

Fishery Management Report No. 13-37

**Kodiak Management Area Commercial Herring Food
and Bait Fishery Harvest Strategy, 2013**

by

Geoff Spalinger

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Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



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ABSTRACT

The 2013 Kodiak Pacific herring *Clupea pallasii* food and bait fishery may open, by regulation, on September 1st. The fishery may occur on Kodiak herring stocks in the Uganik District with a 180 ton (short) guideline harvest level (GHL), the Eastside District with a 175 ton GHL, and the South Afognak District with a 99 ton GHL. The remaining districts are closed due to low GHLs. The Alaska Department of Fish and Game is concerned that a competitive fishery, with all nine permit holders participating, could result in an excessive overharvest given the low GHLs in the entire Kodiak Management Area. Therefore, in addition to current regulations, stipulations for a potential combine fishery are specified in the harvest strategy.

Key words: Kodiak, herring, *Clupea pallasii*, harvest, food and bait fishery, Kamishak, combine, GHL, KMA

INTRODUCTION

The Kodiak Management Area (KMA) commercial Pacific herring *Clupea pallasii* food and bait fishery has a long history dating back to 1912 (Gretsch 2001). Early harvests were primarily utilized for food and reduction products (Reid 1971). During the peak years of the reduction fishery (1934 to 1950) the average annual harvest was 31,600 tons. Since the early 1960s, these harvests have been utilized mainly as bait for crab and longline fisheries (Figure 1).

During the 1980s and 1990s, the majority of the harvest from the food and bait fishery occurred in the northeast portion of the Shelikof Strait (Figure 2) with the fishery targeting a mix of Kodiak and Kamishak herring stocks.¹ The *Kamishak Bay District Herring Management Plan* (5 AAC 27.465) outlines criteria for the management of the Kamishak Bay sac roe fishery and provides for a harvest allocation for the Kodiak food and bait fishery, based on the Kamishak spawning biomass. The Kamishak management plan stipulates that when the Kamishak herring stock biomass is below threshold (6,000 tons), then the Kamishak Bay sac roe fishery and the Kodiak food and bait fishery in the northern portion of Shelikof Strait will remain closed. For the remainder of the KMA, the Kodiak herring food and bait fishery is allowed to occur in districts that have strong spawning stocks. For the first time since 1998, The Kamishak spawning biomass was above the minimum threshold and no additional restrictions are necessary for the Kodiak food and bait fishery.

In the mid 1990s, market demands for fresh herring bait were strong, stocks were large enough to allow fairly large guideline harvest levels (GHLs), and up to 8 to 10 vessels participated in the fishery annually. Kodiak and Kamishak stock declines led to a reduction of the GHL in 1998. Due to the Alaska Department of Fish and Game's (ADF&G) concern for manageability of a competitive fishery with small GHLs on highly aggregated stocks, the KMA herring food and bait fishery was closed for the 1999 and 2000 seasons.

In 2001, the Commercial Fisheries Entry Commission (CFEC) designated the KMA herring food and bait fishery a limited entry fishery. In 2001, due to department concerns of controlling the harvests in areas with relatively small GHLs, permit holders agreed to conduct a combine fishery, with fewer boats participating and the proceeds divided among all permit holders. This allowed ADF&G to provide more liberal fishing time and area during fishing periods. Combine fisheries have occurred during the 2001 through 2012 herring food and bait seasons.

¹ Johnson, B. A., C. Burkey, and D. Gaudet. *Unpublished*. Stock identification of Pacific herring in the bait fishery in Shelikof Strait, Alaska, 1985/86. Alaska Department of Fish and Game, Division of Commercial Fisheries, Juneau.

In July 2002, the CFEC issued limited entry permits to nine individuals based on fishery participation in the 1994 to 1998 seasons. Five combination purse seine/gillnet and four trawl permits were issued. The KMA food and bait fishery is guided by a regulatory management plan (5 AAC 27.535). This harvest strategy will summarize current regulations and the management of the fishery for the 2013 season and specify stipulations for potential competitive or combine fisheries.

