ALASKA DEPARTMENT OF FISH AND GAME DIVISION OF COMMERCIAL FISHERIES

NEWS RELEASE



Sam Cotten, Commissioner Scott Kelley, Director



Contact:

Jim Menard, Nome Area Manager (907) 443-5167 Jeff Estensen, Yukon Area Manager (907) 459-7274 Aaron Tiernan, Kuskokwim Area Manager (907) 267-2379

Fax: (907) 267-2442

Anchorage Area Office 333 Raspberry Road Anchorage, AK, 99518

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2018 Arctic-Yukon-Kuskokwim Herring Outlook

This news release is to inform fishermen of projected herring biomass and GHLs in the Arctic-Yukon-Kuskokwim (AYK) Region in 2018. At this time, a small commercial bait fishery is anticipated to occur in the Norton Sound District. There has been minimal commercial fishing in the AYK Region since 2006 given limited market interest. Under the *Bering Sea Herring Fishery Management Plan* 5 AAC 27.060, commercial fishing will not open in a district unless the minimum threshold biomass is observed in that district. Since all preseason projected biomass thresholds are expected to be exceeded, commercial fishing may occur in any of the AYK districts.

The 2018 AYK herring forecast and guideline harvest levels (GHLs), given a maximum 20% exploitation rate of the projected biomass, are listed below for the northeastern Bering Sea herring stocks (Table 1). The 2018 estimated spawning biomass for northeastern Bering Sea herring stocks (Security Cove to Norton Sound districts) is 60,387 short tons and the total allowable harvest is 11,776 short tons. Based on fishing effort from previous years, only a small portion of the total allowable harvest is anticipated to be taken in 2018.

In previous years, the AYK region herring biomass projection was based on an age-structured assessment (ASA) model. The ASA model requires age composition information, harvest data, and good aerial survey biomass estimates from each of the northeastern Bering Sea stocks. Test fishing projects and aerial surveys were not conducted in any of the AYK herring districts in 2017, and these data have been severely limited since 2006. Data deficiencies make it impossible to continue using the ASA model to project herring biomass. The 2018 projected biomass is the median of the long-term (1981–2014, no aerial surveys from 2015–2017) biomass estimates from "good" aerial surveys (rating 3 or higher) in AYK districts. A "Good" rating refers to the quality of the aerial survey; "good" aerial surveys are those that occurred during peak herring spawning in good weather conditions and are therefore considered reliable abundance estimates. The actual biomass observed in 2018 may fall above or below the preseason projections given that herring experience annual fluctuations in survival and recruitment rates.

2018 Management Strategies

The department will monitor catch statistics inseason if commercial fishing occurs. Given current resources available, it is unlikely the department will be able to conduct aerial surveys or test fishing projects for herring. Commercial fishery openings may be adjusted according to inseason assessments of herring biomass. In accordance with the AYK Region harvest strategy, any operational commercial fishery will not target newly recruited age classes (age-2 through age-5 herring). The duration of fishing periods will vary in each district depending on inseason biomass estimates, roe quality, spawning activity, weather conditions, fishing effort, and processor input.

Kuskokwim and Cape Romanzof Districts

A commercial fishery is not anticipated in 2018 given the lack of a buyer.

Norton Sound District

The 2018 projected biomass for the Norton Sound District is 33,924 short tons which surpasses the minimum biomass threshold of 7,000 tons. A 20% exploitation rate results in a guideline harvest of 6,785 short tons. The allocation for the herring pound spawn-on-kelp fishery may not be more than 320 tons leaving 6,465 short tons of the guideline harvest remaining (5 AAC 27.965 (d)). Additionally, the spawn-on-kelp guideline harvest is no more than 90 tons of product (combined weight of herring roe and kelp; 5 AAC 27.965 (e)). The beach seine harvest is allocated 10% of the sac roe projected harvest, or 647 tons (5 AAC 27.960 (a)). The 2018 herring fishery will be opened by emergency order and the fishery will close by emergency order when up to 20% of the available herring biomass has been harvested. Varied harvest rates may be applied to individual subdistricts based on biomass distribution, roe quality, weather, and sea ice conditions.

Table 1. Projections of Pacific herring spawning biomass and GHLs for commercial fishing districts in the northeastern Bering Sea, Alaska, 2018.

District	Threshold (short tons)	2018 Projected Biomass (short tons)	Exploitation Rate (%)	2018 Harvest Guideline (short tons)
Security Cove	1,200	5,270	20	1,054
Goodnews Bay	1,200	5,258	20	1,052
Cape Avinof ^a	500	2,042	15	306
Nelson Island b	3,000	5,275	20	855
Nunivak Island	1,500	4,980	20	996
Cape Romanzof	1,500	3,638	20	728
Norton Sound ^c	7,000	33,924	20	6,785
Totals		60,387		11,776

^a Cape Avinof commercial harvest is 15% of projected biomass (5 AAC 27.895(a)).

b Nelson Island commercial harvest is 20% of projected biomass minus 200 tons for subsistence harvest (5 AAC 27.895 (d)).

^c See Norton Sound District management strategies for more details on GHL allocations (5 AAC 27.960).