

1989

DUTCH HARBOR FOOD AND BAIT HERRING FISHERIES

MANAGEMENT PLAN

By:

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## AREA DESCRIPTION

The Dutch Harbor food and bait fishery management plan applies to the following Districts of the Alaska Peninsula/Aleutian Islands management area; Unimak, Akutan, Unalaska, and that portion of the Umnak District east of Samalga Pass (See figure 1).

## SEASON DATES AND FISHING PERIODS

The Dutch Harbor food and bait herring season is from July 16 through February 28. The fishery opens 12:01 A.M. July 16 and will remain open unless changed by emergency order (see section on registration and fisheries monitoring).

Sac - roe herring landings have not been documented in the area of the Dutch Harbor food and bait fishery. In order to prevent early fishing on herring stocks located in the Dutch Harbor area, the Unimak, Akutan, Unalaska, and that portion of the Umnak District east of Samalga Pass will be closed to all commercial herring fishing from June 15 through July 15.

## GEAR RESTRICTIONS

During the food and bait season, herring may be taken with purse seines not to exceed 250 fathoms in length and gillnets with unrestricted length. During the sac - roe season, April 15 - July 15, purse seines are limited to 100 fathoms in length and may not be more than 1,000 meshes in depth. Herring gillnets are restricted to a mesh size of 2-1/8 - 2-1/2 inches, except that gillnets with 2-1/2 - 3 inch mesh may be used under the authority of a permit issued by the Department.

## HISTORICAL PERSPECTIVE

The Dutch Harbor herring fishery has been based on a food and bait product. A fishery was conducted from 1929 through 1938 averaging 1,474 short tons. No harvest restrictions were in effect during this period and annual harvest rates reflected processing and marketing conditions (Table 1).

The most recent period of activity began in 1981. The 1981 and 1982 seasons had no regulatory harvest restrictions, however the dramatic increase in harvest in 1982 prompted the Board of Fisheries to implement a harvest ceiling of 3,525 short tons. This harvest ceiling was in effect for the 1983, 84, and 85 seasons (Table 1).

A trend of decreasing biomass and recruitment was noted in the Togiak sac - roe fishery during 1986 (Table 2). Based on a stock identification study using a

