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

ELK ANNUAL SURVEY AND INVENTORY

STATE: Alaska

GRANT AND SEGMENT NUMBER: AKW-4 Wildlife Restoration FY2015

PROJECT NUMBER: 13.0

PERIOD: 1 July 2014 – 30 June 2015

PROJECT LOCATION: Statewide

PROJECT TITLE: The Status of Elk and Factors Influencing Their Populations

REPORT DESCRIPTION: This performance report describes elk survey and inventory activities. Regionwide activities are listed before specific activities by game management unit.

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

Region wide Activities:

ACTIVITY 1: Provide information to state and federal regulatory processes on elk management.

Data from elk harvest and population monitoring efforts was used in the winter 2015 Board of Game meeting to assist in elk management strategy.

ACTIVITY 2: Monitor harvest through analysis of drawing and registration permit data.

As part of the permit requirements, all harvested elk must be reported, and photos of antlers are taken.

ACTIVITY 3: Monitor dispersal of elk through anecdotal information from hunters.

During discussions with hunters, fishermen and other outdoors people, we acquire information about elk presence and or absence throughout the unit.

ACTIVITY 4: Collect biological data on harvested elk including incisors for aging and photos of antlers.

The Petersburg Area Biologist collected 4 incisors and 5 antler photographs from the 5 elk harvested in Unit 3 during the report period.

ACTIVITY 5: Conduct spring fecal pellet surveys as budgets permit.

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This activity was not conducted during this report period.

Activities by Unit

Units 1A, 1B, 2, and 3

ACTIVITY 1: Monitor for presence of elk in southern southeast Alaska through contact with deer, elk, moose and bear hunters.

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

Staff received no confirmed reports of elk outside the Etolin-Zarembo permit hunt area during 2014.

ACTIVITY 2: Monitor the general elk hunt in Units 1, 2, and "the remainder of Unit 3."

Staff received 1 unconfirmed report of a cow elk harvested on Wrangell Island outside of the Etolin-Zarembo drawing permit hunt area under the "general hunt". However, anecdotal evidence suggests that animal may have been illegally harvested on Etolin Island where only bulls may be harvested.

Unit 3

ACTIVITY 1: Monitor the Unit 3 Etolin and Zarembo Islands elk hunt and analyze the permit report data.

The Petersburg Area Biologist and other staff members spoke with hunters before, during and/or after their hunts. Seventy six drawing and/or registration permit holders hunted and 5 elk were harvested. Hunt-based parameters were evaluated by use of mandatory drawing and registration permit hunt reports, incisors, and photos of antlers submitted by hunters.

ACTIVITY 2: Use established population modeling techniques to estimate population growth.

This activity was not conducted during the report period.

ACTIVITY 3: Conduct spring elk fecal pellet surveys on Etolin, Zarembo and Onslow Islands in conjunction with spring deer pellet-group surveys.

Elk and deer fecal pellet surveys were not completed on Etolin and Onslow Islands.

Submitted by: Tom Schumacher, Region I Management Coordinator

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

Region wide Activities:

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ACTIVITY. Prepare a biennial regional elk management report.

Staff collected information for preparation of the biennial report in 2014. The department is transitioning to a 5-year report and plan. The next report will be published in 2019.

ACTIVITY. Provide information to state and federal regulatory processes on elk management.

Staff routinely interact with federal staff and discuss management of elk relative to the respective regulatory systems. Staff prepared information for presentation to the state Board of Game meeting during the March 2015 meeting.

Activities by Unit and herd

Unit 8

ACTIVITY. Aerial composition surveys indicate an increasing trend in the Unit 8 elk population. The population on Raspberry and Afognak islands is estimated to be 885 animals in 2014–15. This estimate is higher than previous reporting periods (685 and 765 in 2012–13 and 2013–14, respectively); and is notably higher than the 5-year average ($\bar{x} = 674$). Increased snow accumulation combined with extended periods of cold weather during the harsh winter of 2011–12 likely contributed to a reduction in herd size; however, the mild winters of 2012–13 and 2013–14 have facilitated a slight population increase.

Aerial surveys indicate the elk population was comprised of 8% calves in 2014–15. The calf:cow ratio was 9.7:100 in 2014–15 indicating a decrease in calf production during this reporting period. Further, it is important to note, due to the difficulty in distinguishing spike bulls from cows, survey results may overestimate cow numbers (misidentify yearling bulls as cows) thereby underestimating the calf:cow ratio. The bull:100 cow ratio was 11.7 in 2014–15.

Activity. Assessing movements, distribution, and resource use of Roosevelt elk on Afognak Island, Alaska. Nine Roosevelt elk radio collared in 2014 on Afognak Island continue to be monitored. A total of 25,481 GPS locations have been collected on 9 elk through the end of this reporting period resulting in 371–3,243 locations per individual (mean = 2,831, SD 928). No collared elk were harvested or died during this reporting period. Resource use and movement analysis are currently underway.

ACTIVITY. Hunt reports provided data on hunting effort and harvest. We issued 516 drawing and registration permits. Hunters reported harvesting 63 elk (25 males, 38 females). The harvest by permit hunt was as follows: Raspberry Island drawing hunt – 7 elk (4 males, 3 females); southwest Afognak drawing hunt – 11 elk (3 males, 8 females); eastern Afognak drawing hunt – 7 elk (7 males, 0 females); remainder of Unit 8 drawing hunt – 11 elk (10 males, 1 female); registration hunt – 26 elk (26 females); Federal Subsistence – 1 elk (1 male). One additional male elk was illegally harvested bringing the total harvest to 64 (26 males, 38 females). The reported 2014–15 harvest of 64 elk was about 7% of the estimated population.

On October 21, 2014 an Emergency Order was issued to close all portions of registration hunt RE755 to the harvest of antlerless elk only

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ACTIVITY. Herd specific objectives have been developed for each of the recognized herds on Afognak and Raspberry Islands and we are currently managing each herd based on these objectives.

Submitted by: Gino Del Frate, Region II Management Coordinator