2013 FISHERY

Due to the small GHLS available for the Kodiak herring food and bait fishery and the harvest capabilities of five purse seine vessels and four trawlers competing for the fish, ADF&G is concerned that a competitive fishery with all permit holders participating would be difficult to manage, leading to excessive harvests. The food and bait season extends from September 1, 2013, through February 28, 2014. The fishery will be opened by emergency order by district in order to slow and control the harvests. At least 24 hours advance notice will be given prior to any herring food and bait fishing period. Individual CFEC permit holders must be registered with ADF&G management staff in Kodiak before participating in this fishery.

OPEN DISTRICTS AND GUIDELINE HARVEST LEVELS

The herring food and bait fishery GHLS are based on the preceding herring sac roe fishery season GHLS, with 10% of the 2013 sac roe GHLS, by district, allocated to the 2013 food and bait fishery. The overall GHL for the 2013 Kodiak herring food and bait fishery is 454 tons (Table 1).

Table 1.–2013 herring food and bait guideline harvest levels (GHLS) by district.

<u>Management District</u>	<u>GHL (tons)</u>
F/B 3 - South Afognak	99
F/B 4 - Uganik	180
F/B 8 - Eastside	175
Total	454

The 2013 KMA herring food and bait fishery may occur on Kodiak herring stocks in the Uganik District with a 180 ton GHL (Figure 3), the Eastside District with a 175 ton GHL (Figure 4), and the South Afognak District with a 99 ton GHL (Figure 5). The remaining districts will remain closed because the GHL for an area would be less than 10 tons and therefore unmanageable.

MARKET CONCERNS

The Kodiak herring food and bait fishery harvest has been utilized mainly as bait for crab and longline fisheries. In recent years, only KMA-based processing companies have participated in this fishery. From initial discussions with KMA processors it appears that there is a very limited market for bait in 2013. Any permit holder that intends to participate in the 2013 Kodiak herring food and bait fishery must have a market for any herring they catch during a food and bait fishery.

COMBINE FISHERY

ADF&G will consider a combine fishery under the same guidelines required during previous seasons. All nine permit holders must notify the department that either they support a combine fishery or they will not participate in the 2013 fishery. ADF&G would require that only one catcher vessel be used and that an ADF&G management biologist be permitted onboard the fishing vessel during any fishery. The management biologist would monitor the harvest, close the fishery if the GHL is reached, and collect commercial catch samples for age composition data. Permit holders would be fully responsible for determining which vessel conducts the harvest, all marketing aspects, and all costs associated with harvesting and tendering the herring.

REGULATIONS

Consult the 2013-2014 Statewide Commercial Herring Fishing Regulations (ADF&G 2013) for a complete listing of applicable regulations.

REGISTRATION

Permit holders must be registered with ADF&G in Kodiak before participating in the food and bait fishery (5 AAC 27.510). Buyers and tender operators must also be registered prior to taking KMA herring (5 AAC 27.540).

SEASON DATES

The fishery may open by emergency order between September 1, 2013 and February 28, 2014. The duration of fishing periods and areas opened to fishing will be determined by department management biologists and will be based on effort and availability of the herring. At least 24 hours advance notice will be given prior to any herring food and bait fishing period. The fishery will be closed when the GHL has been harvested for each district. Emergency Orders will also be issued that announce the closure of each district.

In the event that CFEC permit holders agree to form a combine for the 2013 food and bait fishery, the fishery may open without restrictions on the duration of fishing periods.

CLOSED WATERS

To protect late season salmon near the head of Kodiak bays, herring may not be taken in the closed waters described in the Chignik and Kodiak Commercial Salmon Fishing Regulations through October 31 (5 AAC 18.350). Closed waters may be reduced by emergency order prior to October 31, if needed to access the herring.

GEAR RESTRICTIONS

Only one gear type may be fished at a time for the combination permit holders (5 AAC 27.515).

GEAR CODE

- 01 - Purse Seine
 - Maximum length: 150 fathoms
 - Maximum depth: 1,625 meshes. For Area K there are no web size restrictions.
- 34 - Gillnet
 - Maximum length: 150 fathoms; mesh size: 2-1/8" to 2-1/2".
 - No depth restrictions.
- 07 - Trawl
 - No restrictions

FISH TICKETS

All fish tickets must be completed and sent to the Kodiak Fish and Game office within a week of each landing.

