



Juvenile Herring Abundance in Prince William Sound

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RESEARCH PERIOD

2012-2017

FUNDING

Exxon Valdez Oil Spill
Trustee Council

This project is part of the *Herring Research and Monitoring* program. The purpose of this study is to improve predictive models of herring stocks in Prince William Sound through observations and research.

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BACKGROUND

Typically, young fish spawning for the first time make up a large portion of the spawning stock and currently there isn't a reliable means to predict how many fish are going to recruit (join the spawning stock) in any given year. This project aims to provide a measure of juvenile herring abundance in order to predict future additions to the spawning stock.



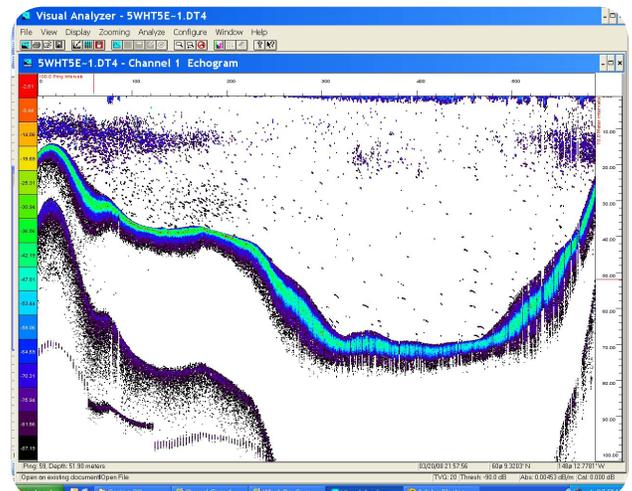
Picking juvenile herring from a gillnet.

METHODS

The PWSSC is conducting hydroacoustic (sonar) surveys in November each year in eight bays around the Sound to estimate the abundance of new juvenile herring. We focus on the age-0 fish because they are the easiest group to survey using acoustics. Researchers will then determine the relationship between the number of fish counted during the surveys, and the number of new spawning adults counted 2-3 years later.

WHAT WE WILL LEARN

By providing a prediction of the herring expected to join the spawning stock, we can greatly increase the accuracy in our predictions of the spawning biomass. They surveys also provide an indication of which areas within the Sound juvenile herring are using as nursery grounds, which provides a measure to test larval drift models against and alerts the scientists to when conditions are favorable for herring recruitment.



Groups of herring are visible on an echogram.