# PENINSULA/ALEUTIAN MGMT. AREA

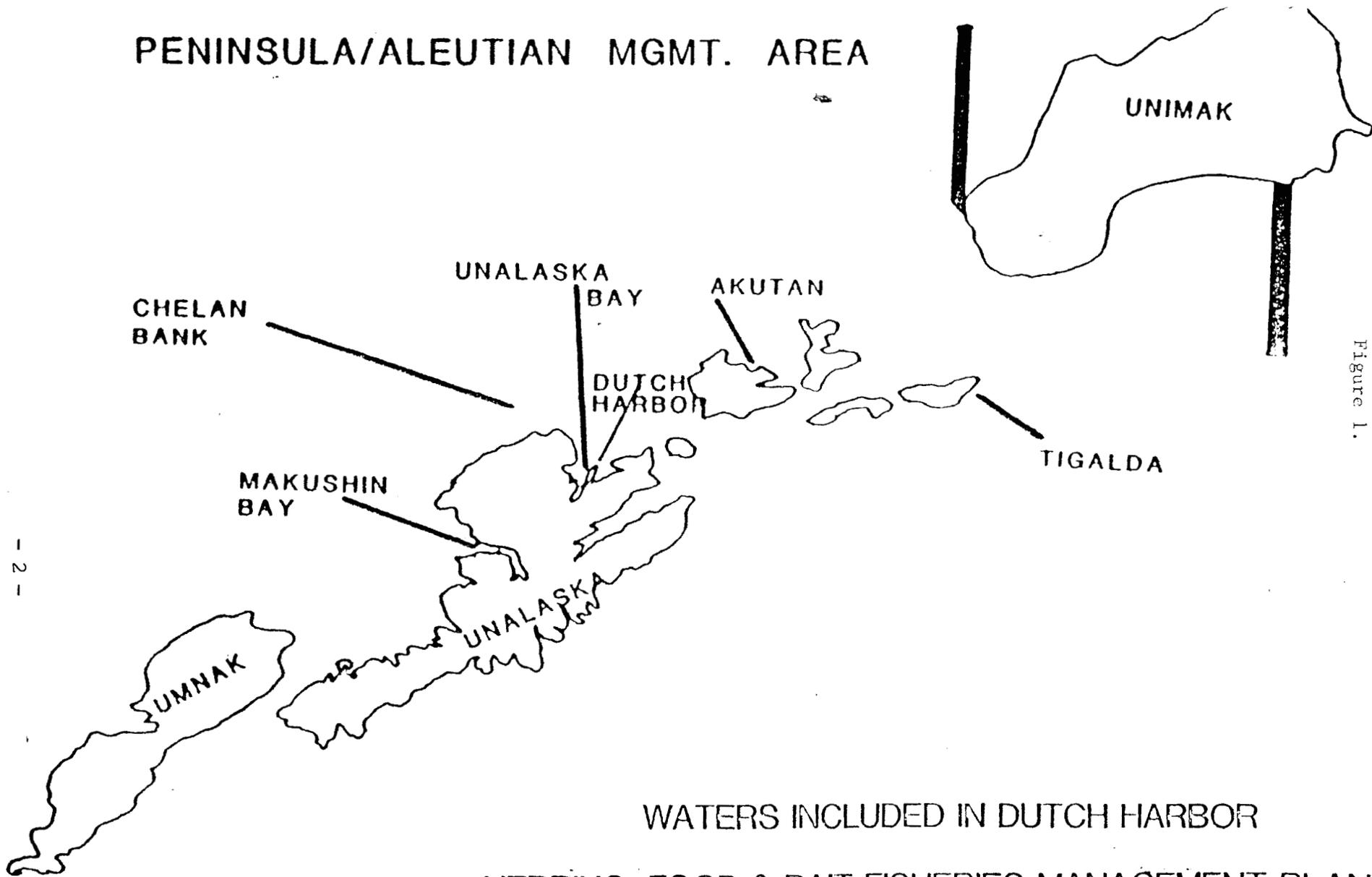


Figure 1.

