

Alaska Department of Fish and Game  
Division of Wildlife Conservation



Federal Aid in Wildlife Restoration  
Annual Performance Report of  
Survey-Inventory Activities  
1 July 1993-30 June 1994

# ELK

Mary U. Hicks, Editor



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367.2  
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1993-94

Grant W-24-2  
Study 13.0  
December 1994

**STATE OF ALASKA**  
**Tony Knowles, Governor**

**DEPARTMENT OF FISH AND GAME**  
**Carl L. Rosier, Commissioner**

**DIVISION OF WILDLIFE CONSERVATION**  
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**Project Title: Southeast Elk Population Management**

**Overview:** Elk from the 1987 transplant and their progeny have established viable populations on Etolin and Zarembo islands. Initial mortalities were high, but the rate of mortality declined abruptly in 1988. Currently the population is estimated to be about 150.

**Project Location:** Unit 3 (3,000 mi<sup>2</sup>)  
Islands of the Petersburg and Wrangell area

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

**Work Accomplished During the Project Segment Period:** Using radiotelemetry, we flew 8 aerial surveys to locate elk. All flights were successful to the extent that one or more radios were located. Radio failure hindered our locating some elk. Our last survey was on May 20, 1994, and two radios were functioning on Etolin Island. During spring deer pellet surveys on Etolin Island, we saw no elk, but we observed trails, fecal deposits, and heavy localized browsing.

**Progress Meeting Project Objectives:** The Etolin Island elk population has been growing slowly. Aerial surveys of radiocollared animals, photographs from the public, and reports from loggers and fishermen indicate recruitment in the population. Some emigration has occurred and a small herd is established on Zarembo Island. We expect additional emigration as the population increases. Elk have been reported by the public from Wrangell, Mitkof, and the Kashevaroff islands.

**Segment Period Project Costs:**

	<u>Personnel</u>	<u>Operating</u>	<u>Total</u>
Planned	15.3	1.9	17.2
Actual	15.3	1.9	17.2
Difference	0.0	0.0	0.0

**Submitted by:**

Bruce Dinneford  
Management Coordinator

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**Project Title:** Southcentral Alaska Elk Management

**Project Location:** Unit 8 (5,100 mi<sup>2</sup>)

**Project Objectives:**

- Maintain a minimum population of at least 1,000 elk for use by 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 flew surveys in July and August to determine sex and age composition. We classified 746 elk: 16 bulls (2%), 583 cows (78%), 147 calves (20%). We estimated the prehunt population between 950 and 1,095 elk. Two cow elk from the Seal Bay herd were captured and radiocollared in July. Seven of the 8 elk herds on Afognak Island have radiocollared animals.

Mandatory permit reports returned by hunters provided statistics on hunting effort and harvest. We issued 797 permits; 428 hunters reported going afield, taking 87 elk (48 males, 39 females). Hunter success was 25%. The harvest by permit hunt was as follows: Raspberry Island drawing permit hunt, 6 males, 6 females; southeastern Afognak drawing permit hunt, 33 males, 28 females; southeastern Afognak registration permit hunt, 6 males, 4 females; northern Afognak registration permit hunt, 3 males, 1 female.

We issued an Emergency Order shortening the registration permit hunt to 3 days for that part of eastern Afognak Island containing the Duck Mountain, Portage Lake, and Marka Lake elk herds. That Emergency Order also closed the southwestern part of Afognak Island where drawing permit hunters harvested 45 elk from the Malina Lakes herd, approximately 15% of the estimated population. Hunting pressure in the drawing hunt was heavily concentrated on the Malina Lakes herd, which sustained 76% of the kill. Harvest in the drawing permit hunt from the remaining herds was as follows: Marka Lake - 0; Duck Mountain - 10; Portage Lake - 4; Seal Bay - 0. Seventy-two of the 87 elk (83%) killed were taken in the drawing permit hunt.

