate columns on the reverse of the AWL before submitting, and darken in the code from the left front margin to the left back margin of the AWL form.
7. The data processing program uses the "litho code" on the AWL. (It is located in the lower left margin of the AWL.) It helps if the AWL's are used in the order of this code. It should not be hard to keep them in order if they are arranged that way before page numbering. Those who sample different areas throughout the season can arrange the litho codes in order before each sample is taken.
8. If AWL's get wrinkled or blotched they should be copied over before sending to Port Moller. The optical scanning machine is extremely sensitive to wrinkles and blotches and will misread or reject the sheets.

Appendix B.1. Assigned port and weir location codes.

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Port Codes

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150 - King Cove  
151 - Port Moller  
152 - Dutch Harbor  
153 - Akutan  
154 - Sand Point  
155 - Bear River, ADF&G Weir  
156 - Nelson River, ADF&G Weir  
157 - Canoe Bay  
158 - Ilnik Lagoon, ADF&G Weir  
159 - Orzinski River, ADF&G Weir  
160 - Sandy River, ADF&G Weir  
161 - Thin Point Lagoon, ADF&G Weir  
162 - Middle Lagoon, ADF&G Weir

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Appendix B.3. Periods and corresponding calendar dates, 1995.

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| Period | Calendar Dates   | Period | Calendar Dates   |
|--------|------------------|--------|------------------|
| 1      | 01-Jan to 03-Jan | 28     | 05-Jul to 11-Jul |
| 2      | 04-Jan to 10-Jan | 29     | 12-Jul to 18-Jul |
| 3      | 11-Jan to 17-Jan | 30     | 19-Jul to 25-Jul |
| 4      | 18-Jan to 24-Jan | 31     | 26-Jul to 01-Aug |
| 5      | 25-Jan to 31-Jan | 32     | 02-Aug to 08-Aug |
| 6      | 01-Feb to 07-Feb | 33     | 09-Aug to 15-Aug |
| 7      | 08-Feb to 14-Feb | 34     | 16-Aug to 22-Aug |
| 8      | 15-Feb to 21-Feb | 35     | 23-Aug to 29-Sep |
| 9      | 22-Feb to 28-Feb | 36     | 30-Aug to 05-Sep |
| 10     | 01-Mar to 07-Mar | 37     | 06-Sep to 12-Sep |
| 11     | 08-Mar to 14-Mar | 38     | 13-Sep to 19-Sep |
| 12     | 15-Mar to 21-Mar | 39     | 20-Sep to 26-Sep |
| 13     | 22-Mar to 28-Mar | 40     | 27-Sep to 03-Oct |
| 14     | 29-Mar to 04-Apr | 41     | 04-Oct to 10-Oct |
| 15     | 05-Apr to 11-Apr | 42     | 11-Oct to 17-Oct |
| 16     | 12-Apr to 18-Apr | 43     | 18-Oct to 24-Oct |
| 17     | 19-Apr to 25-Apr | 44     | 25-Oct to 31-Oct |
| 18     | 26-Apr to 02-May | 45     | 01-Nov to 07-Nov |
| 19     | 03-May to 09-May | 46     | 08-Nov to 14-Nov |
| 20     | 10-May to 16-May | 47     | 15-Nov to 21-Nov |
| 21     | 17-May to 23-May | 48     | 22-Nov to 28-Nov |
| 22     | 24-May to 30-May | 49     | 29-Nov to 05-Dec |
| 23     | 31-May to 06-Jun | 50     | 06-Dec to 12-Dec |
| 24     | 07-Jun to 13-Jun | 51     | 13-Dec to 19-Dec |
| 25     | 14-Jun to 20-Jun | 52     | 20-Dec to 26-Dec |
| 26     | 21-Jun to 27-Jun | 53     | 27-Dec to 31-Dec |
| 27     | 28-Jun to 04-Jul |        |                  |

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Species: Sockeye Card No: 015  
 Locality: Nelson Lagoon  
 Stat. Code: 313-20-151  
 Sampling Date: Mo. 6 Day 19 Year 91  
 Gear: \_\_\_\_\_  
 Collector(s): TM, NH, SN  
 Remarks: \_\_\_\_\_

