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ALEUTIAN ISLANDS MANAGEMENT AREA
FOOD AND BAIT HERRING MANAGEMENT PLAN, 1996

By

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INTRODUCTION

This document is intended to provide commercial herring fishers and buyers with management information and guidelines for participating in the Aleutian Islands Management Area food and bait herring fishery. This fishery is commonly referred to as the "Dutch Harbor" herring fishery.

The Aleutian Islands Herring Management Area is described as part of Management Area "M" and consists of Bering Sea waters extending west of Unimak Pass and Pacific Ocean waters extending west of 163°30' W.long. (the south side of Unimak Island near Cape Lazaref) to the International Dateline (Figure 1).

In November 1991, the Alaska Board of Fisheries (BOF) enacted regulations which allow only the Aleutian Islands Herring Management Area open to commercial food and bait herring fishing. The North and South Peninsula food and bait herring were allocated to sac roe fisheries.

Historically the "Dutch Harbor" food and bait herring fishery has occurred annually from 1929 through 1938 and catches ranged from 513 tons to 2,510 tons. The fishery was closed from 1939 through 1944 and again from 1946 through 1980 (Table 1). From 1981 through 1995, catches ranged from 704 tons to 3,578 tons. From 1990 through 1995, the number of days fished has averaged two days, with the entire 1995 allocation being harvested in a single 20 minute period (Table 2). In recent years, the primary harvest locations have been in Unalaska and Makushin Bays (Figures 2-4).

The commercial fisheries are intended to occur with minimal waste of the resource and within conservation limits as determined by the BOF. The Alaska Department of Fish and Game (ADF&G) will manage the fisheries per the Bering Sea Herring Fishery Management Plan (5 AAC 27.060; ADF&G 1995). Permit holders are encouraged to check with their markets prior to fishing to determine which products are acceptable to the industry.

Local offices of the ADF&G for "Dutch Harbor" food and bait herring information are:

Sand Point:

Alaska Department of Fish and Game
P.O. Box 129
Sand Point, AK 99661
phone (907) 383-2066
fax (907) 383-2606
record (907) 383-2334
VHF 6 & 72
Single Side Band 3.230 MHz
KWB 362

Dutch Harbor:

Alaska Department of Fish and Game
P.O. Box 920587
Dutch Harbor, AK 99692
phone (907) 581-1239
fax (907) 581-1572
VHF 9
Single Side Band 4.125 MHz
WIM 76

MANAGEMENT PLAN

Registration Requirements for Fishing Vessels, Tenders, and Processors

Each fishing vessel, CFEC permit holder, tender operator, and buyer must register at the ADF&G office in Dutch Harbor prior to catching, buying, tendering, or processing herring. The buyer and tender reporting requirements are located in Table 3.

Fishing Periods

The department anticipates fishing periods will occur during hours of darkness and be no more than two hours in duration. A catch report from each CFEC permit holder and tender operator will be required after each fishing period, whether or not herring were taken, before the next fishing period will be announced. Generally, there will be a 12 hour closure between fishing periods, to allow ADF&G time to assess the harvest and fishers the opportunity to deliver their catch. A shorter closed period may be allowed, if an agreement can be achieved between ADF&G and the fishers.

Catch Reporting

If monitoring of the "Dutch Harbor" food and bait fishery becomes difficult due to late catch reporting or high gear levels, stringent in-season measures will be taken to prevent excessive harvests. Such measures may include but will not be limited to frequent closures to assess fish ticket information, followed by at least a 24 hour closure before the next fishing period.

Failure to adhere to the reporting requirements specified on the tender and fishing vessel registration form will result in enforcement action. Timely and accurate catch information provided by the fishers, tender operators, and processors is essential in managing this fishery. Fishers, tender operators, and processors are required to provide accurate catch information after each fishing period, even if no herring were caught or purchased. Permit holders must provide an accurate estimate of herring onboard the fishing vessel as well as an estimate of herring held within the seine or gillnet. Tender operators must provide accurate estimates of herring onboard their vessel. Processors must provide accurate estimates of delivered herring. Individual codes will be provided for each permit holder, tender, or processor that is involved in the fishery. Catch reporting instructions will be explained in detail during vessel and processor registration.

