

Fishery Management Report No. 05-13

**Kodiak Management Area Herring Sac Roe Fishery
Harvest Strategy, for the 2005 Season**

by

Dennis Gretsch

and

Kevin Brennan

April 2005

Alaska Department of Fish and Game

Divisions of Commercial Fisheries and Sport Fish



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ABSTRACT

This report presents information concerning how the Alaska Department of Fish and Game (ADF&G) will manage the 2005 Kodiak Management Area (KMA) commercial Pacific herring *Clupea pallasii* sac roe fishery. This report also presents the guideline harvest levels (GHLs) by section, management changes from previous years, reporting and registration requirements, and the regulations pertaining to this fishery.

The 2005 KMA areawide GHL is 3,475 tons and GHLs have been established for 32 sections. The areawide GHL is divided by gear type due to a regulatory allocative management plan (5AAC 27.535). The purse seine GHL is 2,625 tons (75.5% of the areawide GHL) and the gillnet GHL is 850 tons (24.5% of the areawide GHL). The Alaska Board of Fisheries (BOF) made several regulation changes in January 2005. New regulations allow the department to combine sections to be managed as a single unit; in 2005, the Northeast Arm, East Arm, South Arm, and Village Islands Sections of the Uganik District will be combined and managed as one unit and will be referred to as the (Village Islands/Uganik Bays Section). New regulations also allowed both gear types to fish the same section when allocation objectives can't be met by having separate gear areas; in 2005, both gear types will fish within the Village Islands/Uganik Bays and Inner Uyak Bay Section.

In 2005, the fisheries in the Village Islands/Uganik Bays, Inner Uyak Bay, and Paramanof/Foul Bay Sections will be managed to enhance the value of the landed product and control harvest rates. Fishing periods will be established by emergency order, herring will be sampled by purse seine and gillnet test sets, and time and area restrictions may be used to target these fisheries on herring of the largest size and highest roe content. In sections where both gear types have an allocation, fishing will occur by each gear type on alternating days.

Key Words: Kodiak Management Area, Pacific herring, Sac roe guideline harvest levels, registration requirements.

INTRODUCTION

Pacific herring *Clupea pallasii* have been commercially harvested each spring for their sac roe since 1964 in the Kodiak Management Area (KMA; Table 1). This fishery was open-to-entry from 1964 to 1980, under a moratorium to new entries from 1981 to 1984, and has been designated a limited entry fishery since 1985. Gear for this fishery includes purse seines (81 permits) and gillnets (101 permits). Average permit activity has been low and declining; from 1995 to 2004 an average of 41 purse seine and 27 gillnet permit holders made landings, and from 2000 to 2004 an average of 30 purse seine and 11 gillnet permit holders made landings (Table 2).

The KMA is divided into 13 districts that define geographical areas used in managing the herring sac roe fishery. Each district is further divided into smaller areas called sections; there are a total of 82 sections in the KMA (Figure 1). Sections are intended to define the spawning area used by a stock of herring or to define a geographical harvest location. Since 1979, herring have been harvested within 63 sections. Statistical charts, which illustrate districts and sections, are available at the Alaska Department of Fish and Game (ADF&G) office in Kodiak.

Guideline Harvest Levels (GHLs), or the desired level of harvest within each section (harvest projection), are established by ADF&G fishery management biologists in Kodiak each year (Table 3). After an annual review of stock status trends for the entire KMA, the department determines which sections will be open to commercial fishing and what level of harvest will be targeted. Each section's GHL is set based on: 1) fishery performance during the preceding season or seasons (e.g., total harvest, timing, duration of fishery, average school size), 2) trends in age composition, 3) spawn and juvenile herring observations, 4) aerial surveys, and 5) hydroacoustic surveys. Input from commercial fishermen and spotter pilots is relied on as well.

Since 1979, GHLs have ranged from 1,495 tons (1999) to 4,550 tons (1994; Table 2). GHLs are not guaranteed quotas, and actual harvests may be more or less than these projections. The recent 10-year average harvest (1995 to 2004) was 2,483 tons (range: 1,370 to 4,604 tons; Table 2).

In 2000, an allocative harvest strategy was implemented by the Alaska Board of Fisheries (BOF) to provide opportunities for gillnet permit holders to harvest approximately 25% of the total preseason GHL and purse seine permit holders to harvest approximately 75% of the total preseason GHL (5AAC 27.535 (e)). This is accomplished by either assigning sections to only purse seine or only gillnets. For each district the sum of all purse seine section GHLs should be 70% to 80% of the areawide GHL and the sum of all gillnet section GHLs should be 20% to 30% of the areawide GHL (5AAC 27.535 (e)(2)(D)). Assignment of a section to a particular gear type is based on: 1) the estimated biomass and age composition of the stock(s) found within a section, 2) historical harvest by gear from that section, 3) historical harvest timing, 4) fishery manageability concerns, and 5) the mathematics of the allocation percentages. Input from fishery participants is solicited prior to final section assignments.

The 2004 fishery preseason GHL was 2,850 tons, and 27 purse seine and 11 gillnet permit holders participated to harvest 3,167 tons. Purse seine gear harvested 2,894 tons (91% of the total harvest) and gillnet gear harvested 273 tons (9% of the total harvest), with a total exvessel value of \$1,583,500 dollars (Table 2).

The ADF&G Commercial Fisheries Division staff in Kodiak will manage the 2005 Kodiak herring sac roe fishery. The Kodiak herring sac roe fishery is intended to occur in an orderly fashion, with minimal waste of resource and within conservation limits as determined by the department, while striving for the highest quality product (5AAC 27.535. (e)(6)). In addition, the fishery will be managed in accordance with general statewide herring guideline harvest policies, which provide for catches in traditional inshore areas, management for the greatest value, and exploitation (harvest) not to exceed 20% of the available spawning biomass. This report presents the harvest strategy for the 2005 KMA herring sac roe fishery, including the GHLs by section, section assignment by gear, changes in management, reporting, and registration requirements, and regulations for the 2005 fishery.

2005 HARVEST STRATEGY

In some sections there will be substantial changes in how the Kodiak herring sac roe fishery will be managed during the 2005 season. Several regulatory changes concerning Kodiak herring fisheries were made by the BOF at an Anchorage, Alaska, meeting on January 7 to 10, 2005. In addition, public comments were taken at the Kodiak Advisory Committee and fishermen meetings before and after the BOF meeting. The following harvest strategy for the 2005 season reflects the input received at those meetings.

GUIDELINE HARVEST LEVELS

For the 2005 season, GHLs have been established for 32 sections (Table 3). A total of 18 sections have had little or no harvest during the last 10 years, and have been designated as exploratory in 2005 (exploratory areas are open to both gear types and have no set GHL). The remaining 32 sections will remain closed, based on either low stock abundance or no records of herring sac roe harvests.

The 2005 GHL is 3,475 tons (Table 3), an increase of about 22% from the 2004 GHL (2,850; Table 2), which represents approximately 7.3% of the statewide herring sac roe projected harvest of 47,202 tons (Table 4).

SECTION ASSIGNMENTS

In 2005, based on BOF changes to the regulations governing the KMA herring fisheries, adjacent sections may be combined and managed as a single section (5AAC 27.535. (e)(1)(A)). The following sections will be combined and managed as single units in 2005:

- Paramanof Bay and Foul Bay,
- Izhut Bay, Kitoi Bay, and MacDonald Lagoon,
- Village Islands, Northeast Arm Uganik, East Arm Uganik, and South Arm Uganik,
NOTE: The Village Islands/Uganik Bays unit does not include the West Uganik Passage Section, which will be assigned and managed as a separate section.
- Inner Alitak Bay, Portage Bay, and a portion of Lower Olga-Moser Bay.

Also, based on BOF changes, both purse seine and gillnet gear may be assigned to fish within the same section, in order to achieve the allocative split by gear type within a district (5 AAC 27.535. (e)(2)(A)). The following sections will be opened to both gear types in 2005, with each gear type assigned a portion of the section(s) GHL:

- Village Islands/Uganik Bays,
- Inner Uyak Bay.

These two units will be managed intensively, under a distinct harvest strategy, as will be outlined later in this document.

The remaining sections are assigned as follows:

<u>Purse Seine Only</u>	<u>Gillnet Only</u>	<u>Exploratory (both gear)</u>
Paramanof/Foul Bays	Malina Bay	Perenosa Bay
Inner Alitak/Portage Bays	Izhut/Kitoi/MacDonald	Tonki Bay
Inner Deadman Bay	Danger Bay	Blue Fox/Devils Inlet
Outer Deadman Bay	Viekoda Bay	North Upper and Upper Olga Bay
West Sitkalidak Strait	Terror Bay	Geese/Two Headed
Barling Bay	West Uganik Passage	Kaiugnak Bay
East Sitkalidak Strait	Browns Lagoon	Southwest Sitkalidak
Outer Kiliuda Bay	Zachar Bay	Three Saints Bay
Inner Ugak Bay	Sulua Bay	Newman Bay
Kizhuyak Bay	Shearwater Bay	Tanginak Anchorage
	Inner Kiliuda Bay	Inner Kukak Bay
	Outer Ugak Bay	Inner Katmai Bay
	Womens Bay	Alinchak Bay
	Anton Larsen Bay	Puale Bay
	Sharatin Bay	Portage and Outer Portage Bay
		Wide Bay

Of the total GHL, 2,625 tons (75.5%) is assigned to purse seine permit holders and 850 tons (24.5%) is assigned to gillnet permit holders (Table 3; Figure 1).

FISHING PERIODS

Perhaps the most significant change to the KMA herring sac roe fishery harvest strategy has been the use of emergency order (E.O.) fisheries in areas where the department determined that fishery openings needed to be short in duration or limited in area. This has occurred during the past two fishing seasons in the Paramanof Bay and Village Islands Sections, and also in the Inner Uyak Bay Section last year. This year the BOF confirmed the E.O. management strategy of these sections in regulation (5AAC 27.510).

Standard Daily Fishing Periods for Most Purse Seine and Gillnet Sections

For many years, there has been a “standard” fishing schedule for purse seine and gillnet permit holders, established in regulation (5AAC 27.510). For most of the KMA, this daily fishing schedule for purse seine and gillnet gear will still be in effect.

Unless otherwise specified in a emergency order, herring may be taken during the sac roe season from April 15 through June 30, as follows:

- **FOR PURSE SEINER PERMIT HOLDERS:** from April 15 through May 7, fishing periods for purse seine permit holders are from 12:00 NOON until 9:00 PM on odd-numbered days, and from 9:00 AM until 12:00 NOON on even-numbered days if a harvestable surplus is available; from May 8 through June 30, fishing periods for purse seine permit holders are from 12:00 NOON until 10:00 PM on odd-numbered days, and from 9:00 AM until 12:00 NOON on even-numbered days if a harvestable surplus is available;
- **FOR GILLNET PERMIT HOLDERS:** from April 15 through June 30, the fishing periods for gillnet permit holders are from 12:00 NOON on odd-numbered days until 12:00 NOON on even-numbered days.