WATERS INCLUDED IN DUTCH HARBOR

HERRING FOOD & BAIT FISHERIES MANAGEMENT PLAN

# HERRING

## ALASKA PENINSULA DISTRICTS & STAT NUMBERS

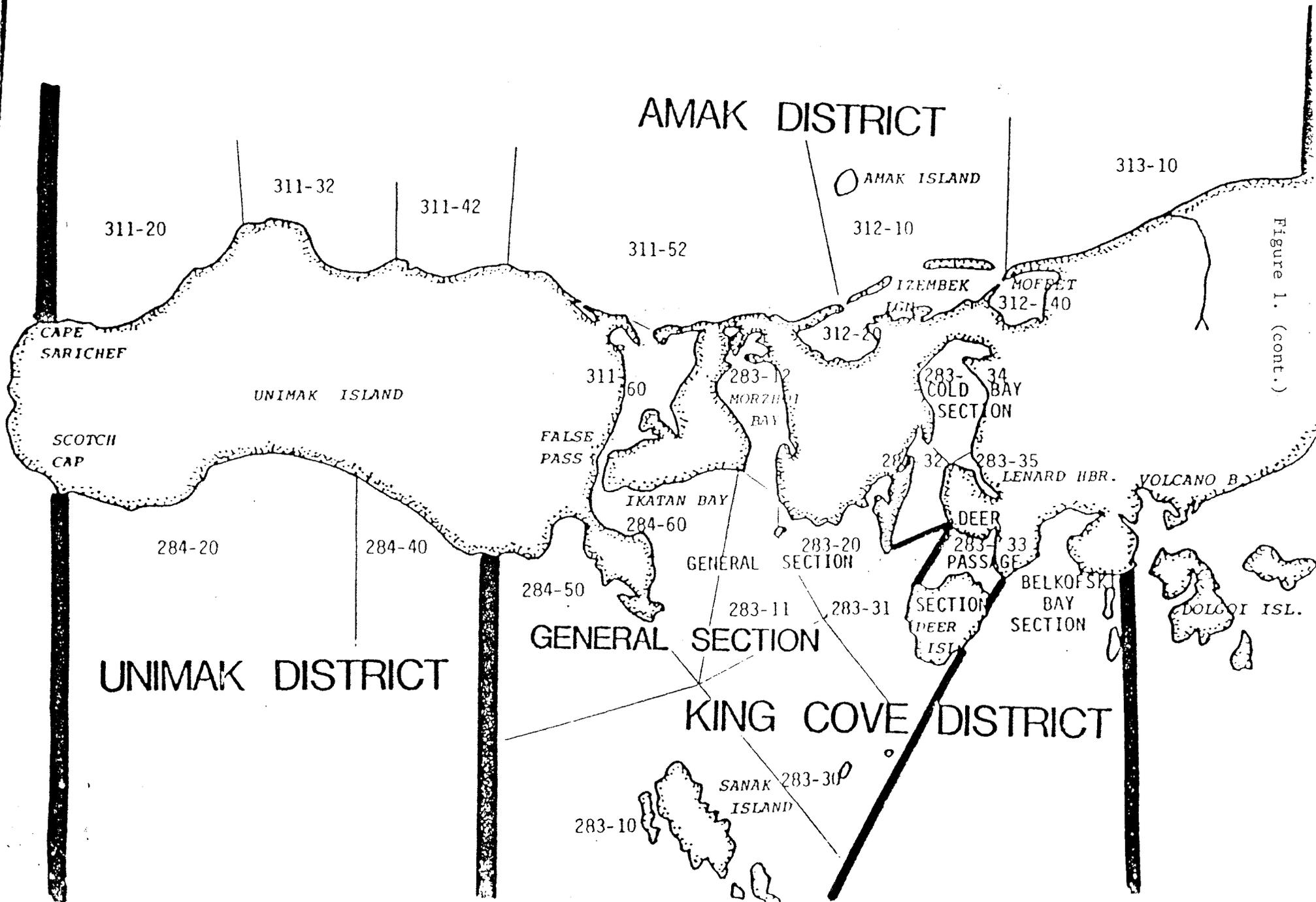


Figure 1. (cont.)

