

ALASKA PENINSULA AND ALEUTIAN ISLANDS MANAGEMENT AREAS
HERRING SAC ROE AND FOOD AND BAIT MANAGEMENT PLAN, 1991

By

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INTRODUCTION

This document is intended to provide commercial herring fishermen and buyers with management information and guidelines that are required when participating in the Alaska Peninsula and Aleutian Islands Management Areas sac roe and food and bait fisheries.

The Alaska Peninsula and Aleutian Islands Management Areas (Figure 1) are described as Management Area "M" and are divided into three subareas; (1) the South Peninsula, consisting of Pacific Ocean coastal waters extending west of Kupreanof Point to 163°30' W.long. (the south side of Unimak Island near Cape Lazaref); (2) the Aleutian Islands, consisting of Bering Sea waters extending west of Unimak Pass and Pacific Ocean waters extending west of 163°30' W.long. (the south side of Unimak Island near Cape Lazaref) to the international dateline; and (3) the North Peninsula, consisting of Bering Sea waters extending west from Cape Menshikof to Cape Sarichef (Figures 2-5).

The South Peninsula sac roe fishery has occurred annually since 1979 (except in 1983, the Board of Fish allocated the entire sac roe catch to the food and bait fishery), while the North Peninsula fishery has occurred annually since 1982 (Table 1; McCullough 1990). In recent years the Aleutian Islands Area has had no sac roe deliveries during the sac roe season. The North Peninsula has never had a delivery of herring during the food and bait fishery, and the South Peninsula had food and bait deliveries only in 1982. All fisheries continue to be open-to-entry. The sac roe fisheries target on individual herring stocks during their spawning period and during the food and bait fisheries on an aggregate of stocks. The desired product during the sac roe fisheries is pre-spawn herring having a roe recovery percentage acceptable to industry. The average roe recovery is usually less than 10%. The South Peninsula sac roe fishery has averaged 357 tons since 1980 (not counting 1983 when the fishery was closed). The North Peninsula sac roe fishery has averaged 557 tons since 1982. Both purse seine and set gill net gear have been used but set gill net gear has not been use with much success.

The commercial fisheries are intended to occur with minimal waste of the resource and within conservation limits as determined by Alaska Department of Fish and Game (ADF&G). ADF&G will manage the fisheries per the statewide general herring guideline harvest policy which provides for harvests not to exceed 10-20% of the available spawning biomass. Roe recovery will not be a criteria for emergency openings or closures except in cases where documented excessive wastage is, or is expected to be a factor. Permit holders are encouraged to check with their markets prior to fishing to determine roe percentages which are acceptable to the industry.

Those management units with guideline harvest levels (Table 2) are areas that are treated as individual stocks and have a history of sac roe harvests. Those management units lacking historic harvests and biomass estimates are open for exploration and may potentially support sac roe fisheries, or are management units where fisheries occur outside of bays and lagoons and are not perceived to have habitat suitable for herring spawning. Due to the lack of data for exploratory areas, annual harvest levels may fluctuate considerably until their status is understood.

