EVOS ANNUAL PROJECT REPORT

All recipients of funds from the *Exxon Valdez* Oil Spill Trustee Council must submit an annual project report in the following format by September 1 of each fiscal year for which project funding is received, with the exception of the final funding year in which a final report must be submitted. Satisfactory review of the annual report is necessary for continuation of multi-year projects. Failure to submit an annual report by September 1 of each year, or unsatisfactory review of an annual report, will result in withholding of additional project funds and may result in cancellation of the project or denial of funding for future projects.

PLEASE NOTE: Significant changes in a project's objectives, methods, schedule, or budget require submittal of a new proposal that will be subject to the standard process of proposal submittal, technical review, and Trustee Council approval.

Project Number: G-050769

Project Title: Temporal stability of fatty acids used to discriminate Pacific herring in Alaska

PI Name(s): Ted Otis (ADF&G-CF, Homer) and Ron Heintz (NMFS-Auke Bay Lab)

Time Period Covered by Report: April 1, 2004- September 1, 2005

Date of Report: September 19, 2005

1. Work Performed: Summarize work performed during the reporting period, including any results available to date and their relationship to the original project objectives. Describe and explain any deviation from the original project objectives, procedural or statistical methods, study area, or schedule. Also describe any known problems or unusual developments, and whether and how they have been or can be overcome. Include any other significant information pertinent to the project.

A total of 825 Pacific herring (*Clupea pallasi*) hearts were collected from six locations during spring 2005 (e.g., Sitka, Prince William Sound [PWS], Kodiak, Kamishak, Togiak, Bering Sea). Sampling of spawning herring began March 20th in Sitka and ended June 6th in Toksook Bay. Seventy-five fish were sampled at each of 11 sites within these six areas. Due to insufficient numbers of fish showing up to spawn, we were unable to collect samples from all of the specific locations we targeted (e.g., Montague Island and Fairmont Bay in PWS, Paramanof Bay in the Kodiak/Afognak archipelago, and Dutch Harbor). In those cases, we attempted to collect samples from alternate sites in the area (e.g., Kiliuda Bay, Kodiak I.). As proposed, we plan to collect an additional 75 herring heart samples from the Kodiak Fall/Winter food bait fishery scheduled for October-November 2005. Samples collected to date are currently being prepared for fatty acid analysis.

We encountered a serious logistical challenge this year that was not expected and was never an issue when we conducted our pilot study several years ago. Stringent liquid nitrogen (LN) transportation restrictions enacted following 9/11 have dramatically affected our ability to collect

samples at remote locations, preserve them at -80° C, and ship them back to a lab for processing. The "dry-ship" LN containers that meet the new "Non-Hazmat" shipping guidelines are only viable for 7-10 days, which leaves very little room for sample collection/shipping delays (e.g., fish are late arriving on the spawning grounds, flights are delayed, etc.). This problem was exacerbated by containers being frequently opened for inspection by the Transportation Security Administration (TSA), causing them to further reduce their viable service life. This year, we lost one sampling opportunity when a container arrived in the field without a charge, and had to recollect another sample when the specimens arrived at the lab in a thawed state. In both cases, it appears the shipping container was closed improperly following inspection by TSA officials.

2. **Future Work:** Summarize work to be performed during the upcoming year, if changed from the original proposal. Describe any proposed changes in objectives, procedural or statistical methods, study area, or schedule. [**PLEASE NOTE**: Significant changes in a project's objectives, methods, schedule, or budget require submittal of a new proposal that will be subject to the standard process of proposal submittal, technical review, and Trustee Council approval.]

No proposed changes. We will continue to coordinate with ADF&G area staff to collect samples from our target herring stocks and will seek ways to reduce "handling damage" by TSA officials.

3. **Coordination/Collaboration:** Describe efforts undertaken during the reporting period to achieve the coordination and collaboration provisions of the proposal, if applicable.

This project relies heavily upon close coordination and collaboration with ADF&G research vessels and personnel conducting normal agency functions. By coordinating with area personnel and existing programs, we're able to collect herring heart samples for this project at greatly reduced cost by not having to charter our own vessels.

4. **Community Involvement/TEK & Resource Management Applications:** Describe efforts undertaken during the reporting period to achieve the community involvement/TEK and resource management application provisions of the proposal, if applicable.

The local Homer representative of the Alaska Marine Conservation Council (AMCC: Alan Parks) received approval from his organization's governing board to collaborate with us to outreach this project via AMCC's network of personnel in Alaska's coastal fishing communities. We are currently designing a project outreach poster that will be displayed in selected communities with an interest in Alaska's herring fisheries, and are planning to write an article for the AMCC newsletter.

This proposal has broad support from ADF&G Management/Research staff, as demonstrated by their efforts to help collect samples from their respective areas (e.g., Sitka [Marc Pritchett], PWS [Steve Moffitt], Lower Cook Inlet [Lee Hammarstrom], Kodiak [Mark Witteveen, Kevin Brennan], Togiak [Lowell Fair], and Kuskokwim Bay [Craig Whitmore]).

5. **Information Transfer:** List (a) publications produced during the reporting period, (b) conference and workshop presentations and attendance during the reporting period, and (c) data and/or information products developed during the reporting period. [**PLEASE NOTE:** Lack of compliance with the Trustee Council's data policy and/or the project's data management plan will result in withholding of additional project funds, cancellation of the project, or denial of funding for future projects.]

Attended Annual EVOS-GEM Marine Workshop January 24-26, 2005. Submitted Annual Report for this project on September 19, 2005.

6. **Budget:** Explain any differences and/or problems between actual and budgeted expenditures, including any substantial changes in the allocation of funds among line items on the budget form. Also provide any new information regarding matching funds or funds from non-EVOS sources for the project. [**PLEASE NOTE:** Any request for an increased or supplemental budget must be submitted as a new proposal that will be subject to the standard process of proposal submittal, technical review, and Trustee Council approval.]

No problems and no substantial differences between actual and budgeted expenditures to report.

Report Prepared By: Ted Otis **Project Web Site Address:** http://www.cf.adfg.state.ak.us/region2/pubs/evos/2005_050769.pdf

SUBMIT ANNUAL REPORTS ELECTRONICALLY TO <u>brenda ramos@evostc.state.ak.us</u>. THE REPORTS WILL BE POSTED ON THE TRUSTEE COUNCIL'S WEB SITE AND SHOULD ALSO BE POSTED ON THE PI'S WEB SITE. The subject line of the e-mail transmitting the report must include the project number and the words "annual report" (e.g., "035620 Annual Report"). Electronic reports must be submitted either as an Acrobat Portable Document Format (PDF) file or word processing document (Microsoft Word 2000 for Windows or lower or WordPerfect 9.0 or lower) with any figures and tables imbedded. Acrobat PDF 4.0 or above file format must be used, preferably in 'formatted text with graphics' (called "PDF normal" under Acrobat PDF 4.0) format. Minimally, "PDF searchable image" (called "PDF original image with hidden text" under Acrobat PDF 4.0) may be used if pre-approved by the Trustee Council Office. In either case, the PDF file must not be secured or locked from future editing, or contain a digital signature from the principal investigator.