Send to: Alaska Department of Fish and Game
ATTN: James Jackson
351 Research Court
Kodiak, Alaska 99615

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- Gretsch, D. R. 2001. Kodiak Management Area annual herring fisheries management report, 2001. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K02-25, Kodiak.
- Reid, G. M. 1971. Age composition, weight, length, and sex of herring, *Clupea pallasii*, used for reduction in Alaska, 1929-66. NOAA Technical Report, NMFS, SSRF 634, pp. 25.

FIGURES

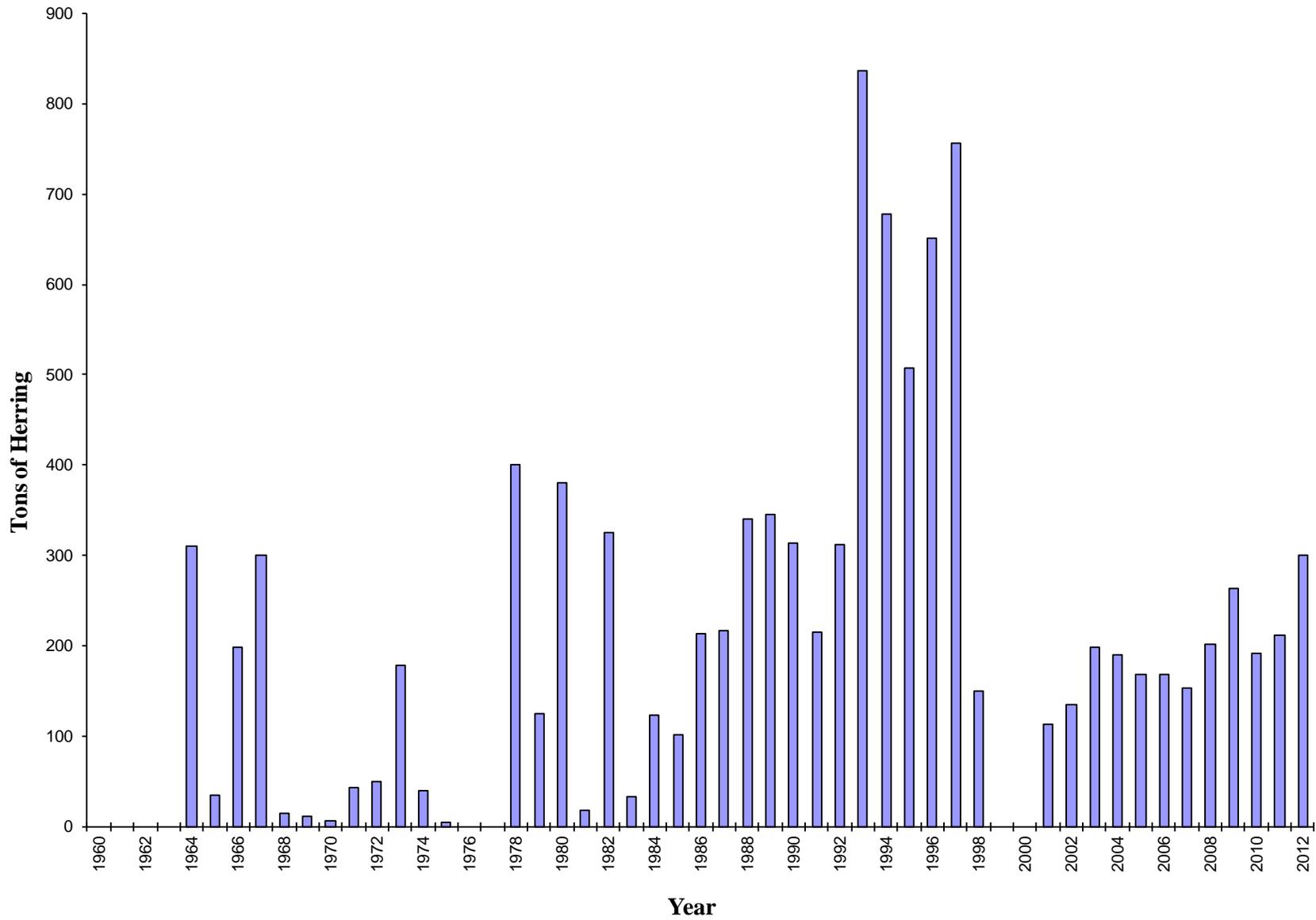


Figure 1.—Herring food and bait fishery harvests 1960–2012.