Fish Tickets

Fishers must provide specific catch locations (statistical area or a specific landmark) to buyers, so that they can be recorded on fish tickets.

Fish tickets must be received, by mail or hand delivered, in the Sand Point ADF&G office within ten days of the close of the fishery. All fish tickets must be received in the Sand Point ADF&G office before completing operations and leaving Management Area M. If delivering fish tickets within ten

days to ADF&G personnel in Sand Point causes undue inconvenience, other arrangements may be possible, but processors must contact ADF&G in Sand Point.

Gillnet And Seine Specifications (5 AAC 27.631 and 5 AAC 27.632 in part)

During the food and bait herring season there are no restrictions on gillnet length or depth. Purse seines are restricted to a maximum of 250 fathoms in length with no depth restrictions.

Aircraft

There is no restriction on the use of aircraft.

Industry and ADF&G Cooperation

Cooperation by fishers, tender operators, and processors will be appreciated when ADF&G personnel request herring samples from the commercial catch, or from juvenile or other schools inadvertently seined. These samples will be used to monitor age composition, which assists in determining the health of a stock and in forecasting next year's run strength. ADF&G will also be soliciting information on herring sightings to supplement information gathered by ADF&G personnel. Fishers and spotter pilots are encouraged to provide biomass information to ADF&G; these reports will be treated confidentially. Past cooperation has proven valuable in evaluating stock status and gaining management information.

Test Fishing

The department will conduct a test fishery in 1996. The test fishery will provide the department with valuable stock assessment information prior to commercial herring fishing periods. In addition, the test fish program will provide age, weight, and length samples of herring present in the Dutch Harbor area, and help pay for the associated costs of analyzing data, and managing the fishery. The department will advertise for test fish vessels in late June and early July.

Aleutian Islands "Dutch Harbor" Commercial Food and Bait Fishery

The "Dutch Harbor" food and bait herring season is from July 16 through February 28. At the March, 1991 BOF meeting, the Bering Sea Herring Fishery Management Plan was amended in regards to biomass threshold levels. The minimum threshold of herring estimated at Nelson Island was lowered to 2,000 short tons in order for the "Dutch Harbor" fishery to occur. ADF&G, was also instructed to develop a threshold level for Port Clarence. If any Bering Sea herring stock is below its threshold, the "Dutch Harbor" food and bait fishery will be closed for that season. ADF&G will not be able to determine until late-June or early-July if the "Dutch Harbor" food and bait fishery will occur because biomass estimates for each Bering Sea herring stock must be made in-season during the spawning period. Currently, the biomass of all stocks are forecast above their respective threshold levels (Hamner and Kerkvliet 1996). The Nelson Island District 1996 biomass forecast is 6,638 tons

(C. Burkey, Alaska Department of Fish and Game, Bethel, personal communication). This is above the 2,000 ton threshold required to open the "Dutch Harbor" food and bait fishery. Therefore, the outlook for a 1996 "Dutch Harbor" food and bait fishery is favorable. However, processors and fishers are advised that management of the 1996 fishery will be based on the observed spawning biomass in 1996 for each Bering Sea herring stock. ADF&G will update biomass estimates for each stock as herring move into coastal waters during spawning migrations.

In-season emergency orders will be broadcast on the single side band radio frequencies 4.125 and 3.230 MHz and on the VHF radio. A VHF channel will be designated and announced at the registration meeting prior to the first fishing period; which fishers will be required to monitor during openings.

Harvest Projection For The 1996 Fishery

The department shall manage the "Dutch Harbor" food and bait herring fishery so that it is allocated seven percent of the allowable Togiak District sac roe herring harvest determined under the provisions of the Bristol Bay Herring Management Plan (5AAC 27.865). The estimated quota for the 1996 "Dutch Harbor" food and bait herring fishery is 1,793 tons (Table 4; K.A. Rowell, Alaska Department of Fish and Game, Anchorage, personal communication). This quota is derived using the Bering Sea Herring Management Plan (5 AAC 27.060) and the preseason projected 1996 Togiak herring spawning biomass of 135,585 tons. The actual quota will be established when the 1996 Togiak herring spawning biomass is determined.