# HERRING

ALASKA PENINSULA DISTRICTS & STAT NUMBER

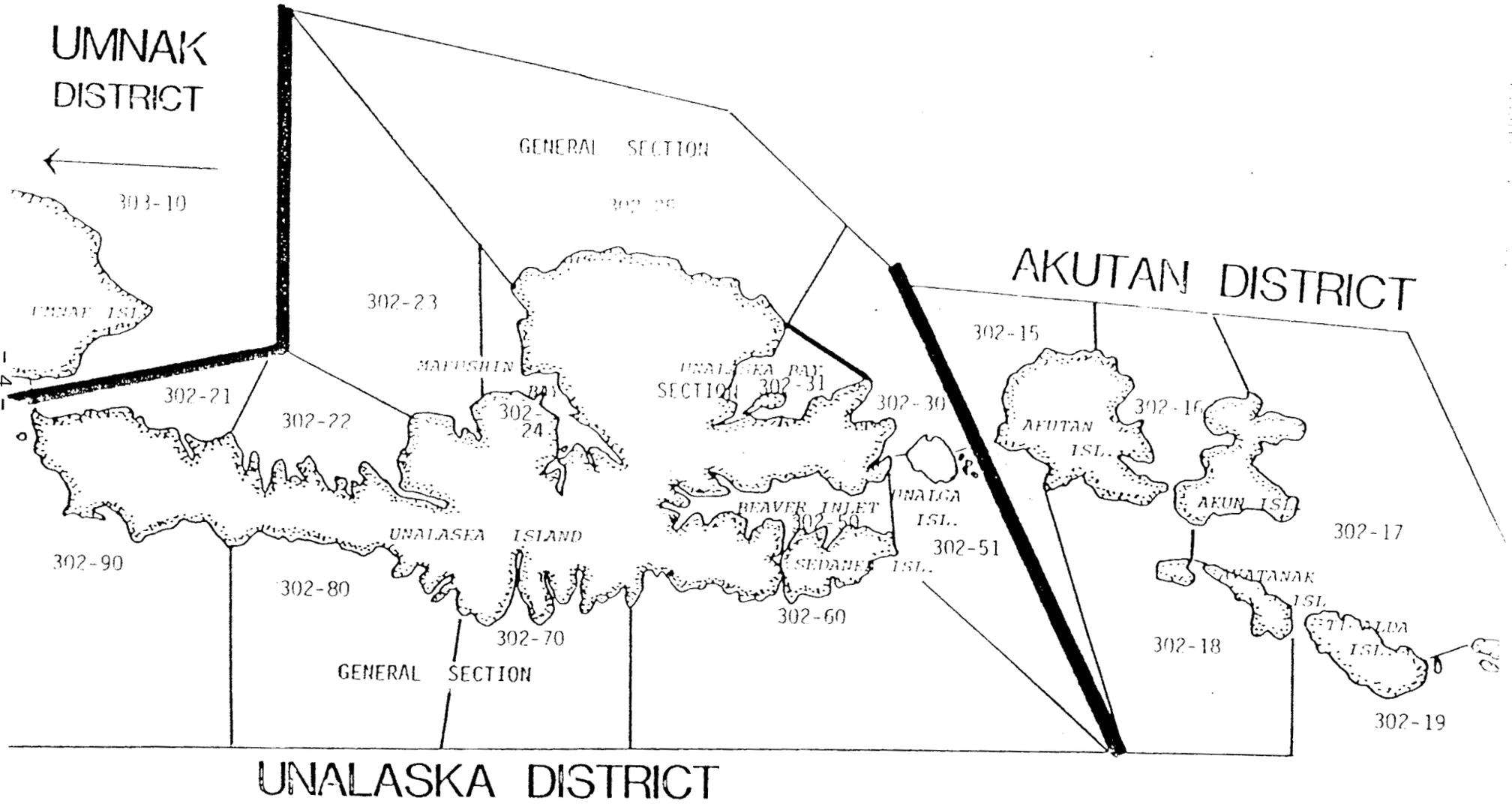


Figure 1. (cont.)