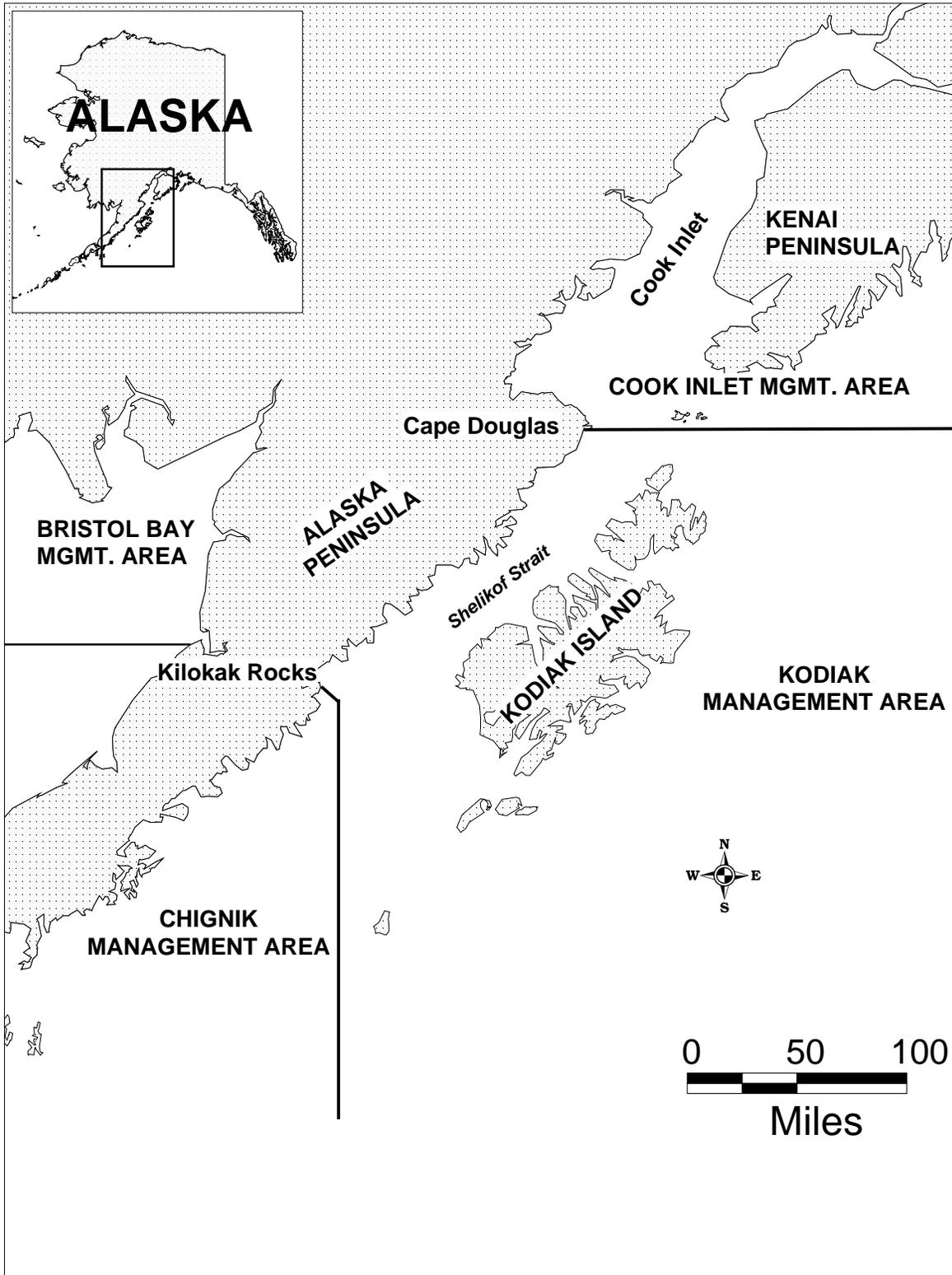


Figure 2.—Map of southwestern Alaska emphasizing the Kodiak Management Area (Area K) and its relationship to surrounding management areas.

