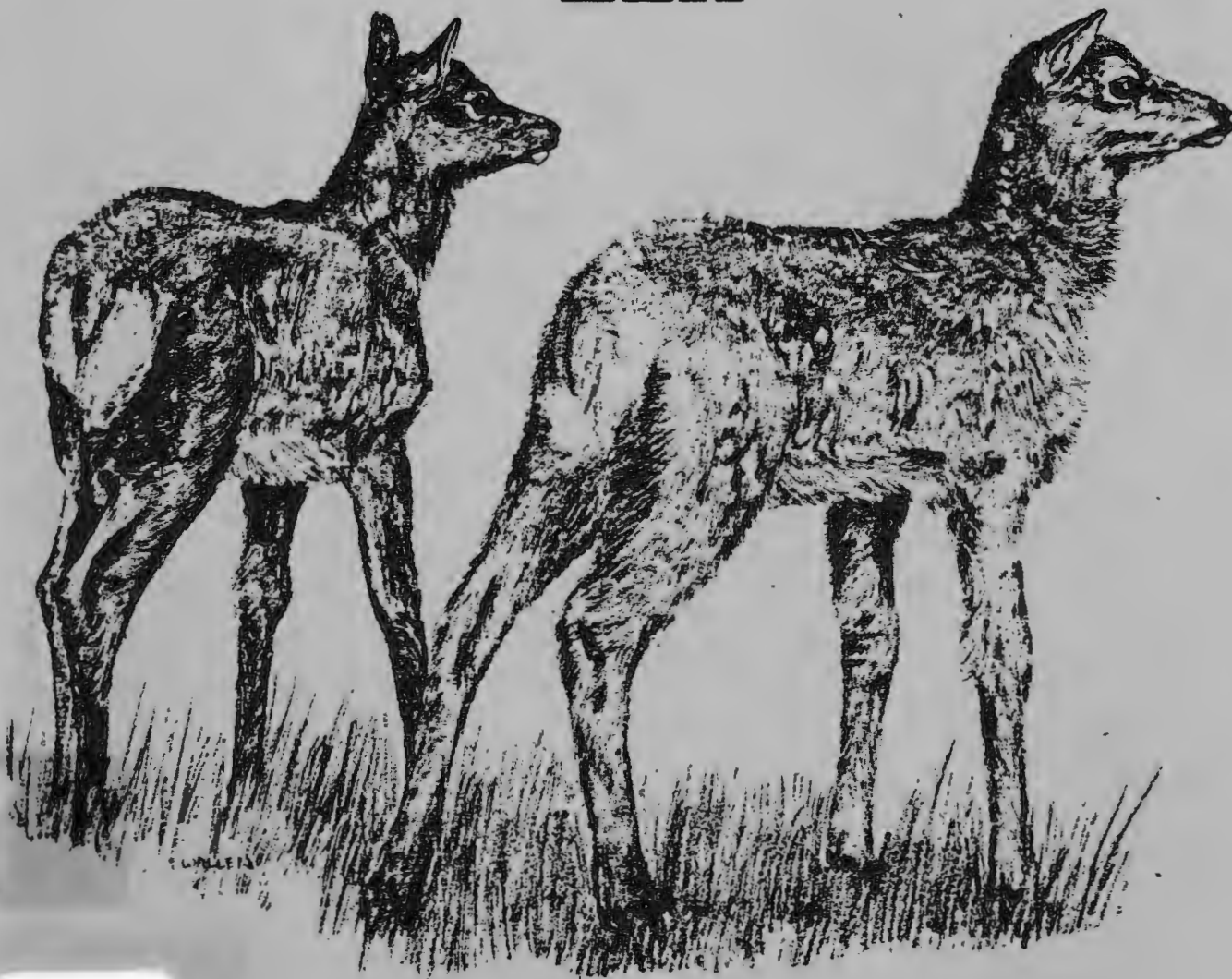


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US FISH & WILDLIFE SERVICE--ALASKA

Alaska Department of Fish and Game  
Division of Wildlife Conservation  
Federal Aid in Wildlife Restoration  
Annual Performance Report of  
Survey-Inventory Activities  
1 July 1989-30 June 1990

ELK



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Compiled and edited by  
Sid O. Morgan, Publications Technician  
Vol. XXI, Part III  
Project W-23-3, Study 13.0  
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DEPARTMENT OF FISH AND GAME  
Don W. Collinsworth, Commissioner

DIVISION OF WILDLIFE CONSERVATION  
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PROJECT TITLE: Southeast Elk Population Management

OVERVIEW: Although elk were transplanted to southeast Alaska several times in the 20th century, none were successful prior to 1987. Two groups of Rocky Mountain and Roosevelt elk totalling 50 animals were introduced to Etolin Island in central Southeast in 1987. Initial mortalities were high, but they have recently stabilized.

