

CHIGNIK MANAGEMENT AREA  
SAC ROE HERRING FISHERY  
MANAGEMENT PLAN, 1998

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## INTRODUCTION

### *Description of Area*

The Chignik Management Area (CMA) lies on the south side of the Alaska Peninsula between the Kodiak Management Area to the east and the Alaska Peninsula and Aleutian Islands Management Areas to the west (Figure 1). Kilokak Rocks is the eastern boundary and Kupreanof Point is the western boundary. Within these boundaries, the guideline harvest level (GHL) is designated by sections (Table 1 and Figure 2).

### *History of the Herring Fishery*

The Alaska Peninsula herring fishery began in the early 1900s and the first catch was recorded in 1906. Chignik area catches that were grouped with the north and south Peninsula areas during the early 1900s and labeled as southwestern Alaska catches, did not exceed 500 tons.

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

CMA herring fisheries ceased in the late 1930s and did not commence again until 1980, when the modern sac roe herring fishery was initiated. The Alaska Department of Fish and Game (ADF&G) has been responsible for CMA herring management since the 1960s.

From 1980-1997, the CMA sac roe herring harvest has ranged from 0 to 587 tons, with an average annual harvest of 99 tons (Figure 3). Recent harvest and effort levels suggest that it will continue to be a relatively low participation and low yield fishery.

### *Management Strategy Sac Roe Fishery*

The department shall manage the CMA herring fisheries not to exceed 20 percent of the biomass of those stocks. Since a few geographic areas support the majority of Chignik's spawning biomass, herring GHL's are established by section to effectively manage each discrete stock. Each section's GHL is based on an exploitation rate of 0-20% which is established by using trends in previous years' biomass estimates, recruitments, and age compositions. Actual harvest levels may differ from GHL's 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 and other commercial herring spotters, commercial fishers, and processors. All observations shared with the ADF&G concerning biomass estimates, locations of herring, and herring roe quality are encouraged and will be confidential.

By regulation, the sac roe herring season extends from April 15 through June 30. Fishing periods during the season are established by emergency order (see page 3 **Fishing Periods**).

## REGULATIONS AND REPORTING REQUIREMENTS

- I. **REGISTRATION, BUYER AND TENDER REPORTING REQUIREMENTS** (Regulation 5 AAC 27.590). In addition to the requirements of 5 AAC 39.130 (g) each tender operator and each buyer or his agents shall report in person, by telephone, or by radio to, and register with a local representative of ADF&G upon arrival in the statistical area before commencing operations and before changing location of the operation.

### Each buyer shall:

- (1) identify all vessels to be employed in transporting or processing herring and shall register such vessels with a local representative of ADF&G before transporting or processing herring;
  - a. **Buyers and Tenders:** Each tender operator and buyer must register in person 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
- (2) make daily reports of all herring purchased from 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 MHZ 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 call sign for Chignik is KGB 76 "Chignik Weir", telephone number 845-2243, or FAX number 845-2235. If unable to contact ADF&G Chignik, catch information should be given to ADF&G in Kodiak or Cold Bay via telephone or 4125 MHZ SSB. The call signs for Kodiak and Cold Bay are WHM 29 and WHW 906 respectively. Failure to report is a violation of commercial fishing regulations (5 AAC 27.590 (2)). Vigorous enforcement of this regulation should be expected as a result of past harvest reporting deficiencies.
  - b. Because of the relatively small GHl's 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 GHL is reached, or increase the 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), the statistical area(s) where herring were caught, and herring quality must be included in each report.

- (3) submit fish tickets before departure from the area and no later than 10 days after termination of buying operations in the area, or as otherwise specified by a local representative of the department.

## **II. Guideline Harvest Level and Management Strategy:**

The department 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 GHL in 1998 is 65 tons (Table 1). Section GHL's may be modified inseason (increased or decreased) based on stock status. The actual 1998 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 GHL's within any section could result in adjacent section closures because the resource is small and vulnerable to overfishing.

## **III. 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.

## **IV. 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 from 12:00 noon June 1 through noon June 3 when the fishery will actually be closed for a 48-hour period, due to the occurrence of two consecutive odd numbered days. Any other changes in this fishing schedule will be announced by inseason emergency order.

## **V. Airplanes:**

There is no restriction on the use of airplanes in the sac roe herring fishery.

## **VI. Legal Herring Gear:**

- a. 5 AAC 27.565. (a) Herring may be taken only by purse seines.