There is a 24 hour closed period for both gear types, from 12:00 NOON on even-numbered days until 12:00 NOON on odd-numbered days. This “day-on, day-off” schedule will apply to most sections, except those to be managed under EO authority, as listed below.

Emergency Order Fishing Areas; Management for Enhanced Value

There are three areas that will not follow the standard fishing schedule, but will instead be managed inseason by EO. In 2005, Kodiak Area management biologists will actively manage the fisheries within some sections to enhance the value of the landed product and control harvest rates. These areas are:

- Paramanof/Foul Bays
- Village Islands/Uganik Bay
- Inner Uyak Bay

These sections will not open to herring fishing at 12:00 NOON April 15, 2005. Instead, the department will manage the Paramanof/Foul Bays, Village Islands/Uganik Bays, and Inner Uyak Bay fisheries by emergency order to enhance the value of the landed product. This may include timing fisheries so that the mature roe content of the catch is likely to be the highest and focusing the fishery into areas where the catch is likely to be composed of large herring (5 AAC 27.059). These sections have relatively large spawning biomass, early spawn timing, and generally

experience high effort levels of fishermen. Also, large numbers of small-young, recruit-age herring may be present in these fisheries. Management biologists will attempt to minimize the harvest of small-young herring. Combined, these three areas comprise 2,000 tons, or 57%, of the total KMA GHL in 2005.

When marketable herring are found, if overharvest concerns exist, the department will, as necessary, use E.O. authority as a harvest control by limiting the duration of fishing periods and/or the specific portion of a section that may open. As much advance notice as possible will be given prior to any potential fishing period. Fishing periods in actively managed sections may be short, followed by a closed period to allow time to assess the harvest before allowing additional fishing. E.O. announcements, concerning opening time, fishing period duration, and the open area within a section, will be made on VHF channel 6.

The department may also restrict the amount of herring harvested in a short period areawide, for processor quality concerns. Early in the season, the potential exists for having a large amount of herring caught and delivered to processing plants in a single day. Product quality problems may occur if herring must wait to be processed due to large harvests.

Management of the Paramanof/Foul Bays, Village Islands/Uganik Bays, and Inner Uyak Bay Sections will be based on the size of their GHLs, the observed biomass in these fishing areas, effort levels, and the spawn timing of these different stocks. In the Village Islands/Uganik Bays and Inner Uyak Bay Sections, both gear types will fish within the same section, and additional restrictions will apply (see below). The department, fishermen, and buyers must work closely inseason to control harvest rates and target high quality roe herring.

It is expected that fisheries will be restricted to small areas and short periods, depending on the available biomass, the amount of fishing effort, and the results from samples collected during the test fishery beginning April 15. At the discretion of the management biologist, test fisheries will be conducted every day until good quality herring are located. Fishery openings will occur in locations where roe testing has shown high quality herring are present. Once commercial fisheries begin, additional test fisheries may be needed to identify the best quality fish. Whenever possible, fisheries will be coordinated with fisheries in the other EO areas.

Test Fishing

ADF&G would like to enlist the help of Kodiak herring sac roe within the EO fisheries. Conducting test sets prior to fishery openings will allow sampling for fish size and roe maturity.

Prior to any fishery in the Paramanof/Foul Bays, Village Islands/Uganik Bays, and Inner Uyak Bay Sections, the management biologist on the grounds will seek volunteer fishermen to conduct the test sets. The boats to be sent out to test fish will be determined by the management biologist. In some circumstances, there may be a need to send out more than one boat. All test fishing must be coordinated and directed by the ADF&G management biologist on the grounds. No test set should be made without consulting with the management biologist, either in person or via VHF radio channel 6 or the satellite phone.

Small amounts of herring from each test set will be kept for roe and size testing. From 75 to 150 pounds of herring should be randomly selected from each set for a sample. Samples from each set should be bagged separately and tagged with information on where and when it was caught, what vessel caught the sample, and an estimate of the size of the herring school from which the sample was taken. Sampling bags and tags will be available from the ADF&G management

biologists present in the EO area. Fish may be tested for mature roe recovery or size aboard the fishing vessel or may be transported to a central fishing boat or tender for later testing, as determined by the ADF&G management biologist and fishermen in the area.

ADF&G staff will not conduct roe recovery testing; industry personnel (processor technicians, fishermen, or tendermen) are expected to determine roe maturity and percent recovery. Instruction on how to determine roe quality and recovery percentages may be available from buyers and processors. Additionally, processors establish minimum size requirements (average weights) for the herring that they will purchase. All fishermen are urged to check with their market to determine what roe recovery and size limits will be required by the buyer. Management biologists will attempt to manage fisheries so industry roe recovery and size requirements are met or exceeded. ADF&G will broadcast test fishery results on VHF channel 6, as they become available.

Paramanof/Foul Bay Sections Fishery Management

The Paramanof and Foul Bay Sections will be managed as one section, with a GHL of 250 tons. These sections have been assigned as purse seine gear only. The department has concerns for the strength of the herring biomass in the Paramanof/Foul Bays Sections and the GHL could be adjusted downward inseason if the available biomass is less than anticipated. These sections will be actively managed by EO, by an ADF&G management biologist present aboard the ADF&G *R/V Resolution*. Purse seine permit holders wishing to fish in these sections are urged to meet with the management biologist at 10:00 AM Friday April 15, aboard the *R/V Resolution* to volunteer for test fishing and discuss how the fishery will be managed. What portion of these sections will open and the duration of each fishing period will be determined by the ADF&G management biologist on the grounds aboard *R/V Resolution*.

Village Islands/Uganik Bays Sections Management

The Village Islands, Northeast Arm Uganik, East Arm Uganik, and South Arm Uganik Sections will be managed as one section, with a GHL of 1,450 tons (this does not include the West Uganik Passage Section, which will be assigned and managed as a separate section with a separate GHL; Table 2). In order to properly allocate herring within the Uganik District, both purse seine and gillnet gear will be allowed to fish within these combined sections. For Village Islands/Uganik Bays, for purse seine permit holders the GHL is 1,200 tons and for gillnet permit holders the GHL is 250 tons.

These sections will be actively managed by E.O., by an ADF&G management biologist present aboard the ADF&G *R/V K-Hi-C*. Permit holders wishing to fish in these section are urged to meet with the management biologist at 10:00 AM Friday April 15, aboard the *R/V K-Hi-C* to volunteer for test fishing and discuss how the fishery will be managed. What portion of these sections will open and the duration of each fishing period will be determined by the ADF&G management biologist on the grounds aboard *R/V K-Hi-C*.

To alleviate the potential for gear conflicts, it is expected that Village Islands/Uganik Bays fisheries for these gear types will be separated by date. The department will attempt to prosecute purse seine fisheries on odd-numbered days and gillnet fisheries on even-numbered days. This is a general framework within which EO openings may occur. It is not expected that gillnet fishing periods will begin until after at least one successful purse seine fishing period has occurred. This should insure that high quality herring are present on the grounds.

The department anticipates a 6 to 8 hour break in fishing activity for both gear types prior to starting the next gear opening. Once the GHL for one gear group has been met, fishing time for the other gear type that has not met its allocation could occur on any day.

Inner Uyak Bay Section Management

The Inner Uyak Bay Section has been assigned a GHL of 300 tons (Table 3). In order to properly allocate herring within the Uyak District, both purse seine and gillnet gear will be allowed to fish within this section. For the Inner Uyak Bay Section, the GHL for purse seine gear is 250 tons and the GHL for gillnet gear is 50 tons.

Fishery management for the Inner Uyak Bay Section will be similar to management of the Village Islands/Uganik Bays Sections. This Section will be actively managed by EO. However, due to budgetary restrictions and shortages of personnel, the Inner Uyak Bay fishery will be delayed until an ADF&G management biologist aboard a research vessel is available. This means that the Inner Uyak Bay Section will remain closed until either the Paramanof/Foul Bays or Village Islands/Uganik Bays fisheries have closed for the season. It is expected that the ADF&G management biologist aboard the *R/V Resolution* will manage this fishery after the Paramanof/Foul Bay Sections close for the season. There will be a 24-hour advance notice given before fisheries will be considered in the Inner Uyak Bay Section.

Permit holders wishing to fish in this section are urged to meet with the management biologist aboard the ADF&G research ship, to volunteer for test fishing and discuss how the fishery will be managed. What portion of these sections will open and the duration of each fishing period will be determined by the ADF&G management biologist on the grounds.

To alleviate the potential of gear conflicts, it is expected that Inner Uyak Bay Section fisheries for each gear type will be separated by date. The department will attempt to prosecute purse seine fisheries on odd-numbered days and gillnet fisheries on even-numbered days. This is a general framework within which EO openings may occur. It is not expected that gillnet fishing periods will occur until after at least one successful purse seine fishing period has occurred. This should insure that high quality herring are present on the grounds, using the purse seine fishery as another test fishery.

The department anticipates a 6 to 8 hour break in fishing activity for both gear types prior to starting the next gear opening. Once the GHL for one gear group has been met, fishing time for the other gear type that has not met its allocation could occur on any day.

ADF&G AND INDUSTRY COOPERATION

Management of the herring sac roe fishery relies primarily on harvest data collected by ADF&G field crews. Timely harvest information is essential to fishery management. In addition to the management biologists aboard the *R/V Resolution* and *R/V K-Hi-C*, ADF&G will station technicians in mobile field camps in sections where the highest fishing activity is expected (Table 5). Field crews will initially be stationed at Ameer Bay and in Kiliuda Bay, both within the Eastside District. On-the-grounds monitoring of fisheries is limited in some sections, and may occur incidental to monitoring efforts in adjacent sections. Department staff will make frequent contact with permit holders to collect harvest data, fleet movement information, spawn observations, and observations of juvenile and adult herring concentrations.

Permit holders and tender operators are encouraged to keep ADF&G field crews aware of herring harvests. In exploratory sections and all sections where a field crew is not present, if a harvest does occur, fishermen, tenders, or buyers should immediately contact area management biologists in Kodiak. Cooperation between the department, the fishing fleet, and buyers has been very good, and it is hoped that this will continue. If cooperation is lacking, closure of sections for the remainder of the 2005 season may be necessary, and future openings will be closely evaluated.

Fishermen are strongly encouraged to test catches prior to landing to harvest the highest value product possible.

Permit holders and spotter pilots are encouraged to provide biomass estimates, juvenile herring observations, and spawn observations to the department field crews or management staff. Past cooperation has helped evaluate stock status and gain critical management information. All information from fishermen and spotters pilots will remain confidential. Of particular interest is any observations of herring in closed management sections. Timely information will be used to direct ADF&G aerial or hydroacoustic surveys.