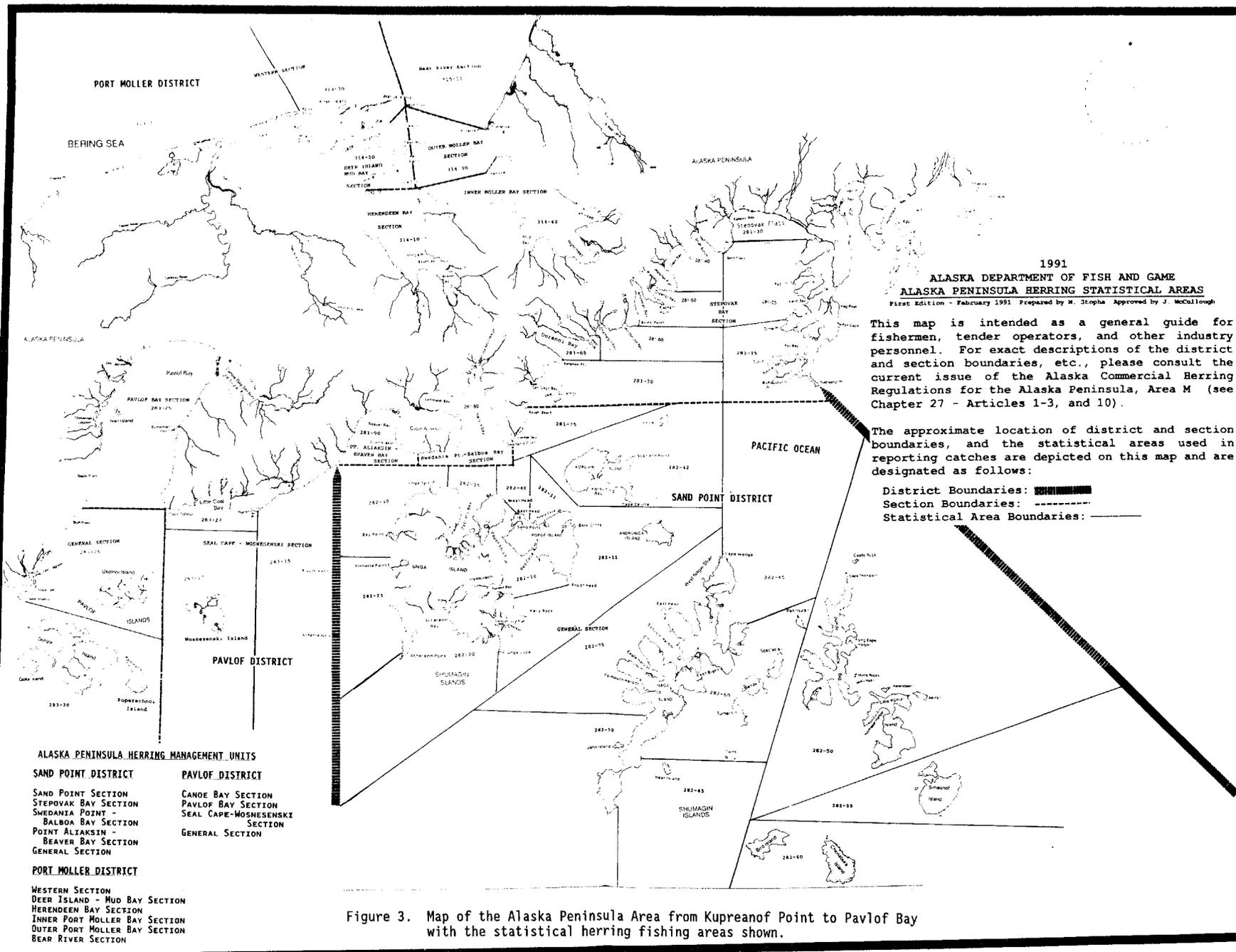


Figure 3. Map of the Alaska Peninsula Area from Kupreanof Point to Pavlof Bay with the statistical herring fishing areas shown.