RMA READER RM  
 W. G. P. S. J. SAMPLE DATE 4/20/91

DESCRIPTION: Sockeye Nelson Lagoon

ADF&G ADULT SALMON AGE-LENGTH FORM VERSION 2.1

|                             |     |       |        |     |           |                |
|-----------------------------|-----|-------|--------|-----|-----------|----------------|
| CARD: 015                   | SEX | 100's | LENGTH | 1's | AGE GROUP | AGE ERROR CODE |
| SPECIES: 2                  |     |       |        |     |           |                |
| DAY: 17                     |     |       |        |     |           |                |
| MONTH: 6                    |     |       |        |     |           |                |
| YEAR: 91                    |     |       |        |     |           |                |
| DISTRICT: 12                |     |       |        |     |           |                |
| SUBDISTRICT: 20             |     |       |        |     |           |                |
| STREAM:                     |     |       |        |     |           |                |
| LOCATION: 131               |     |       |        |     |           |                |
| PERIOD:                     |     |       |        |     |           |                |
| PROJECT: 1                  |     |       |        |     |           |                |
| GEAR:                       |     |       |        |     |           |                |
| MLSH:                       |     |       |        |     |           |                |
| TYPE OF LENGTH MEASUREMENT: |     |       |        |     |           |                |
| NUMBER SCALES/FISH: 1       |     |       |        |     |           |                |
| NO. OF CARDS: 1             |     |       |        |     |           |                |

|    |    |    |    |
|----|----|----|----|
| 1  | 11 | 21 | 31 |
| 2  | 12 | 22 | 32 |
| 3  | 13 | 23 | 33 |
| 4  | 14 | 24 | 34 |
| 5  | 15 | 25 | 35 |
| 6  | 16 | 26 | 36 |
| 7  | 17 | 27 | 37 |
| 8  | 18 | 28 | 38 |
| 9  | 19 | 29 | 39 |
| 10 | 20 | 30 | 40 |

Appendix B. 4. Sockeye salmon AWL form and gumcard with one scale per fish.

Species: Coho Card No: 001  
 Locality: Harbor PT - Cape Sabine  
 Stat. Code: 315- - -151  
 Sampling Date: Mo. 8 Day 18 Year 91  
 Gear: \_\_\_\_\_  
 Collector(s): T.M. MAA  
 Remarks: \_\_\_\_\_

DESCRIPTION: Coho Harbor - Cape Sabine

R. TA Reader: RM  
 Date 8/19

ADF&G ADULT SALMON AGE-LENGTH  
 FORM VERSION 2.1

| CARD: | #  | SEX | LENGTH |     |  | AGE GROUP | AGE ERROR CODE |
|-------|----|-----|--------|-----|--|-----------|----------------|
|       |    |     | 100's  | 1's |  |           |                |
| 001   | 1  | M   |        |     |  |           |                |
|       | 2  | F   |        |     |  |           |                |
|       | 3  | M   |        |     |  |           |                |
|       | 4  | F   |        |     |  |           |                |
|       | 5  | M   |        |     |  |           |                |
|       | 6  | F   |        |     |  |           |                |
|       | 7  | M   |        |     |  |           |                |
|       | 8  | F   |        |     |  |           |                |
|       | 9  | M   |        |     |  |           |                |
|       | 10 | F   |        |     |  |           |                |
|       | 11 | M   |        |     |  |           |                |
|       | 12 | F   |        |     |  |           |                |
|       | 13 | M   |        |     |  |           |                |
|       | 14 | F   |        |     |  |           |                |
|       | 15 | M   |        |     |  |           |                |
|       | 16 | F   |        |     |  |           |                |
|       | 17 | M   |        |     |  |           |                |
|       | 18 | F   |        |     |  |           |                |
|       | 19 | M   |        |     |  |           |                |
|       | 20 | F   |        |     |  |           |                |
|       | 21 | M   |        |     |  |           |                |
|       | 22 | F   |        |     |  |           |                |
|       | 23 | M   |        |     |  |           |                |
|       | 24 | F   |        |     |  |           |                |
|       | 25 | M   |        |     |  |           |                |
|       | 26 | F   |        |     |  |           |                |
|       | 27 | M   |        |     |  |           |                |
|       | 28 | F   |        |     |  |           |                |
|       | 29 | M   |        |     |  |           |                |
|       | 30 | F   |        |     |  |           |                |
|       | 31 | M   |        |     |  |           |                |
|       | 32 | F   |        |     |  |           |                |
|       | 33 | M   |        |     |  |           |                |
|       | 34 | F   |        |     |  |           |                |
|       | 35 | M   |        |     |  |           |                |
|       | 36 | F   |        |     |  |           |                |
|       | 37 | M   |        |     |  |           |                |
|       | 38 | F   |        |     |  |           |                |
|       | 39 | M   |        |     |  |           |                |
|       | 40 | F   |        |     |  |           |                |

