

CHIGNIK MANAGEMENT AREA
HERRING SAC ROE FISHERY
MANAGEMENT PLAN, 2002

By

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ABSTRACT

Chignik Management Area Pacific herring *Clupea pallasii* sac roe fishery occurs in bays and marine waters within the Chignik Management Area. This document describes how the fisheries will be managed, the requirements of the fishing industry to participate in the fishery, and how to contact and relay information to the Alaska Department of Fish and Game. Historical harvests for the Chignik Management Area as well as 2002 season guideline harvest levels and harvest projections are presented. This document is intended as a guide for commercial herring fishers, buyers, and tender operators. Information regarding specific commercial herring fishing periods must be received from the department prior to any fishing activity.

INTRODUCTION

Description of Area

The Chignik Management Area (CMA) is located on the south side of the Alaska Peninsula between the Kodiak Management Area to the east and the Alaska Peninsula – Aleutian Islands Management Area to the west (Figure 1). Kilokak Rocks (156° 20.22' W long.) is the eastern boundary and Kupreanof Point (from a line running 135° from the southern tip of Kupreanof Point at 55° 33.98' N lat., 159° 35.88' W long.) is the western boundary. Within these boundaries, guideline harvest levels (GHLs) are designated by section (Table 1; Figure 2).

History of the Chignik Management Area Pacific Herring Fishery

The Alaska Peninsula Pacific herring *Clupea pallasii* fishery began in the early 1900s and the first catch was recorded in 1906. Chignik area catches were grouped with the north and south Peninsula areas during the early 1900s. These catches, labeled as southwestern Alaska, never exceeded 500 tons.

A small herring saltery was operated at Lake Bay in the Chignik Bay District during the early 1930s. Although herring were harvested with beach seines and salted for future resale, the actual catch from this area is not available.

The CMA herring fishery ceased in the late 1930s and did not commence again until 1980, when the modern herring sac roe fishery was initiated. The Alaska Department of Fish and Game (ADF&G) has been responsible for CMA herring management since 1960. From 1980-1998, the CMA herring sac roe harvest ranged from 0 to 587 tons, with most of the harvest occurring in 1980, 1981, and 1982 (Figure 3). Since then, harvest and effort levels have been low and this trend is expected to continue.

Pacific Herring Sac Roe Fishery Management Strategy

The ADF&G manages the CMA herring sac roe fisheries so as not to exceed a 20% exploitation rate of the available spawning biomass. Historically, only a few geographic areas supported the majority of the CMA spawning biomass and herring GHLs were established by section. Each section's GHL was based on an exploitation rate of 0-20% which was established by using trends in previous years' biomass estimates, recruitments, and age compositions. Actual harvests may differ from GHLs if herring stocks are stronger or weaker than anticipated.

An important element in the management of the CMA herring fishery comes from inseason information provided by the ADF&G, commercial herring spotters, commercial fishermen, and processors. All observations shared with the ADF&G concerning biomass estimates, locations of herring, and herring roe quality are encouraged and will remain confidential.

By regulation, the herring sac roe season extends from April 15 through June 30. All fishing periods during the season are established by emergency order.

REGULATIONS AND REPORTING REQUIREMENTS

Registration, Buyer and Tender Reporting Requirements

In addition to the requirements of 5 AAC 39.130 (g) (ADF&G 1999), each tender operator and each buyer or his agents shall report in person to register (which may not be practical in the CMA - the use of telephone or radio will be allowed) with a local representative of the ADF&G upon arrival in the registration area before commencing operations and before changing location of the operation (5 AAC 27.590; ADF&G 2001).

Each buyer shall:

- (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;
 - a. Buyers and Tenders: Each tender operator and buyer must register in person (where possible) with the Kodiak or Chignik ADF&G and acquire a registration packet containing a management plan and statistical chart.
 - b. Fishing Vessels: There is no area registration requirements for fishing vessels.
- (2) make daily reports of all herring purchased from commercial fishermen, and other processing records as specified by a local representative of the department.
 - a. All processors and tender operators are required to report daily catch information to ADF&G. This can be accomplished either by single side band radio (SSB) or telephone. The Chignik ADF&G office will stand by on (SSB) 4125 KHz (call sign KGB 76) or 3230 KHz (call sign WON 29) and VHF channel 6, between 0800 hours - 1000 hours (8:00 -10:00 A.M.) and 2000 hours to 2200 hours (8:00 P.M. - 10:00 P.M.). The "Chignik Weir" telephone number is 845-2243 and the FAX number is 845-2235. If you are unable to contact ADF&G Chignik, catch information should be given to ADF&G in Kodiak or Cold Bay. Kodiak ADF&G will stand by SSB 3230 KHz (WON 32) and 4125 KHz (WHN 29); Cold Bay ADF&G will stand by on 3230 KHz (KCO 332) and 3261 KHz (KXP 78). Failure to report is a violation of commercial fishing regulations (5 AAC 27.590 (2); ADF&G 2001). Vigorous enforcement of this regulation should be expected as a result of past harvest reporting deficiencies.