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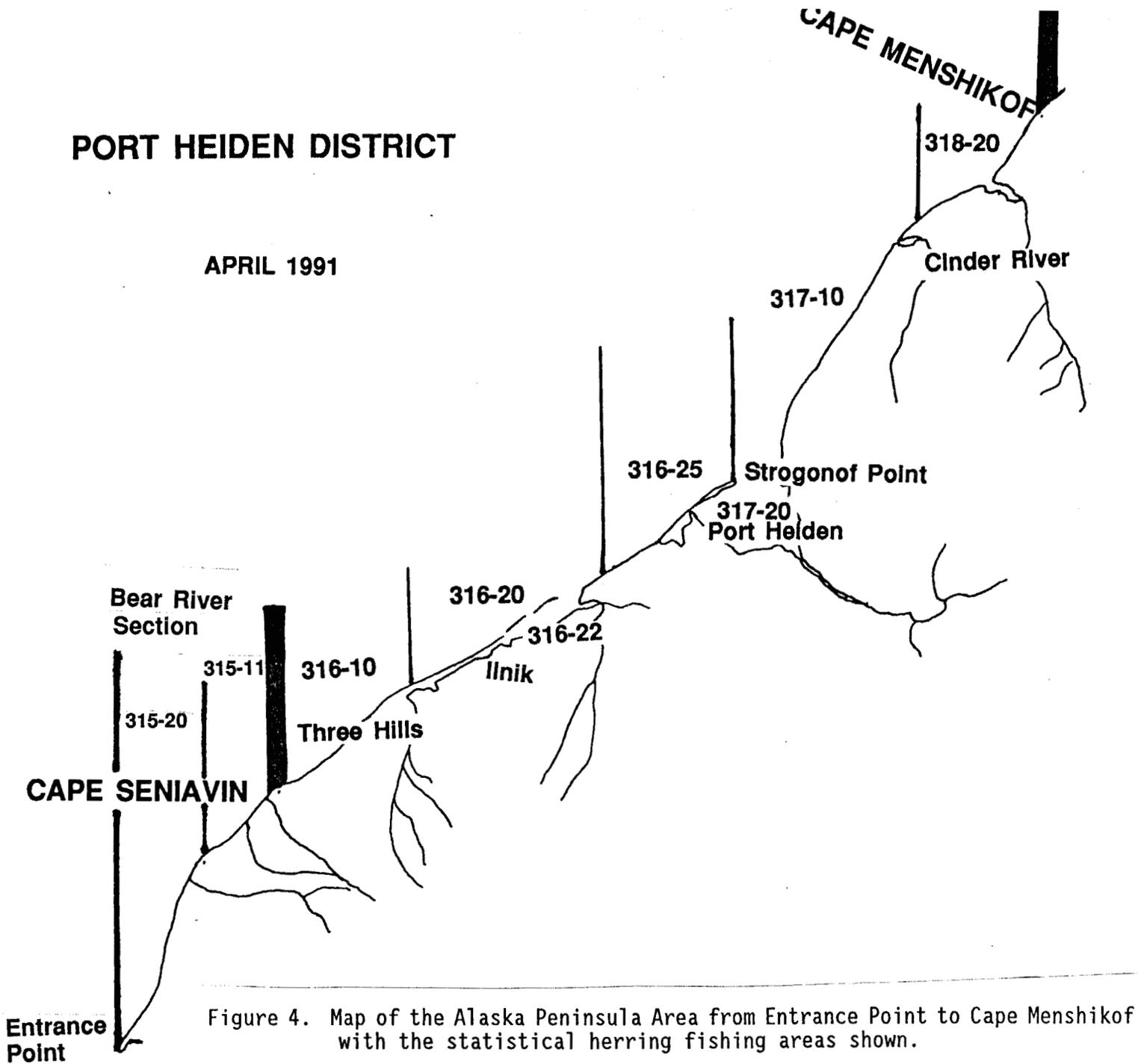


Figure 4. Map of the Alaska Peninsula Area from Entrance Point to Cape Menshikof with the statistical herring fishing areas shown.