# HERRING

ALASKA PENINSULA DISTRICTS & STAT NUMBE

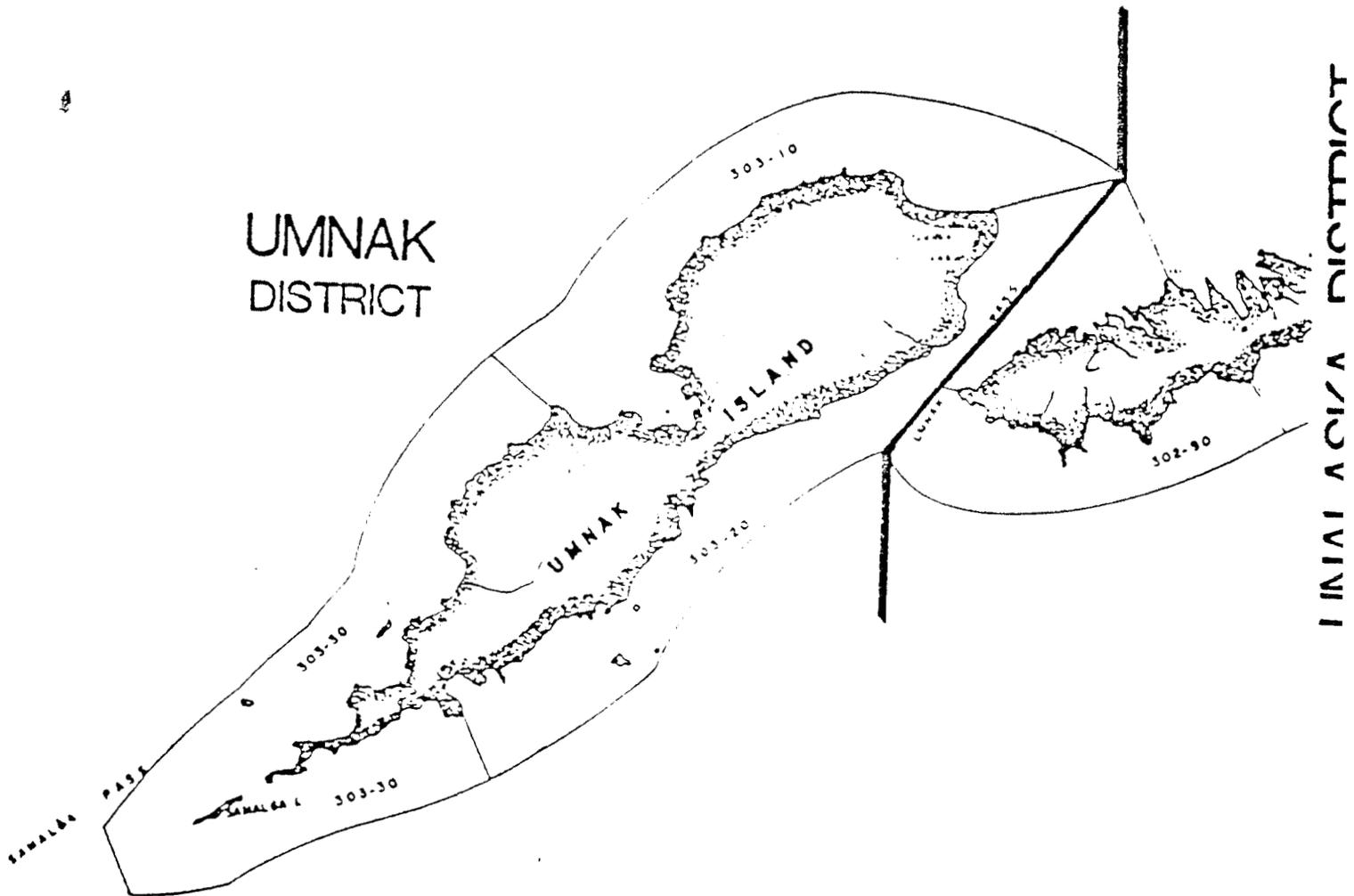


Table 1. PENINSULA/ALEUTIANS MANAGEMENT AREA EASTERN ALEUTIAN ISLANDS HERRING FOOD/BAIT FISHERY HISTORICAL INDUSTRY SUMMARY BY YEAR

YEAR	HARVEST IN SHORT TONS	NO. PROCESSORS	NO. BOATS	NO. LANDINGS	X TONS PER BOAT	X TONS PER LANDING	X \$ PER TON	\$ VALUE (MILLIONS)	X \$ PER VESSEL
1929	1259	*	*	*	*	*	*	*	*
1930	1916	*	*	*	*	*	*	*	*
1931	1056	12	26	*	*	*	*	*	*
1932	2510	12	30	*	*	*	*	*	*
1933	1585	12	38	*	*	*	*	*	*
1934	1533	9	*	*	*	*	*	*	*
1935	2412	10	*	*	*	*	*	*	*
1936	1379	8	*	*	*	*	*	*	*
1937	579	*	*	*	*	*	*	*	*
1938	513	*	*	*	*	*	*	*	*
1939-44	NO FISHERY								
1945	75	*	*	*	*	*	*	*	*
1946-80	NO FISHERY								
1981	704	2	2	16	352	44	300	0.211	0.11
1982	3565	6	7	95	509.3	37.5	300	1.02	0.15
1983	3567	5	8	96	445.9	37.2	232	0.828	0.10
1984	3578	5	9	61	397.6	58.7	210	0.751	0.68
1985	3480	3	6	78	560	44.6	162	0.564	0.09
1986	2394	4	7	53	342	45.2	254	0.600	0.09
1987	2503	4	8	45	373	55.6	300	0.751	0.09
1988	2004	6	8 <sup>a</sup>	59	251	34.0	252	.505	0.06

<sup>a</sup>Seven seiners and one gill netter participated.

Table 2. DUTCH HARBOR FOOD AND BAIT HERRING FISHERY (SHORT TONS)

YEAR	PRESEASON TOGIAK SPAWNING BIOMASS	HARVEST QUOTA	FOOD AND BAIT HARVEST	% SPAWNING BIOMASS HARVESTED
1981	159,000	NONE	704	.4%
1982	98,000	NONE	3,565	2.5%
1983	142,000	3,525 <sup>a</sup>	3,567	2.5%
1984	115,000	3,525	3,578	3.1%
1985	132,000	3,525	3,480	2.7%
1986	96,000	2,453 <sup>b</sup>	2,394	2.5%
1987	88,000	2,332 <sup>b</sup>	2,503	2.8%
1988	132,000	3,100 <sup>c</sup>	2,204	2.3%

<sup>a</sup>Harvest ceiling of 3,525 established by Board of Fisheries.