10 9 8 7 6 5 4 3 2 1  
 20 19 18 17 16 15 14 13 12 11  
 30 29 28 27 26 25 24 23 22 21  
 40 39 38 37 36 35 34 33 32 31

PCS-DUCUSCAN® MB20 1/81/7 54 A5200

APPENDIX C

Camp Policy

## CAMP POLICY

1. No alcoholic beverages are to be stored in areas open to public view including cook tents. If alcohol is consumed at a camp an employee must be off-duty and under no circumstances shall he or she engage in the operation of any State equipment, including boats and motors nor shall he or she return to duty status under the influence of alcohol.
2. The crew leader of each sampling station shall establish a policy on living standards and personnel behavior in accordance with normal guidelines.
3. All sampling stations will operate as directed. No crew leader shall be off location for more than 24 hours unless specifically authorized by immediate supervisor. Time-off for individual crew members shall be scheduled by the crew leader and shall have the option as to whether sampling duties allow time-off from the location.
4. All employees will be required to act in a professional manner at all times and shall be especially courteous to the public.
5. It will be the responsibility of the crew leader to report any equipment abuse to the AMB and to ensure that abuse does not occur.

Additionally, the crew leader must also report within 24 hours any loss of equipment which occurs.

## PERSONAL GEAR AND PETS

Generally 100 lbs. is a maximum for personal gear. If you anticipate bringing more than that amount to your field camp, check with your supervisor first. Pets shall not be brought to a catch sampling site unless approved beforehand.

Rabies is common on the Alaska Peninsula, be careful of all mammals including ground squirrels, fox, wolf, otters, and your pet. If bitten save the head of the animal if possible, wrap the head in several layers of plastic, put in a good box and freeze if possible. Notify your supervisor of the accident and your supervisor will send you into Anchorage if tests for rabies prove positive. Burn and bury remaining parts of the carcass away from water sources and cabins, take precautions such as wearing plastic gloves to dispose of the carcass. Do not send suspected rabies animals out of your area unless you are bitten, burn and bury the carcass as instructed.

## RADIO SCHEDULES

Radio schedules will be made twice during every day. Radio schedules are normally at 8:45 a.m. and 7:45 p.m. on 3.230 megahertz unless otherwise specified and are usually handled by staff in Port Moller, however, on occasion it may be necessary for the catch sampling crew to perform radio schedules. King Cove crew are not required to participate in daily schedules but are requested to listen in on schedules when time permits. The morning schedule is used for passing along the current weather (visibility, ceiling, precipitation, etc.) and the previous days escapement counts. The evening schedule are used for updated escapement counts, grocery and supply orders, and the latest pertinent fishery announcements. All camps must complete the schedule within 15 minutes, so we do not invade another areas time allotment. So, keep the conversation short. Personal conversation between camps should be arranged as not to interfere with any ADF&G schedules.

If a field camp does not respond to two consecutive radio schedules, the worst will be assumed and a plane will be dispatched.

## FISH AND WILDLIFE VIOLATIONS

**CONTACT A FISH & WILDLIFE PROTECTION OFFICER IMMEDIATELY IF POSSIBLE!** This is not intended as an inclusive procedure for handling violations, it is not your job. Use this as a guideline for obtaining the necessary information and/or evidence to show and prove that a violation has been committed. It is important to be familiar with the commercial fishing, subsistence fishing, sport fishing, and hunting regulations in your area. Violation procedures are printed on the back cover of the commercial fishing regulation book. Request the regulation book if your camp does not have one.