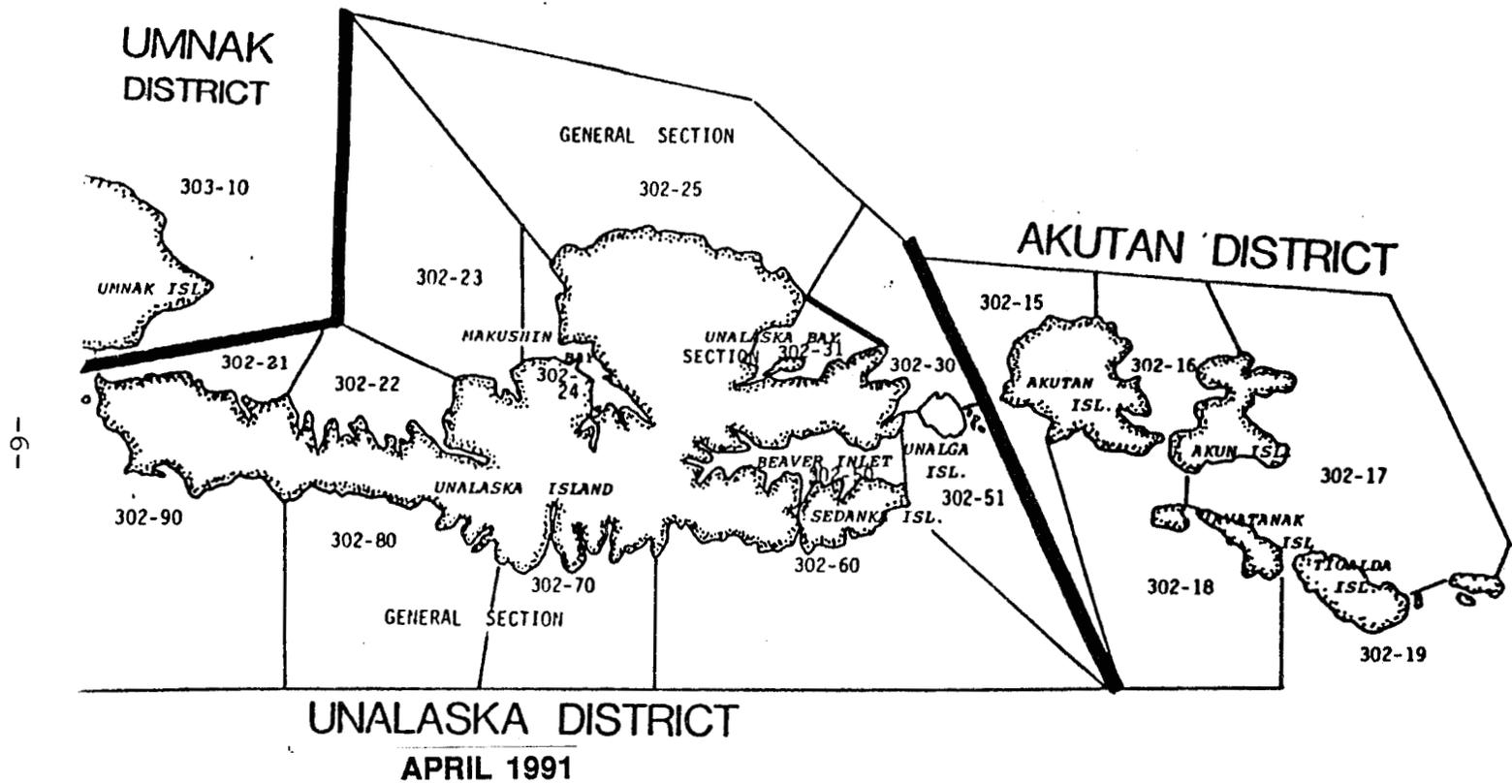


Figure 5. Map of the Aleutian Islands Area from Tigalda Island to Umnak Island with the statistical herring fishing areas shown.

Table 1. Alaska Peninsula Management Area herring sac roe catch by time period and area, 1979-90 (short tons).

Year	South Peninsula	South Peninsula Time Period	North Peninsula	North Peninsula Time Period	Total
1979	10.1	July 4-July 4	0.0		10.1
1980	453.0	May 18-July 14	0.0		453.0
1981	787.0	May 9-June 23	0.0		787.0
1982	176.2	May 31-June 14	513.5	May 31-June 12	689.7
1983	0.0		637.5	May 9-May 29	637.5
1984	210.4	May 13-June 1	431.2	May 24-June 8	641.6
1985	345.0	June 1-June 11	716.0	May 24-June 4	1,061.0
1986	281.5	June 7-June 14	888.9	May 18-May 30	1,170.4
1987	319.0	June 8-June 19	512.4	May 9-June 5	831.4
1988	376.8	May 31-June 20	293.7	May 17-June 15	670.5
1989	310.0	May 13-June 19	744.7	May 28-June 23	1,054.7
1990	312.2	May 14-June 14	272.8	June 4-June 19	585.0
Average ¹	319.9		542.5		862.4

¹Five year, 1986-90 average.