Samples from the commercial herring harvests need to be collected by ADF&G field crews and management biologists. Once again, industry cooperation is greatly appreciated. Department staff will also collect samples of juvenile herring. Samples are primarily used to monitor age composition and, when used with other stock performance indicators, will assist in determining stock status.

Changes in the 2005 management style will create additional responsibilities for the department management staff, enforcement staff, and fishery participants. Support and assistance from the industry is necessary for this style of fishery management to be successful. These changes should result in a more manageable fishery, greater economic benefit to the permit holders, and ensure the long-term health of the KMA herring stocks.

CATCH REPORTING

Processors and independent tender operators are required to provide timely daily catch reports by section. Herring on board tenders that have not yet been delivered to a processing facility must also be reported. Timely and accurate harvest reports received from field crews, permit holders, tender operators, spotters, and processors are critical in the assessment of herring harvests and guide the management of the fishery. Inaccurate or late information could result in premature area closures or overharvest.

BUYER, TENDER, AND FISHERMEN REGISTRATION

Each KMA tender operator and buyer must register with the ADF&G in Kodiak Area, at the Kodiak office, either in person or through an authorized agent (5AAC 27.540). Registration must occur prior to taking fish on board the tender or taking fish at the processing plant. Tenders are required to complete ADF&G fish tickets for each delivery. The fish ticket must have the fisherman's permit information legibly recorded, and must show how many fish were harvested (the on-the-grounds weight), date of harvest, and section from which the fish were harvested.

At the January 2005 meeting, the BOF added a new regulation requiring that after May 8, all KMA herring sac roe fishermen must register with the department and must have a registration

permit aboard in order to participate in the herring sac roe fishery (5 AAC 27.510. (a)(4)). It is the responsibility of the permit holders to keep the department informed of fishing activity and report herring harvests daily. The registration permit will outline reporting requirements by gear type. The permits will be available from ADF&G in Kodiak and on the fishing grounds beginning May 2, 2005.

A purse seine permit holder may use only one vessel to take herring – either the vessel identified on the holder’s permit card or a replacement vessel. If a Kodiak sac roe seine permit holder intends to fish with a different vessel than is listed on their permit card, they must register the replacement vessel with Kodiak management staff (5 AAC 27.525 (d)).

EMERGENCY ORDER ANNOUNCEMENTS

Two types of E.O.’s may be issued inseason by ADF&G for the Kodiak herring sac roe fishery: 1) announcements of short commercial fishing periods in the Paramanof/Foul Bays, Village Islands/Uganik Bays, and Inner Uyak Bay Sections; and 2) announcements of inperiod fishery closures in all other sections, which follow the standard fishing periods. When a preseason GHL for a section is approached or achieved, that section will be closed for the remainder of the season. Due to the rapid pace of harvest in certain locations, inperiod closures are likely. When inperiod closures are necessary, there may be as little as five minutes advanced notice prior to the closure time, or less if practical. Inperiod closures will be announced on VHF channel 6. Fishermen and tender operators should monitor VHF channel 6 to remain aware of section closures.

At any time during the season, if the department determines that herring stock abundance is below preseason expectations, sections may be closed prior to reaching their assigned GHL.

A news release will be issued to announce fishery decisions such as openings, closures, area restrictions, etc. News releases are distributed to processors, local radio stations and newspapers, and other interested parties. Contact the Kodiak herring area management biologists at the Kodiak ADF&G office to become part of the fax or email distribution lists for herring news releases.

All permit holders, tender operators, and processors are responsible for staying updated on section closures as they occur inseason. To accomplish this:

- 1) Contact the herring management staff in the Kodiak office, in person, by telephone at 486-1830, on SSB frequency 3.230 MHz (call sign WON32 Kodiak Fish and Game), or using Matrix AlaskaNet Satellite Dispatch at #7410.
- 2) Contact department field personnel on VHF channel 6, on SSB frequency 3.230 MHz (call sign WNJI 929 Kodiak Fish and Game), or using Matrix AlaskaNet Satellite Dispatch (*R/V Resolution* - #7411, and *R/V K-Hi-C* - #7412).
- 3) Contact any local herring processor for the latest Kodiak herring news release.
- 4) Call the ADF&G 24-hour recorded message phone at 486-4559.

- 5) Obtain a copy of the most recent news release from the Kodiak ADF&G office at 211 Mission Road (copies are available 24 hours per day in a bin located outside the main entrance to the building).
- 6) Listen to the ADF&G reports broadcast over the local AM and FM radio stations (consult stations for broadcast times).

HERRING TEST FISHERY PROGRAM

A herring test fishery program is proposed for the 2005 season, to generate funds to be used for Kodiak herring fishery management and research projects. The department will be requesting bids from processors and/or fishermen for the harvest and purchase of the herring. Contact a Kodiak Area herring management biologists at the Kodiak ADF&G office for more details.

OTHER REGULATORY CHANGES FOR 2005

Several regulatory changes concerning Kodiak herring fisheries were made by the BOF at a meeting held in Anchorage, Alaska, on January 7 to 10, 2005. Some of these changes were relatively minor while others substantially change how the fishery may be managed. The most significant changes have been previously outlined. Below is a list of regulatory changes not previously discussed. A complete set of current KMA commercial herring fishery regulations is attached as Appendix 1.

- The description of the Kodiak Area for herring fisheries was modified to mirror the description of the Kodiak Area salmon fishery (5 AAC 27.500).
- Global Positioning System (GPS) technology will be used to determine regulatory district, section, and closed water boundary lines for Kodiak herring fisheries (5 AAC 27.503).
- Districts will no longer close to fishing should section harvests exceed the combined district GHF (5 AAC 27.535. (e)(3)).

TABLES AND FIGURES

Table 1.—Historical harvest data for the commercial herring sac roe and food/bait fisheries and percent of the total annual herring harvest that occurs by fishery, Kodiak Management Area, 1964-2004.

Year	Sac Roe Harvest (Tons)	Food/Bait Harvest (Tons)	Total Herring Harvest (Tons)	Sac Roe Fishery Percent of Total Harvest (%)	Food/Bait Fishery Percent of Total Harvest (%)
1964	568	310	878	65%	35%
1965	657	35	692	95%	5%
1966	2,769	198	2,967	93%	7%
1967	1,662	300	1,962	85%	15%
1968	2,001	15	2,016	99%	1%
1969	1,130	11	1,141	99%	1%
1970	342	8	350	98%	2%
1971	284	44	328	87%	13%
1972	215	50	265	81%	19%
1973	831	178	1,009	82%	18%
1974	868	40	908	96%	4%
1975	8	5	13	62%	38%
1976	5	0	5	100%	0%
1977	338	0	338	100%	0%
1978	904	399	1,303	69%	31%
1979	1,735	125	1,860	93%	7%
1980	2,383	381	2,764	86%	14%
1981	2,065	18	2,083	99%	1%
1982	1,771	326	2,097	84%	16%
1983	2,318	33	2,351	99%	1%
1984	2,163	123	2,286	95%	5%
1985	1,968	102	2,070	95%	5%
1986	1,558	213	1,771	88%	12%
1987	2,146	217	2,363	91%	9%
1988	2,171	340	2,511	86%	14%
1989	2,249	345	2,594	87%	13%
1990	2,347	313	2,660	88%	12%
1991	2,432	215	2,647	92%	8%
1992	4,283	312	4,595	93%	7%
1993	4,929	837	5,766	85%	15%
1994	5,893	677	6,570	90%	10%
1995	4,604	507	5,111	90%	10%
1996	3,386	651	4,037	84%	16%
1997	3,235	756	3,991	81%	19%
1998	2,057	151	2,208	93%	7%
1999	1,651	0	1,651	100%	0%
2000	1,370	0	1,370	100%	0%
2001	1,694	115	1,809	94%	6%
2002	1,677	135	1,812	93%	7%
2003	1,992	199	2,191	91%	9%
2004	3,167	190	3,357	94%	6%
Average					
1964 to 2004	1,947	216	2,163	90%	10%
10 Year Average					
1995 to 2004	2,483	270	2,754	92%	8%
5 Year Average					
2000 to 2004	1,980	128	2,108	94%	6%

Table 2.—Herring sac roe fishery summary of season length, guideline harvest levels (GHL), harvest data by gear type, percentage of harvest by gear type, number of landings, and estimated exvessel earnings, Kodiak Management Area, 1979-2004.

Year	Season Length (Days)	GHL (Tons)	Total Harvest (Tons)	Harvest by Gear Type		Percent Harvest by Gear Type		Number of Landings by Gear Type		Units of Gear Fished ^a		Average Catch by Gear		Estimated Average Earnings ^b		Price per Ton ^b (\$)	Estimated Exvessel Total Value ^b (\$)
				Seine (Tons)	Gillnet (Tons)	Seine	Gillnet	Seine	Gillnet	Seine	Gillnet	Seine (Tons)	Gillnet (Tons)	Seine (\$)	Gillnet (\$)		
1979	36	2,400	1,735	1,457	278	84%	16%	-	-	57	125	26	2	\$38,342	\$3,336	\$1,500	\$2,602,500
1980	35	2,400	2,383	2,009	374	84%	16%	-	-	92	109	22	3	\$15,068	\$2,368	\$690	\$1,644,270
1981	48	2,400	2,065	1,596	469	77%	23%	207	406	79	114	20	4	\$14,647	\$2,983	\$725	\$1,497,125
1982	59	2,400	1,771	1,447	324	82%	18%	138	191	45	67	32	5	\$17,686	\$2,660	\$550	\$974,050
1983	51	2,400	2,319	1,797	522	77%	23%	164	284	41	64	44	8	\$35,063	\$6,525	\$800	\$1,855,200
1984	54	2,400	2,163	1,691	472	78%	22%	138	212	39	69	43	7	\$34,687	\$5,472	\$800	\$1,730,400
1985	59	2,000	1,968	1,244	724	63%	37%	118	348	34	81	37	9	\$32,929	\$8,044	\$900	\$1,771,200
1986	61	1,690	1,558	1,110	448	71%	29%	132	385	31	71	36	6	\$34,016	\$5,994	\$950	\$1,480,100
1987	61	1,640	2,146	1,591	554	74%	26%	122	411	29	62	55	9	\$54,862	\$8,935	\$1,000	\$2,146,000
1988	59	2,065	2,171	1,304	867	60%	40%	169	555	33	76	40	11	\$51,370	\$14,830	\$1,300	\$2,822,300
1989	76	2,415	2,249	1,513	736	67%	33%	171	627	37	83	41	9	\$34,749	\$7,535	\$850	\$1,911,149
1990	75	2,375	2,347	1,644	703	70%	30%	156	544	27	63	61	11	\$51,756	\$9,485	\$850	\$1,994,950
1991	83	2,510	2,432	1,697	735	70%	30%	169	587	32	64	53	11	\$45,077	\$9,762	\$850	\$2,067,200
1992	77	2,720	4,283	3,260	1,023	76%	24%	185	706	40	74	82	14	\$40,750	\$6,912	\$500	\$2,141,500
1993	77	3,525	4,929	4,203	726	85%	15%	237	294	41	86	103	8	\$56,382	\$4,643	\$550	\$2,710,950
1994	71	4,550	5,893	4,976	917	84%	16%	285	485	66	57	75	16	\$60,315	\$12,870	\$800	\$4,714,400
1995	73	4,480	4,604	3,837	768	83%	17%	280	642	73	71	53	11	\$66,858	\$13,759	\$1,272	\$5,856,288
1996	69	4,180	3,386	2,322	1,064	69%	31%	202	890	57	74	41	14	\$81,474	\$28,757	\$2,000	\$6,772,000
1997	49	3,435	3,235	2,629	606	81%	19%	183	418	64	59	41	10	\$20,539	\$5,136	\$500	\$1,617,500
1998	50	2,030	2,057	1,954	103	95%	5%	110	26	35	7	56	15	\$27,914	\$7,357	\$500	\$1,028,500
1999	38	1,495	1,651	1,589	62	96%	4%	94	16	31	5	51	12	\$33,984	\$8,221	\$663	\$1,094,613
2000 ^c	37	1,735	1,370	1,290	80	94%	6%	57	23	31	10	42	8	\$29,129	\$5,600	\$700	\$959,000
2001	47	1,540	1,694	1,412	282	83%	17%	67	37	33	9	43	31	\$21,394	\$15,667	\$500	\$847,000
2002	46	1,860	1,677	1,274	403	76%	24%	37	50	30	14	42	29	\$21,233	\$14,393	\$500	\$838,500
2003	42	2,600	1,992	1,738	254	87%	13%	59	45	31	11	56	23	\$28,032	\$11,545	\$500	\$996,000
2004	42	2,850	3,167	2,894	273	91%	9%	95	36	27	11	107	25	\$53,593	\$12,409	\$500	\$1,583,500
Average																	
1979 to 2004	57	2,542	2,586	2,057	530	79%	21%	149	342	44	59	50	12	\$38,533	\$9,046	\$817	\$2,140,623
10 Year																	
1995 to 2004	49	2,621	2,483	2,094	390	86%	14%	118	218	41	27	53	18	\$38,415	\$12,284	\$764	\$2,159,290
5 Year																	
2000 to 2004	43	2,117	1,980	1,722	258	86%	14%	63	38	30	11	58	23	\$30,676	\$11,923	\$540	\$1,044,800

