

EVOSTC ANNUAL PROJECT REPORT

Project Number: 10100132

Project Title: PWS Herring Survey: Assessment of Juvenile Herring Abundance and Habitat Utilization

PI Name: Richard E. Thorne

Time period covered: Oct 1, 20011 to August 31, 2012

Date of Report: August 17, 2012

Report prepared by: Richard E. Thorne

Project website (if applicable): pwssc.org

Work Performed:

The objectives of the project are to improve understanding of habitat utilization by juvenile herring, especially age 0. Three cruises were successfully completed: (1) a juvenile herring survey of six locations in November 2011, (2) a juvenile herring survey of the same six locations in March 2012, and (3) an adult herring survey in March/April 2012. The two juvenile surveys were conducted in conjunction with several other survey projects and covered Simpson Bay, Eaglek Bay, Lower Herring Bay, Whale Bay, Port Gravina (Bear Trap Bay) and Zaikof Bay. The adult herring survey was conducted in cooperation with Alaska Department of Fish and Game (ADF&G) and focused on prespawning herring concentrations in Port Gravina and Port Fidalgo. The survey appears to have been very successful. Analysis of all surveys has been completed. Selected results are illustrated below.

Future Work:

Future effort on this project is focused on comparative analysis, integration with other projects in the program and final reporting.

Coordination/Collaboration:

This project is one of several survey efforts coordinated under the Prince William Sound Herring Survey Program.

Community Involvement/TEK & Resource Management Applications:

We worked closely with ADF&G on surveys and samples. The overall PWS Herring Survey Program has an extensive community involvement, including the use of local fishermen to obtain samples.

Information Transfer:

Activities of the integrated herring program are described in recent publications of the Breakwater (Prince William Sound Science Center newsletter), the Delta Sound Connections and the PWSSC webpage (www.pwssc.org).

Budget:

Budget expenditures are proceeding as projected.

Meetings attended

A poster on juvenile herring surveys in Prince William Sound was given at the Alaska Marine Science Symposium (AMSS) in January 2012. Activities were discussed at program meetings in January at AMSS and in Cordova during May.

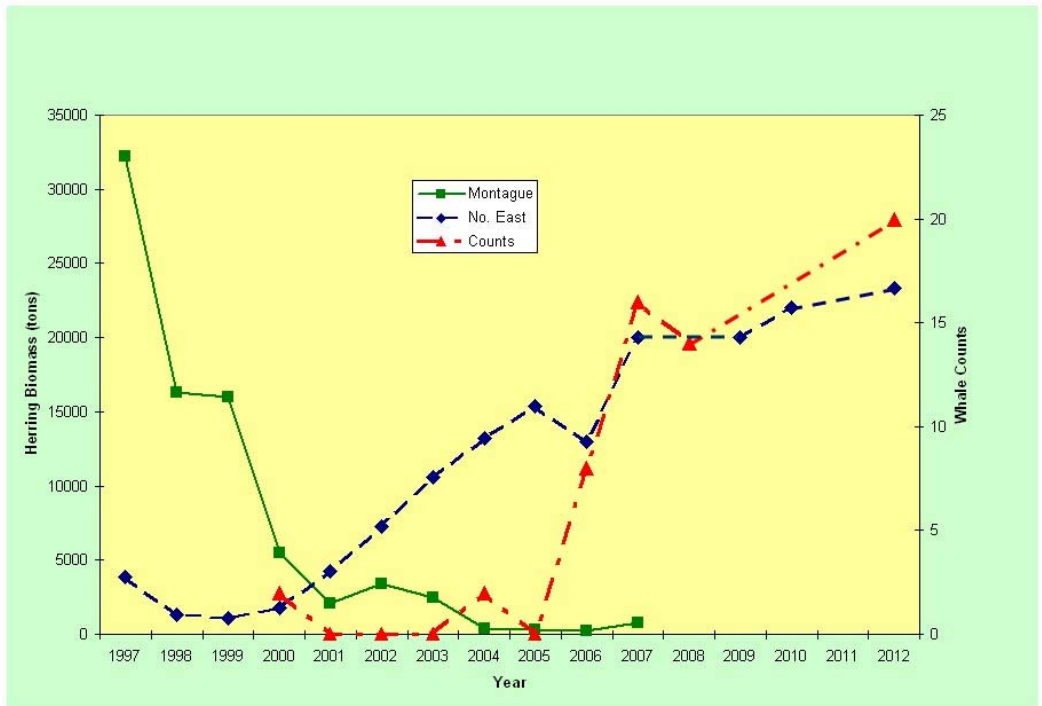


Figure 1. Illustration of a shift in adult herring distribution during spring from the Montague Island region of Prince William Sound (PWS) to Northeastern PWS between 1997 to 2012, and counts of humpback whales associated with the herring in northeastern PWS since 2000. Results suggest herring may have shifted distribution to avoid whale predation, and the whales did not relocate the herring until 2006.

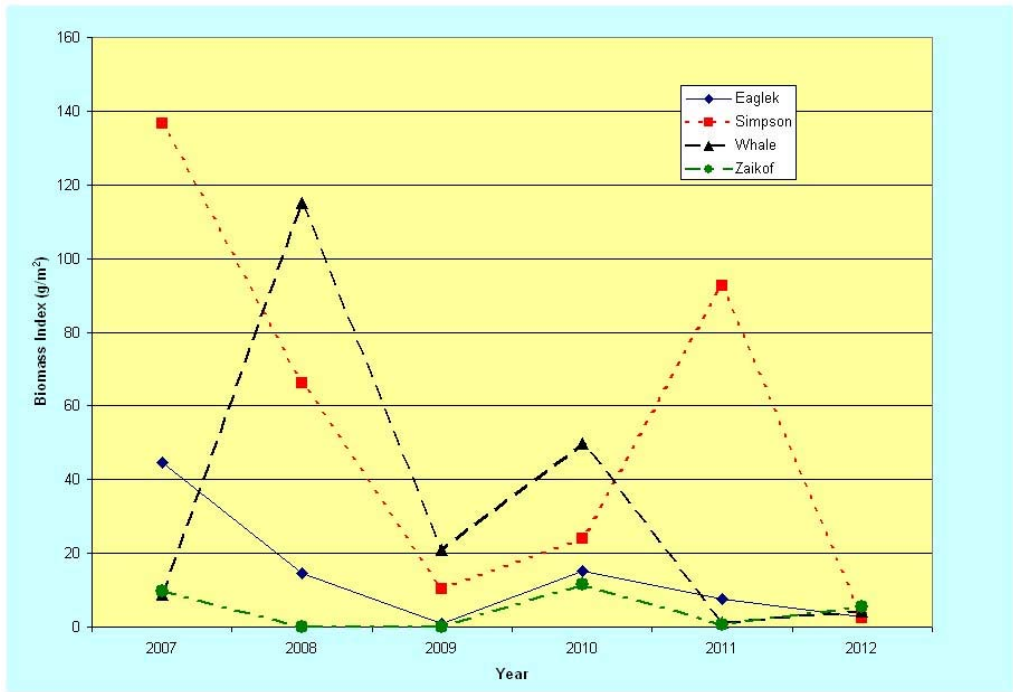


Figure 2. Average biomass index in the upper 25 m at the head of the 4 SEA Bays, Spring 2007-2012