Table 2. Alaska Peninsula and Aleutian Islands Management Areas Herring sac roe harvest guideline levels by management area, 1991.^{1&2}

Management Area	Guideline Harvest Level		Total Harvest
	Sac Roe Harvest	Food\Bait Harvest	
South Peninsula			
Sand Point District			
Stepovak Bay Section	75	25	100
Swedania Point-Balboa Bay Section	19	6	25
Point Aliaksin-Beaver Bay Section	19	6	25
General Section ³			
Pavlof District			
Canoe Bay Section	94	31	125
Pavlof Bay Section	56	19	75
Seal Cape-Wosnesenski Section ³			
General Section (Volcano Bay)	19	6	25
King Cove District			
Belkofski Section	15	5	20
Deer Passage Section	15	5	20
Cold Bay Section	26	9	35
General Section ³			
South Peninsula Total	338	112	450
North Peninsula			
Amak District ³			
Port Moller District ⁴			
Western Section ³			
Deer Island Section ⁵			
Herendeen Bay Section	90		90
Inner Moller Bay Section	90		90
Outer Moller Bay	120		120
Bear River Section ⁶			
Port Heiden District ^{3&4}			
North Peninsula Total	300		300
Aleutian Islands			
Unimak District ³			
Akutan District ³			
Unalaska District ³			
Umnak District ³			
Adak District ³			
<hr/>			
Guideline Harvest Total ⁷	638		750

-Continued-

Table 2. (page 2 of 2).

¹The Aleutian Islands Management Area is open for exploration, no deliveries have ever been made from the Aleutian Islands during the sac roe season.

²Portions of a section, district, or area may be closed if it is suspected that additional harvests in a given location will be over 20% of the spawning biomass.

³All areas without guideline harvest levels are open for exploration. Harvests in these areas will be kept small until ADF&G is able to document the spawning biomass. For the Shumagin Islands, no more than 50 tons of herring will be allowed to be harvested from any single island in exploratory areas.

⁴Herring abundance in the Port Moller District is difficult to document. The guideline harvest levels listed may be conservative and reflect years when the observed abundance was low. The 1991 herring abundance may justify a larger catch than 300 tons, however to increase the guideline harvest level a larger than expected spawning biomass must be documented by ADF&G. Catches in the Port Heiden District will be counted against the Port Moller guideline harvest level if it is suspected that herring caught in the Port Heiden District were traveling to the Port Moller District.

⁵Herring harvested in the Deer Island Section of Herendeen Bay will be counted against the Herendeen Bay guideline harvest level.

⁶Herring harvested in the Bear River Section will be counted against the Port Moller and Herendeen Bays guideline harvest level if it is suspected that these herring were traveling into Port Moller or Herendeen Bays.

⁷Total does not include harvests that may occur in areas open for exploration.

In-season emergency order closures for each area will occur as the guideline harvest levels for each unit are achieved. Closures may also result prior to attaining a guideline harvest level if the fishery performance or aerial surveys indicates that a stock biomass is less than anticipated. Harvests in excess of their guideline harvest level will occur if the assessed available spawning biomass warrants continued catches. Closures will also be used to ensure that excessive harvests are minimized in exploratory situations.

In-season emergency orders will be broadcast on the single side band radio on 4125 and 3230 Khz and on the VHF radio on channel 6 and 70, or other channels if arrangements are made with the local representative of ADF&G. Current announcements will be available on the ADF&G record-a-phone at 383-2334.

Local Offices of the Alaska Department of Fish and Game are:

Alaska Department of Fish and Game
P.O. Box 129
Sand Point, AK 99661
phone (907) 383-2066
fax (907) 383-2606
record (907) 383-2334
VHF 6
Single Side Band 3230

Alaska Department of Fish and Game
P.O. Box 50
Cold Bay, AK 99571
phone (907) 532-2419
fax (907) 532-2470
VHF 6
Single Side Band 3230 and 4125

Alaska Department of Fish and Game
C/O Peter Pan Seafoods-Port Moller
Port Moller, AK
via: Cold Bay 99571-8999
phone (907) 487-2216
fax (907) 487-2215
VHF 70
Single Side Band 3230

MANAGEMENT PLAN

Registration Requirements

Tenders and Processors

Each tender operator and buyer must register in person at an ADF&G office in Cold Bay, Sand Point, or Port Moller prior to buying or tendering herring (Appendix A). Catch reporting instructions will be explained in detail during registration.

