

**FEDERAL AID  
ANNUAL PERFORMANCE REPORT**

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

**ELK  
ANNUAL SURVEY AND INVENTORY  
PERFORMANCE REPORT**

**STATE:** Alaska

**GRANT AND SEGMENT NR.:** W-33-1

**PROJECT NR.:** 13.0

**WORK LOCATION:** Statewide

**PROJECT LOCATIONS:** Game Management Regions 1 and 2

**PERIOD:** 1 July 2002–30 June 2003

**PROJECT TITLE:** The Status of Alaska Elk and Factors Influencing Their Population

**REPORT DESCRIPTION:** This statewide performance report includes the two regions involved in elk survey and inventory activities. Statewide and regional activities are listed before specific activities by herd and game management unit.

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**The Status of Alaska Elk  
and Factors Influencing Their Population in Region I**

**Regionwide Activities**

Activity 1: Write an annual survey and inventory performance report.

This document satisfies the described activity.

Activity 2: Provide information to the Board of Game on elk management.

During the report period the Petersburg Area Biologist testified before the Board regarding 5 regulatory proposals pertaining to Unit 3 elk.

Activity 3: Prepare a draft elk management report.

The Petersburg Area Biologist collected data to be used in the final report, due to headquarters in spring 2004.

**Activities by Unit**

**Units 1A, 1B, 2 and a portion of Unit 3**

Activity 1: Monitor for the presence of elk in southern Southeast Alaska through contact with deer, elk, and bear hunters.

Ketchikan and Petersburg area staff spoke with deer, moose and black bear hunters opportunistically to gain an understanding of elk sightings and gather information on elk dispersal in southern Southeast Alaska.

Activity 2: Monitor the general elk hunt in Units 1, 2, and “the remainder of Unit 3.”

Staff received no verifiable reports of elk harvested other than from Etolin and Zarembo islands, despite rumors of harvest from POW Island.

### **Unit 3**

Activity 1: Monitor the Unit 3 Etolin/Zarembo islands elk hunt and analyze the permit report data.

The Area Biologist and other staff members contacted hunters before and after their hunts. Hunt-based parameters were evaluated by the use of drawing permits, incisors, and photos of antlers submitted by hunters.

Activity 2: Conduct spring fecal pellet-group surveys on Etolin Island.

No pellet-group surveys were conducted on Etolin Island during this report period. Staff did, however, conduct deer and elk pellet-group surveys on Zarembo islands this regulatory year.

Activity 3: Monitor browse condition at established exclosures.

There were no browse surveys conducted of the Etolin Island exclosures this the regulatory year.

Activity 4: Use established population-modeling techniques to estimate population growth.

Established modeling techniques were used during the year to estimate elk population growth and the carrying capacity of Etolin Island. The results were used in discussing elk management techniques with Southeast Alaska hunters.

Activity 5: Coordinate S&I activities with research staff on the Etolin project.

The Petersburg Assistant Biologist stayed in regular communication with DWC elk researchers, spending time in the field with them on one occasion, and time a field on their behalf on a second occasion. Research activities on Etolin and Zarembo have been put on hold due to poor success with self-attaching radio-collar snares.

**Total Regional Segment Period Project Costs (in thousands): \$1.5**

**Submitted by: Dale Rabe, Management Coordinator**

## **The Status of Alaska Elk and Factors Influencing Their Populations in Region II**

### **Regionwide Activities**

Activity 1: Write an annual elk survey and inventory performance report.

Activity 2: Prepare an elk management report.

A draft elk management report was completed during spring 2002.

Activity 3: Provide information to the Board of Game on elk management.

One elk proposal was addressed by the Board of Game during its spring 2003 meeting.

### **Activities by Mountain Range and Unit**

#### **Unit 8**

Activity 1: Conduct aerial sex and age population composition surveys to determine status, trends, productivity, and mortality of elk.

We completed 7 summer aerial composition surveys and 1 winter survey for a portion of the herds. Survey results suggested a further decline in the Malina/Afognak Lakes herd with some increase in the eastern Afognak herds. The unit population of elk is estimated at 745 animals.

The elk population declined substantially from 1,300 animals in 1998 to further reduction of 740 animals in 2001. The reported 2002 harvest of 62 elk was about 8% of the estimated population, harsh fall weather played a role in the decrease in harvest from the 2001 season.

Activity 2: Monitor elk seasonal distribution through relocation of radio-collared elk.

Before 1998 the annual home ranges of most of the elk herds were relatively stable with little interchange between herds. Recent data indicate considerable mixing of herds and changes in traditional use areas during the winter and early spring. We suspect many of these changes are because of significant alteration to winter ranges by commercial logging operations and/or increased severity of winter/early spring weather. Recovery and analysis of movement data from the GPS collars deployed in 1999 has helped in determining the extent of these changes.

Activity 3: Monitor the elk harvest through field observations, hunter harvest reports, and contact with hunters.

Mandatory permit reports returned by hunters provided data on hunting effort and harvest. We issued 285 drawing permits and 368 registration permits. Hunters reported harvesting 62 elk (41 males, 21 females). The harvest by permit hunt was as follows: Raspberry Island drawing permit hunt, 2 males; southeastern Afognak drawing permit hunt, 16 males, 8 females; southeastern Afognak registration permit hunt, 7 males, 5 females; and, northern Afognak registration permit hunt, 16 males, 8 females.

We issued 1 Emergency Order to close a portion of registration hunt RE753 on 22 October 2002. Increased elk hunting pressure during the drawing hunt coupled with poor productivity on the Malina and Afognak Lake elk herds of southwestern Afognak Island prompted the closure of their range prior to the beginning of the registration hunt. The area impacted included the Malina Peninsula and Afognak Lake area (west of a line from the head of Back Bay to the head of Malina Bay).

The total harvest by herd for Afognak and Raspberry Islands was as follows: Raspberry - 2; Duck Mountain - 11; Portage Lake - 5; Seal Bay - 4; Marka Lake - 17; Waterfall Lake - 8; Malina Lakes/Afognak Lake - 15.

**Other activities funded by Federal Aid on this project:**

None.

**Total Regional Segment Period Project Costs (in thousands): \$12.5**

**Submitted by: Michael G McDonald, Assistant Management Coordinator**

**Statewide Project Costs (in thousands):**

**State Share = \$3.5 Federal Share = \$10.5 Total Costs = \$14.0**