ALASKA DEPARTMENT OF FISH AND GAME FEDERAL AID PROJECT ANNUAL PERFORMANCE REPORT

Grant Number: E-5-HP Grant Segment: 1 Grant Title: HCP Alaska Coastal Species: Studies Related to Listed/Candidate Marine Birds Project Number: 2.0 Project Title: <u>Distribution and Abundance of Steller's Eiders</u> Project Duration: February 28, 2003 to December 31, 2005 Project Reporting Period: February 28, 2003 to February 28, 2004 Project Interim Report Due: May 29, 2004 Location: Statewide

Project Objectives:

The objectives of this study are to improve knowledge of the status, distribution, and population trend for Steller's eiders breeding in Alaska by:

- 1. Identifying routes and timing of movements from wintering to spring staging areas to improve population estimates from spring surveys;
- 2. Identifying affiliations of wintering birds with breeding areas;
- 3. Improving knowledge of distribution on the Yukon-Kuskokwim Delta and North Slope;
- 4. Documenting age and sex structure of winter flocks; and
- 5. Collecting blood samples to contribute to studies of contaminants and genetic variation in wintering aggregations.

Summary of Project Accomplishments:

1. Identifying routes and timing of movements.

Work is in progress. Ten birds, (5 males and 5 females) were marked with satellite transmitters and 10 (5 males and 5 females) were marked with VHF transmitters. Locations of satellite birds are being received every 2 days and plotted. Tracking of VHF birds is ongoing. Aerial flights have been conducted in Kodiak, the Alaska Peninsula, and Bristol Bay.

2. Identifying affiliations of wintering birds with breeding areas.

Work is in progress. Birds are currently in spring migration and have yet to arrive at breeding areas.

3. Distribution on the Yukon-Kuskokwim Delta and North Slope.

Work is in progress. Birds are currently in spring migration and have yet to arrive at breeding areas.

4. Age and sex structure of winter flocks.

First year completed. Have determined sex for over 1,800 birds in Cook Inlet and Kodiak. May not be possible to get good age ratio data in field – working on methods.

5. Collecting blood samples.

Collected 23 samples of whole and heparinized blood, 40 samples of blood for genetics, and 40 viral swabs. Samples have been transferred to the Alaska SeaLife Center and USGS Molecular Ecology Lab.

Problems or Deviations from Work Plan:

Five of 10 satellite implanted birds and 4 of 10 subcutaneous implanted VHF birds died within several days of release. No specific cause has been determined. This reduced our sample size.

Anticipated Focus Next Reporting Period:

Continue with all of the above. Discuss modifying surgical and handling methods with Steller's Eider Recovery Team to reduce post-surgical mortality. Consider deploying some VHF and satellite transmitters in lower Cook Inlet in November.

Interim Project Costs (estimated):

Federal share	\$ 80,400
State share	\$ 26,000
Total	\$106,400

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Report Date: May 23, 2004