

1988 Herring Fishery Management Plan  
Security Cove District

By

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## INTRODUCTION

This management plan will inform fishermen and processors of the strategies employed by the Department of Fish and Game to manage the herring fisheries in the Security Cove District. This management plan is a review of the status of the fisheries and herring stocks, processor buyer requirements and a summary of regulations. Figure 1 describes district boundaries. Fishermen should contact the Department of Fish and Game before fishing if they have any question.

The Security Cove District opened to commercial fishing in 1978 when commercial herring fisheries first began in the Kuskokwim Area. Table 1 presents the recent biomass trends and harvests in these fisheries. Biomass and harvest peaked in 1981 then remained constant through 1984. The higher mortality of older age herring and the failure of younger age herring to recruit into the population caused the population to begin a decline in 1985 that continued through 1987.

## REGULATION CHANGES

The Alaska Board of Fisheries made several changes in the regulations for Security Cove that will be in effect in 1988. Only one legal limit of gear may now be on board herring fishing vessels. This regulation will help prevent the use of extra nets by fishermen.

The Department may reduce the legal limit of gear from 100 fathoms to 50 fathoms by emergency order when the number of fishing boats is so great that even a short opening might exceed the harvest guideline. Permit sales appear to be similar to last year and the harvest guideline could be taken in one hour. Therefore gear will be limited to 50 fathoms in Security Cove in 1988.

## MANAGEMENT STRATEGY

The harvest should approach 150 st for Security Cove District in 1988. The harvest will increase or decrease based on the observed herring biomass. Stock condition and abundance is assessed using a combination of the data including age class composition, commercial catch rates, percentage roe recovery, ratios of pre to post spawners from commercial catches, pre-season projection and aerial surveys. The exploitation rate in 1988 is 10% due to the declining biomass of herring in the district.

Commercial fishing periods are regulated by emergency order. Announcements of fishing periods will be made in the district on

regularly scheduled broadcasts on VHF 11 and CB 7. The commercial fishery opens when 1,200 st of herring are in the district. If aerial surveys are not possible the opening will be based on the test fishing results and the presence of herring of good roe quality. In 1987 volunteer commercial fishermen conducted most of the test fishing. Volunteers would call in and ask the Department to make test sets. Permission would be given to make short sets to collect samples of the herring. The fishermen would then return these fish to the Department or a near-by tender for roe quality testing. This program was important to the success of the fishery and we would like to thank all the fishermen who participated. We hope to have a similar program this year.

Periodic closures of commercial fishery will occur to collect harvest estimates or if large numbers of spotter aircraft create a safety hazard for ADF&G personnel conducting aerial surveys.

Significant wastage can occur if unmarketable herring with poor roe recovery are refused by the processors. Unmarketable fish can be used for subsistence. Gill net fishermen can minimize wastage by "testing" herring quality. By setting part of a net for a short period of time and checking the roe quality of a small catch. If roe quality is acceptable, then fishermen can then set all their gear. The estimated volume of discarded herring (not sold or used for subsistence) is included in the total harvest.

#### Management Research Projects:

The Fish and Game camp is located on the beach roughly in the center of Security Cove. Fish and Game personnel will conduct aerial biomass assessment surveys, processor registration, catch monitoring, and sampling the commercial catch for age, length, weight and gonad condition information. Daily fleet broadcasts will be made in the district on VHF 11 and CB 7 to inform fishermen and processors of current fishery status. Processors must register with the local Department representative in each district before purchasing fish. Processors must also turn in their fish tickets to the Department before departing any district.

#### Enforcement:

Fish and Wildlife Protection Division of the Department of Public Safety primarily conducts fishery enforcement. Period openings and closures are patrolled, licenses "spot checked" and other enforcement duties accomplished as warranted.

## PERSONNEL USE FISHERY

Herring and herring roe may be taken under the subsistence herring fishing regulations contained in 5 AAC 01.260 - 5AAC 01.275 for personnel use by people who hold a valid resident Alaska sport fishing license or by an Alaskan resident exempt from licensing by AS 16.05.400.

## FISHING REGULATIONS

A summary of herring fishing regulations for the Security Cove District follows. This is not a complete listing, but is meant as an aid to fishermen. Some wording may vary slightly from the final form.

### Summary of Commercial Herring Regulations for the Kuskokwim Area NEW

5 AAC 27.060. BERING SEA HERRING FISHERY MANAGEMENT PLAN. (a) The department shall follow the directives of the Bering Sea Herring Management Plan, as well as the regulations that govern the individual herring fisheries, when managing the commercial herring fisheries that take place in the Bering Sea.

(b) Unless otherwise specified in this chapter, the department shall manage the fisheries so that the exploitation rate on eastern Bering Sea herring stocks does not exceed 20 percent of the biomass of those stocks.

(c) The following thresholds are minimum biomass levels for each herring fishing district. When the department estimates, in season, that the biomass in a district is below its threshold, the department may not allow a commercial harvest of herring in that district.

