EVOSTC ANNUAL PROJECT REPORT

Project Number: 070830

Project Title: Trends in Adult and Juvenile Herring Distribution and Abundance in PWS

PI Name: Richard Thorne

Time period covered: March 5 - Aug 31, 2007

Date of Report: Aug 31, 2007

Report prepared by: Richard Thorne

Project website (if applicable): Under Construction

Work Performed:

The objectives of this project were to provide information on abundance and distribution of key herring life stages and to provide a platform for biological collections for other EVOS TC projects.

The project was officially funded March 5, and immediately began a series of spring herring cruises in conjunction with an existing, NMFS-funded Herring/Steller sea lion project. The first cruise extended from March 8-14 aboard the FV <u>Kyle David</u>. Personnel were Richard and James Thorne (PWSSC). Accomplishments included surveys of juvenile herring in Sawmill Bay and Whale Bay, and adult herring in Port Fidalgo and Port Gravina.

The second cruise was a two-boat operation with the FV <u>Kyle David</u> and the MV <u>Auklet</u> and extended from March 18-26. Personnel were Richard Thorne (PWSSC), Gary Thomas (UMiami), Karen Brenneman (USFWS) and James Thorne (PWSSC) on the <u>Auklet</u> and Tom Kline (PWSSC), Rob Campbell (PWSSC), Seanbob Kelly (UAF) and Rick Crawford (PWSSC) on the <u>Kyle David</u>. The Auklet concentrated on acoustic and bird surveys, the <u>Kyle David</u> on biological collections. The Auklet conducted day and night acoustic surveys in Port Gravina, Port Fidalgo, Galena Bay, Eaglet Bay, Wells Bay, Simpson Bay and Zaikof Bay. The Kyle David sampled in Simpson Bay, Zaikof Bay, Port Gravina, Whale Bay and Eaglet Bay.

The third cruise extended from March 29 to April 2 on the <u>Kyle David</u>. Participants were Richard Thorne (PWSSC) and Gary Thomas (UMiami). Multiple acoustic surveys and Steller sea lion/whale counts were conducted in Port Fidalgo and Port Gravina, plus hydrophone measurements of herring, Steller sea lions and whales, including bubble curtain formation.

Biological samples were collected for several other EVOS TC projects during these cruises. Data analysis from all cruises is nearly complete.

Future Work:

Future cruises are scheduled for early November 2007 and March 2008.

Coordination/Collaboration:

A primary goal of the project is to provide a platform for biological collections for other EVOS TC projects. This goal was well satisfied during the March 2007 cruises. PWSSC collaborators have met to review sampling plans for the November 2007 cruise. We are in communication with Brenda Norcross (UAF) and Steve Moffitt (ADF&G) on sampling schedules.

Community Involvement/TEK & Resource Management Applications:

We worked closely with ADF&G on surveys and samples. We provided ADF&G some herring samples from our cruises, and ADF&G collected samples for us. ADF&G is doing age/weight/length analysis on the herring.

We communicated with Kate McLauglin (Chenega) about herring and whale observations in Sawmill Bay.

The project was described in the summer 2007 issue of "The Breakwater", a newsletter of the Prince William Sound Science Center.

Information Transfer:

A presentation and associated manuscript titled, "When Endangered Species Collide: Ecosystem Restoration in Prince William Sound, Alaska" was given at an Oceans07 conference on June 21. The paper will be published in the conference proceedings.

Budget:

Budget expenditures are proceeding as per projections. No problems are anticipated.