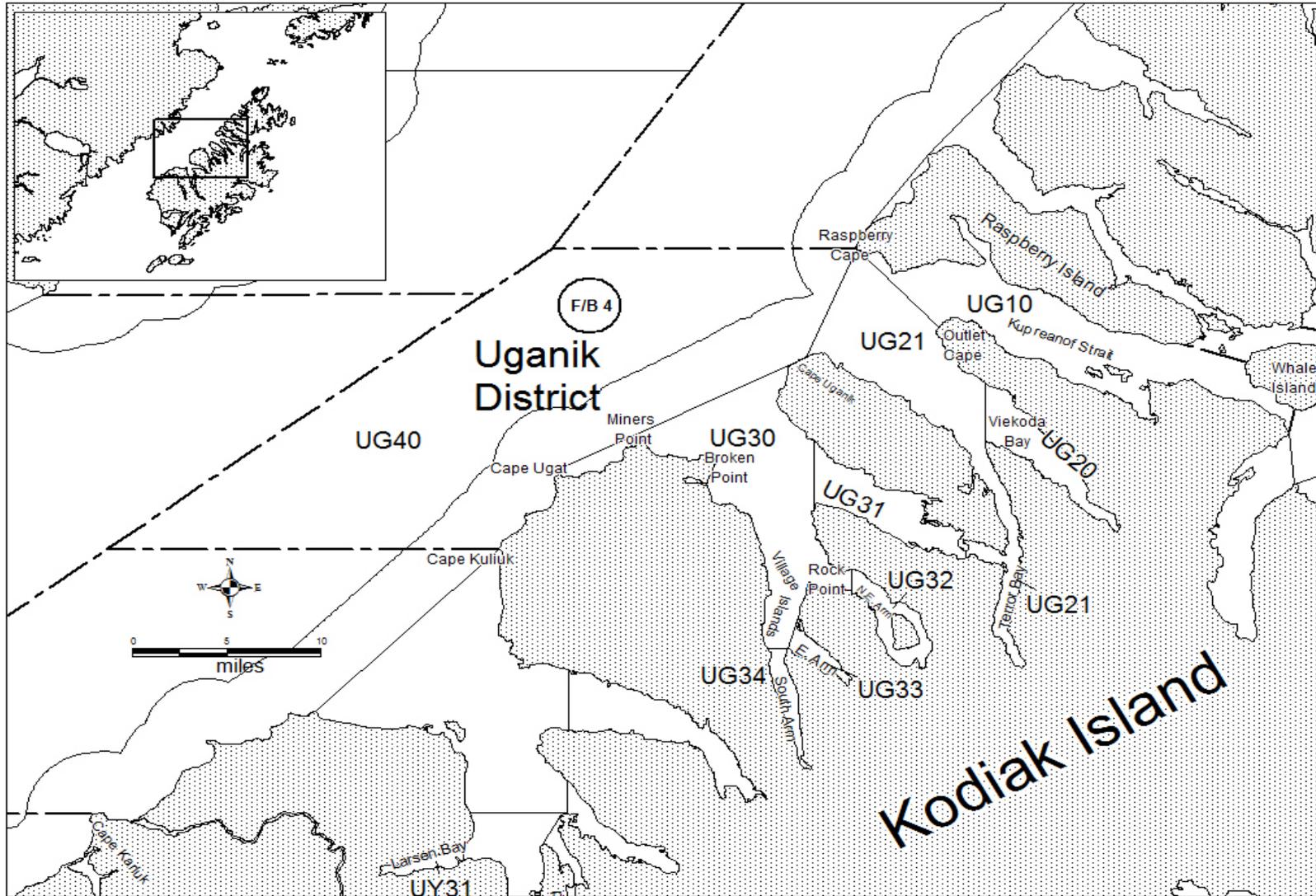


Figure 3.—Map showing the Uganik District (F/B 4) of the herring food and bait fishery.