^a From 1979 to 1998 fishery participation was based on vessels making landings; 1999 to 2004 data is based on actual fishery participation.

^b Exvessel values are based on dock delivered herring and inseason data.

^c Beginning in 2000, an allocative harvest strategy was in effect.

Table 3.-List of districts and management sections, guideline harvest levels (GHLs), closed sections, and district allocation percentages for the herring sac roe fishery, Kodiak Management Area, 2005.

Statistical Area	Management Section	2005 Guideline		
		Harvest Level Tons	Purse Seine Tons	Gillnet Tons
<i>NORTH AFOGNAK DISTRICT</i>				
NA10	Shuyak Island	CLOSED	-	-
NA20	Delphin Bay	CLOSED	-	-
NA30	Perenos Bay	EXPLORATORY	EXPLORATORY	EXPLORATORY
NA40	Seal Bay	CLOSED	-	-
NA50	Tonki Bay	EXPLORATORY	EXPLORATORY	EXPLORATORY
<i>WEST AFOGNAK DISTRICT</i>				
WA10	Raspberry Strait	CLOSED	-	-
WA20	Malina Bay	10	CLOSED	10
WA31	Paramanof Bay	250	250	CLOSED
WA32	Foul Bay	* Note: WA31 and WA32 will be managed as one section.		
WA40	Blue Fox/Devil's Inlet	EXPLORATORY	EXPLORATORY	EXPLORATORY
WA50	Offshore W. Afognak	CLOSED	-	-
<i>SOUTH AFOGNAK DISTRICT</i>				
SA10	Izhut Bay	15	CLOSED	15
SA20	Kitoy Bay	* Note: SA10, SA20, and SA30 will be managed as one section.		
SA30	MacDonalds Lagoon	* Note: SA10, SA20, and SA30 will be managed as one section.		
SA40	Danger Bay	70	CLOSED	70
SA50	Litnik	CLOSED	-	-
SA60	Duck Bay	CLOSED	-	-
<i>TOTAL ALL AFOGNAK DISTRICTS</i>		345	250	95
<i>DISTRICT ALLOCATION PERCENTAGE</i>			72.5%	27.5%
<i>UGANIK DISTRICT</i>				
UG10	Kupreanof	CLOSED	-	-
UG20	Viekoda Bay	25	-	25
UG21	Terror Bay	30	CLOSED	30
UG30	Village Islands	1,450	1,200	250
UG31	West Uganik Passage	60		60
UG32	NE Arm Uganik Bay	* Note: UG30, UG32, UG33, and UG34 will be managed as one		
UG33	East Arm Uganik Bay	section with 1,200 ton GHL for purse seine gear and 250 ton GHL		
UG34	South Arm Uganik Bay	for gillnet gear.		
UG40	Offshore Uganik	CLOSED	-	-
<i>DISTRICT TOTAL</i>		1,565	1,200	365
<i>DISTRICT ALLOCATION PERCENTAGE</i>			76.7%	23.3%
<i>UYAK DISTRICT</i>				
UY10	Offshore Uyak	CLOSED	-	-
UY20	Harvester Island	CLOSED	-	-
UY30	Inner Uyak	300	250	50
UY32	Browns Lagoon	10	CLOSED	10
UY31	Larsen Bay	CLOSED	-	-
UY40	Zachar Bay	20	CLOSED	20
UY50	Spiridon Bay	CLOSED	-	-
<i>DISTRICT TOTAL</i>		330	250	80
<i>DISTRICT ALLOCATION PERCENTAGE</i>			75.8%	24.2%

-continued-

Table 3.-Page 2 of 3.

Statistical Area	Management Section	2005 Guideline		
		Harvest Level Tons	Purse Seine Tons	Gillnet Tons
ALITAK DISTRICT				
AL10	Outer Alitak	CLOSED	-	-
AL20	Inner Alitak	*Note: AL20, AL31, and a portion of AL40 will be managed as one section.		
AL21	Inner Deadman Bay	75	75	CLOSED
AL22	Outer Deadman Bay	75	75	CLOSED
AL30	Sulua Bay	60	CLOSED	60
AL31	Portage Bay	75	75	CLOSED
AL40	Lower Olga/Moser	*Note only a portion of this section will be open see AL20.		
AL41	No. Upper Olga Bay	EXPLORATORY	EXPLORATORY	EXPLORATORY
AL50	Upper Olga Bay	EXPLORATORY	EXPLORATORY	EXPLORATORY
AL60	Geese/Twoheaded	EXPLORATORY	EXPLORATORY	EXPLORATORY
DISTRICT TOTAL		285	225	60
DISTRICT ALLOCATION PERCENTAGE			78.9%	21.1%
STURGEON/HALIBUT DISTRICT				
SH10	Sturgeon/Halibut	CLOSED	CLOSED	CLOSED
EASTSIDE DISTRICT				
EA10	Kaiugnak	EXPLORATORY	EXPLORATORY	EXPLORATORY
EA20	SW. Sitkalidak	EXPLORATORY	EXPLORATORY	EXPLORATORY
EA21	Three Saints Bay	EXPLORATORY	EXPLORATORY	EXPLORATORY
EA22	Newman Bay	EXPLORATORY	EXPLORATORY	EXPLORATORY
EA23	W. Sitkalidak Strait	125	125	CLOSED
EA24	Barling Bay	75	75	CLOSED
EA30	E. Sitkalidak Strait	100	100	CLOSED
EA31	Tanginak Anchorage	EXPLORATORY	EXPLORATORY	EXPLORATORY
EA40	Outer Sitkalidak	CLOSED	-	-
EA41	Boulder Bay	CLOSED	-	-
EA42	Shearwater Bay	30	CLOSED	30
EA43	Outer Kiliuda Bay	200	200	CLOSED
EA44	Inner Kiliuda Bay	75	CLOSED	75
EA50	Outer Ugak Bay	100	CLOSED	100
EA51	Inner Ugak Bay	150	150	CLOSED
EA52	Pasagshak Bay	CLOSED	-	-
DISTRICT TOTAL		855	650	205
DISTRICT ALLOCATION PERCENTAGE			76.0%	24.0%
NORTHEAST DISTRICT				
NE10	Womens Bay	20	CLOSED	20
NE20	Kalsin Bay	CLOSED	-	-
NE30	Middle Bay	CLOSED	-	-
NE40	Inshore Chiniak	CLOSED	-	-
NE50	Offshore Chiniak	CLOSED	-	-
DISTRICT TOTAL		20	CLOSED	20
DISTRICT ALLOCATION PERCENTAGE			0%	100%

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Table 3.-Page 3 of 3.

Statistical Area	Management Section	2005 Guideline		
		<u>Harvest Level</u> Tons	<u>Purse Seine</u> Tons	<u>Gillnet</u> Tons
<i>INNER MARMOT DISTRICT</i>				
IM10	Monashka Bay	CLOSED	-	-
IM20	Anton Larsen Bay	15	CLOSED	15
IM30	Sharatin Bay	10	CLOSED	10
IM40	Kizhuyak Bay	50	50	CLOSED
IM50	Spruce Island	CLOSED	-	-
<i>DISTRICT TOTAL</i>		75	50	25
<i>DISTRICT ALLOCATION PERCENTAGE</i>			66.7%	33.3%
<i>NORTH MAINLAND DISTRICT</i>				
NM10	Hallo Bay	CLOSED	-	-
NM20	Inner Kukak	EXPLORATORY	EXPLORATORY	EXPLORATORY
NM30	Outer Kukak	CLOSED	-	-
NM40	Missak Bay	CLOSED	-	-
<i>MID MAINLAND DISTRICT</i>				
MM10	Inner Katmai	EXPLORATORY	EXPLORATORY	EXPLORATORY
MM20	Outer Katmai	CLOSED	-	-
MM30	Alinchak	EXPLORATORY	EXPLORATORY	EXPLORATORY
MM40	Puale Bay	EXPLORATORY	EXPLORATORY	EXPLORATORY
MM50	Portage Bay	EXPLORATORY	EXPLORATORY	EXPLORATORY
MM60	Outer Portage	EXPLORATORY	EXPLORATORY	EXPLORATORY
<i>SOUTH MAINLAND DISTRICT</i>				
SM10	Wide Bay	EXPLORATORY	EXPLORATORY	EXPLORATORY
SM20	Lower Shelikof	CLOSED	-	-
<i>MAINLAND DISTRICTS TOTAL</i>		0	0	0
<i>DISTRICT ALLOCATION PERCENTAGE</i>			0.0%	0.0%
<i>GRAND TOTAL</i>		3,475	2,625	850
<i>ALLOCATION PERCENTAGE ALL DISTRICTS</i>			75.5%	24.5%

Table 4.—Alaska statewide average sac roe herring harvest for 2000-2004 and preliminary 2005 harvest projections.