The use of the 5 W's can greatly aid the Fish & Wildlife Protection officers in obtaining sufficient evidence for a case.

1. What is the violation?
2. When did the violation occur (date, time, tide condition, etc.)
3. Where did the violation occur?
4. Who is in violation and who are witnesses?
5. Why was the violation committed?

It is important that all witnesses to a violation be interviewed and all statements pertaining to a violation be recorded along with their names and addresses. If you have a camera available, pictures are extremely valuable in prosecuting offenders. Collect as much information as possible and contact your supervisor or a State Trooper from the Fish and Wildlife Protection Division immediately. If you do not feel comfortable, or your personal safety may be in danger, do not pursue the violation. Contact your supervisor and they will handle the violation. Be aware that you do not have the power to arrest somebody and never attempt this.

## **FIREARMS**

A State weapon will be provided at each location. You may bring your own firearm if you wish. Loaded guns are prohibited inside the camp facilities. Loaded, meaning a round in the chamber of the gun. Anyone handling a firearm should always treat it as if it were loaded. Guns should be kept clean and oiled and be completely unloaded while being cleaned. Any horseplay with or misuse of firearms while working for the Department of Fish and Game will not be tolerated and will be grounds for immediate dismissal. Completely unload a firearm of all rounds before entering a vessel or airplane. Keep an empty chamber under the firing pin of each pistol.

## **BEARS**

Do not antagonize bears - each one is a potential danger. Do not encourage bears to come around camp by leaving food or unburned garbage around. Do not shoot at a bear unless, in your best judgement, he is endangering someone's life or damaging personal or state property. Use your best judgement on whether to shoot a bear if property is at stake. When, and if, trying to frighten a bear away by shooting - do not fire toward it. By chance, you may wound it by pulling the shot, ricochets, etc. If you are having problems with a particular bear around camp, call the office and notify them of the situation. The Game Division personnel will take care of the problem, if it is feasible.

## **TRANSPORTATION**

Do not endanger life or property by going out in a boat on dangerously rough water. If you are unfamiliar with Marine Safety, ask for information or advice. All personnel must wear a life jacket when out on open water. Use your head - if you think it is dangerous, don't go out on the water.

Extra shear pins or propellers and a tool kit which includes pliers, spark plugs, and a spark plug wrench should be in the boat at all times. In case travel at night becomes necessary, carry a flashlight.

Some camps may be furnished with 3-wheel or 4-wheel all terrain vehicles (ATV's). The following safety precautions shall be observed at all times regarding Department ATV's. Only employees of the State may use the vehicles. Non-Fish and Game employees are not allowed on these vehicles at any time. Only one employee may ride on the vehicle at one time. Safety helmets are provided for all riders.

Review the Marine Safety and Light Aircraft Safety Manuals located at all camps before boating or flying. Do not get in a boat or plane if you feel uncomfortable with the situation. Consult the crew leader or pilot beforehand.

APPENDIX D

First Aid and Safety

## **FIRE AND FIRST AID**

Check your camp's fire extinguisher. Know where it is and how to use it! Inventory your camp first aid kit, replace items as needed and become familiar with basic first aid treatment. Review the first aid booklet.

Take pains to avoid intestinal parasites carried by beaver and otter etc. When in doubt, boil your drinking water.

Keep the cabin or facilities, surrounding area, and yourself clean and neat. Appearance is important. You will not always be notified of the intended arrival of visitors, officials, etc. Impressions of visitors are often based on appearance.

Rabies is common on the Alaska Peninsula, be careful of all mammals including ground squirrels, fox, wolf, otters, and your pet. If bitten save the head of the animal if possible, wrap the head in several layers of plastic, put in a good box and freeze if possible. Notify your supervisor of the accident immediately. Burn and bury remaining parts of the carcass away from water sources and cabins, take precautions such as wearing plastic gloves to dispose of the carcass. Do not send suspected rabies animals out of your area unless you are bitten, burn and bury the carcass as instructed.