<u>District</u>	<u>Threshold (s.t.)</u>
Port Moller	1,000
Togiak	35,000
Security Cove	1,200
Goodnews Bay	1,200
Cape Avinof	500
Nelson Island	2,500
Nunivak Island	1,500
Cape Romanzof	1,500
Norton Sound	7,000

5 AAC 27.875. DESCRIPTION OF DISTRICTS. (a) The Security Cove District consists of all waters between the latitude of Cape Newenham and the latitude of the Salmon River (58° 52' N. lat.).

(b) The Goodnews Bay District consists of that portion of

Goodnews Bay inside a line between Department of Fish and Game markers placed near the bay entrance and a line between Department of Fish and Game markers placed near the mouth of the Ufigag River and on the opposite shore near the mouth of the Tunulik River.

**NEW**

5 AAC 27.885. GEAR. Herring may be taken by gill nets only.

**NEW**

5 AAC 27.888. GILL NET SPECIFICATION AND OPERATION. (a) No single herring gill net may be less than 50 fathoms in length, unless the gill net is attached to a commercial herring fishing vessel and the gill net is personally attended by a herring interim use or entry permit holder. The aggregate length of herring gill net in use by a herring interim-use or entry permit holder may not exceed 100 fathoms in length. No more than 100 fathoms of herring gill net and no more than two gill nets may be on board or operated from any commercially licensed herring fishing vessel, except that no more than 50 fathoms and one gill net may be on board or operated from any vessel taking or attempting to take herring during periods specified by emergency order for the reduced gear length.

(b) Each gill net in operation must be buoyed at both ends and at least one buoy must be plainly and legibly marked with the permittee's herring interim use or entry permit number.

(c) A vessel used to take herring or a vessel towed by it may have on board it no more than one legal limit of gear in the aggregate, except that it may have on board it sufficient unhung gear for mending purposes.

5 AAC 27.050 GEAR FOR HERRING. (c) The mesh size of a herring gill net may not be less than 2 1/8 inches and may not exceed 3 inches.

5 AAC 27.890 WATERS CLOSED TO HERRING FISHING. (a) Herring may not be taken for commercial purposes in any waters of Statistical Area W that are not set forth in Sec. 875 of this chapter.

(b) Herring spawn on kelp and herring spawn on any other substrate may not be taken for commercial purposes in any waters of Statistical Area W.

**NEW**

5 AAC 27.893. VESSEL SPECIFICATIONS AND OPERATIONS. (a) In the Goodnews Bay, Nelson Island, Nunivak Island, and Cape Avinof Districts, no vessel used to take herring may be more than 30 feet in overall length. For the purposes of this section, "overall length" means the straight line measurement between the extremities of the vessel.

**NEW**

(b) In the Nelson Island, Nunivak Island, and Cape Avinof Districts, no vessel used to take herring may have on board any

mechanical device designed to shake or dislodge herring from a gill net.

**NEW**

5 AAC 27.896. BUYER REPORTING REQUIREMENTS. In addition to the requirements of 5 AAC 39.130 (f) each buyer or his agent shall report in person to a local representative of the department upon arrival on the fishing grounds and before commencing operations in any district in Statistical Area W. Each buyer shall;

(1) identify and describe all vessels to be employed in processing or transporting herring from each district;

(2) report daily all herring purchased from fishermen or other processing records in each district as specified by a department representative, this may be a requirement for fish tender operators if specified by a local department representative; and,

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

5 AAC 27.897. POSSESSION OF SALMON. Salmon taken incidentally in conjunction with commercial herring fishing must be returned to the water.

**NEW**

5 AAC 27.898. SUPEREXCLUSIVE USE AREAS. (a) The Goodnews Bay and Cape Avinof Districts are superexclusive use areas. The Nelson Island and Nunivak Island Districts are a combined superexclusive use area.

(b) A person who participates in the commercial taking of herring as a CFEC permit holder in a superexclusive use area at any time from February 1 through June 30 may not participate or have participated in the commercial taking of herring, either as a CFEC permit holder or a crew member aboard a vessel used to take herring, in another superexclusive or non-exclusive use area at any time from February 1 through June 30 of that same year.

(c) A person who participates in the commercial taking of herring as a crew member aboard a vessel that is used to take herring in a superexclusive use area at any time from February 1 through June 30 may not participate in any commercial taking of herring as a CFEC permit holder in another superexclusive or non-exclusive use area at any time from February 1 through June 30 of that year.

(d) A vessel used in the taking of herring in a superexclusive use area at any time from February 1 through June 30 may not be used or have been used in the taking of herring in another superexclusive or non-exclusive use area at any time from February 1 through June 30 of that year.

(e) Notwithstanding (a), (d) of this section, any person who participates in the taking of herring and any vessel used to take herring in the Goodnews Bay District may also participate in the taking of herring or may be used to take herring in the Security Cove District.

5 AAC 39.002. LIABILITY FOR VIOLATIONS. Unless otherwise provided in 5 AAC 01 - 5 AAC 41 or in AS 16, a person who violates a provision of 5 AAC 01 - 5 AAC 41 is strictly liable for the offense, regardless of his intent.

5 AAC 39.119. VESSEL IDENTIFICATION. (a) Unless otherwise specified, commercial fishing vessel required to be licensed under AS 16.05.490 must display its permanent vessel license plate number.

