

**FEDERAL AID
FINAL PERFORMANCE REPORT**

ALASKA DEPARTMENT OF FISH AND GAME
DIVISION OF WILDLIFE CONSERVATION
PO Box 25526
Juneau, AK 99802-5526

COOPERATIVE ENDANGERED SPECIES CONSERVATION FUND

STATE: Alaska

GRANT AND SEGMENT NR.: E - 2 - 1

PROJECT NR.: 2

WORK LOCATION: Cook Inlet

PROJECT DURATION: 1 January 2003 – 30 June 2004

PROJECT REPORTING PERIOD: 1 January 2004 – 30 June 2004

PROJECT TITLE: Population Status and Distribution of Steller's Eider

Project Objectives:

The general objective of this study was to improve our knowledge of the status, distribution, and population trend for Steller's eiders wintering in Lower Cook Inlet Alaska by:

1. improving knowledge of habitat use and distribution within wintering areas;
2. improving survey methodology and population estimates;
3. documenting age and sex structure of winter flocks;
4. identifying fidelity to wintering sites;
5. identifying arrival and departure dates for wintering Steller's eiders; and
6. exploring capture and marking opportunities for future research.

During this reporting period the specific objective was to complete the GIS portion of the project by mapping the distribution and abundance of Steller's eiders in lower Cook Inlet.

Summary of Project Accomplishments during reporting period:

1. A GIS was developed in ArcView 3.3 software that depicts the distribution and abundance of Steller's eiders in lower Cook Inlet from aerial and boat surveys from 1999-2003.

Reporting period Project Costs:

Federal share \$ 2,772.13 + state share \$ 7,276.48 = total cost \$ 10,048.61
(State share includes \$3,300 in-kind for use of state skiffs in project.)

Summary of Project Accomplishments in addition to this reporting period:

1. Completed 2 aerial surveys along the eastern shore of lower Cook Inlet from Kachemak Bay to Cape Kasilof and 1 along the western shore of lower Cook Inlet from Tuxedni Bay to Cape Douglas. Conducted boat surveys in Kachemak Bay and in lower Cook Inlet from the Homer Spit to Clam Gulch. We planned to conduct additional repetitions but could not due to poor weather.

2. Conducted a repeat aerial surveys along the east side of lower Cook Inlet and followed with a boat survey. Weather (see above) prevented us from our original objective of 3 repeat aerial surveys of the same transects.
3. Conducted boat surveys to test feasibility of documenting age and sex structure from skiffs and videographed large flocks to determine sex ratios. We could not get age ratios from video.
4. This will require multiple years of surveys and/or telemetry. We will also compare our locations with what is known from any previous surveys. This has not been completed.
5. We narrowed departure dates in 2003 to a 2-week window between March 26 and April 11. We did not fly surveys in the fall to get arrival dates but have estimates from anecdotal observations and local knowledge.
6. From aerial and boat surveys we were able to assess the feasibility of capturing eiders in lower Cook Inlet.

Some portions of this project were not completed because during the course of this project, which was being assisted by USFWS, the USFWS received funding from the Mineral Management Service to conduct a similar, but more comprehensive monitoring program.

Total Project Costs:

Federal share \$ 24,465.13 + state share \$8,805.48 = total cost \$ 33,270.61

Prepared By: Dan Rosenberg

Date: September 22, 2004