Harvest Methods In 1996

From 1982 through 1991, an average of 8 permit holders participated in the "Dutch Harbor" food and bait herring fishery (Table 2). Since 1991, the average number of participants in this fishery has increased to about 15 permit holders. Due to the increased effort in this fishery ADF&G implemented the following changes in 1995 to slow down the rate of harvest.

1. fishing restricted to hours of darkness,
2. fishing periods of two hours or less.
3. conduct stock assessment prior to opening the fishery.

For the 1996 season, ADF&G will continue to restrict the initial fishing period to hours of darkness and a duration of two hours or less. ADF&G will place emphasis on collecting stock assessment prior to fishery openings. Stock assessment may include aerial surveys, when weather is favorable and aircraft are available, and sonar surveys. If additional fishing time is needed to harvest the allocation, ADF&G personnel will remain flexible and make any in-season adjustments necessary to prosecute an orderly fishery.

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- ADF&G (Alaska Department of Fish and Game). 1995. 1995-96 Commercial herring fishing regulations, 1995 edition. Alaska Department of Fish and Game, Division of Commercial Fisheries, Juneau.
- Hamner, H.H. and C. Kerkvliet. 1996. Pacific Herring Stocks and Fisheries in the Arctic-Yukon-Kuskokwim Region of the Bering Sea, Alaska, 1995. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 3A96-01, Anchorage.
- McCullough, J.N., and R.D. Campbell. 1995. Alaska Peninsula and Aleutian Islands Management Areas sac roe herring report and the Aleutian Islands Management Area food and bait herring report, 1994. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Regional Information Report 4K95-2, Kodiak.

Table 1. Aleutian Islands "Dutch Harbor" area food and bait herring fisheries historical industry summary, 1929-95.

Year	Harvest In Short Tons	No. Processors	No. Permits	No. Landings	Tons Per Boat	Tons Per Landing	\$ Per Ton	\$ Value (Thousands)	\$ Per Vessel (Thousands)
1929	1,259	*	*	*	*	*	*	*	*
1930	1,916	*	*	*	*	*	*	*	*
1931	1,056	12	26	*	*	*	*	*	*
1932	2,510	12	30	*	*	*	*	*	*
1933	1,585	12	38	*	*	*	*	*	*
1934	1,533	9	*	*	*	*	*	*	*
1935	2,412	10	*	*	*	*	*	*	*
1936	1,379	8	*	*	*	*	*	*	*
1937	579	*	*	*	*	*	*	*	*
1938	513	*	*	*	*	*	*	*	*
1939-44					NO FISHERY				
1945	75	*	*	*	*	*	*	*	*
1946-80					NO FISHERY				
1981	704	^a	^a	16	352	44	300	211	^a
1982	3,565	6	7	95	509	38	300	1,020	146
1983	3,567	5	8	96	446	37	232	828	104
1984	3,578	5	9	61	398	59	210	751	83
1985	3,480	3	6	78	560	45	162	564	94
1986	2,394	4	7	53	342	45	254	600	86
1987	2,503	4	8 ^b	45	73	56	300	751	4
1988	2,004	6	8 ^b	59	251	34	252	505	63
1989	3,081	5	9 ^b	69	342	45	283	873	97
1990	820	5	7	8	117	103	350	287	41
1991	1,325	5	8	18	166	74	300	398	50
1992	1,949	5	11	26	177	75	300	573	52
1993	2,790	4	13	32	215	87	300	837	64
1994	3,349	7	14	65	239	52	300	1,005	72
1995	1,748	6	14	24	125	73	300	524	37
1986-95 Average	2,196	5	10 ^c	40	235	64	294	635	66

Table 1. (page 2 of 2)

* Data not available.

