

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: 050706

Project Title: The Influence of Adult Salmon Carcasses on Energy Allocation in Juvenile Salmonids

PI Name(s): Ron Heintz and Lawrence Schaufler (NMFS-Auke Bay Lab)

Time Period Covered by Report: Oct 1, 2004- September 30, 2005

Date of Report: August 25, 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.

This study began in the June 2004 with the following objectives:

- I. Characterize the persistence of a marine signal in the lipids of age-0 salmonids.
- II. Characterize seasonal variation in energy allocation in populations of age-0 Dolly Varden exposed and not exposed to adult salmon carcasses.
- III. Characterize seasonal growth patterns in Dolly Varden exposed and not exposed to adult salmon carcasses.

As outlined in the proposal, samples collection was completed in May 2005. By the end of October 2004 we had collected 246 samples and these required detailed chemical analysis to determine their proximate, lipid class and fatty acid compositions. The samples represented monthly collections of age 1+ Dolly Varden from the Anchor River and Happy Valley Creek on the Kenai Peninsula and age 0+ Dolly Varden from Shrine and Sheep Creeks near Juneau. In addition we received 68 insect samples from EVOS project 050726 for fatty acid analysis. The

RNA/DNA, proximate and lipid class analyses are all complete for the Dolly Varden samples collected through October 2005. We are currently quantitating the fatty acid data.

The RNA/DNA data indicate growth rates for Dolly Varden in the Anchor River decrease throughout the summer reaching a minimum in August, while the proportion of lipid allocated to triacylglycerols varied widely. In contrast, growth and lipid allocation to triacylglycerols appeared to remain constant over the same period in Dolly Varden collected from Happy Valley Creek.

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 plan to complete our chemical analysis and prepare a final report in FY06.

3. **Coordination/Collaboration:**

Sample collections from the Kenai Peninsula depended on the assistance of staff working on project 050726 "Methods to Monitor Marine Derived Nutrients". Dolly Varden collections will be shared with this project and 050726. ABL will be processing samples collected by project 050726 for fatty acid composition. We hosted investigator Rinella for several weeks in our lab to introduce him to fatty the analysis.

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 work this year was focused on chemical analysis of samples, there was no effort made at community involvement. In the coming year we plan to describe the results in seminars at the University of Alaska.

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.]

Presented a poster at the 2005 Marine Science in the Northwest Pacific in Anchorage AK, January 2005. The poster described preliminary results of our analysis.

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: Ron Heintz
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SUBMIT ANNUAL REPORTS ELECTRONICALLY TO brenda_ramos@evostc.state.ak.us. 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.