

EVOSTC ANNUAL PROJECT REPORT

Project Number: 040775

Project Title: Lingering Oil and Sea Otters: Critical Needs

PI Names: BE Ballachey and JL Bodkin

Time period covered by report: 9/2004-8/2005

Date of Report: 21 September 2005

Report prepared by: BE Ballachey

Project website address (if applicable):

Work Performed: Summarize work performed during the reporting period, including any results available to date and their relationship to the original project objectives. Explain deviations 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 project was initiated in winter 2004 to address specific research needs associated with the ongoing studies on effects of lingering *Exxon Valdez* oil on sea otters and harlequin ducks. Tasks include reanalyses of archived sea otter tissue samples, and evaluation of sea otter population status. The assays on tissue samples are underway but not yet completed (work being done at two laboratories, at Purdue University and at Oregon State University); results are anticipated by early October. To evaluate population abundance, aerial surveys of sea otters were conducted in summer 2005 in western PWS as part of the ongoing field work for project 040620-2-; the annual report for that project includes an account of the aerial surveys. Population modeling work is also underway to assess survival rates of sea otters in western Prince William Sound; results of this work are also anticipated by early October.

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

Work to be conducted in FY 2006 is not anticipated to differ from that described in the study plan, although there has been a delay in completion of reanalyses of samples. These analyses are now scheduled for completion early in FY 2006. Following statistical analyses of the data, full project reports will be prepared in FY2006. No deviation in the final endpoint of the study schedule is anticipated.

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

Reanalyses of archived samples have been done in collaboration with Drs. Paul Snyder at Purdue University and William Baird at Oregon state University. All components of this project are coordinated with efforts ongoing under Project 040620-2-. We will continue to coordinate our efforts with NOAA Auke Bay Laboratory research on presence and prevalence of lingering oil in western Prince William Sound.

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.

This work supplemented studies in Projects 040620 and 040774, and as such contributed to community involvement efforts within those projects. Contracts were established and completed with small businesses operating in Prince William Sound. Results of work conducted under this and related studies will be made available to interested parties and persons.

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.

Ballachey, B.E., D. Esler, C.H. Peterson, J.L. Bodkin, D.Irons, S.D. Rice and J.W. Short. 2004. What happens to wildlife that are in the way: Lessons from the *Exxon Valdez* oil spill. Invited presentation at The Wildlife Society Annual Meeting, Calgary, Canada, September 2004.

J.L. Bodkin, C.H. Peterson, S.D. Rice, J.W. Short, D.E. Esler, B.E. Ballachey, D.B. Irons. 2004. Long-term Ecosystem Responses to the *Exxon Valdez* oil spill. Invited presentation at the Norwegian Research Council, Norwegian Oil Research Programme (PROOF) Annual Meeting, Orkanger, Norway, 12-14 October 2004.

Bodkin, J.L., B.E. Ballachey, and D.H. Monson. 2005. Restoration of *Exxon Valdez* oil contaminated habitats by sea otters in Prince William Sound: mechanisms and consequences. Marine Science in Alaska, 23-25 January, 2005, Anchorage, AK.

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.

Work was conducted within budget and no modifications to the proposed budget are anticipated.

We can accept your annual report as a digital file (Microsoft Word or WordPerfect), with all figures and tables embedded. Acrobat Portable Document Format (PDF) files (version 4.x or later) are also acceptable; please do not lock PDF files or include digital signatures.

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Thank you!

*We appreciate your prompt submission of your annual report
and thank you for your participation in and contribution to EVOS-related research.
revised August 2005*