<sup>b</sup>Harvest quota set by ADF&G. Reduced proportionate with the drop from the 1985 Togiak spawning biomass level.

<sup>c</sup>Harvest quota set under provisions of the Bering Sea Herring Fisheries Management Plan.

scale pattern analysis over a 3 year period, Togiak spawning stocks are believed to be the main stock supporting the Dutch Harbor food and bait fishery. The board of Fisheries directed the staff to adjust the harvest ceiling commensurate with any declines noted in the Togiak spawning biomass. In 1986 the harvest ceiling was 2,453 short tons while in 1987 the ceiling was lowered to 2,332 short tons, commensurate with a declining Togiak biomass (Table 2).

#### CURRENT HARVEST STRATEGY

During the November 1987 Board of Fisheries meeting a Bering Sea Herring Fisheries Management Plan was adopted. To ensure the conservation of herring stocks, it was adopted that the overall exploitation of a herring stock should not exceed 20% of the spawning biomass. In the case of the Togiak spawning stock an allocation between the sac - roe fishery, spawn on kelp fishery, and the Dutch Harbor food and bait fishery was made so that the combined exploitation of these fisheries did not exceed 20% of the spawning biomass. The number of fishermen involved and the value of the fishery were factors considered by the Board when making the allocations between the fisheries. The Bering Sea Management Plan defines under what conditions and to what extent there will be a Dutch Harbor food and bait fishery. The elements governing the food and bait fishery are listed below:

1. The Dutch Harbor food and bait fishery quota is determined through the following calculations:
  - A. The desired exploitation rate (maximum of 20%) is applied to the estimated Togiak spawning biomass. This figure represents the total combined allowable harvest to be extracted by the Togiak sac - roe fishery, spawn on kelp fishery, and the Dutch Harbor food and bait fishery.
  - B. The spawn on kelp fishery is allocated 1,500 tons of herring.
  - C. The Dutch Harbor fishery is allocated 7% of the remaining allowable harvest (after the 1,500 ton spawn on kelp allocation has been subtracted from the total allowable harvest).
  - D. The Togiak herring sac - roe harvest allocation is the remainder of the total allowable harvest after the spawn on kelp and Dutch Harbor allocation have been subtracted.
2. If the herring sac - roe harvest in the Togiak district exceeds its allocation by more than 20 percent, the department shall deduct the amount of herring that exceeds the Togiak District herring sac - roe allocation from the Dutch Harbor fishery allocation for that season.
3. If the Togiak District herring sac - roe fisheries do not harvest their allocation the unharvested amount of herring will be added to the Dutch Harbor fishery allocation. When an increase of the Dutch Harbor fishery allocation is made under this section, the total allocated harvest may not exceed 3,100 short tons.

4. When the Togiak District is below its threshold (35,000 tons), the Dutch Harbor fishery will be closed for that season.

*1989 Dutch Harbor Food and Bait Herring Harvest Quota*

The revised 1989 Togiak herring biomass for the season is 100,108 short tons. At a 20% exploitation rate, the allowable harvest is then 20,022 tons. The 1989 Togiak roe on kelp harvest was 2,469 short tons which resulted in an exploitation rate of 15% or 12.039 tons for the spring sac - roe fishery. The remaining unutilized harvestable biomass, then totals 5,514 tons. According to the Bering Sea Herring Fisheries Management Plan adopted in November, 1987 by the Board of Fisheries, when an increase of the Dutch Harbor fishery allocation is made under this plan, the total allocated harvest may not exceed 3,100 short tons.

	100,108	Estimated 1989 Togiak Spawning Biomass (2)
x	20%	desired exploitation.
<hr/>		
	20,022	TOTAL ALLOWABLE HARVEST
-	12,039	ACTUAL 1989 TOGIAC SAC ROE HARVEST
-	2,469	ACTUAL 1989 ROE ON KELP HARVEST
<hr/>		
	5,514	UN - UTILIZED HARVESTABLE BIOMASS

Therefore, the 1989 Dutch Harbor food and bait herring harvest quota is 3,100 short tons.