^a The number of processors, fishing vessels, and catch by gear type can not be released due to State confidentiality requirements.

^b The catch by gear type can not be released due to State confidentiality requirements.

^cThe number of permit holders making at least one successful set.

Table 2. Aleutian Islands " Dutch Harbor" commercial food and bait herring catch, in short tons, 1981-95.

Year	<u>Landing Date</u>		Days	Preseason	Harvest	Food	% Togiak	Number
	First	Last	Fished	Spawning	Quota	and	Spawning	Permit
				Biomass		Bait	Biomass	Holder
						Harvest	Harvested	Fishing
1981	8/03	8/23	21	159,000	NONE	704	0.4	^a
1982	8/05	9/12	39	98,000	NONE	3,565	3.6	6
1983	7/23	9/06	46	142,000	3,525b	3,567	2.5	5
1984	7/17	7/27	11	115,000	3,525b	3,578	3.1	5
1985	7/17	8/11	26	132,000	3,525b	3,480	2.6	3
1986	7/16	7/28	13	96,000	2,453c	2,394	2.5	4
1987	7/16	7/23	4d	88,000	2,332c	2,503	2.8	9
1988	7/16	9/18	21	132,000	3,100e	2,004	1.6	8
1989	7/16	8/05	19f	100,108	3,100e	3,081	3.2	9
1990	8/15	8/15	<1	72,000	903e	820	1.1	7
1991	7/17g	7/17	<1	83,229	931e	1,325	1.6	8
1992	7/16	7/28h	5	60,214i	1,940i	1,949	1.3	11
1993	7/16	7/16	<1	164,135	2,193	2,790	1.7	14k
1994	7/16	7/19	4	165,747j	2,215j	3,349	2.0	16k
1995	7/16	7/16	<1	149,093	1,982	1,748	1.2	18k
1986-95								
Average			7	111,053	2,115	2,196	1.9	10

^a Number can not be released due to state confidentiality requirements.

^b Harvest ceiling of 3,525 established by Board of Fisheries.

^c Harvest quota set by ADF&G. Reduced proportionate with the drop from the 1985 Togiak spawning biomass level.

^d Closed 7/19, reopened for 14 hours on 7/23.

-Continued-

Table 2 . (page 2 of 2)

- ^e Harvest quota set under provisions of the Bering Sea Herring Fisheries Management Plan
- ^f Closed 7/26, reopened 7/27 through 8/5.
- ^g Fishery opened for six hours on 7/16; weather prevented any fishing effort.
- ^h Fishery co-op after 7/16.
- ⁱ The preseason forecasted biomass was adjusted by ADF&G. The final estimate for Togiak was 146,037 tons and the harvest quota was revised to 1,940 tons.
- ^j The preseason forecasted biomass was adjusted by ADF&G (Kathy Rowell, personnel communication, May 25, 1994).
- ^k Number of permit holders registered to fish.

Table 3. Buyer and tender reporting requirements.

5 AAC 27.662 BUYER AND TENDER REPORTING REQUIREMENTS.

In addition to the requirements of 5 AAC 39.130(f) each tender operator and each buyer or his agents shall report in person to and register with a local representative of the department 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 the department located in the statistical area before transporting or processing of herring;
 - (2) make daily reports of all herring purchased from fishermen, and other processing records as specified by local representative of the department; and
 - (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.
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Table 4. Forecasted harvest allocation for Togiak sac roe and " Dutch Harbor" food and bait herring fisheries, 1996.

