

Hello,

I didn't hear back to my previous request. Under AS 40.25.110 and the Alaska Public Records Act, I am writing to request records from Alaska Department of Fish and Game.

The records under request are part of the Alaska Department of Fish and Game herring research program in Sitka, Alaska. I hope to better understand specific details about how Alaska Department of Fish and Game counts of herring eggs in Sitka Sound were reached during earlier stages of the program. I have reviewed all the publicly available publications on Sitka herring from that time and find that they lack critical contextualizing information which I am hoping is available through other documentation.

In order to allow informed discussion at the Board of Fisheries, I further request that this information be made available prior to the January 14, 2025 Public Comment deadline for the upcoming Board of Fisheries meeting.

What I am requesting:

I am requesting data regarding ADF&G herring research in Sitka Sound that is lacking from published reporting for the years 1976-1991:

- transect maps are lacking for 1984-1991;
- detailed transect data is lacking for all years between 1981-1991
- methodology/formulae by which the average transect width and average egg density figures were derived mathematically from individual transect findings are lacking for 1981-1991;
- aerial and skiff survey logs are absent in reporting for years prior to 1992.
- There is no reporting available for 1985 and 1986.

In order to understand the nature of the ADF&G herring research program at this important developmental time in the research initiative, I request any field notes, internal reports, egg deposition transect maps and tabulations, flight maps, and survey logs, which might inform those specific gaps in reporting for those specific years. Thank you.

Request Background

Beginning in 1981, Alaska Department of Fish and Game has based Guideline Harvest Levels for the commercial seine herring fishery on biomass assessments based on

spawn deposition surveys. These surveys involve aerial and skiff monitoring of herring spawning grounds during spawning, followed by diving on transects to collect data on egg deposition; from those dives an estimate of total egg deposition is derived – a number somewhere in the low trillions. The result, after all these years, is an egg index.

Recently, the Department conducted a *Simulation Study to Estimate Unfished Biomass* of herring in Sitka Sound; the simulation is informed by outputs of the Statistical Catch at Age model, which is based substantially on the egg deposition index. The *Simulation Study* is used to come up with a reference point that is meant to describe what the average herring biomass might be in Sitka Sound *absent a commercial fishery*; from that number the threshold level (below which a fishery may not occur) is derived. Additionally, the threshold is used to determine the Guideline Harvest Level for any given year. A lower Unfished Biomass will result in a lower threshold, leaving fish less protected in low-medium abundance states and leading to a maximum harvest rate at lower population states than would be the case with a higher Unfished Biomass.

Given that the egg index is the foundation of this important Unfished Biomass figure, it is important to know how that egg deposition figure was determined for any given year. It is apparent from reviewing the reports for those years that the survey methodology was not fully mature at that point, and much information is missing.

There are signals in the egg index data (a very tight linear or near-linear relationship between miles of spawn and total egg deposition until at least 1991) that suggest that surveys before 1991 were conducted and/or applied at a significantly different standard than is done today. Given how effort-dependent the egg deposition surveys are, it is important to understand how the data was collected, organized, applied, and distilled at different points in time. Hence this request.

In the *Simulation Study*, the ADF&G biometricians offer a single-factor explanation for the extraordinary boom that has been reported by ADF&G in herring populations since the 1970's: changing ocean conditions, in accord with Pacific Decadal Oscillation (PDO).

While the PDO has surely been an important factor influencing herring populations, the strangeness of the findings of the Unfished Biomass study (populations above “unfished biomass” for most recent years, despite record-breaking fisheries in many years and in the midst of subsistence failure) – necessitates a second look at the earlier years of the egg index for which reporting is inadequate.

Fee Relief

Per 2 AAC 96.370 and 2 AAC 96.470, I request fee relief, given that the records are likely to contribute significantly to the public's understanding of the operations or activities of the State of Alaska. My findings from this request will help me provide accurate context in public comment for the Southeast Alaska Board of Fisheries meeting in January when the threshold level (and thus the Unfished Biomass described in the Simulation Study) will be discussed in the context of a number of proposals, in particular ADF&G's Proposal 95.