#### ALASKA DEPARTMENT OF FISH AND GAME

JUNEAU, ALASKA

STATE OF ALASKA Bill Sheffield, Governor

DEPARTMENT OF FISH AND GAME Don W. Collinsworth, Commissioner

DIVISION OF GAME
W. Lewis Pamplin, Jr., Director
Robert A. Hinman, Deputy Director

ANNUAL REPORT OF SURVEY-INVENTORY ACTIVITIES

PART III. ELK

Edited and Compiled by Alma Seward, Publications Technician

Volume XV

Federal Aid in Wildlife Restoration

Project W-22-3, Job 13.0

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(Printed November 1984)

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# Statewide Harvest and Population Status

Alaska's only elk population, on Afognak and Raspberry Islands, continued to increase in 1983. The total population is estimated at 1,200 elk.

Hunter harvest also increased, a total of 187 elk was taken in 1983. Hunting pressure also increased. Increased access (logging roads) contributed toward increased harvest on northern and eastern Afognak.

Robert A. Hinman Deputy Director

#### ELK

## SURVEY-INVENTORY PROGRESS REPORT

GAME MANAGEMENT UNIT: 8

GEOGRAPHICAL DESCRIPTION: Kodiak and Adjacent Islands

PERIOD COVERED: 1 July 1983-30 June 1984

Season and Bag Limit

See Hunting Regulations No. 24

### Population Status and Trend

The pre-hunting season population of elk on Afognak and Raspberry Islands was estimated at 1,200. Minimum counts of 189 elk for Raspberry Island and 193 elk for southwest Afognak herds were higher than the previous year's counts of 149 and 116 elk, respectively. Segments of the Duck Mountain and Izhut Bay/Seal Bay herds located on Afognak Island were not surveyed during 1983. The Tonki Cape Peninsula herd appeared to be in a continuing decline. Only 26 elk, with no calves, were counted there.

### Population Composition

Aerial surveys (19.4 hours) conducted in August and September revealed 834 elk. Of these, 139 were classified as bulls, 505 as cows and 190 as calves. The calf:cow ratio of 38:100 was about average and the bull:cow ratio of 28:100 was improved over that recorded in 1982.

### Mortality

Hunters killed 187 elk during the hunting season. The sex composition of the kill was 123 males (66%), 62 females (34%), and 2 elk of unknown sex. Eight hundred sixty-seven permittees reported hunting and 21% were successful. Residency of the hunters was as follows: Kodiak Island, 403 (47%); mainland Alaska, 429 (50%); nonresidents, 31 (3%).

On northern and eastern Afognak Island (Registration Hunt No. 750), 668 hunters reported killing 140 elk, including 91 males (66%), 47 females (34%), and 2 elk of unknown sex. Hunter success was 21%. Distribution of the harvest was as follows: Waterfall Lake/Paramanof Mts., 24; Paramanof/Malina Bays, 24; Portage Lake/Discoverer Bay, 22; Seal Bay/Laura Lake/E. Izhut Bay, 23; Tonki Cape/Bay, 14; Duck Mtn./Kazakof Bay, 18; and Afognak Island (unspecified location), 14. Chronology of the harvest was as follows: August, 19 (14%); September, 35 (25%); October, 34 (24%); November, 26 (19%); December, 25 (18%).

On southwest Afognak Island (Registration Hunt No. 751), 164 hunters reported killing 34 elk, including 21 males (62%) and 13 females (38%). One additional male calf was recorded as a wounding loss. Hunter success was 21%. This hunt was closed on 16 November by Emergency Order when the allowable kill of 35 was taken, 4 days before the published season closure date.

On Raspberry Island (Drawing Hunt No. 702), 95 permits were issued and 35 permittees reported hunting. Twelve elk, including 10 males and 2 females were killed. Hunter success was 34%.

Natural mortality during the winter months was light. Although snow accumulations were deep at higher elevations, precipitation on wintering areas at lower elevations fell as rain.

### Management Summary and Recommendations

Results of survey information suggest an overall increase in the elk population from the previous year.

The elk kill in 1983 (187) exceeded the previous year's kill (151) by 19%. There was, however, a 23% increase in the number of elk hunters. Hunters continued to demonstrate their preference for male elk (66%).

The elk kill from northern and eastern Afognak increased 27% from the previous year. Most of this increase was taken from herds accessible by logging roads. Although most kill locations were not reported precisely, a minimum of 50 elk were estimated to have been killed from the Duck Mountain, Discoverer Bay, Kazakof Bay and Izhut Bay areas, accessible from the road system. The sex composition of those elk was about 50:50. Twenty-four successful hunters (17%) reported using road vehicles for transportation. This confirmed the belief that the improved access created by logging roads was an important factor in the high harvest on Afognak. The road system transects the ranges of 3 elk herds. Although the overall trend in the elk population points to an increase, a more conservative harvest may soon be required in herds accessible by the road system.

The size of the southwest Afognak elk herd continued to increase. The average annual harvest over the past 3 years was 33 elk, which was near the recommended annual harvest quota of 35 elk. An increased harvest could be supported while allowing a gradual increase in herd size. I recommend that the annual harvest quota be set each year after completion of the summer composition surveys.

The Raspberry Island herd continued to increase, numbering about 200 elk in 1983. It was previously recommended that the preseason herd size be held at 200 elk. Only 12 elk were killed in 1983 with 95 permits issued. Additional harvest is needed to maintain the herd at the recommended level. The hunt should therefore be changed to a registration permit hunt, with a

harvest quota set after completion of summer composition surveys. I also recommend the same season dates be set for both the southwest Afognak and the Raspberry Island hunts to better distribute hunting pressure.

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