COOPERATIVE ENDANGERED SPECIES CONSERVATION FUND

STATE: Alaska  GRANT AND SEGMENT NR.: E - 4 - 1
PROJECT NR.: 1

WORK LOCATION: Lower Cook Inlet


PROJECT REPORTING PERIOD: 25 September 2004 – 24 September 2005

PROJECT TITLE: Population Structure and Distribution of Steller’s Eider

Project Objectives:

Objective 1: Improve knowledge of habitat use and distribution on the east side of Cook Inlet.

Job/Activity 1a: Conduct boat surveys to locate, count, and record locations of eider flocks.
Job/Activity 1b: Map distribution using GIS and overlay with bathymetry.

Objective 2: Improve survey methodology and population estimates;
Job/Activity 2a: Conduct photographic census of eider concentrations and compare boat surveys with USFWS aerial estimates.

Objective 3: Document age and sex structure of winter flocks;
Job/Activity 3a: Classify eiders by sex using photographic and visual techniques; continue to explore photographic techniques for aging eiders in the field.

Objective 4: Identify routes, and timing of movements from wintering to breeding areas to improve timing and interpretation of spring migration surveys, identify use of specified areas in the Bering Sea and Gulf of Alaska, and identify affiliations between wintering, breeding, and molting areas.
Job/Activity 4a: Capture and mark eiders with satellite transmitters to improve knowledge of seasonal distribution and site fidelity of birds wintering in coastal Alaska.

Objective 5: Identify Alaskan breeding birds molting in Cook Inlet, check for avian influenza, and sample for contaminants, and genetic markers.
Job/Activity 5a: Capture molting birds, band, and collect blood samples and cloacal swabs

Summary of Project Accomplishments:
1. Boat surveys were attempted on 2 occasions in February 2004 but neither could be completed due to weather.
2. See # 1 above. An aerial survey and photographic census of molting flocks on the west side of Cook Inlet was completed in September 2005. We located 2100 Steller’s eiders molting in Kamishak Bay. No boat surveys were conducted due to weather and USFWS did not fly aerial surveys of the east side of Cook Inlet.

3. No surveys were conducted in Cook Inlet due to weather. Limited surveys were conducted in Kodiak. Results have not been fully analyzed.

4. In concert with Steller’s Eider Habitat Conservation Planning Project we marked 21 Steller’s eiders with satellite transmitters in Kodiak in March 2005. We identified routes and timing of movements to Russian breeding areas for 9 females and 4 males and identified molting locations for 6 females and 3 males. We identified affiliations between wintering areas in Kodiak, breeding locations in Russia, and molting locations in Cook Inlet and on the Alaska Peninsula.

5. No Alaskan breeding birds were identified in Cook Inlet through satellite telemetry. Poor weather aborted plans to capture and band molting birds in Kamishak Bay, test for avian influenza and collect blood samples. An unsuccessful trip was attempted in September 2005.

**Project Costs:** Federal share $9,180.64 + state share $3,060.21 = total cost $12,240.86

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