Fishing periods will be seven days per week and 24 hours per day. If monitoring of the Alaska Peninsula and Aleutian Islands Management Areas sac roe or food and bait fisheries becomes impossible due to late catch reporting procedures, stringent in-season measures will be effected to insure that excessive harvests do not occur. Such measures may, but will not be limited to; frequent closures to assess fish tickets information, followed by adequate (usually 24 hour) notice of the next fishing period. Failure to adhere to the reporting requirements specified on the tender registration form will result in a citation. Timely and accurate catch information provided by the processors will be essential in managing the fisheries. Processors and tender operators will be required to provide daily tallies of herring activities (report into ADF&G on a daily basis even if no herring were purchased) by area and must provide accurate estimates of herring onboard tenders that have not yet delivered to the processor. Individual codes will be provided for each tender or processor that will be involved in the fisheries.

Fish tickets from herring fisheries must be delivered to a local ADF&G commercial fishery representative prior to transporting herring out of any subarea (North and South Peninsula or Aleutian Islands), and before completing operations and leaving Management Area M. If delivering fish tickets directly to ADF&G personnel causes undue inconvenience other arrangements can be made through contacting ADF&G at either Port Moller, Sand Point, or Cold Bay. For information and catch reporting during the herring sac roe and food and bait fisheries in the Aleutian Islands west of Unimak contact ADF&G in Dutch Harbor on Single Side Band 4125 or VHF 6 radios.

Fishing Vessels

During the sac roe season there are no specific vessel registration requirements for fishing vessels. During the food and bait season all fishing vessels in addition to all tenders and processors will be required to register with ADF&G. Fishermen must provide specific catch locations to buyers, so that it can be recorded on fish tickets. If active gear levels become excessive and the herring become susceptible to a large harvest, the normal continuous open fishing periods may be changed to hourly openings followed by a long enough closure to collect, summarize, and update all harvest data.

Gill Net And Seine Specifications (5 AAC 27.631 and 5 AAC 27.632 in part)

During the herring sac roe season, the aggregate length of herring gill nets in use by a herring CFEC permit holder may not exceed 150 fathoms. There are no restrictions during the herring food and bait season to gill net length nor depth.

During the herring sac roe season, no purse seine may be more than 1,000 meshes in depth and more than 100 fathoms in length. During the herring food and bait season, no purse seine may be more than 250 fathoms in length.

Aircraft

There are no restriction on the use of aircraft for Alaska Peninsula and Aleutian Islands herring fisheries.

Cooperation

Fishermen, tender operator, and processor cooperation will be appreciated when ADF&G personnel request herring samples from the commercial catch, or from juvenile or spawnout schools inadvertently seined. These samples will be used for monitoring age composition, which assists in determining the health of a stock and in forecasting next years run strength. ADF&G will also be monitoring and mapping spawning activities and will be soliciting information on commercial sightings to supplement information gathered by ADF&G. Fishermen and spotter pilots are encouraged to provide biomass and spawning information to ADF&G, these reports will be treated confidentially. Past cooperation has been excellent and has proven valuable in evaluating stock status and in gaining management information.

North Peninsula

Commercial Sac Roe Fishery

By emergency order (number 4-F-M-SP-01-91) the Port Heiden and Amak Districts commercial sac roe herring fishery is from April 15 through June 30. The Port Moller District will open for commercial herring fishing on May 30 and continue through June 30. North Peninsula herring sac roe fisheries will close on June 30, if sac roe stocks are discovered during the July 1 through July 15 time period, appropriate locations can be opened to herring sac roe fishing by emergency order. Fishing periods are continuous from the opening date of each fishery. However, ADF&G ability to monitor herring fisheries becomes limited by mid-June, this may be a consideration in establishing fishing times after mid-June.