- b. Because of the relatively small GHGs by section (Table 1), the fishing season will be promptly closed by emergency order when it appears that accurate catch information cannot be quickly obtained. Prompt catch reporting will increase the likelihood of appropriate management action. Such an action may close a management unit once the GHG is reached, or allow for increased harvest if a stock is stronger than anticipated.
 - c. Code sheets will be given to each tender/processor to ensure confidential reporting. The catch (in tons), statistical area(s) where herring were caught, and herring quality must be included in each report.
- (3) submit fish tickets before departure from the Chignik Management Area and no later than 10 days after termination of buying operations in the area, or as otherwise specified by a local representative of the department.

Guideline Harvest Level and Management Strategy

The ADF&G shall manage the CMA by using a harvest policy of a 0-20% exploitation rate of the available spawning biomass. The commercial herring harvest from the CMA has been declining since 1980 (Figure 3). Based on the estimated CMA stock status, the anticipated 2002 GHG is 65 tons (Table 1). Section GHGs may be modified inseason (increased or decreased) based on stock status. The actual 2002 harvest range will depend upon the biological condition of the stocks, the amount of effort actively exploring the area, harvest rates, and the availability of local processing. Overexploitation of GHGs within any section could result in adjacent section closures because the resource is small and vulnerable to overfishing.

Fishing Season

- a. Herring may be taken from April 15 through June 30.
- b. Herring may be taken only during periods established by emergency order.

Fishing Periods

The first fishing period schedule will begin at 1200 hours (12:00 noon) April 15. Fishing periods will be 24 hours long beginning at 1200 hours (12:00 noon) on all odd numbered days and ending at 1200 hours (12:00 noon) on all even numbered days. The only exception to this "24-hour on - 24-hour off rule" is the period that has two consecutive odd numbered days, May 31 and June 1. To prevent the fishery from being open two consecutive days, the fishery will be closed 48 hours from noon May 30 until noon June 1. When the fishery is reopened on June 1, the "24 hour on and off" schedule will be

reestablished for the rest of the season. Any other changes in this fishing schedule will be announced by inseason emergency order.

Aircraft

There are no aircraft restrictions in the herring sac roe fishery.

Legal Herring Gear

- a. 5 AAC 27.565. (a) Herring may be taken only by purse seines (ADF&G 2001).
- b. 5 AAC 27.575. A purse seine may not be more than 1,000 meshes in depth or more than 100 fathoms in length (ADF&G 2001).

Closed Waters

The Ivanof Bay Section northwest of the Road Island Markers will be closed to commercial fishing to ensure that subsistence harvests are met while conserving local herring stocks. Specifically, in Ivanof Bay, all waters will be closed northwest of a line from a point on the northeast shore at 55°52.42' N lat., 159° 28.40' W long. to a point on the north end of the spit at 55°50.95' N lat., 159°31.02' W long. (5 AAC 15.350; ADF&G 1999).

The Perryville and Mitrofanina Sections (Figure 2) will also be closed to commercial herring fishing to ensure that subsistence harvest needs are met while conserving local herring stocks. Initially, the Big River Section will remain closed at the beginning of the 2002 season. If ADF&G documents at least 250 tons of herring within this section, a GHF and fishery will be established inseason. Until recently, the Big River Section did not appear to have any appreciable herring recruitment since the harvest overexploitation in the early 1980s. However, during a May 1996 aerial survey, 100 tons of herring were observed in Amber Bay. Unless 250 tons of herring can be documented, the Big River Section will remain closed in 2002.

LITERATURE CITED

ADF&G (Alaska Department of Fish and Game). 2001. 2001-2002 Commercial Herring Fishing Regulations. Commercial Fisheries Division, Juneau.

ADF&G (Alaska Department of Fish and Game). 1999. 1999-2001 Chignik, Kodiak, and Cook Inlet Areas, Commercial Fishing Regulations. Commercial Fisheries Division, Juneau.

Table 1. Guideline harvest levels (GHLs) at 10% and 20% exploitation rates for spawning biomass levels in the Chignik Management Area, 2002.