	Biomass (short tons)	Harvest (short tons)
Forecasted Total Biomass:		135,585
Exploitation at maximum 20% for Total Allowable Harvest:		27,117
Togiak Spawn-on-kelp Fishery (Fixed Allocation):		1,500
Remaining Allowable Harvest:		25,617
Dutch Harbor Food and Bait Fishery at 7.0%:		1,793
Remaining Allowable Harvest for Togiak District Sac Roe Fishery:		23,826
Purse Seine Allocation 75.0%:		17,868
Gill Net Allocation 25.0%:	5,956	

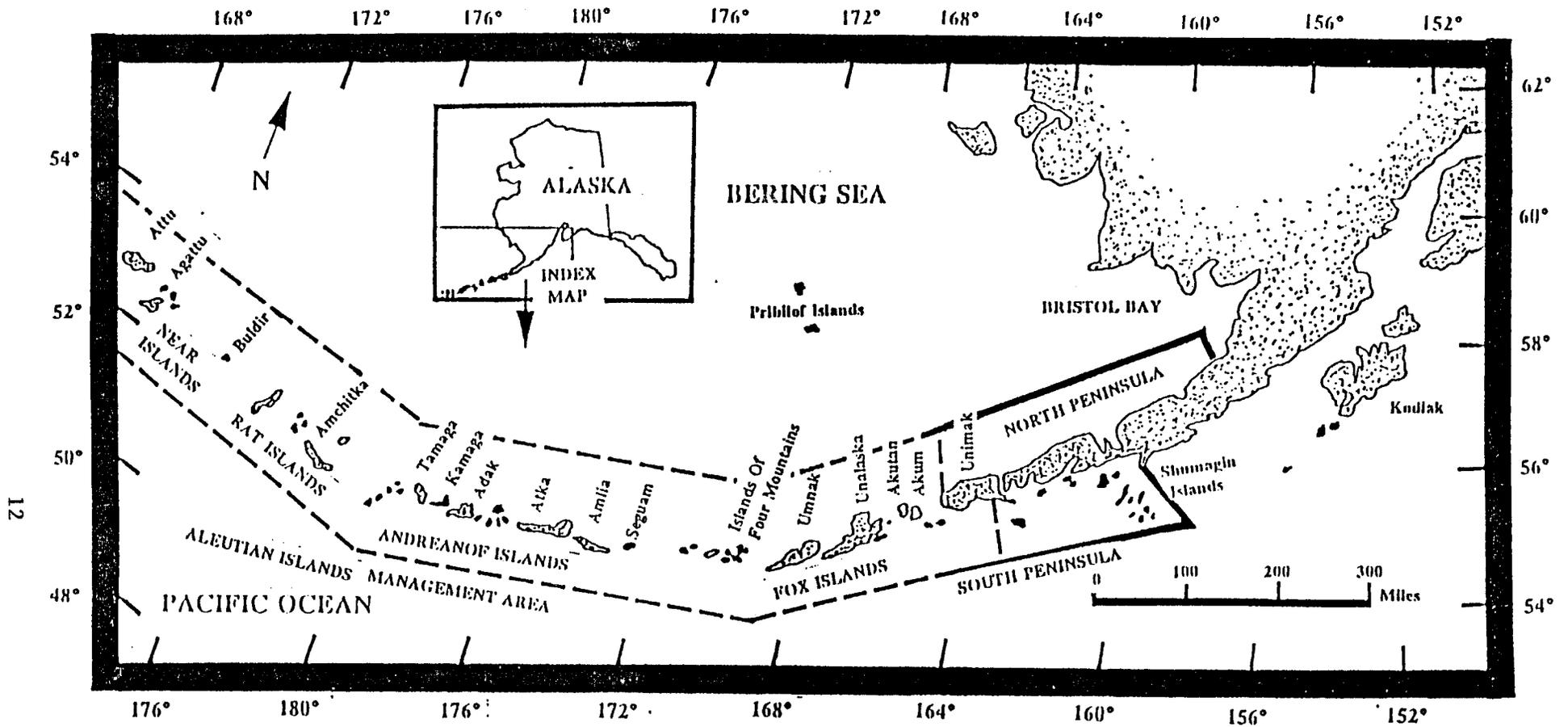


Figure 1. Map of Statistical Management Area M with the Aleutian Islands Herring Management Area defined.