Fishery Location	Average Harvest	
	2000-2004	2005 Harvest Projection
<i>Southeast</i>		
Kah Shakes	0	Closed
Sitka Sound	8,877	11,192
Seymour Canal	901	894
Hobart/Houghton	0	Closed
West Behm Canal	0	Closed
Lynn Canal	0	Closed
Southeast Total	9,778	12,086
<i>Prince William Sound</i>		
	0	Closed
<i>Cook Inlet</i>		
Kamishak District	0	Closed
Upper Cook Inlet	0	0
Cook Inlet Total	0	0
<i>Kodiak</i>		
Purse Seine	1,722	2,625
Gillnet	258	850
Kodiak Total	1,980	3,475
<i>Alaska Peninsula</i>		
North Peninsula	0	0
South Peninsula	0	0
AK. Peninsula Total	0	0
<i>Bristol Bay (Togiak)</i>		
Seine	14,005	11,527
Gill Net	5,710	4,940
Togiak Total	19,715	16,467
<i>AYK Area</i>		
Security Cove	283	3,638
Goodnews Bay	30	2,682
Cape Avinof	183	507
Nunivak Island	89	956
Nelson Island	816	688
Cape Romanzof	168	677
Norton Sound		
Gillnet	1,723	5,275
Beach Seine	16	586
Port Clarence	0	165
AYK Total	3,308	15,174
<i>Statewide Total Harvest</i>	34,781	47,202

Table 5.– Alaska Department of Fish and Game, Division of Commercial Fisheries management staff, Kodiak Management Area, 2005.

Office:	
Regional Supervisor	Denby Lloyd
Regional Management Finfish Supervisor	Jim McCullough
Area Management Biologist	Kevin Brennan
Assistant Area Management Biologist	Dennis Gretsch
Assistant Area Management Biologist	Jeff Wadle
Fishery Technician	Chris Bond

Field Staff:	
R/V K-Hi-C:	
Boat Officer	Tom Emerson
Assistant Area Management Biologist	Dennis Gretsch
R/V Resolution:	
Boat Officer	Dennis Cox
Assistant Area Management Biologist	Jeff Wadle
Field Crews:	
Fishery Technician	Jon Becker
Fishery Technician	Robin Overall
Fishery Technician	Tim Chiles
Fishery Technician	Lisa Creelman

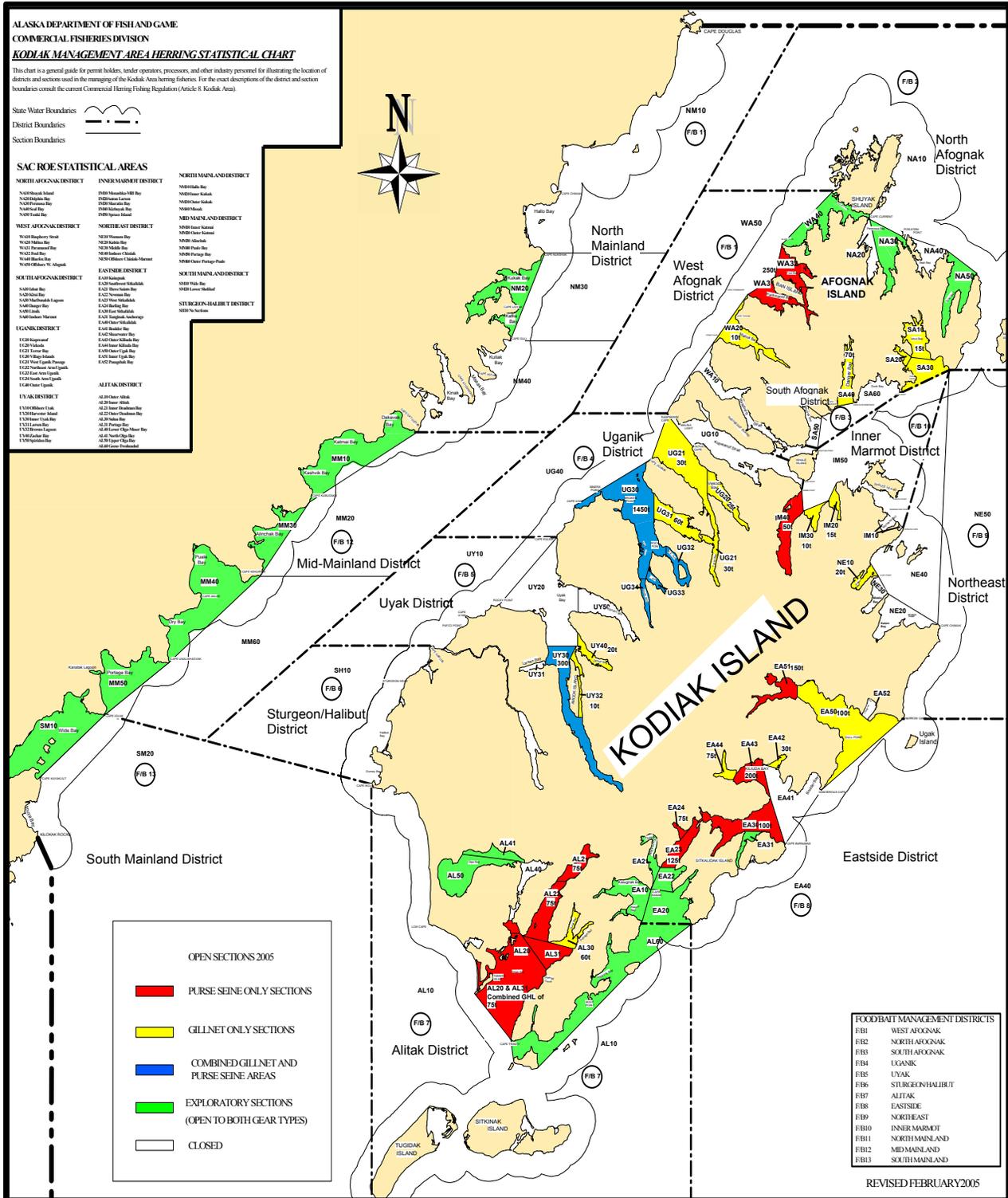


Figure 1.—Map of the Kodiak herring sac roe fishery by harvest areas.

APPENDIX A: HERRING SAC ROE REGULATIONS

Appendix A1.-Regulations for the 2005 Kodiak herring sac roe fishery.

Chapter 27. Herring Fishery.

Article 8. Kodiak Area (Registration Area K).

5 AAC 27.500. Description of Kodiak Area.

The Kodiak Area includes all waters of Alaska south of a line extending from Cape Douglas (58° 51.10' N. lat.), west of 150° W. long., north of 55° 30.00' N. lat., and north and east of a line extending 135° southeast for three miles from a point near Kilokak Rocks at 57° 10.34' N. lat., 156° 20.22' W. long. (the longitude of the southern entrance of Imuya Bay), then due south.

5 AAC 27.505. Description of Kodiak Area districts and sections.

(a) West Afognak District: all waters south of a line from Head Point (57° 59.67' N. lat., 152° 46.75' W. long.) to Dolphin Point (57° 59.17' N. lat., 152° 43.42' W. long.), and north of a line from Occident Point (57° 57.42' N. lat., 152° 51.75' W. long.) to Last Timber Point (57° 58.60' N. lat., 152° 59.05' W. long.), and north of a line extending west on the latitude of Raspberry Cape (58° 03.58' N. lat.) to midstream of Shelikof Strait, east of midstream of Shelikof Strait to Cape Newland (58° 30.40' N. lat., 152° 39.50' W. long.), and west of the longitude of Cape Current (152° 28.90' W. long.).

(1) Raspberry Strait Section: all waters of Raspberry Strait enclosed by a line extending from Raspberry Cape (58° 03.58' N. lat., 153° 25.25' W. long.) to Steep Cape (58° 12.00' N. lat., 153° 12.50' W. long.), and by lines from Head Point (57° 59.67' N. lat., 152° 46.75' W. long.) to Dolphin Point on Whale Island (57° 59.17' N. lat., 152° 43.42' W. long.), and north of a line from Occident Point (57° 57.42' N. lat., 152° 51.75' W. long.) to Last Timber Point (57° 58.60' N. lat., 152° 59.05' W. long.);

(2) Malina Bay Section: all waters of Malina Bay east of a line from Steep Cape (58° 12.00' N. lat., 153° 12.50' W. long.) to Cape Paramanof (58° 18.33' N. lat., 153° 02.80' W. long.);

(3) Paramanof Bay Section: all waters of Paramanof Bay east of a line from Cape Paramanof (58° 18.33' N. lat., 153° 02.80' W. long.) to the westernmost tip of Ban Island, and south of a line extending from the east side of Ban Island to the west side of Afognak Island at 58° 19.25' N. lat.;

(4) Foul Bay Section: all waters of Foul Bay east of a line from the westernmost tip of Ban Island to Black Cape (58° 24.50' N. lat., 152° 53.30' W. long.), excluding the Paramanof Bay Section;

(5) Bluefox Bay Section: all waters enclosed by a line from Black Cape (58° 24.50' N. lat., 152° 53.30' W. long.) to Cape Newland (58° 30.40' N. lat., 152° 39.50' W. long.), and west of a line at the longitude of Cape Current (152° 28.90' W. long.) north to Shuyak Island;

(6) Offshore West Afognak Section: all waters enclosed by lines extending west along the latitudes of Raspberry Cape (58° 03.58' N. lat.) and Cape Newland (58° 30.40' N. lat.) to midstream of Shelikof Strait, and by lines from Raspberry Cape to Steep Cape to Cape Paramanof to Cape Newland.

(b) North Afognak District: all waters north of the latitude of Cape Newland and east of midstream Shelikof Strait to the latitude of Cape Douglas, east of the longitude of Cape Current, and north of the latitude of Pillar Cape (58° 08.90' N. lat., 152° 06.90' W. long.).

(1) Shuyak Island Section: all waters north of the latitude of Cape Newland, east of the longitude of Cape Current, and north of a line from Cape Current to Tolstoi Point (58° 23.75' N. lat., 152° 07.50' W. long.), to Tonki Cape (58° 21.13' N. lat., 151° 59.20' W. long.), and north of the latitude of Pillar Cape;

(2) Delphin Bay Section: all waters of Delphin Bay south and west of a line from Delphin Point (58° 22.78' N. lat., 152° 26.30' W. long.) to Cape Current;

(3) Perenosa Bay Section: all waters of Perenosa Bay south of a line from Cape Current to Posliedni Point (58° 26.00' N. lat., 152° 19.50' W. long.), excluding the Delphin Bay Section;

(4) Seal Bay Section: all waters of Seal Bay south of a line from Posliedni Point to Tolstoi Point;

(5) Tonki Bay Section: all waters of Tonki Bay south of a line from Tolstoi Point to Tonki Cape.

