Federal Aid in Wildlife Restoration
Annual Performance Report of
Survey-Inventory Activities
1 July 1995-30 June 1996

ELK

Mary U Hicks, Editor

Grant W-24-4
Study 13.0
December 1996
STATE OF ALASKA
Tony Knowles, Governor

DEPARTMENT OF FISH AND GAME
Frank Rue, Commissioner

DIVISION OF WILDLIFE CONSERVATION
Wayne L. Regelin, Director

Persons intending to cite this material should receive permission from the author(s) and/or the Alaska Department of Fish and Game. Because most reports deal with preliminary results of continuing studies, conclusions are tentative and should be identified as such. Please give authors credit.

Free copies of this report and other Division of Wildlife Conservation publications are available to the public. Please direct requests to our publications specialist.

Mary Hicks
Publications Specialist
ADF&G, Wildlife Conservation
P.O. Box 25526
Juneau, AK 99802
(907) 465-4190

ARLIS
Alaska Resources
Library & Information Services
Anchorage, AK

The Alaska Department of Fish and Game administers all programs and activities free from discrimination on the basis of race, religion, color, national origin, age, sex, marital status, pregnancy, parenthood, or disability. For information on alternative formats for this and other department publications, please contact the department ADA Coordinator at (voice) 907-465-4120, (TDD) 1-800-478-3648, or FAX 907-586-6595. Any person who believes she/he has been discriminated against should write to ADF&G, PO Box 25526, Juneau, AK 99802-5526 or O.E.O., U.S. Department of the Interior, Washington DC 20240.
Project Title: Southeast Alaska Elk Management

Project Location: Unit 3 (3,000 mi²)
All islands west of Unit 1B, north of Unit 2, south of the centerline of Frederick Sound, and east of the centerline of Chatham Strait

Project Objectives and Activities: Project objectives have not been established.

Work Accomplished During the Project Segment Period: One aerial survey was flown to locate elk on March 1, 1996, when about 30 unclassified elk were seen on the beach at Kelp Point. Two small bulls were seen north of Stone Island and 3 large bulls were seen at Steamer Bay. Elk tracks were observed west of Mt. Shakes and Olive Cove on Etolin Island and near Macnamara Point and Snow Passage on Zarembo. Private pilots reported seeing as many as 44 elk in the valley on the west side of Mt. Shakes. No radio collars are functioning.

Progress Meeting Project Objectives: The Etolin Island elk population has been growing slowly. Indications from aerial surveys, sightings from Commercial Fisheries Management and Development staff, and Forest Service biologists, hunters, loggers, and fishermen suggest recruitment is taking place in the population. Emigration has occurred and a herd is established on Zarembo Island. We expect additional emigration as the population increases. We have received public reports of elk on Wrangell, Mitkof, Kupreanof, and the Kashevaroff islands.

Segment Period Project Costs:

<table>
<thead>
<tr>
<th></th>
<th>Personnel</th>
<th>Operating</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned</td>
<td>16.7</td>
<td>12.0</td>
<td>28.7</td>
</tr>
<tr>
<td>Actual</td>
<td>17.1</td>
<td>1.6</td>
<td>18.7</td>
</tr>
<tr>
<td>Difference</td>
<td>-.4</td>
<td>10.4</td>
<td>10.0</td>
</tr>
</tbody>
</table>

Preliminary studies for a field project on Etolin Island proved it unfeasible to immobilize and fit elk with radio collars for management purposes.
Project Title: Southcentral Alaska Elk Management

Project Location: Unit 8 (5,100 mi²)

Project Objectives:

- Maintain a minimum population of at least 1000 elk for all user groups.
- Maintain harvests within sustainable-yield levels of the elk population.
- Develop population objectives for each major subherd.

Work Accomplished During the Project Segment Period: We completed aerial sex and age composition surveys during July and September 1995. On Raspberry Island 192 elk were classified (25 bulls, 120 cows, and 47 calves). On Afognak Island 819 elk were classified (50 bulls, 595 cows, and 174 calves). The calf:cow ratio for Raspberry Island was 39:100 and 29:100 for Afognak Island. The bull:cow ratio was 6:100 for Afognak and 13:100 for Raspberry Island. The total prehunt population was estimated at 1100-1200 elk.