**REGISTRATION AND FISHERIES MONITORING**

In accordance with regulation (5 AAC 27.095), persons fishing herring in statistical area M shall obtain a permit (Figure 2) from the Department of Fish and Game before taking herring during the period July 15 through February 28. Fishermen shall register for the Dutch Harbor fishery in Dutch Harbor prior to fishing.

Each buyer and/or tender operator participating in the Dutch Harbor fishery shall register in Dutch Harbor prior to purchasing fish and are required to report as directed in the Tender Registration Form which is updated as necessary at registration (Figure 3).

(2). Memo from Kathy Rowell to Arnie Shaul dated June 5, 1989. The Dutch Harbor food and bait herring fleet has a large harvesting capacity. Past seasons daily catches have exceeded 800 tons, and during the 1989 season 1,000 tons were taken in two days. This large harvesting capacity will make accurate and timely monitoring of catches necessary in order to keep the actual harvest close to the harvest quota.

Due to the necessity of timely catch monitoring described above, tenders will be required to notify the department in Dutch Harbor immediately after taking

WESTWARD REGION COMMERCIAL HERRING \_\_\_\_\_ FISHERY

REGISTRATION PERMIT FOR FISHERMEN

This permit provides for commercial herring fishing as authorized by 5 AAC 27.095, Article 3, Ch. 27 ( ) for the Westward Region (which includes statistical areas K, L, M and N).

Number: \_\_\_\_\_ Permit For Statistical Area: \_\_\_\_\_

On (Date): \_\_\_\_\_ Issued At (location): \_\_\_\_\_

By: Name \_\_\_\_\_ To: Name \_\_\_\_\_

Title \_\_\_\_\_ Address \_\_\_\_\_

Signature \_\_\_\_\_ Interim-Use Permit No. \_\_\_\_\_

Signature \_\_\_\_\_

\*\*\*\*\*

CONDITIONS OF THIS PERMIT:

(1) Prior to commercial herring fishing:

The holder of this registration permit must indicate to an ADF&G representative in the intended statistical area of operation, the following information:

Expected Dates of Operation: \_\_\_\_\_

Processor Affiliation (if known): \_\_\_\_\_

Fishing Vessel: Name \_\_\_\_\_ Keel Length \_\_\_\_\_

Color \_\_\_\_\_ Capacity \_\_\_\_\_

Gear Type \_\_\_\_\_ Amount of Gear \_\_\_\_\_

(2) Waters closed to commercial herring fishing:

(a) During the period June through October 31, herring may not be taken in waters closed to salmon fishing - as specified in sections 5 AAC 19.350 (pg. 62) and 5 AAC 39.290 (pg. 176) of the Finfish Regulation Book.

OR

- as otherwise specified by the emergency order for herring in effect during the time of fishing.

(b) During the period November 1 through February 28 there are no closed waters to commercial herring fishing unless otherwise specified by emergency order announcement:

DUTCH HARBOR FOOD AND BAIT HERRING  
TENDER/PROCESSOR REGISTRATION FORM

NOTE: 5 AAC 27.662: Each tender operator and each buyer  
shall report in person and register before commencing  
operations.

Company or Tender Name: \_\_\_\_\_

Associated Tenders or Company: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4 Associated Fishing Vessels: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Tender Holding Capacity (Herring Tonnage) \_\_\_\_\_

Tender Overall Length: \_\_\_\_\_

Reporting Requirements \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

COMPANY REPRESENTATIVE: \_\_\_\_\_ DATE: \_\_\_\_\_

TENDER OPERATOR: \_\_\_\_\_

DEPARTMENT REPRESENTATIVE: \_\_\_\_\_

herring on board as well as the daily radio schedule, specified on the Processor/Tender Registration Form.

If four or more vessels are registered for the fishery then fishing periods of set length will be announced by emergency order. Set period lengths will allow for accurate catch tabulation before additional announcements are made and also somewhat limit the possibility for large daily catches.

If the fishery is closed to tabulate harvest and the actual harvest is less than the harvest quota, then the fishery will only be reopened if fishing effort is low enough to allow an opening without the risk of an overharvest.

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