- b. 5 ACC 27.575). No purse seine may be more than 1,000 meshes in depth or more than 100 fathoms in length

## VII. 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.

The Perryville and Mitrofanina Sections will be closed to commercial herring fishing ensure that subsistence harvest needs are met while conserving local herring stocks. Big River Section will be closed for the 1998 season. ADF&G fishery managers would like to see at least 250 tons of herring within this section prior to establishing a GHL and fishery. Until recently, the Big River Section appears not to have received any appreciable herring recruitment since 1980. However, during a May 1996 survey, 100 tons of herring were spotted in Amber Bay. Chignik managers would like to see at least 250 tons for an opening because of an apparent slow rebuilding process. Consequently, unless harvestable concentrations of herring are observed by aerial spotters, the Big River Section will remain closed in 1998.

Table 1. Guideline harvests levels at 10% and 20% exploitation rates for spawning biomass levels in the Chignik Management Area, 1998.

Statistical Area	Management Unit <sup>a</sup>	Guideline Harvest Level <sup>b</sup>	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 <sup>c</sup>	Closed	-	-
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	-	-
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
275-60c	Perryville Section	Closed		
275-50	Humpback Bay Section	5 Tons	25 Tons	50 Tons
275-40	Ivanof Bay Section <sup>d</sup>	5 Tons	25 Tons	50 Tons
TOTAL		65 Tons	325 Tons	650 Tons

<sup>a</sup> The guideline harvest levels by section area are estimated by fishery performance while leaving areas open for exploration. Harvests will be regulated within the CMA herring harvest policy of 0% to 20% of the available biomass.

<sup>b</sup> Overexploitation of Guideline Harvest Levels within any section could result in adjacent area section closures because the resource is small and vulnerable to overfishing.

<sup>c</sup> The Big River Section will remain closed in 1998 unless the spawning biomass is estimated to exceed over 250 tons.

<sup>d</sup> 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..