A composition count was done from the ground for the Raspberry Island herd in September 1995 to more accurately classify bulls. The 25 bulls counted were classified into 3 categories as follows: spike – 44%; 2-3 pt – 44%; 4 or more pt – 12%. In a comparable ground count in 1994, only 32% of 19 bulls classified there were larger than spikes.

Mandatory permit reports returned by hunters provided statistics on hunting effort and harvest. We issued 811 permits; 408 hunters reported going into the field, taking 96 elk (56 males, 39 females, 1 sex unknown). The harvest by permit hunt was as follows: Raspberry Island drawing permit hunt, 4 males, 7 females; southeastern Afognak drawing permit hunt, 39 males, 20 females; southeastern Afognak registration permit hunt, 8 males, 8 females, 1 unknown sex; northern Afognak registration permit hunt, 5 males, 4 females.

We issued an emergency order closing the scheduled registration permit hunt in part of central Afognak enclosing the Duck Mountain and Portage Lake elk herds. Those herds are highly vulnerable to hunting from the logging roads, and we considered the risk of excessive harvest too high to allow unlimited hunters in the field. The 5-25 November registration permit hunt in the southeastern part of Afognak proceeded with no more closures. Unsuitable hunting weather contributed to low hunter success and less than expected harvest, with 17 elk taken in that hunt. Only 9 elk were killed in the northern Afognak registration permit hunt which was open during 10 October-25 November.

A small increase from 369 hunters in the field in 1994 to 408 hunters in 1995 resulted in a harvest of 96 elk in 1995, compared with 85 elk in 1994. Hunters took 59 of 85 (69%) elk killed on Afognak in the drawing permit hunt. The total harvest from drawing and registration permit hunts by herd was as follows: Duck Mountain - 15; Portage Lake - 9; Seal Bay - 8; Mark Lake - 11; Waterfall Lake - 7; Malina Lakes - 31; location not specified - 4.
Progress Meeting Project Objectives: The elk population has increased steadily since 1992 when low bull:cow ratios and a declining trend in the population prompted more conservative regulations. The change from a 1 September-15 December season to a 10 October-25 November season began with the 1993-94 hunt. The elk population was estimated at 1100-1200 animals in 1995, above the 1000 elk objective. Based on consecutive years’ counts, we found that most individual herds have been increasing since 1993. The reported 1995 harvest of 96 elk equaled 9% of the minimum estimated population, the same exploitation rate recorded in 1994, below sustainable level.

Less restrictive regulations, possibly including an earlier season opening date and issuing more drawing permits, are needed to increase the harvest rate in elk herds which are not readily accessible from the logging roads. The present conservative regulations were implemented because of a declining population and low bull:cow ratios. When the regulations became effective in 1993-94, an increasing trend in the population had already begun. Hunters were hampered by unusually severe weather in both 1994 and 1995; an earlier opening date would give hunters better odds of having suitable hunting weather. Registration permit hunt closures by field announcement have been effective in achieving predetermined harvest quotas, but weather becomes a more important variable with later opening dates.

Segment Period Project Costs:

<table>
<thead>
<tr>
<th></th>
<th>Personnel</th>
<th>Operating</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned</td>
<td>19.1</td>
<td>7.0</td>
<td>26.1</td>
</tr>
<tr>
<td>Actual</td>
<td>19.1</td>
<td>7.0</td>
<td>26.1</td>
</tr>
<tr>
<td>Difference</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Submitted by:

Michael G. McDonald
Assistant Management Coordinator
Alaska's Game Management Units
The Federal Aid in Wildlife Restoration Program consists of funds from a 10% to 11% manufacturer's excise tax collected from the sales of handguns, sporting rifles, shotguns, ammunition, and archery equipment. The Federal Aid program allots funds back to states through a formula based on each state's geographic area and number of paid hunting license holders. Alaska receives a maximum 5% of revenues collected each year. The Alaska Department of Fish and Game uses federal aid funds to help restore, conserve, and manage wild birds and mammals to benefit the public. These funds are also used to educate hunters to develop the skills, knowledge, and attitudes for responsible hunting. Seventy-five percent of the funds for this report are from Federal Aid.