PROJECT LOCATION: Unit 3 (3,000 mi<sup>2</sup>)  
Islands of the Petersburg, Kake, and Wrangell  
area

WORK ACCOMPLISHED DURING THE PROJECT SEGMENT PERIOD:

Several aerial surveys of the Etolin Island elk population were conducted during the reporting period. All radio-collared animals alive at the beginning of the reporting period were alive at the end of the period. No carcasses were found or examined.

PROGRESS TOWARDS MEETING PROJECT OBJECTIVES:

The Etolin Island population appeared to be slowly growing. Indications from aerial surveys of radio-collared animals, photographs from the public, reports from loggers and fishermen, and other sources suggested that recruitment is taking place in the population. Some emigration has occurred; a radio-collared elk, accompanied by two others, has moved to Zarembo Island, just north of Etolin, and 2 other elk have been seen on Deer Island, southeast of Etolin. We expect additional emigration as the population increases.

SEGMENT PERIOD PROJECT COSTS:

	<u>Personnel</u>	<u>Operating</u>	<u>Total</u>
Planned	4.8	5.6	10.4
Actual	7.5	2.1	9.6
Difference	-2.7	3.5	0.8

Actual personnel costs have been estimated. Personnel costs were higher than planned partially because the illness of a Wildlife Biologist III required us to fill in for him by temporarily upgrading a WB I and extending his normal working season.

SUBMITTED BY:

David M. Johnson  
Regional Management Coordinator

PROJECT TITLE: Southcentral Alaska Elk Management

PROJECT LOCATION: Unit 8 (5,100 mi<sup>2</sup>)  
Kodiak, Afognak, and adjacent islands

PROJECT OBJECTIVES:

To maintain a minimum population of at least 1,000 elk for use by all user groups.

To maintain harvests within sustainable-yield levels of the elk population.

To develop population objectives for each major subherd.

WORK ACCOMPLISHED DURING THE PROJECT SEGMENT PERIOD:

Aerial surveys were conducted every month except March and May. The most intensive survey activity was in August, when 973 elk were classified: 76 bulls (8%), 712 cows (73%), 185 calves (19%). The population was estimated at a minimum of 1,200 elk, including 150 on Raspberry Island and 1,050 on Afognak Island. Ten elk were captured and radio-collared. A total of 15 radio-collared elk were distributed in six of the 9 major elk herds.

Approximately monthly flights were made to relocate radio-collared elk in 6 herds inhabiting eastern and central Afognak Island, where commercial timber harvest is occurring on private lands. A total of 169 point locations of radio-collared elk were mapped, and habitat attributes were recorded for each location. A cooperative agreement between a timber management firm (KONCOR) and the Alaska Department of Fish and Game was implemented, and preliminary discussions on wildlife-logging studies were held.

Harvest and hunting activities were monitored with a field check station at Malina Lake and by periodic flights and skiff patrols. Mandatory permit reports returned by hunters were used to compile statistics on hunting effort and harvest.

The total number of permits issued was 1,545, and 654 individuals reported hunting. Hunters killed 206 elk (116 males, 74 females, 16 unknowns) for a 31% success rate. The harvests for each of the permit hunt areas were as follows: Raspberry Island, 8 males, 14 females; Southwest Afognak, 31 males, 10 females, 1 unknown; Southwest Afognak, 36 males, 31 females, 2 unknowns; East Afognak, 13 males, 6 females, 7 unknowns; and Northwest Afognak, 28 males, 13 females, 6 unknown sex. The 1989 harvest was the highest recorded since 1984 when 271 elk taken.

#### PROGRESS TOWARDS MEETING PROJECT OBJECTIVES:

The preseason estimate of 1,200 elk exceeded the minimum population objective of 1,000. Management objectives should be developed for specific herds, recognizing the differences in human accessibility, habitat characteristics, and estimated carrying capacity for each herd. The rapid proliferation of new logging roads, providing improved access for hunters, required the close monitoring of harvest and sex and age composition.

The Southwest Afognak Island area was administered with a drawing-permit hunt (300 permits) from 1 September to 10 October and a registration permit hunt with unlimited permits from 15 October to 15 December. This strategy was intended to provide an early hunt with low hunter density and high aesthetic quality, followed by a hunt allowing maximum participation. In the drawing hunt 85 hunters participated, and 42 elk were killed (31 males, 10 females, 1 unknown). The registration hunt produced 69 elk (36 males, 31 females 2 unknowns); 204 hunters participated.

The Raspberry Island herd appears to have declined from an estimated 220-230 elk in 1987 to 150-160 elk in 1989. An unconfirmed but probably accurate report of a group of elk emigrating from Raspberry Island to Afognak Island during the fall of 1987 may explain the decline. Harvests will be reduced in 1990 to allow herd growth to a minimum of 200 elk.

#### SEGMENT PERIOD PROJECT COSTS:

	<u>Personnel</u>	<u>Operating</u>	<u>Total</u>
Planned	12.9	7.4	20.3
Actual	12.9	8.4	21.3
Difference	0.0	1.0	1.0

More radio tracking flights were made than had been planned because elk-logging relationships were assigned a higher priority.

#### SUBMITTED BY:

John N. Trent  
Regional Management Coordinator



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