The season will close for each stock by emergency order as their respective guideline harvest levels are achieved, or when fishery performance and stock performance indicate that deviations from the guideline harvest levels are warranted (where actual harvests occur at levels greater or lesser than expected), or by July 1. Stocks which are considered under-exploited will remain

open for adequate exploitation to occur or until July 1, the current emergency order closure date. During the sac roe season, stocks which have been closed to harvesting may be reopened if it is determined by ADF&G that more fish in spawning condition have moved into the area, increasing the available spawning biomass to the point that the initial exploitation rate has dropped below 20%. Any reopenings will have new guideline harvest levels established by ADF&G.

The Port Heiden and Amak Districts will be open for continuous exploration. No reported catches nor biomass estimates have been made for the Port Heiden and Amak Districts nor for the Western and Deer Island Sections of the Port Moller District, nor have guideline harvest levels been established (Table 1). Catches from these districts will be kept small until an estimate is made of the stock biomass by ADF&G. ADF&G monitoring of exploratory commercial activity will be accomplished by requiring industry to report catches and by ADF&G aerial surveys.

Commercial Food And Bait Fishery

The commercial food and bait herring fishery for Amak, Port Moller, and Port Heiden Districts is from August 15 through February 28. An emergency order opening the food and bait fishery will be issued after the conclusion of the North Peninsula sac roe fishery. The emergency order will provide fishermen with guideline harvest levels for the North Peninsula food and bait fishery when exploitation rates of local North Peninsula sac roe herring stocks are determined. The North Peninsula food and bait fishery will close by emergency order as each areas respective guideline harvest levels are achieved or when fishery performance and stock performance indicate that deviations from the guideline harvest levels are warranted (where actual harvests occur at levels greater or lesser than expected). Food and bait catches from all areas will be kept small until an estimate is made of the stock biomass by ADF&G.

South Peninsula

Commercial Sac Roe Fishery

By emergency order (number 4-F-M-SP-01-91) the Sand Point, Pavlof, and King Cove Districts commercial sac roe herring fishery is from April 15 through July 15. Fishing periods are continuous from the opening date of each fishery. However, ADF&G ability to monitor herring fisheries becomes limited by mid-June, this may be a consideration in establishing fishing times after mid-June.

The season will close for each stock by emergency order as their respective guideline harvest levels are achieved, or when fishery performance and stock performance indicate that deviations from the guideline harvest levels are warranted (where actual harvests occur at levels greater or lesser than expected). Stocks which are considered under-exploited will remain open for adequate exploitation to occur or until the July 15 regulatory closure date. During the sac roe season, stocks which have been closed to harvesting may be reopened if it is determined by ADF&G that more fish in spawning condition have moved into the area, increasing the available spawning biomass to the point that the initial exploitation rate has dropped below 20%. Any reopenings will have new guideline harvest levels established by ADF&G.

The General Section (Shumagin Islands) of the Sand Point District, the Seal Cape-Wosnesenski Section of the Pavlof District, and the general Section of the King Cove District will be open for continuous exploration. No biomass estimates have been made for these sections, nor have guideline harvest levels been established. Catches from these sections will be kept small until an estimate is made of the stock biomass by ADF&G. ADF&G monitoring of exploratory commercial activity will be accomplished by requiring industry to report catches and by ADF&G aerial surveys.

Commercial Food And Bait Fishery

The commercial food and bait herring fishery for Sand Point, Pavlof, and King Cove Districts is from August 15 through February 28. An emergency order opening the food and bait fishery will be issued after the conclusion of the South Peninsula sac roe fishery. The emergency order will provide fishermen with guideline harvest levels for the South Peninsula food and bait fishery when exploitation rates of local South Peninsula sac roe herring stocks are determined. The South Peninsula food and bait fishery will close by emergency order as each areas respective guideline harvest levels are achieved or when fishery performance and stock performance indicate that deviations from the guideline harvest levels are warranted (where actual harvests occur at levels greater or lesser than expected). Food and bait catches from all areas will be kept small until an estimate is made of the stock biomass by ADF&G.