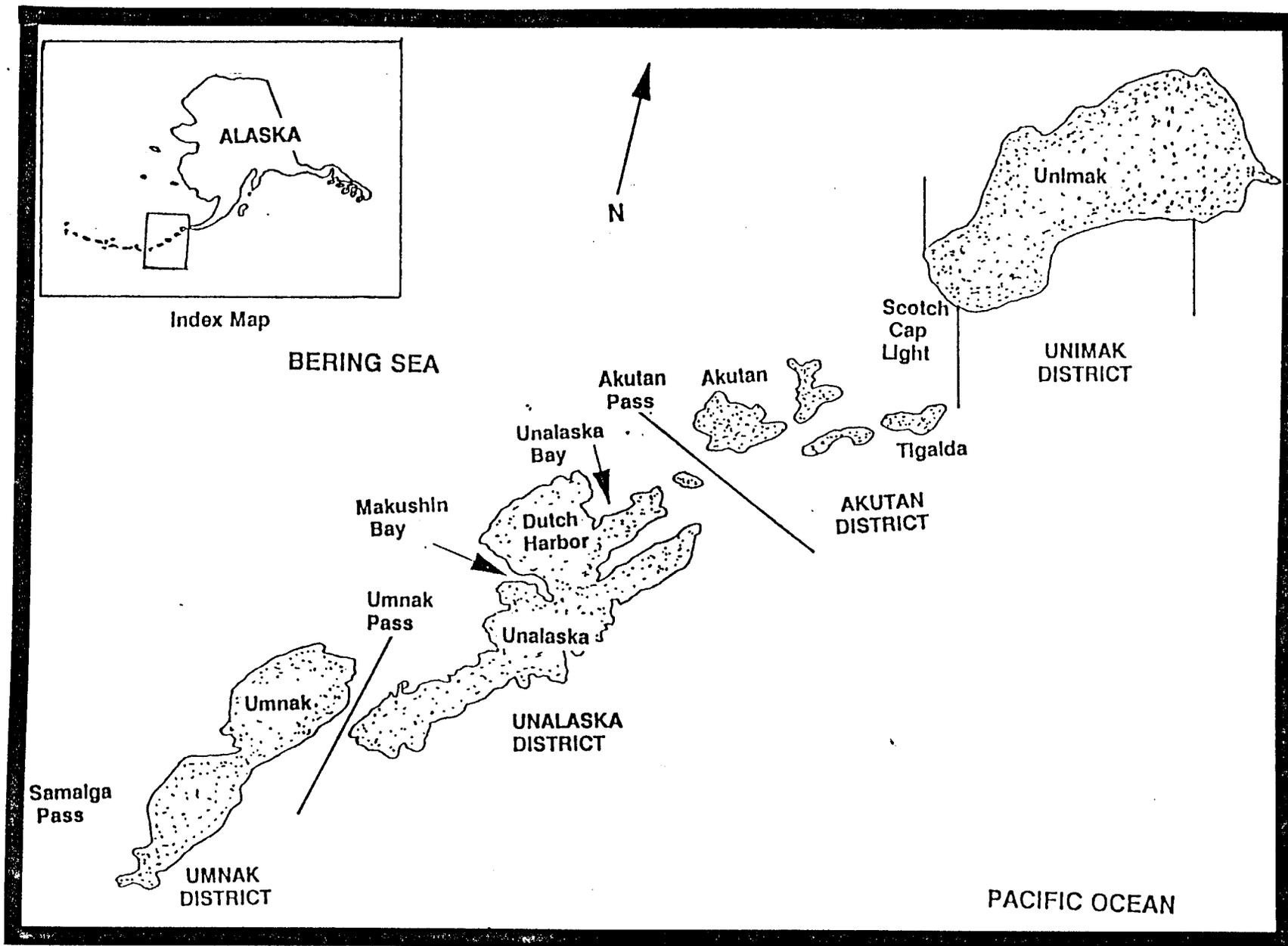


Figure 2. Map of the Eastern Aleutian Islands, the study area includes the Unimak, Akutan, and Unalaska Districts and that portion of the Umnak District east of Samalga Pass.