Statistical Area	Management Unit ^a	Guideline Harvest Level ^b	Required Spawning Biomass	
			@20%	@10%
271-10 to 272-40	Chignik Lagoon and Bay Section	10 Tons	50 Tons	100 Tons
272-50	Kujulik Section	5 Tons	25 Tons	50 Tons
272-60 to 272-70	Big River Section ^c	Closed	0	0
272-62 to 272-64	Cape Kumlik Section	5 Tons	25 Tons	50 Tons
272-72 to 272-80	Yantarni Section	5 Tons	25 Tons	50 Tons
272-90	Chiginagak Section	5 Tons	25 Tons	50 Tons
272-92 to 272-96	Agripina Section	5 Tons	25 Tons	50 Tons
273-70 to 273-74	Mitrofanina Section	Closed	0	0
273-82 to 273-84	Dorner Bay Section	15 Tons	75 Tons	150 Tons
273-90 to 273-94	Castle Cape Section	5 Tons	25 Tons	50 Tons
275-60	Perryville Section	Closed	0	0
275-50	Humpback Bay Section	5 Tons	25 Tons	50 Tons
275-40	Ivanof Bay Section ^d	5 Tons	25 Tons	50 Tons
TOTAL		65 Tons	325 Tons	650 Tons

^a The GHLs by section are estimated by past fishery performance while leaving some areas open for exploration. Harvests will be regulated within the CMA herring harvest policy of 0% to 20% of the available biomass.

^b Overexploitation of GHLs within any section could result in adjacent area section closures because the resource is small and vulnerable to overfishing.

^c The Big River Section will remain closed in 2002 unless the spawning biomass is estimated to exceed over 250 tons.

^d The Ivanof Bay Section will be closed northwest of the Road Island Markers. All waters northwest of a line from a point on the northeast shore at 55°52.42' N lat., 159° 28.40' W long. to a point on the north end of the spit at 55°50.95' N lat., 159°31.02' W long.