## **APPEARANCE**

Keep the cabin, surrounding area, and yourself clean and neat. Appearance is important even in remote camps. Impressions of visitors (public, visitors, officials, etc.) are often based on personal appearances. Do your best to look respectable and keep the grounds clean.

## **COMPATIBILITY OF FIELD PERSONNEL**

If you find yourself unable to get along with other members at your camp, notify the appropriate supervisor and an attempt will be made to solve the problem. Usually, the person with the most experience in camp will be the crew leader. If it is not clear who has been designated crew leader in your camp ask your supervisor.

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## MEMORANDUM

## STATE OF ALASKA

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To: Catch Sampling Crews

1995 FIELD CAMPS

From: Bob Murphy  
Area Management Biologist  
Division of Commercial Fisheries  
Department of Fish & Game - Kodiak, Port Moller

SUBJECT: Health and Welfare of Crew Members

All employees must read the Safety Standard Operational Plans and other safety materials included and must be fully aware of all health and safety practices (e.g. basic first aid, location of fire extinguishers, etc.). More often than not, these obvious practices are ignored. With camps as they are, neglect of health practices can have serious ramifications if an employee were to become ill.

King Cove and Port Moller have medical clinics. Insurance forms will be available at both locations. Inform your supervisor immediately of any illness or injury that will require medical assistance or lost work time.

A State rifle or shotgun will be provided at each camp. You may bring your own firearm if you wish. Loaded guns are prohibited inside the camp facilities. Loaded, meaning a round in the chamber of the gun. Anyone handling a firearm should always treat it as if it were loaded. Guns should be kept clean and oiled and be completely unloaded while being cleaned. Any horseplay with or misuse of firearms while working for the Department of Fish and Game will not be tolerated and will be grounds for immediate dismissal. Completely unload a firearm of all rounds before entering a vessel or airplane. Keep an empty chamber under the firing pin of each pistol to prevent accidental discharge by accidentally dropping the weapon.

Do not antagonize bears - each one is a potential danger. Do not encourage bears to come around camp by leaving food or unburned garbage around. Do not shoot at a bear unless, in your best judgement, he is endangering someone's life or damaging personal or state property. Use your best judgement on whether to shoot a bear if property is at stake. When, and if, trying to frighten a bear away by shooting near it. By chance, you may wound the animal accidentally. If you are having problems with a particular bear around camp, call the AMB and notify them of the situation. The Game Division personnel will take care of the problem, if it is feasible.

Port Moller has 3-wheel and 4-wheel all terrain vehicles (ATV's). The following safety precautions shall be observed at all times regarding Department ATV's. Only employees of the State may use the vehicles. Non-Fish and Game employees are not allowed on these vehicles at any time. The safety helmet provided must be worn during operation of an ATV. An ATV may provide transport of State materials, supplies, and equipment between camp sites and supply planes or vessels. In addition, they may be used for transportation to and from assigned duties in the field such as monitoring a fishery or collecting harvest information, etc. Recreational activities within reason are permitted but safety of the rider and vehicle must be adhered.

Check your camp's fire extinguisher. Know where it is and how to use it! Inventory your camp first aid kit, replace items as needed and become familiar with basic first aid treatment. Review the first aid booklet.

Keep the cabin, surrounding area, and yourself clean and neat. Appearance is important. You will not always be notified of the intended arrival of visitors, officials, etc. Impressions of visitors are often based on appearance.

Rabies is common on the Alaska Peninsula, be careful of all mammals including ground squirrels, fox, wolf, otters, and your pet. If bitten save the head of the animal if possible, wrap the head in several layers of plastic, put in a good box and freeze if possible. Notify your supervisor of the accident immediately. Burn and bury remaining parts of the carcass away from water sources and cabins, take precautions such as wearing plastic gloves to dispose of the carcass. Do not send suspected rabies animals out of your area unless you are bitten.

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If you believe you have been discriminated against in any program, activity, or facility, or if you desire further information please write to ADF&G, P.O. Box 25526, Juneau, AK 99802-5526; U.S. Fish and Wildlife Service, 4040 N. Fairfax Drive, Suite 300 Webb, Arlington, VA 22203 or O.E.O., U.S. Department of the Interior, Washington DC 20240.

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