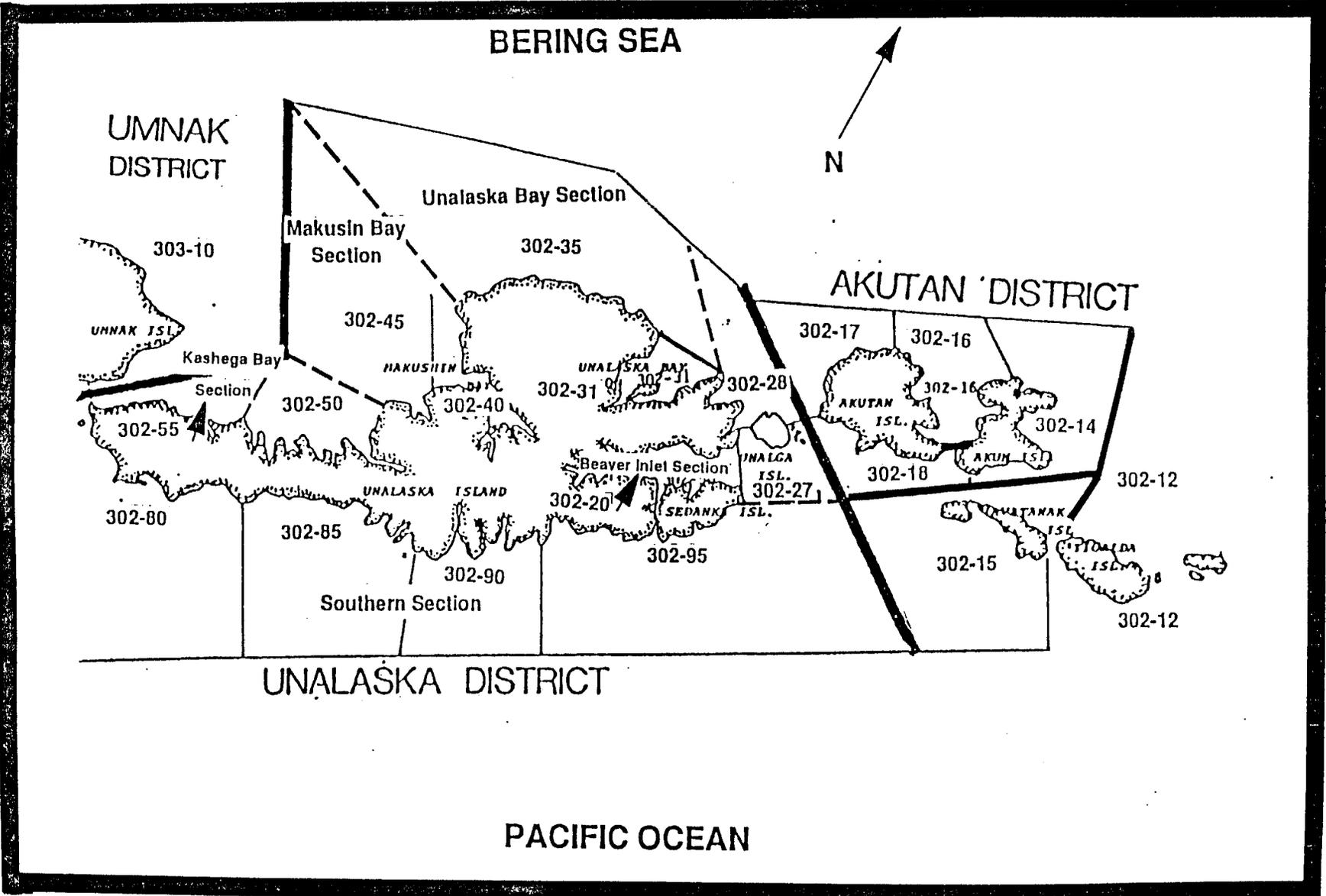


Figure 3. Map of Aleutian Islands Area from Tigalda Island to Umnak Island with the statistical herring fishing areas shown.