**Progress Meeting Project Objectives:** Aerial surveys in 1993 indicated a slight increase in the elk population. Hunter success increased from a low of 17% in 1992 to 25% in 1993. Although the bull:cow ratio was only 2 bulls:100 cows, hunters took 55% males, an increase from the previous season's 44% male harvest. Overwinter mortality was low, and much of the increased male harvest was yearlings.

The preseason estimate of 950-1095 elk was near the population objective of 1,000 elk. The 1993 harvest of 87 elk was approximately 9% of the minimum estimated population.

This was the first season with southern and eastern Afognak Island combined into one hunting area under a drawing permit hunt. Hunters did not distribute their effort uniformly among the 5 elk herds in this area, concentrating primarily on the Malina Lakes herd in southwestern Afognak Island and on the Duck Mountain herd, accessible by the logging road system. It may become necessary to further subdivide the drawing permit hunting area to distribute the harvest in proportion to the size of each herd.

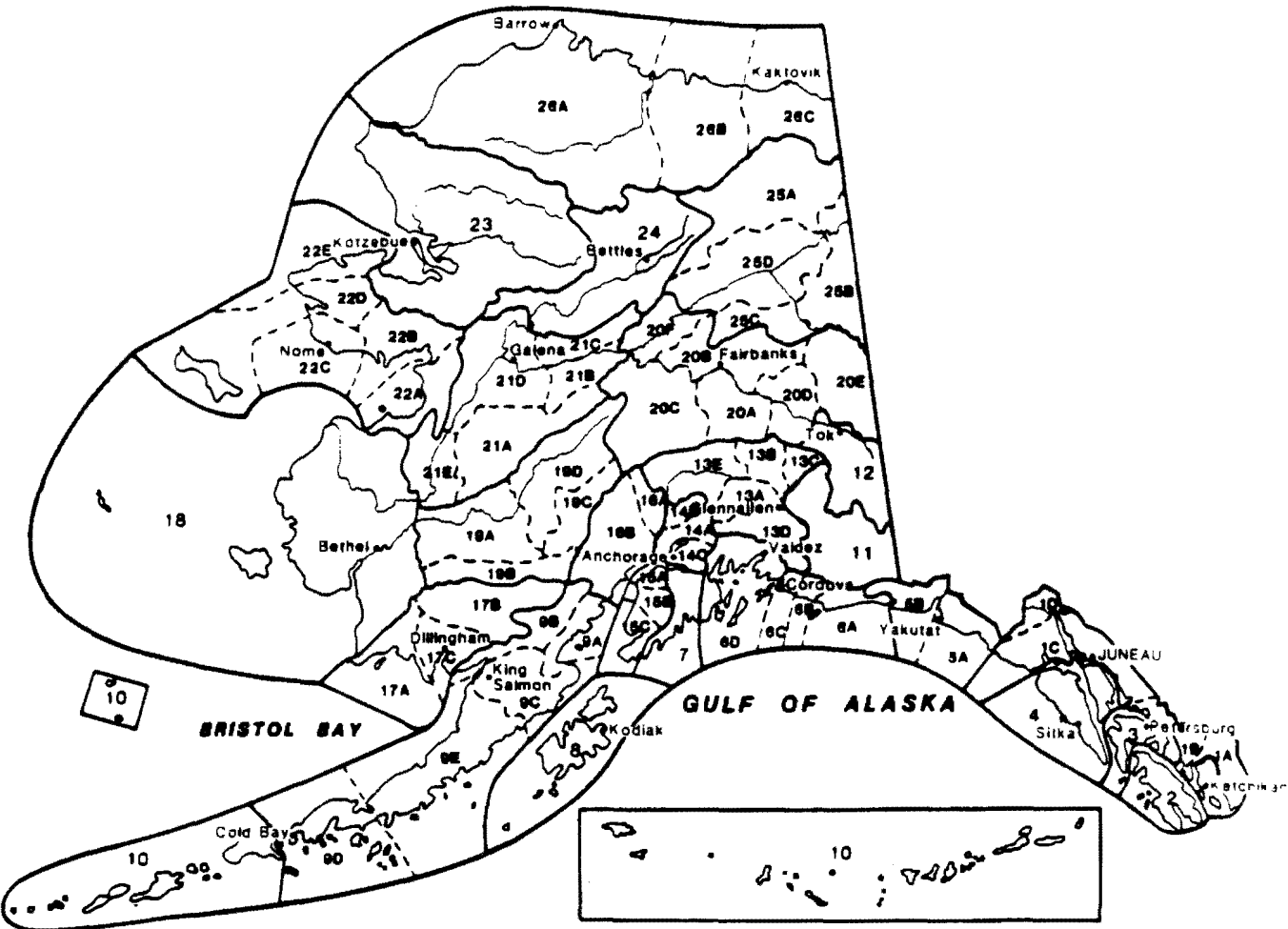
**Segment Period Project Costs:**

	<u>Personnel</u>	<u>Operating</u>	<u>Total</u>
Planned	7.1	11.5	18.6
Actual	7.1	11.8	18.9
Difference	0.0	-0.3	-0.3

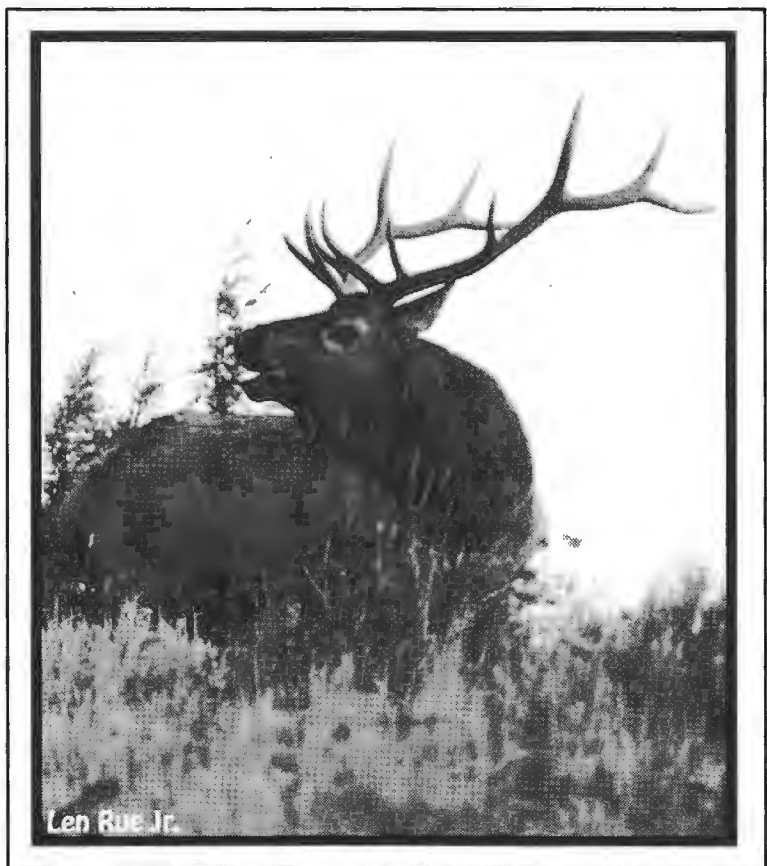
**Submitted by:**

Karl Schneider  
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 distributes funds to states using a formula based on each state's geographic area and number of paid hunting license holders. Alaska receives a maximum of 5% of revenues collected each year. The Alaska Department of Fish and Game uses its funds to help restore, conserve, and manage wild birds and mammals. These funds are also used to educate hunters to develop skills and attitudes for responsible hunting. Federal Aid funds paid for 75% of this study.



Len Rue Jr.

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