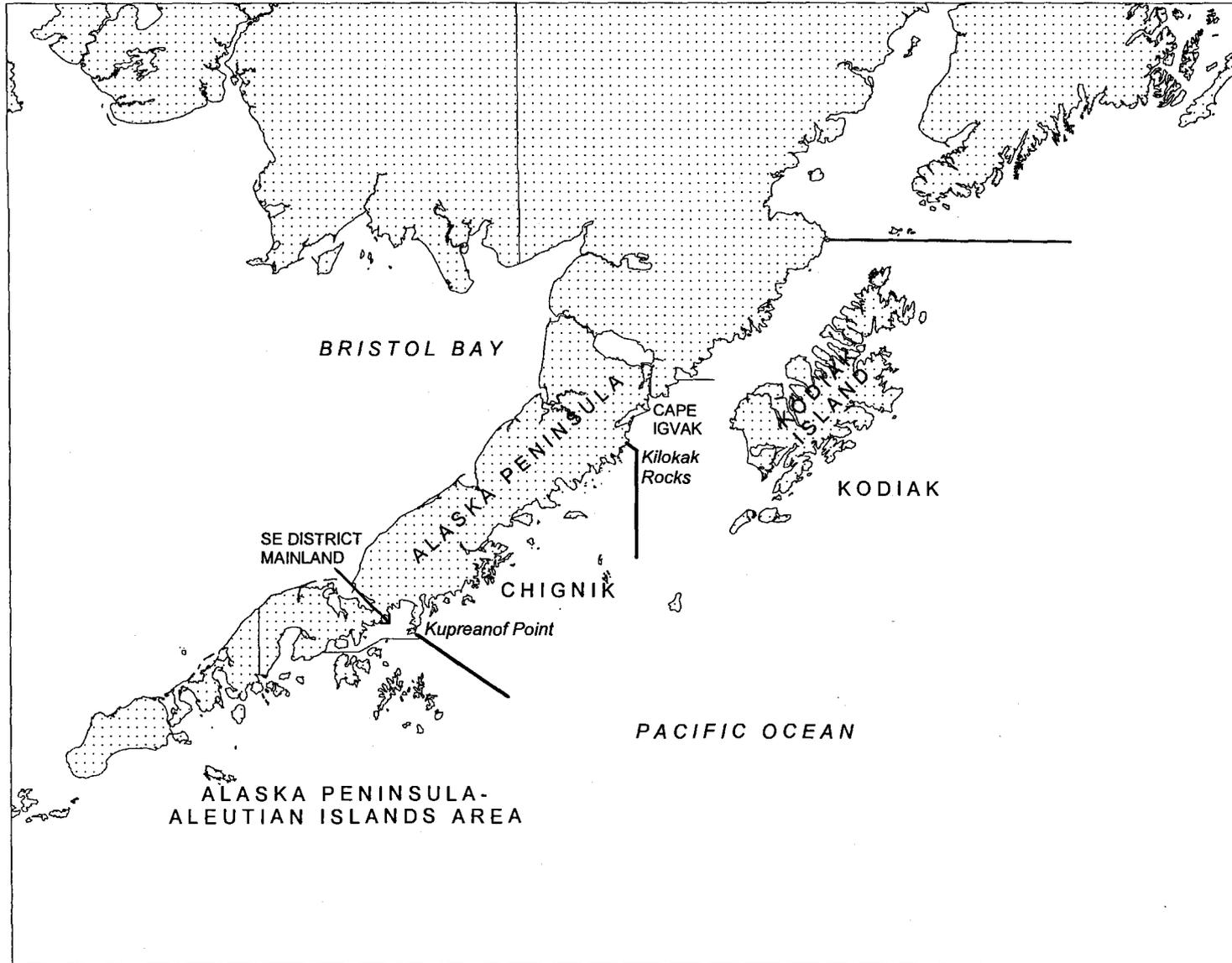


Figure 1. Map of the Alaska Peninsula illustrating the relative locations of the Chignik, Kodiak, and Alaska Peninsula – Aleutian Islands Management Areas

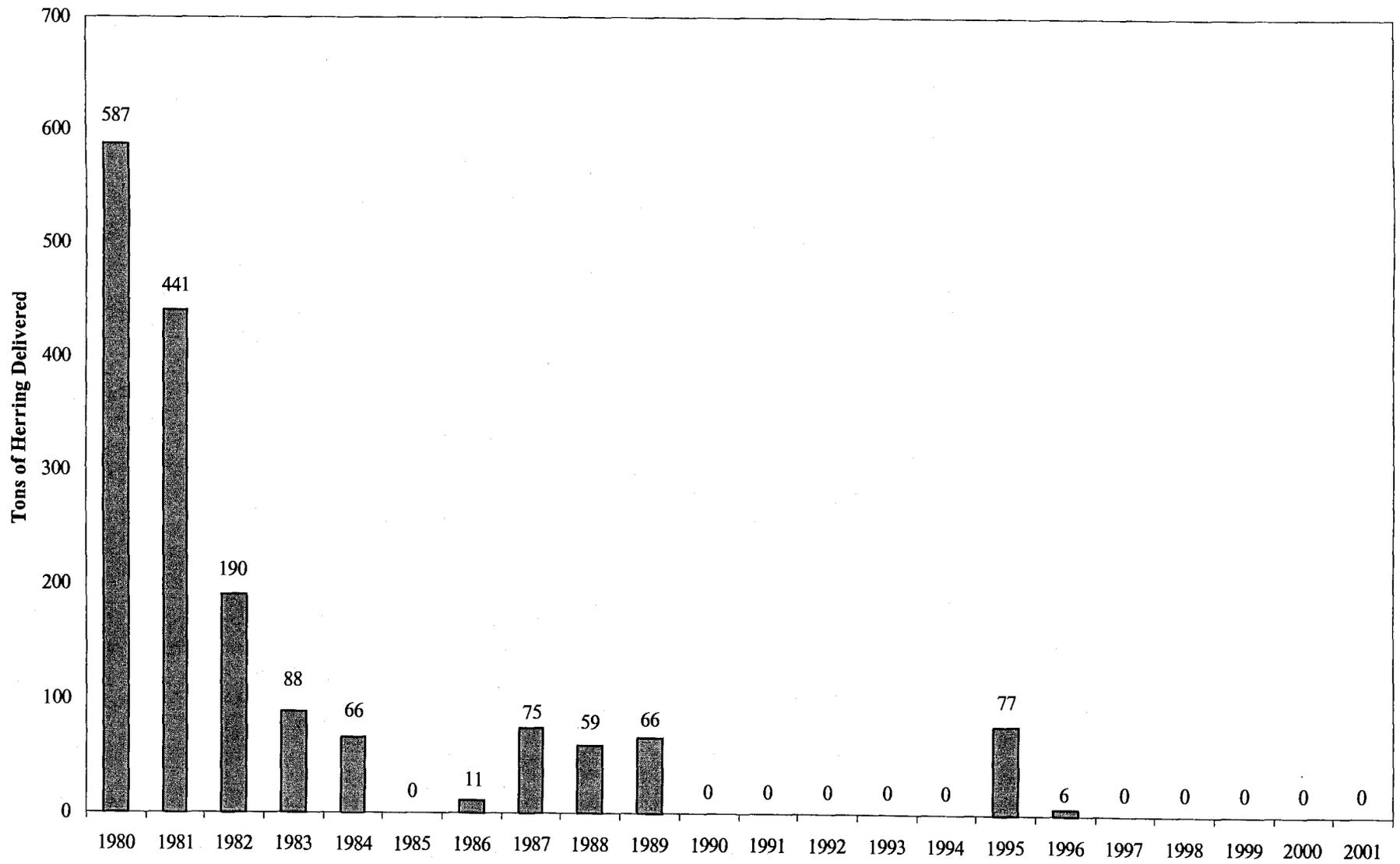


Figure 3. Pacific herring sac roe harvests for the Chignik Management Area, 1980-2001.

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