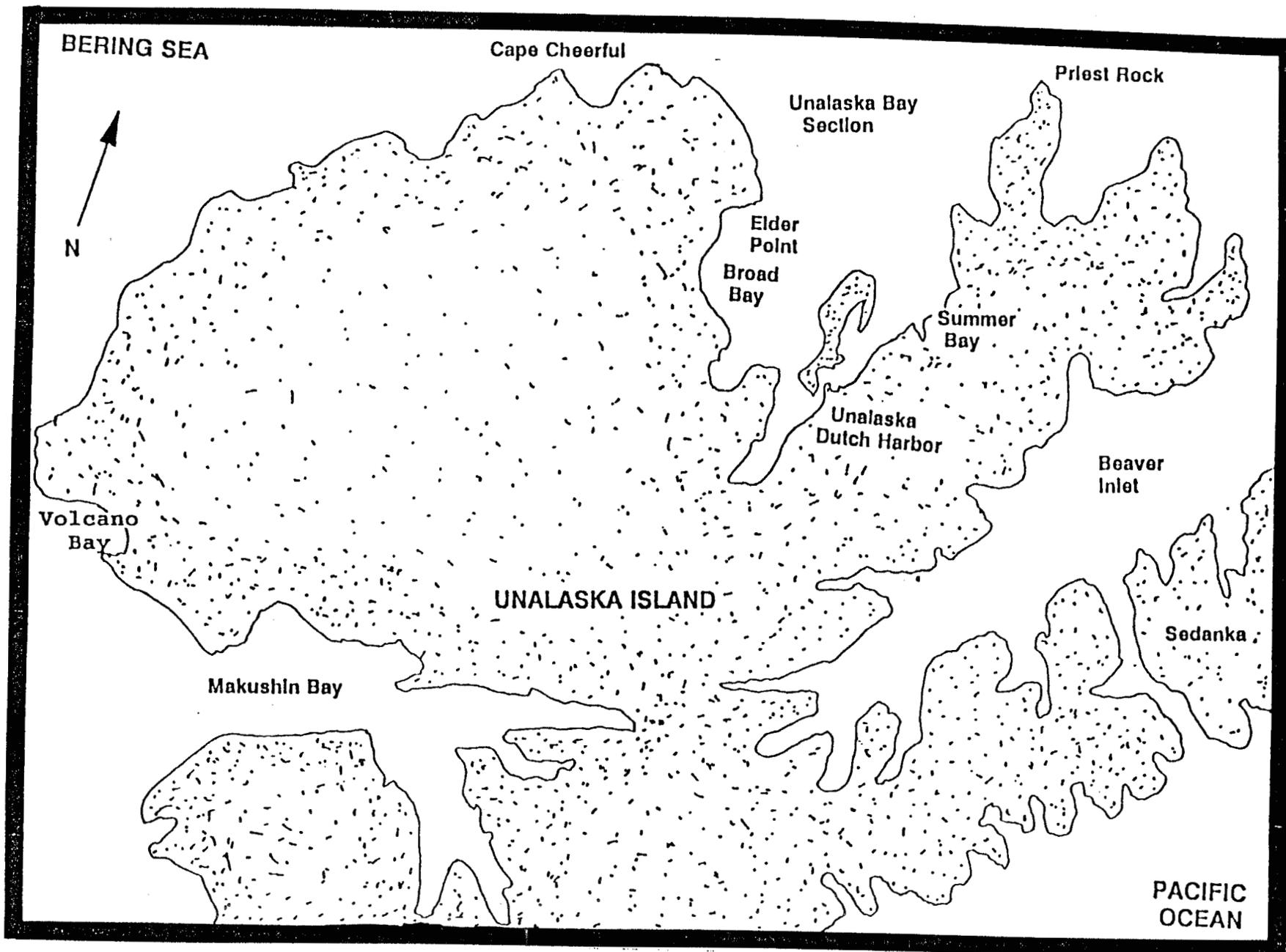


Figure 4. Map of Northern Unalaska Island with Unalaska Bay Section shown.

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