Aleutian Islands

Commercial Sac Roe Fishery

By emergency order (number 4-F-M-SP-01-91) the Unimak, Akutan, Unalaska, Umnak, and Adak Districts commercial sac roe herring fishery is from April 15 through June 15. Aleutian Islands herring sac roe fisheries will close on June 15, if sac roe stocks are discovered during the June 15 through July 15 time period, appropriate locations can be opened to herring sac roe fishing by emergency order. Fishing periods are continuous from the opening date of each fishery. However, ADF&G ability to monitor herring fisheries becomes limited by mid-June, this may be a consideration in establishing fishing times after mid-June.

Information on Aleutian spawning stocks of herring is limited to Margarets Bay in Unalaska Harbor where a few herring in ripe condition were sampled by ADF&G in 1983 and 1984. No biomass estimates have been made of any Aleutian stocks, nor have guideline harvest levels have been established. If spawning stocks of herring are harvested the season will close for each stock by emergency order when fishery performance and stock performance indicate closures are warranted (where actual harvests occur at levels greater or lesser than expected). Stocks which are considered underexploited will remain open for adequate exploitation to occur or until the June 15 emergency order closure date. During the sac roe season, stocks which have been closed to harvesting may be reopened if it is determined by ADF&G that more fish in spawning condition have moved into the area, increasing the available spawning biomass to the point that the initial exploitation rate has dropped below 20%. Any reopenings will have new guideline harvest levels established by ADF&G.

All Aleutian Islands Districts will be open for continuous exploration. Catches from these districts will be kept small until an estimate is made of the stock biomass by ADF&G. ADF&G monitoring of exploratory commercial activity will be accomplished by requiring industry to report catches and by ADF&G aerial surveys.

Commercial Food And Bait Fishery

During the March 19, 1991 Board of Fish meeting 5 AAC 27.610 Fishing Seasons And Periods was amended in regards to the opening date of the Aleutian Islands food and bait fishery, the food and bait season is now from July 16 through February 28. 5 AAC 27.060 Bering Sea Herring Fishery Management Plan was also amended in regards to biomass threshold levels, the threshold was lowered to 2,000 short tons at Nelson Island and ADF&G was instructed to develop a threshold level for Port Clarence. If any Bering Sea herring stock is below its threshold, then the Dutch Harbor food and bait fishery will be closed for that season. ADF&G will not be able to advise fishermen and processors until June or July whether the Aleutian Islands food and bait fishery will occur because, biomass estimates for each Bering Sea herring stock must be made in-season during the spawning period. If the Aleutian Islands food and bait fishery does not occur, the Togiak allocation to the Dutch Harbor food and bait fishery will not be reallocated to the Togiak sac roe fishery. Because the Nunivak Island biomass is forecasted at about 16% of its biomass threshold level the likelihood of a Aleutian Islands (Dutch Harbor) food and bait fishery during the 1991-92 season is remote. ADF&G will update biomass estimates for each stock as herring stocks move into coastal waters during spawning migrations.

LITERATURE CITED

- ADF&G (Alaska Department of Fish and Game). 1990. 1990 Commercial herring fishing regulations, 1990 edition. Alaska Department of Fish and Game, Division of Commercial Fisheries, Juneau.
- McCullough, J.N. 1990. Alaska Peninsula and Aleutian Islands Management Areas sac roe herring report, 1990. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K90-33, Kodiak.

APPENDIX A

5 AAC 27.662 BUYER AND TENDER REPORTING REQUIREMENTS.

In addition to the requirements of 5 AAC 39.130(f) each tender operator and each buyer or his agents shall report in person to and register with a local representative of the department upon arrival in the statistical area before commencing operations and before changing location of the operation. Each buyer shall:

- (1) identify all vessels to be employed in transporting or processing herring and shall register such vessels with a local representative of the department located in the statistical area before transporting or processing of herring;
- (2) make daily reports of all herring purchased from fishermen, and other processing records as specified by local representative of the department; and
- (3) submit fish tickets before departure from the area and no later than 10 days after termination of buying operations in the area, or as otherwise specified by a local representative of the department.

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