(c) South Afognak District: all waters north of a line from Pillar Cape (58° 08.90' N. lat., 152° 06.80' W. long.) to Cape Izhut (58° 06.03' N. lat., 152° 20.40' W. long.) to Dolphin Point (57° 59.17' N. lat., 152° 43.42' W. long.) and to Head Point (57° 59.67' N. lat., 152° 46.17' W. long.).

(1) Izhut Bay Section: all waters of Izhut Bay north of 58° 10.60' N. lat.;

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- (2) **Kitoi Bay Section:** all waters of Kitoi Bay west of a line from 58° 10.60' N. lat., 152° 17.40' W. long. to 58° 09.53' N. lat., 152° 18.70' W. long.;
- (3) **MacDonald Lagoon Section:** all waters of Izhut Bay south of 58° 10.60' N. lat., the eastern boundary of the Kitoi Bay Section, and a line from Cape Izhut to Pillar Cape;
- (4) **Danger Bay Section:** all waters of Danger Bay north of a line from Cape Kazakof (58° 04.67' N. lat., 152° 37.67' W. long.) to Cape Kostromitinof (58° 05.00' N. lat., 152° 32.75' W. long.);
- (5) **Litnik Section:** all waters of Afognak Bay enclosed by a line from Head Point to Dolphin Point and the longitude of Dolphin Point;
- (6) **Duck Bay Section:** all waters of Marmot Bay enclosed by a line from Cape Izhut to Dolphin Point, by the longitude of Dolphin Point, and by a line from Cape Kazakof to Cape Kostromitinof.
- (d) **Uganik Bay District:** all waters north of the latitude of Cape Kuliuk (57° 48.25' N. lat.) to midstream Shelikof Strait, and south of the latitude of Raspberry Cape to midstream Shelikof Strait, east of midstream Shelikof Strait, and including the waters of Kupreanof Straits west of a line from Inner Point (57° 54.10' N. lat., 152° 47.80' W. long.) to Bird Point (57° 55.33' N. lat., 152° 47.50' W. long.), and south of a line from Occident Point (57° 57.42' N. lat., 152° 51.75' W. long.) to Last Timber Point (57° 58.60' N. lat., 152° 59.05' W. long.).
- (1) **Kupreanof Section:** all waters enclosed by a line from Raspberry Cape to Outlet Cape (57° 59.75' N. lat., 153° 17.50' W. long.) and by lines from Inner Point to Bird Point and from Occident Point to Last Timber Point;
- (2) **Viekoda Bay Section:** all waters of Inner Viekoda Bay east of the longitude of Naugolka Point (57° 53.70' N. lat., 153° 14.10' W. long.);
- (3) **Terror Bay Section:** all waters of Terror Bay and Outer Viekoda Bay enclosed by lines from Raspberry Cape to Cape Uganik and from Raspberry Cape to Outlet Cape, and all waters of West Uganik Passage east of 153° 15.70' W. long.;
- (4) **Village Islands Section:** all waters of Uganik Bay south of a line from Cape Ugat to Cape Uganik (57° 58.00' N. lat., 153° 30.28' W. long.), west of lines from Cape Uganik to East Point (57° 50.50' N. lat., 153° 28.70' W. long.), and west of a line at 153° 26.00' W. long. in Northeast Arm Uganik Bay, and north and west of a line that extends from Mink Point to Packer's Spit at 57° 43.95' N. lat., 153° 30.00' W. long. in East Arm Uganik Bay, and north of the latitude of Mink Point;
- (5) **West Uganik Passage Section:** all waters of West Uganik Passage west of 153° 15.70' W. long., and east of a line from Cape Uganik to East Point;
- (6) **Northeast Arm Uganik Section:** all waters of the Northeast Arm of Uganik Bay east of a line at 153° 26.00' W. long.;
- (7) **East Arm Uganik Section:** all waters of the East Arm of Uganik Bay (Mush Bay) south and east of a line that extends from Packer's Spit at 57° 43.95' N. lat., 153° 30.00' W. long., to Mink Point (57° 43.13' N. lat., 153° 30.10' W. long.);
- (8) **South Arm Uganik Section:** all waters of the South Arm of Uganik Bay south of the latitude of Mink Point;
- (9) **Outer Uganik Section:** all waters south of the latitude of Raspberry Cape, north of the latitude of Cape Kuliuk, east of midstream of Shelikof Strait, and west of a line from Cape Uganik to Cape Ugat (57° 52.33' N. lat., 153° 50.92' W. long.).
- (e) **Uyak District:** all waters south of the latitude of Cape Kuliuk to midstream of Shelikof Strait and north of the latitude of Cape Karluk to midstream of Shelikof Strait, and east of midstream of Shelikof Strait and including all of Uyak Bay.
- (1) **Offshore Uyak Section:** all waters south of the latitude of Cape Kuliuk to midstream Shelikof Strait and north of the latitude of Cape Karluk (57° 34.70' N. lat.) to midstream Shelikof Strait, east of midstream Shelikof Strait, and west of a line from Cape Kuliuk to Rocky Point (57° 39.78' N. lat., 154° 13.90' W. long.);
- (2) **Harvester Island Section:** all waters north of the latitude of Carlsen Point (57° 34.55' N. lat.) and west of 153° 50.00' W. long., and south of a line from Cape Kuliuk to Rocky Point (57° 39.78' N. lat., 154° 13.90' W. long.);
- (3) **Inner Uyak Bay Section:** all waters of Inner Uyak Bay south of the latitude of Carlsen Point, excluding the Larsen Bay and Browns Lagoon Sections;
- (4) **Larsen Bay Section:** all waters of Larsen Bay west of 153° 58.50' W. long.;
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- (5) **Browns Lagoon Section:** that portion of the Inner Uyak Bay Section in Amook Pass south of a line from the northern tip of Amook Island to Carlsen Point, and north of the latitude of the southern tip of Amook Island;
- (6) **Zachar Bay Section:** all waters of Zachar Bay east of 153° 50.00' W. long.;
- (7) **Spiridon Bay Section:** all waters of Spiridon Bay east of 153° 50.00' W. long.
- (f) **Sturgeon-Halibut Bay District:** all waters south of the latitude of Cape Karluk to midstream Shelikof Strait, and north of a line from Cape Ikolik (57° 17.43' N. lat.) to midstream of Shelikof Strait (57° 22.00' N. lat. and 155° 25.00' W. long.), and east of midstream Shelikof Strait, and including all bays from Cape Ikolik to Cape Karluk.
- (g) **Alitak Bay District:** all waters east of the longitude of Cape Ikolik (154° 47.50' W. long.), west of the longitude of Black Point (153° 18.65' W. long.), and south of a line from Black Point (56° 59.50' N. lat., 153° 18.65' W. long.) to Cape Kiavak (57° N. lat., 153° 32.50' W. long.).
- (1) **Outer Alitak Bay Section:** all waters encompassed by lines east of the longitude of Cape Ikolik, west of the longitude of Black Point, south of a line from Black Point to the northernmost tip of Twoheaded Island, from the southernmost tip of Twoheaded Island to the easternmost tip of Aiaktalik Island, from the westernmost tip of Aiaktalik Island to Cape Trinity, and northwest to Cape Alitak (56° 50.58' N. lat., 154° 18.50' W. long.);
- (2) **Inner Alitak Bay Section:** all waters enclosed by a line from Cape Alitak to Cape Trinity and south of a line from the latitude of Bun Point in Moser Bay, and from Bun Point to the northern entrance of Seaborg Cove (56° 53.83' N. lat., 153° 58.72' W. long.);
- (3) **Inner Deadman Bay Section:** all waters of Deadman Bay north of 57° 05.00' N. lat.;
- (4) **Outer Deadman Bay Section:** all waters north of a line from Cape Hepburn to Bun Point and south of 57° 05.00' N. lat.;
- (5) **Portage Bay Section:** all waters enclosed by a line from Bun Point to Cape Hepburn (56° 57.30' N. lat., 154° 06.45' W. long.) to a point in Portage Bay at 56° 56.50' N. lat., 153° 51.40' W. long.), and north of a line from Bun Point to the northern entrance of Seaborg Cove (56° 53.83' N. lat., 153° 58.72' W. long.);
- (6) **Sulua Bay Section:** all waters of Sulua and the northern portion of Portage Bay north of a line from Cape Hepburn to a point in Portage Bay at 56° 56.50' N. lat., 153° 51.40' W. long.;
- (7) **Lower Olga-Moser Bay Section:** all waters of Lower Olga and Moser Bays south of a line from Stockholm Point (57° 07.60' N. lat., 154° 06.75' W. long.), east to a point at 57° 07.47' N. lat., 154° 04.90' W. long., and north of the latitude of Bun Point;
- (8) **North Olga Bay Section:** all waters of Olga Bay north of a line that extends from the terminus of Silver Salmon Creek (No. 257-303) to Stockholm Point, and east to a point at 57° 07.47' N. lat., 154° 04.90' W. long.;
- (9) **Upper Olga Bay Section:** all waters of Upper Olga Bay south of a line from Stockholm Point to the terminus of Silver Salmon Creek;
- (10) **Geese-Twoheaded Section:** all waters encompassed by lines from Cape Trinity to the westernmost tip of Aiaktalik Island, from the easternmost tip of Aiaktalik Island to the southernmost tip of Twoheaded Island, from the northernmost tip of Twoheaded Island to Black Point, and south of a line from Black Point (56° 59.50' N. lat., 153° 18.65' W. long.) to Cape Kiavak (57° N. lat., 153° 32.50' W. long.).
- (h) **Eastside District:** all waters south of the latitude of Narrow Cape, extending east to 150° W. long., and north and east of a line from Black Point to Cape Kiavak.
- (1) **Kaiugnak Section:** all waters of Kaiugnak and Kiavak Bays west of a line from Cape Kasiak to Cape Kiavak;
- (2) **Southwest Sitkalidak Section:** all waters of West Sitkalidak Strait and associated bays enclosed by a line north of Cape Kiavak to Black Point, east of a line from Cape Kiavak to Cape Kasiak, and south of a line from Cape Kasiak to Natalia Point, including all waters of Natalia Bay;
- (3) **Three Saints Bay Section:** all waters of Three Saints Bay west of a line from Cape Kasiak to Cape Liakik;
- (4) **Newman Bay Section:** all waters of Newman Bay and a part of Sitkalidak Strait enclosed by a line north of Natalia Point to Cape Kasiak, east of a line from Cape Kasiak to Cape Liakik, and south of the latitude of Cape Liakik at 57° 06.73' N. lat.;
- (5) **West Sitkalidak Section:** all waters of West Sitkalidak Strait west of 153° 16.55' W. long. and north of the latitude of Cape Liakik at 57° 06.73' N. lat., excluding the Barling Bay Section;
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- (6) Barling Bay Section:** all waters of Barling Bay west of a line from the northern entrance at 57° 11.65' N. lat., 153° 19.08' W. long. to Barling Spit at 57° 10.20' N. lat., 153° 21.68' W. long.;
- (7) East Sitkalidak Section:** all waters of East Sitkalidak Strait and associated bays enclosed by a line from Left Cape (57° 15.40' N. lat., 152° 56.52' W. long.) to Cape Barnabas (59° 09.07' N. lat., 152° 52.20' W. long.) and east of 153° 16.55' W. long., excluding the Tanginak Anchorage Section;
- (8) Tanginak Anchorage Section:** all waters of MacDonald Lagoon and Tanginak Anchorage south of the latitude of Lagoon Point (57° 11.37' N. lat., 153° 03.75' W. long.);
- (9) Outer Sitkalidak Section:** all waters east of the longitude of Black Point, south of the latitude of Narrow Cape, and east of lines from Cape Barnabas to Dangerous Cape, and from Dangerous Cape to Narrow Cape;
- (10) Boulder Bay Section:** all waters of Outer Kiliuda, Santa Flavia, and Boulder Bays enclosed by a line from Dangerous Cape to Cape Barnabas to Left Cape to Shearwater Point to Pillar Point;
- (11) Shearwater Section:** all waters of Shearwater Bay east of a line from Shearwater Point (57° 19.80' N. lat., 152° 58.50' W. long.) to Pillar Point (57° 19.22' N. lat., 152° 54.95' W. long.);
- (12) Outer Kiliuda Bay Section:** all waters of Kiliuda Bay west of a line from Left Cape to Shearwater Point, and east of a line from a point at 57° 18.63' N. lat., 153° 05.95' W. long. to a point at 57° 17.82' N. lat., 153° 06.95' W. long.;
- (13) Inner Kiliuda Bay Section:** all waters of Kiliuda Bay west of a line from a point at 57° 18.63' N. lat., 153° 05.95' W. long. to a point at 57° 17.82' N. lat., 153° 06.95' W. long.;
- (14) Inner Ugak Bay Section:** all waters of Ugak Bay west of 152° 49.00' W. long.;
- (15) Outer Ugak Bay Section:** all waters of Ugak Bay east of 152° 49.00' W. long., and north and west of a line from Dangerous Cape to Narrow Cape, excluding the Pasagshak Section;
- (16) Pasagshak Bay Section:** all waters of Pasagshak Bay north and east of a line from 57° 26.00' N. lat., 152° 31.15' W. long. to 57° 25.00' N. lat., 152° 29.40' W. long.
- (i) Northeast District:** all waters north of the latitude of Narrow Cape, including Chiniak Bay, and east of a line from Spruce Cape to Pillar Cape, and south of the latitude of Pillar Cape.
- (1) Womens Bay Section:** all waters of Womens Bay south and west of a line from Cliff Point (57° 43.50' N. lat., 152° 26.52' W. long.) to the terminus of Buskin River;
- (2) Kalsin Bay Section:** all waters of Kalsin Bay south and west of a line from Cape Chiniak (57° 37.55' N. lat., 152° 09.28' W. long.) to Broad Point;
- (3) Middle Bay Section:** all waters of Middle Bay south and west of a line from Broad Point to Cliff Point;
- (4) Inshore Chiniak Section:** all waters of Chiniak Bay enclosed by lines from Cape Chiniak to Broad Point to Cliff Point to the terminus of Buskin River, and from Spruce Cape to Pillar Cape to Cape Chiniak;
- (5) Offshore Chiniak-Marmot Section:** all waters east of a line from Pillar Cape to Cape Chiniak, south of the latitude of Pillar Cape and north of the latitude of Narrow Cape.
- (j) Inner Marmot Bay District:** all waters east of a line from Spruce Cape to Pillar Cape, south of a line from Pillar Cape to Cape Izhut to Dolphin Point, and east of a line from Bird Point to Inner Point.
- (1) Monashka-Mill Bay Section:** all waters of Monashka Bay and Mill Bay west of a line from Termination Point (57° 51.37' N. lat., 152° 24.15' W. long.) to Spruce Cape (57° 49.57' N. lat., 152° 19.62' W. long.);
- (2) Anton Larsen Bay Section:** all waters of Anton Larsen Bay south of a line from Kizhuyak Point (57° 55.02' N. lat., 152° 38.20' W. long.) to Crag Point (57° 52.75' N. lat., 152° 40.00' W. long.);
- (3) Sharatin Bay Section:** all waters of Sharatin Bay south of a line from Crag Point to Kekur Point (57° 51.48' N. lat., 152° 47.15' W. long.);
- (4) Kizhuyak Bay Section:** all waters of Kizhuyak Bay west of a line from Kekur Point to Inner Point (57° 54.05' N. lat., 152° 47.75' W. long.);
- (5) Spruce Island Section:** all waters of Marmot Bay and adjacent bays and islands enclosed by a line from Spruce Cape to Pillar Cape to Cape Izhut to Dolphin Point to Inner Point to Kekur Point to Crag Point to Kizhuyak Point.
- (k) North Mainland District:** all waters south of the latitude of Cape Douglas (58° 51.10' N. lat.), west of midstream Shelikof Strait, and north of the latitude of Cape Ilktugitak (58° 35.00' N. lat., 154° 01.15' W. long.).
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(1) Hallo Bay Section: all waters south of the latitude of Cape Douglas to midstream of Shelikof Strait, and north of the latitude of Cape Nukshak (58° 23.50' N. lat., 153° 58.95' W. long.), and east to midstream of Shelikof Strait;

