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Advisory Announcement

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2024 TOGIAK HERRING FORECAST

The 2024 Togiak herring biomass forecast is 216,037 short tons with the Togiak District sac roe and spawn-on-kelp fishery, and the Dutch Harbor food and bait fishery harvest allocations listed below. The gear group allocation specified in the *Bristol Bay Herring Management Plan* 5AAC 27.865(b)(5) is 80% purse seine and 20% gillnet in the Togiak District. The following represents the allocations and quotas based on current regulations and a 20% exploitation rate.

Table 1.—The 2024 Togiak District Pacific herring biomass and harvest forecast and allocation by fishery and gear.

	Biomass (Short Tons)	Harvest (Short Tons)
Biomass Estimate	216,037	
Total Allowable Harvest (20% exploitation rate)		43,207
Togiak Spawn on Kelp Fishery (Fixed Allocation)		1,500
Remaining Allowable Harvest		41,707
Dutch Harbor Food/Bait Allocation (7% of remaining allocation)		2,920
Togiak District Sac Roe Fishery		38,787
Purse Seine Allocation (80%)		31,030
Gillnet Allocation (20%)		7,757

The 2024 mature herring biomass forecast is 216,037 short tons and is the fifth highest forecast since 1993. Under a 20% exploitation rate, the 2024 potential harvest is 43,207 short tons in all fisheries and 38,787 short tons in the Togiak sac roe fisheries (purse seine and gillnet).

This year's forecast is based on a median of aerial survey biomass estimates from the last 10 years (2014–2023) that received a confidence rating greater than 0.25. Due to the lack of a fishery in 2023 there was no age, sex, and length data with which to run the standard statistical catch-at-age (SCAA) model (Figure 1). The traditional assessment model used to forecast the Togiak herring population in previous years utilizes time series of catch, age composition of the purse seine and gillnet harvest, age composition of the mature population, and aerial survey biomass estimates plus catch data from 1980 forward. Herring samples in the assessment are fishery-dependent and with no fishery conducted in 2023, there were no samples with which to estimate the age, length, and weight compositions of the stock. Should the herring fishery occur in 2024, the SCAA model will be utilized for future forecasts.

Herring are detected in our sampling when they recruit into the fishery; a process that begins around age-4 and may not be fully complete until approximately age-9. Large recruitments in this population generally occur every eight to ten years and typically last one or two years. Recent biological sampling suggests that the Togiak herring population experienced large age-4 recruitment events in 2020 and 2021. Without sampling herring in 2023 though, there is no information on age-4 recruitment in 2023. It is difficult to measure contributions of young age classes because these fish are not fully recruited (available) in the harvest and often arrive on the spawning grounds near the end of, or after, the fishery. Improved estimation of herring year class size is expected as cohorts are observed in the fishery in subsequent years.

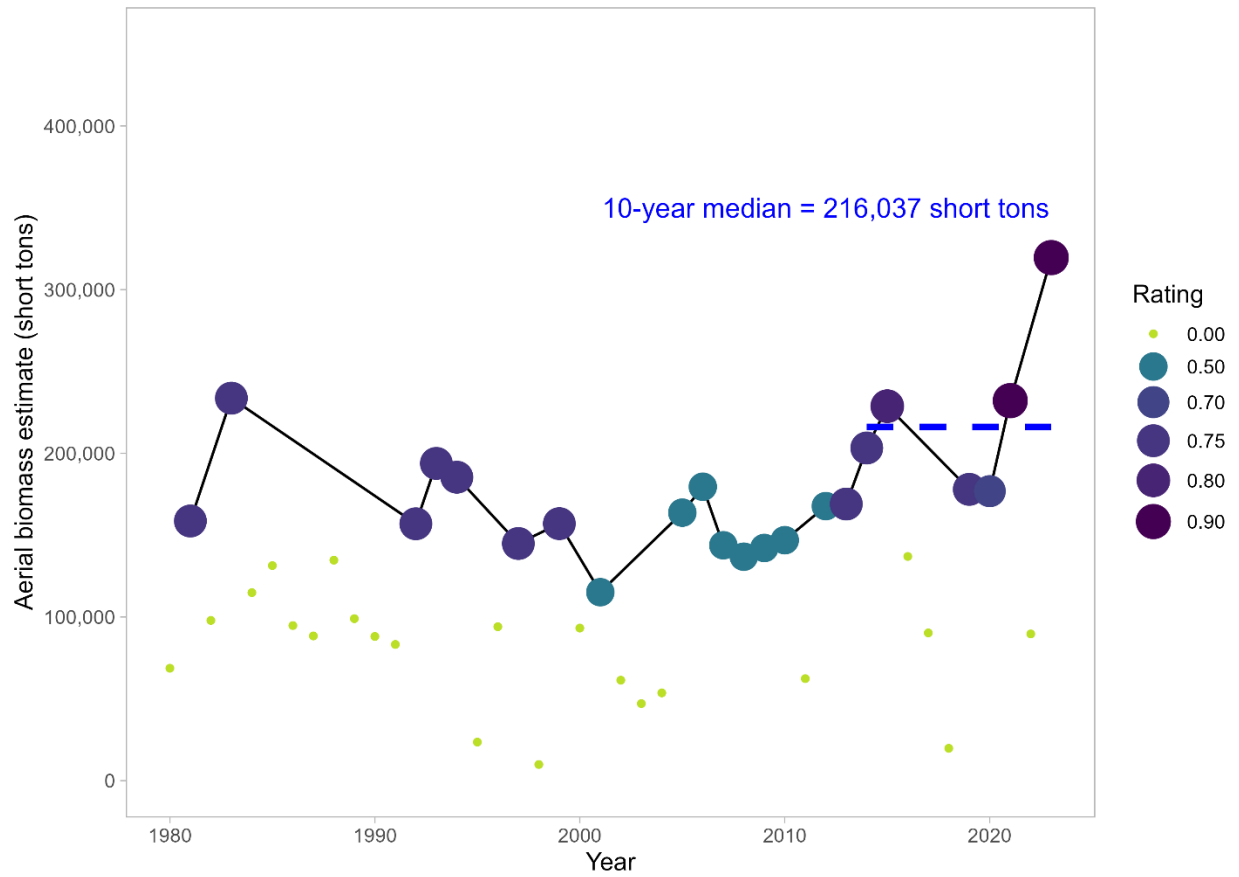


Figure 1.—Observed aerial survey biomass estimates of Togiak herring biomass with point size and color scaled to the confidence rating with the median (blue line) calculated from aerial surveys from the last ten years (2014–2023) rated greater than 0.25.