(1) in permanent symbols at least 12 inches in height and with lines at least one inch in width that contrast with the background.

(2) on both sides of the hull, cabin, or mast;

(3) in a manner such as to be plainly visible and unobscured; and

(4) at all times when registered to fish.

#### Subsistence Fishing

5 AAC 01.020. SUBSISTENCE FISHING BY COMMERCIAL FISHERMEN. Commercial fishermen may retain fish for their personal use from their lawfully taken commercial catch.

#### NEW

5 AAC 01.285. LIMITATIONS ON PARTICIPATION IN SUBSISTENCE FINFISH FISHERIES... (d) Only those residents domiciled within 20 miles of the coast between the westernmost tip of the Naskonant Peninsula and the terminus of the Ishowik River and on Nunivak Island may take herring and herring roe in those locations.

#### NEW

#### PERSONAL USE HERRING FISHERY

5 AAC 77.010. METHODS, MEANS AND GENERAL RESTRICTIONS. (a) Finfish may be taken for personal use only by a holder of a valid resident Alaska sport fishing license or by an Alaskan resident exempt from licensing under AS 16.05.400...

(b) It is unlawful to buy, sell, trade or barter fish or their parts taken under the regulations in 5AAC 77....

(d) Each personal use fishermen shall plainly and legibly inscribe his or her first initial, last name and home address on a keg or buoy attached to a gill net or pot...

Table 1. Estimated biomass and commercial harvest of Pacific herring in Kuskokwim Area fishing districts, Alaska, 1981 - 1987.

District	Estimated Biomass (st)	Harvest (st)			% Harvest by Gear				Estimated Value (\$ x1,000)	Exploitation Rate (%)
		Catch	Waste	Total	Bill Net	Purse Seine	Beach Seine	Roe %		
<u>1987</u>										
Security Cove	2,300	313	0	313	100	0	0	9.7	242	13.4
Goodnews Bay	2,000	321	0	321	100	0	0	7.3	133	16.0
Nelson Is.	8,100	923	0	923	100	0	0	9.2	661	11.4
Munivak Is.	4,400	414	0	414	100	0	0	7.8	231	9.2
Total	16,800	1,971	0	1,971	400	0	0	34.0	1,267	50.0
<u>1986</u>										
Security Cove	3,700	751	0	751	100	0	0	11.2	535	20.3
Goodnews Bay	3,000	557	0	557	100	0	0	10.4	385	18.1
Nelson Is.	7,300	886	0	886	100	0	0	10.3	428	12.1
Munivak Is.	6,000	511	0	511	100	0	0	10.1	213	8.5
Total	20,000	2,705	0	2,705	400	0	0	42.0	1,501	59.0
<u>1985</u>										
Security Cove	4,900	703	30	733	100	0	0	10.1	355	15.0
Goodnews Bay	4,300	724	0	724	100	0	0	8.7	309	16.8
Nelson Is.	9,500	977	0	977	100	0	0	10.6	527	10.3
Munivak Is.	5,700	358	0	358	100	0	0	8.9	146	6.3
Total	24,400	2,762	30	2,792	400	0	0	18.8	628	30.4
<u>1984</u>										
Security Cove	5,100	325	10	335	100	0	0	11.8	110	6.6
Goodnews Bay	4,100	667	50	717	100	0	0	10.1	168	17.5
Total										
<u>1983</u>										
Security Cove	6,400	1,073	0	1,073	100	0	0	9.4	443	16.8
Goodnews Bay	3,200	435	0	435	100	0	0	9.4	185	13.6
Total	9,600	1,508	0	1,508	200	0	0	18.4	628	30.4

-Continued-

Table 1. Estimated biomass and commercial harvest of Pacific herring in Keekoolia Area fishing districts, Alaska, 1981 - 1987 (Continued).

District	Estimated Biomass (st)	Harvest (st)			% Harvest by Gear			Roe %	Estimated Value (\$ x1,000)	Exploitation Rate (%)
		Catch	Waste	Total	Bill Net	Purse Seine	Beach Seine			
<u>1982</u>										
Security Cove	5,100	813	0	813	100	0	0	9.3	271	15.9
Goodnews Bay	2,600	486	0	486	100	0	0	9.5	188	18.7
Total	7,700	1,830	0	1,830	200	0	0	18.8	459	24.6
<u>1981</u>										
Security Cove	8,300	1,173	0	1,173	100	0	0	8.1	347	14.1
Goodnews Bay	4,300	657	0	657	100	0	0	7.7	196	15.3
Total	12,600	1,830	0	1,830	200	0	0	15.8	543	29.4

Table 2. Pacific herring minimal spawning biomass and harvest projections for commercial fishing districts in the Security Cove and Goodnews Bay, Alaska, 1988.

District	1988 Projection a/		
	Biomass (st)	Harvest @ (Short Tons)	Exploitation Rate (%)
Security Cove	1,500	150	10
Goodnews Bay	1,300	130	10
Total	2,800	280	

a/ Minimal projection, use estimate with extreme caution.