(2) Inner Kukak Section: all waters west of a line from Cape Nukshak to Cape Gull (58° 13.05' N. lat., 154° 08.65' W. long.);

(3) Outer Kukak Section: all waters east of a line from Cape Nukshak to Cape Gull, and east of the latitudes of Cape Nukshak and Cape Gull to midstream of Shelikof Strait;

(4) Missak Section: all waters south of the latitude of Cape Gull east to midstream of Shelikof Strait, and north of the latitude of Cape Ilktugitak to midstream of Shelikof Strait.

(l) Mid Mainland District: all waters south of the latitude of Cape Ilktugidak, west of midstream Shelikof Strait, and north of the latitude of Cape Igvak.

(1) Inner Katmai Section: all waters north and west of a line from Cape Ilktugitak (58° 01.12' N. lat., 154° 35.05' W. long.) to Cape Kubugakli (57° 53.83' N. lat., 155° 03.70' W. long.);

(2) Outer Katmai Section: all waters encompassed by the latitude of Cape Ilktugitak east to midstream of Shelikof Strait, the latitude of Cape Kekurnoi east to midstream of Shelikof Strait, west of midstream of Shelikof Strait, east of lines from Cape Ilktugitak to Cape Kubugakli, and from Cape Kubugakli to Cape Kekurnoi (57° 43.45' N. lat., 155° 18.05' W. long.);

(3) Alinchak Section: all waters west of a line from Cape Kubugakli to Cape Kekurnoi;

(4) Puale Bay Section: all waters west of a line from Cape Kekurnoi to Cape Unalishagvak (57° 32.70' N. lat., 155° 43.83' W. long.);

(5) Portage Bay Section: all waters west of a line from Cape Unalishagvak to Cape Igvak (57° 26.05' N. lat., 156° 01.43' W. long.);

(6) Outer Portage-Puale Section: all waters east of lines from Cape Kekurnoi to Cape Unalishagvak and from Cape Unalishagvak to Cape Igvak, and north of a line that extends from Cape Igvak east to midstream of Shelikof Strait at 57° 22.00' N. lat. and 155° 25.00' W. long., and south of a line from the latitude of Cape Kekurnoi east to midstream of Shelikof Strait.

(m) South Mainland District: all waters enclosed by a line north of the latitude of 55° 30.00' N. lat., west of the longitude of Cape Ikolik, south of a line from Cape Ikolik to Cape Igvak, and east of a line extending south from the southern entrance of Imuya Bay near Kilokak Rocks at 156° 20.07' W. long.

(1) Wide Bay Section: all waters west of a line from Cape Igvak to Cape Kayakliut (57° 17.65' N. lat., 156° 19.00' W. long.);

(2) Lower Shelikof Section: all waters enclosed east of a line from Cape Igvak to Cape Kayakliut, east of the longitude of Kilokak Rocks, west of the longitude of Cape Ikolik, and south of a line from Cape Igvak to Cape Ikolik.

5 AAC 27.506. Use of global positioning system (GPS).

In the Kodiak Area, boundaries, lines, and coordinates are identified with the global positioning system (GPS). If the global positioning system is not operating, the boundaries, lines, and coordinates are as identified by ADF&G regulatory markers.

5 AAC 27.510. Fishing seasons and periods for Kodiak Area.

(a) Unless otherwise provided for by emergency order, herring may be taken during the sac roe season from April 15 through June 30, as follows:

(1) from April 15 through May 7 fishing periods for purse seines are from 12:00 NOON until 9:00 PM on odd-numbered days, and from 9:00 AM until 12:00 NOON on even-numbered days if a harvestable surplus is available; from May 8 through June 30, fishing periods for purse seines are from 12:00 NOON until 10:00 PM on odd-numbered days, and from 9:00 AM until 12:00 NOON on even-numbered days if a harvestable surplus is available;

(2) from April 15 through June 30, the fishing periods for gillnets are from 12:00 NOON on odd-numbered days until 12:00 NOON on even-numbered days;

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- (3) before participating in the sac roe herring fishery after May 8, a CFEC permit holder must be registered with the department.
- (b) Herring may be taken during the food and bait season from September 1 through February 28 only during fishing periods established by emergency order. A CFEC permit holder must register with the department before participating in the food and bait fishery.

5 AAC 27.515. Lawful gear for Kodiak Area.

- (a) Herring may be taken only by seines, gillnets and trawls, except that beach seines and trawls may not be used to take herring during the sac roe season.
- (b) A herring fishing vessel may operate or assist in operating, or have on board it, only one legal limit of herring fishing gear in the aggregate, except that
 - (1) a herring fishing vessel may tow or transport another herring fishing vessel containing those vessels' own gear; and
 - (2) parts of gear used in other management areas may be on board the vessel if those parts of gear are stowed below the deck of the vessel while that vessel is in the Kodiak Area.
- (c) Unhung gear sufficient for mending purposes may be carried aboard fishing vessels.
- (d) A purse seine, hand purse seine or beach seine may not be fished simultaneously with gillnet gear by any person or vessel.
- (e) Herring fishing nets shall be measured, either wet or dry, by determining the maximum length of cork line when the net is fully extended with traction applied at one end only.
- (f) The interim-use or entry permit holder is responsible for operation of the net.
- (g) The use of leads with any net gear used for commercial herring fishing is prohibited during the herring sac roe season.