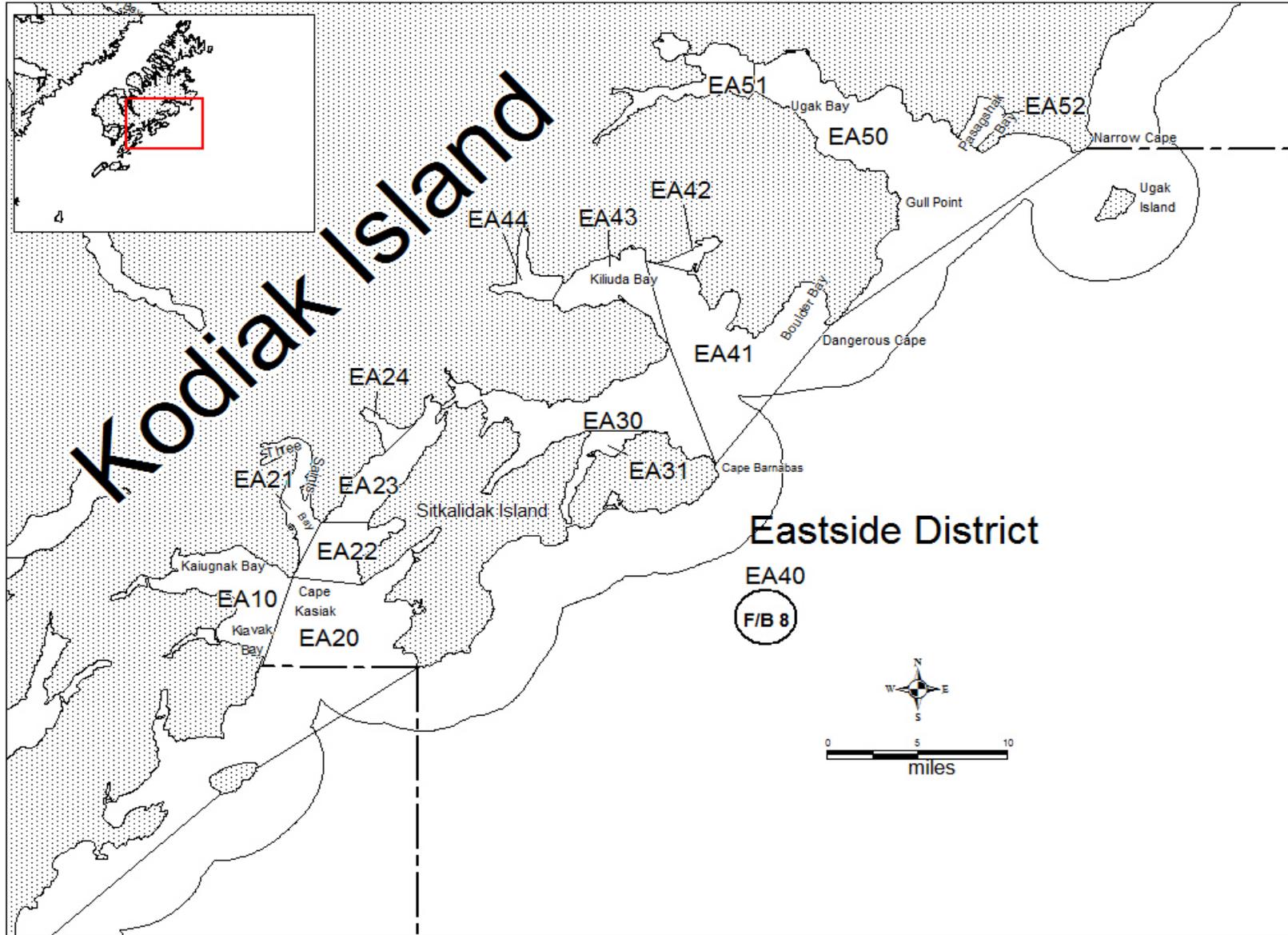


Figure 4.—Map showing the Eastside District (F/B 8) of the herring food and bait fishery.