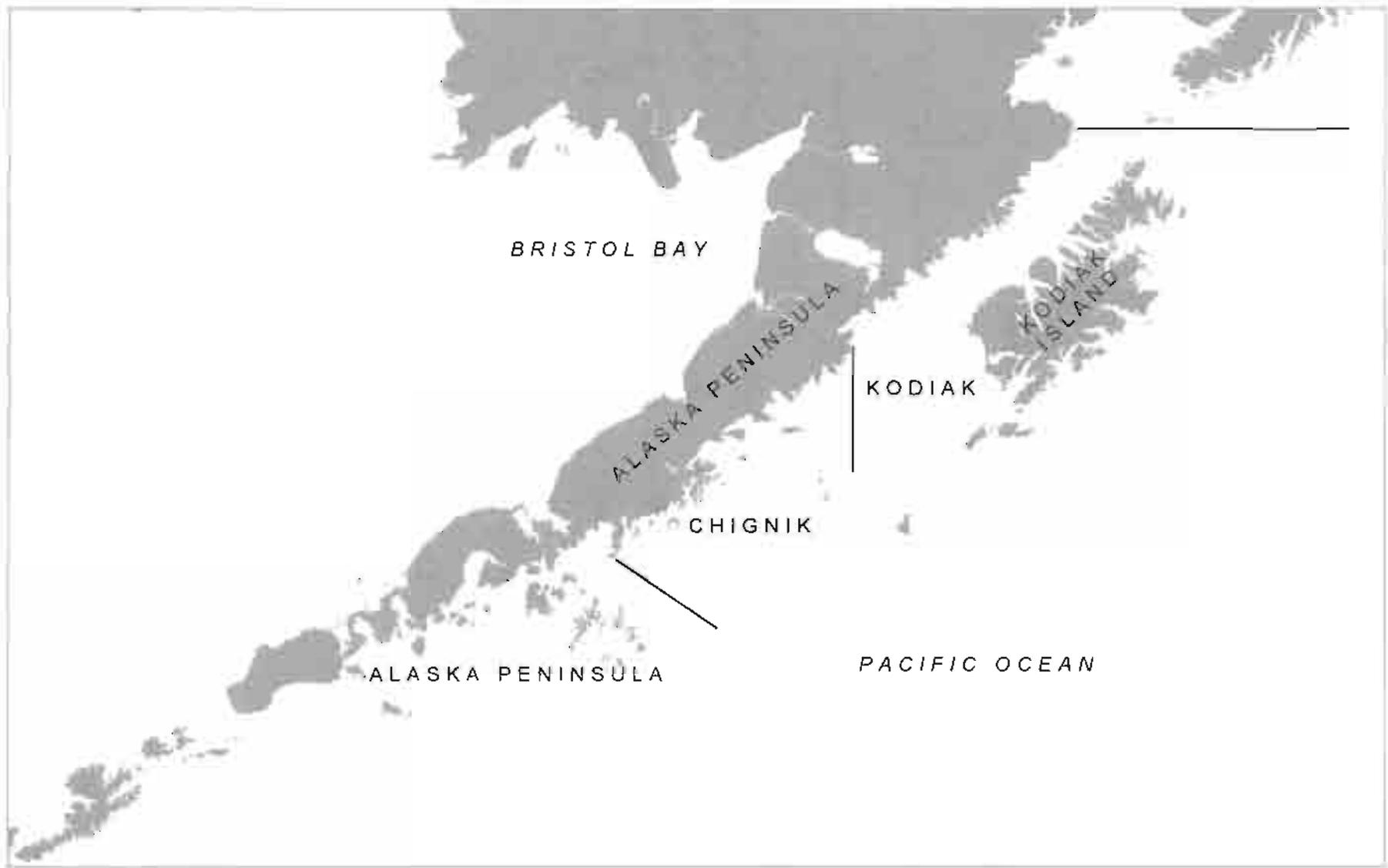


Figure 1. Map of the Alaska Peninsula illustrating the relative location of the Chignik Management Area.

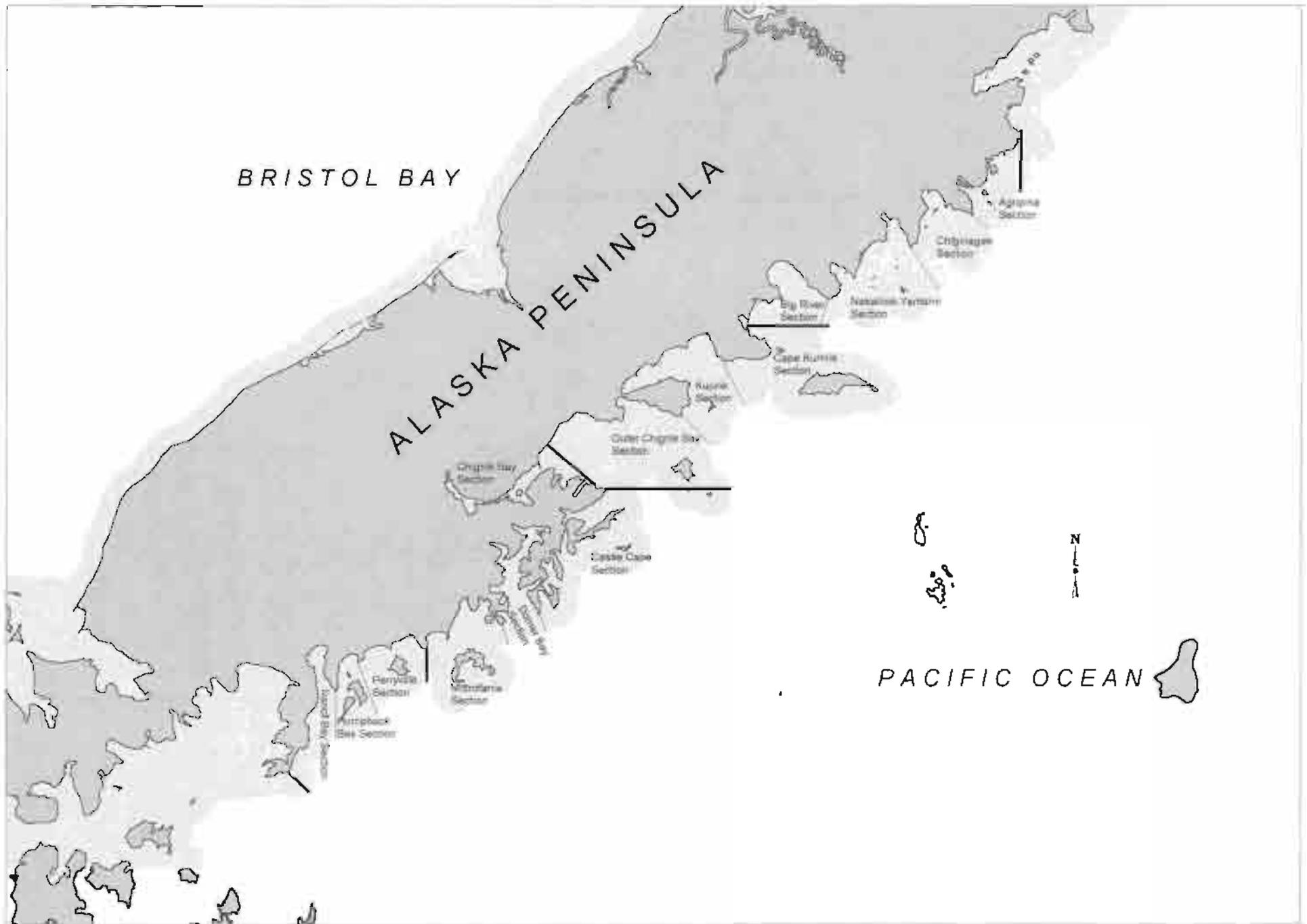


Figure 2. Map of the Chignik Management Area illustrating guideline harvest section areas.