5 AAC 27.520. Gillnet specifications and operations for Kodiak Area.

- (a) The aggregate length of herring gillnets in use by any herring CFEC permit holder may not exceed 150 fathoms.
- (b) The interim-use or entry permit holder must be physically present while the gillnet is being fished.
- (c) Each drift gillnet in operation must have a buoy at one end and the opposite end must be attached to the fishing vessel. Each set gillnet in operation must be anchored and buoyed at both ends. All buoys must be at least 10 inches in diameter and all buoys used on an individual gillnet must be of the same color. Each buoy must be plainly and legibly marked with the permanent vessel license plate number (ADF&G number) of the vessel operating the gear. The buoy may bear only a single number, and this number must be that of the vessel used in operating the gear. The number must be painted on the top one-third of the buoy in numerals at least four inches in height, one-half inch in width, and in a color contrasting to that of the buoy. The buoy markings must be visible on the buoy above the water surface. Set gillnets must have a buoy spaced every 25 fathoms along the net and the buoys must be floating on the surface of the water.
- (d) Herring gillnets may remain in the water for up to four hours after the announced closing time for any opening of three hours or less fishing time. No herring gillnets may be set or reset after a closure time. Herring gillnets may remain in the water for up to four hours after an emergency order closure if that closure is announced by the department less than three hours before the closure time. No herring gillnet may remain in the water past the 12:00 noon closure on even-numbered days described in 5 AAC 27.510.
- (e) From April 1 through July 31, a herring gillnet may not exceed 230 meshes in depth

5 AAC 27.525. Seine specifications and operations for Kodiak Area.

- (a) From April 1 through July 31, a purse seine may not exceed 18 fathoms stretch measure in depth or 100 fathoms in length. The depth shall be determined by using a stretch measure of the web from the cork line to the bottom of the net, including any lines that hang below the lead line.
- (b) Repealed 4/14/82.

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(c) From August 1 through February 28, a purse seine may not be more than 1,625 meshes in depth, including meshes used as chafing gear, or more than 150 fathoms in length.

(d) From April 1 through July 31, an Area K CFEC sac roe seine permit holder may use only one vessel to take herring - either the vessel identified on the holder's permit or a replacement vessel that the holder has registered, in person, at the department's Kodiak office. Only one seine vessel at a time may be registered as a replacement vessel.

(e) From March 1 through April 13, a person may make practice purse seine sets from a purse seine vessel in the Kodiak Area within one-half mile of the Sealand dock. All fish caught shall be immediately released back to the water unharmed.

5 AAC 27.530. Waters closed to herring fishing in Kodiak Area.

(a) During the period July 1 - October 31, herring may not be taken in waters described in 5 AAC 18.350 and 5 AAC 39.290.

(b) During the commercial herring sac roe fishing season, herring may not be taken in the waters of Womens Bay enclosed by a line from Shannon's Point (57° 43.80' N. lat., 152° 31.60' W. long.) to Nymans Peninsula (57° 43.30' N. lat., 152° 31.40' W. long.).

(c) During the period from April 15 through June 30, or later if the season is extended by emergency order, herring may not be taken in the waters of Brown's Lagoon.

(d) During the period from April 15 through June 30, herring may not be taken in the following waters of Uganik Island:

(1) south and west of a line from 57° 51.10' N. lat., 153° 13.53' W. long. to 57° 52.12' N. lat., 153° 15.00' W. long.;

(2) north of a line from 57° 49.37' N. lat., 153° 17.65' W. long. to 57° 49.47' N. lat., 153° 19.30' W. long.;

(3) east of a line from 57° 50.85' N. lat., 153° 19.18' W. long. to 57° 50.07' N. lat., 153° 19.18' W. long.

5 AAC 27.535. Harvest strategies for Kodiak Area.

(a) The department shall manage the Shelikof Strait food and bait herring fishery in the waters set out in 5 AAC 27.505(a) (West Afognak District), 5 AAC 27.505(b) (North Afognak District), 5 AAC 27.505(d) (Uganik District), and 5 AAC 27.505(e) (Uyak District), so that the total harvest does not exceed the combined guideline harvest level, established in (b), for these districts and the allowable harvest of the Kamishak spawning stocks that overwinter in Shelikof Strait, as determined under the Kamishak Bay District herring management plan set out in 5 AAC 27.465. The waters set out in 5 AAC 27.505(k) (North Mainland District) and 5 AAC 27.505(l) (Mid Mainland District) shall be managed based on the guideline harvest level for these districts as established in (b), however, these districts will be closed when the guideline harvest level is reached in the Shelikof Strait fishery.

(b) The department shall establish guideline harvest levels for the herring food and bait fisheries for each section of the districts specified in (a) of this section, which may not exceed 10 percent of the guideline harvest level of that section in the previous sac roe season.

(c) The department shall manage the remaining districts of the food and bait herring fishery, so that the harvest does not exceed the combined sum of the guideline harvest levels of the individual sections of a district. The department may manage the food and bait fishery, including the Shelikof Strait fishery, by section of a district, if the harvest location, age class composition of the harvest, or biomass estimates indicate a harvest has occurred on a single herring spawning stock.

(d) When the Kamishak Bay herring spawning biomass is below 6,000 short tons, the commissioner shall close, by emergency order, the food and bait fishery in Shelikof Strait north of the latitude of Miners Point (57° 54.00' N. lat.).

(e) The department shall manage the sac roe herring fishery to provide opportunities for gillnet permit holders to harvest approximately 25 percent and purse seine permit holders to harvest approximately 75 percent of the total preseason guideline harvest level for the management area as follows; the commissioner shall issue emergency orders as necessary:

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- (1) based on the department's assessment of
 - (A) biomass, recent spawning areas, and status of a herring stock in a bay or complex of bays, adjacent sections may be combined and managed as a single section; and
 - (B) effort levels, harvest rates, and the department's ability to monitor the fishery, the length of the fishing periods for either or both gear groups may be increased or reduced;
- (2) except as provided in (4) of this subsection, the department shall establish guideline harvest levels each year by section based on information such as historical data, current and past fishery performance, sampling of commercial catches, and aerial surveys as follows:
 - (A) except in districts where only one section is open for fishing, the department shall designate one legal gear type for each section with a guideline harvest level, unless the allocation by gear type within a district cannot be achieved;
 - (B) in districts where only one section is open for fishing, the department will, in its discretion, assign a portion of the guideline harvest level to each gear type;
 - (C) for allocative purposes only,
 - (i) the North Mainland, Mid Mainland, and South Mainland Districts will be considered one district; and
 - (ii) the North Afognak, West Afognak, and South Afognak Districts will be considered one district;
 - (D) each district having more than one section that is open for fishing will have approximately 20 to 30 percent of the guideline harvest level for the district allocated to the gillnet permit holders and 70 to 80 percent allocated to the purse seine permit holders;
- (3) an individual section shall be closed to fishing once that section's guideline harvest level has been achieved; the guideline harvest level for an individual section may be adjusted downward inseason depending on observed stock abundance; the department may make adjustments in the management of a section based on inseason changes in fish behavior or harvest patterns; these changes may result in an adjacent section closure;
- (4) a section that does not have an extensive history of sac roe production may be designated as exploratory with no specified guideline harvest level; permit holders for either gear type may fish in an exploratory section; a section listed as exploratory under this paragraph may be opened or closed, based on inseason information such as observed stock abundance, harvest levels, and changes in fish behavior or harvest patterns, including such changes in adjacent sections;
- (5) a section that has been closed because its guideline harvest level has been achieved may be reopened, if the department determines that additional herring arriving on the grounds have increased the available biomass to the point that the initial exploitation rate has dropped below 10 percent for that stock; any reopening will require information indicating that juvenile herring, post spawners, or other forage fish are not present and that the department has the ability to monitor and regulate the reopening on the grounds; the department shall give at least 24 hours' advance notice before a section is reopened under this paragraph;
- (6) the Kodiak herring sac roe fishery is intended to occur in an orderly fashion, with minimal waste of resource and within conservation limits as determined by the department, while striving for the highest quality product;
- (7) in this subsection, "section" means a section as described in 5 AAC 27.505.

5 AAC 27.536. Size limits for Kodiak Area.

A CFEC herring seine permit holder may not sell or have aboard a vessel any herring that were taken during the herring sac roe season if the number of individual herring per 50 pounds of net weight exceeds 250 fish.

5 AAC 27.540. Buyer and tender reporting requirements for Kodiak Area.

(a) In addition to the requirements of 5 AAC 39.130(g), each tender operator and each buyer or the tender operator or buyer's agent shall report in person to and register with a local representative of the department upon arrival in the registration area before commencing operations and before changing location of the operation. Each buyer or buyer's agent shall

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- (1) identify all vessels to be employed in transporting or processing herring and shall register those vessels with a local representative of the department located in the registration area before transporting or processing herring;
 - (2) make daily reports of all herring purchased from fishermen and other processing records as specified by a local representative of the department; and
 - (3) submit fully completed fish tickets with accurate and final weight and roe percentages no later than 10 days after termination of buying operations in the area, or as otherwise specified by a local representative of the department.
- (b) At the time herring are received from a CFEC permit holder in the Kodiak Area each buyer of herring, each fisherman selling to a buyer not licensed to process fish (catcher/seller), and each person or company that catches and processes that person's or company's own catch or has that catch processed by another person or company, shall, in addition to the requirements of 5 AAC 39.130(c) , at the request of the CFEC permit holder record on a herring fish ticket, the following information:
- (1) the on-the-fishing ground weight of herring measured by the most efficient method possible, such as dump boxes, scales or totes, with weight in tons and pounds; and
 - (2) estimated roe percentage of the herring as determined by a regular sampling of the catch; the sampling shall test 10 kilograms of herring for each five to 10 tons of herring delivered.
- (c) A copy of the fish ticket required under (b) of this section must be provided at the time of delivery to the CFEC permit holder from the person, buyer, company, firm, or other organization that is the first purchaser of herring that is taken in the Kodiak Area.

5 AAC 27.545. Harvest of bait by commercial permit holders in Kodiak Area

The holder of a valid CFEC interim use or limited entry permit may take but may not sell herring for use as bait in the commercial fishery for which the permit is held as follows:

- (1) herring may only be taken under the authority of a herring bait fishing permit issued by the commissioner or the commissioner's designee;
 - (2) herring may only be taken by gillnet or purse seine gear;
 - (3) from April 12 through July 3, a vessel, crew member, or permit holder that participates in the Kodiak commercial herring sac roe fishery may not take herring under this section in the Kodiak Area;
 - (4) person may not take more than 500 pounds of herring in a calendar year.
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