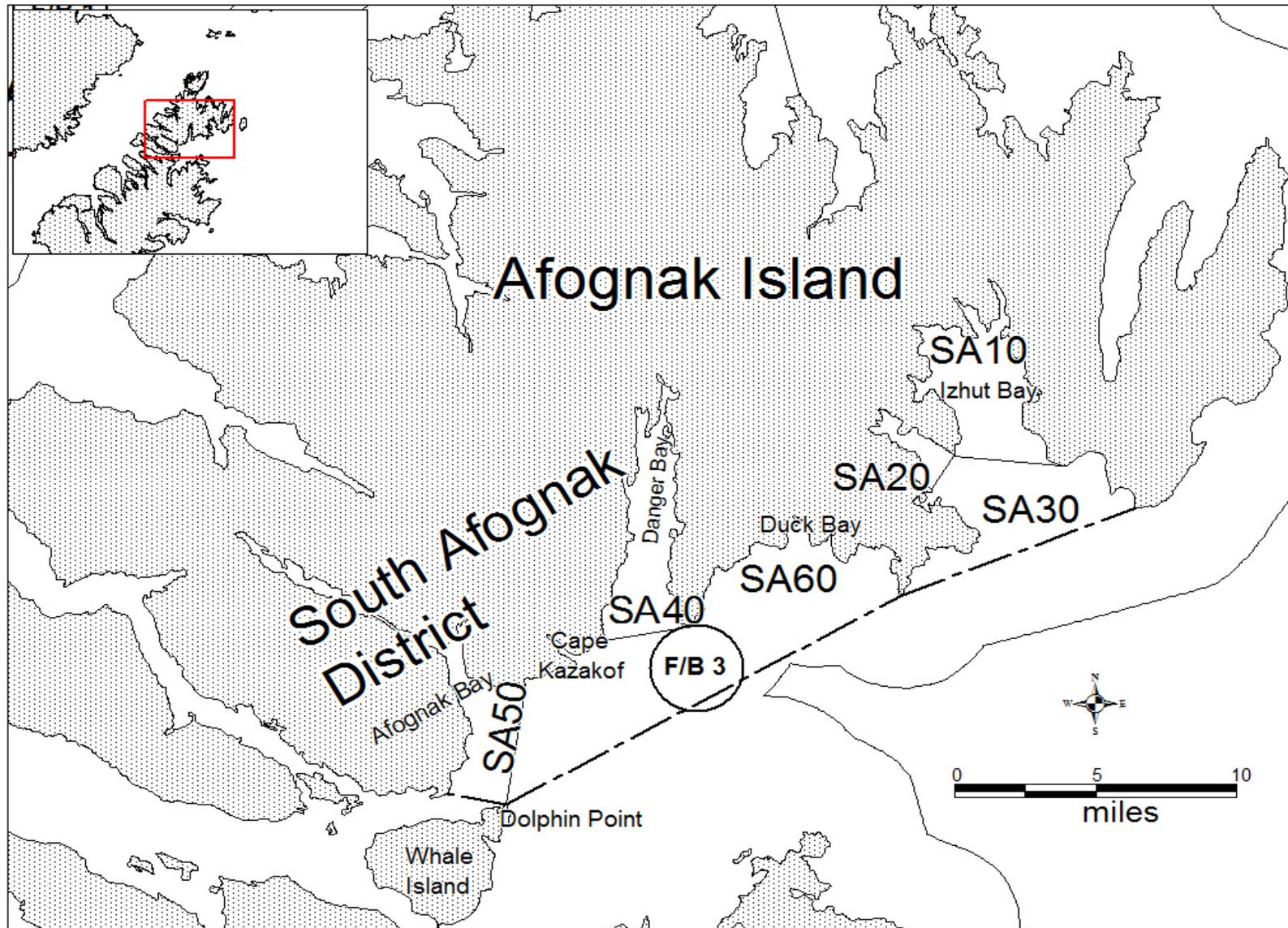


Figure 5.—Map showing the South Afognak District (F/B 3) of the herring food and bait fishery.