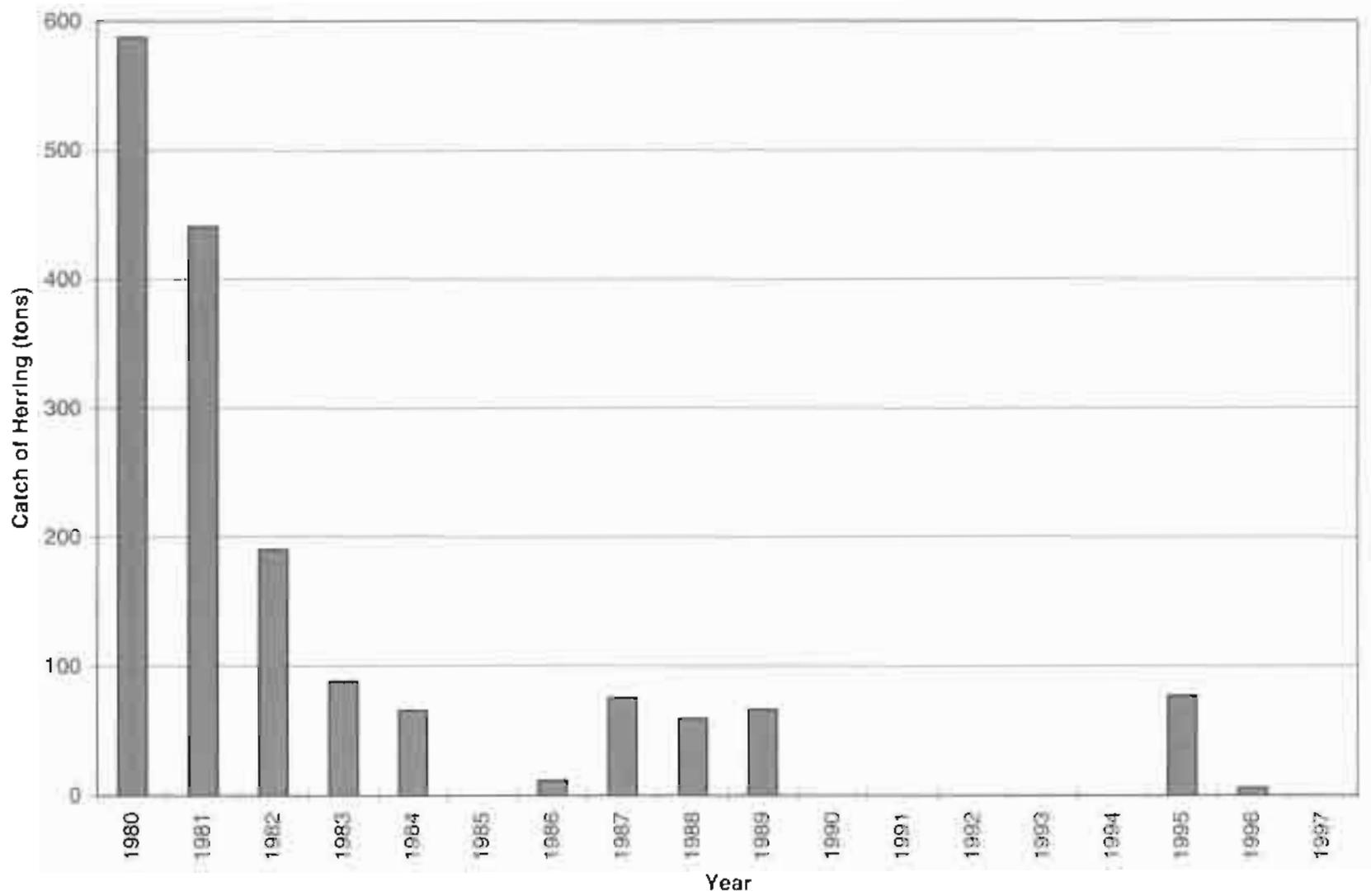


Figure 3. Herring harvests in the Chignik Management Area, 1980-1997.

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