Alaska Department of Fish and Game
Division of Game
Federal Aid in Wildlife Restoration
Annual Report of Survey—Inventory Activities

ELK

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STATEWIDE HARVEST AND POPULATION STATUS

Elk are found in Alaska only in Unit 8, Raspberry and Afognak Islands. Although some groups are declining in number, the elk population as a whole continues to be at a relatively high level, with over 1,100 elk present.

Harvest by hunters was relatively high and near established harvest quotas. Several hunts were closed by emergency order to prevent overharvest. Total elk harvest was 138 bulls and 62 cows.

Robert A. Hinman
Deputy Director

ELK

SURVEY-INVENTORY PROGRESS REPORT

GAME MANAGEMENT UNIT: 8

GEOGRAPHICAL DESCRIPTION: Kodiak and adjacent islands

PERIOD COVERED: 1 July 1985-30 June 1986

Season and Bag Limit

See Hunting Regulations No. 26.

Population Status and Trend

The pre-hunting-season population of elk on Afognak and Raspberry Islands was estimated to exceed 1,100 animals. The population status of these herds ranges from stable to slightly increasing in size. On eastern Afognak Island, the elk population appears to be declining.

Population Composition

Sex and age composition surveys were flown in August and 1,115 elk were classified in 18.2 hours of survey time (Table 1). Total counts in all hunt areas are higher than those observed in 1984. Calf:cow ratios on Raspberry Island (Hunt 702) and southwestern Afognak Island (Hunt 751) are similar to those noted in 1984. In Hunt Area 751, the calf:cow ratio is lower, but more calves were observed than in 1984. Overall, the ratio of 33 calves:100 cows is below the 10-year average of 37:100.

Successful hunters on Raspberry and southwestern Afognak Islands were required to turn in the lower jaw of their elk. Age data obtained from examination of tooth eruption and wear are presented in Figures 1 and 2. These data indicate an abundance of relatively young animals in those herds.

Mortality

Hunters killed 200 elk, including 138 males (69%) and 62 females (31%) during the season. In addition, 5 dead elk were discovered by hunters during the spring. The cause of these mortalities was unknown. Seven hundred sixty-five permittees reported hunting; 26% were successful. The residency of 748 hunters was reported as follows: Kodiak Island, 376 (50%); mainland Alaska, 347 (46%); and nonresident, 25 (3%).

On northeastern Afognak Island (Registration Hunt 750), 554 hunters reported killing 112 elk, including 79 males (71%) and 33 females (29%). Hunter success was 20%. That part of Afognak Island east of a line from the northwest arm of Kazakof Bay to Delphin Point in Perenosa Bay was closed by Emergency Order on 15 November. The reason for the closure was suspected excessive take of female elk. The harvest in the eastern portion of this hunt area was 16 males (52%) and 15 females (48%) and hunter success was 13%. The harvest in the western portions of the hunt was 57 males (81%) and 13 females (19%); hunter success was 27%. Six males and 5 females were killed in unspecified portions of Hunt Area 750.

On southwest Afognak Island (Registration Hunt 751), 124 hunters reported killing 52 elk, including 35 males (67%) and 17 females (33%). Hunter success was 41%. This hunt was closed by emergency order on 26 September, after 7 days of hunting. The harvest quota was 55 elk.

On Raspberry Island (Registration Hunt 702), 83 hunters reported killing 36 elk, including 24 males (67%) and 12 females (33%). Hunter success was 42%. The season was closed by emergency order on 22 September, after 3 days of hunting. The harvest quota was 35 elk.

Management Summary and Recommendations

All elk hunts were administered by registration permits. The Raspberry and southwest Afognak hunts were classified as Tier I subsistence hunts and participation was limited to Alaska residents only. This added restriction did not appear to influence hunter effort as harvest quotas were reached in less than 1 week in both hunts. Both elk herds experienced intense hunting pressure during that week. Observations indicate that both herds are stable to increasing in number with herd sizes at or near historical high levels.

The Waterfall and Paramanof elk herds on northwestern Afognak Island are also stable to increasing. Elk herds on eastern Afognak Island appear to have declined. Overharvest facilitated by improved hunter access on logging roads, and diminished habitat quality due to logging, are contributing factors which may have caused the decline (Smith 1985). For the 2nd consecutive year, the hunting season on eastern Afognak Island was closed by emergency order. Surveys of the Seal/Saposa Bay herd were not possible again during 1985 because the herd remained in dense Sitka spruce forests. The Tonki Cape Peninsula herd contains fewer than 50 elk and appears to be declining.

I recommend exploring new management strategies to maintain harvest levels for Raspberry and southwest Afognak Island elk herds while reducing the intensity of the hunting pressure.

The Raspberry Island hunt should be managed as a limited participation hunt with a flexible number of permits available to assure adequate harvest. Hunting pressure on southwestern Afognak Island could be better distributed with later season-opening dates, but the registration permit hunt should be continued. Imposing a prohibition on the use of off-road vehicles for hunting elk in both of these areas would slow the harvest rate.

The hunt on northeastern Afognak Island should be split into eastern and western sections, each to be managed separately. The season should be shortened in the eastern section to limit the harvest. Closing the elk season on Tonki Cape Peninsula is recommended.

Literature Cited

Smith, R. B. 1985. Unit 8 elk survey-inventory progress report. Pages 1-3 in B. Townsend, ed. Annual report of survey-inventory activities. Part III. Vol XVI. Alaska Dep. Fish and Game. Fed. Aid in Wildl. Rest. Prog. Rep. Job W-22-4. Job 13.0. Juneau. 4pp.

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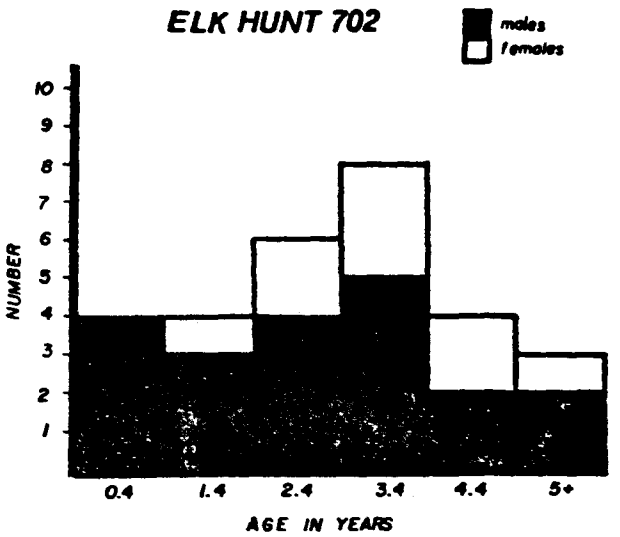

Fig. 1. Age distribution of elk harvest in Hunt 702, Raspberry Island, 1985.

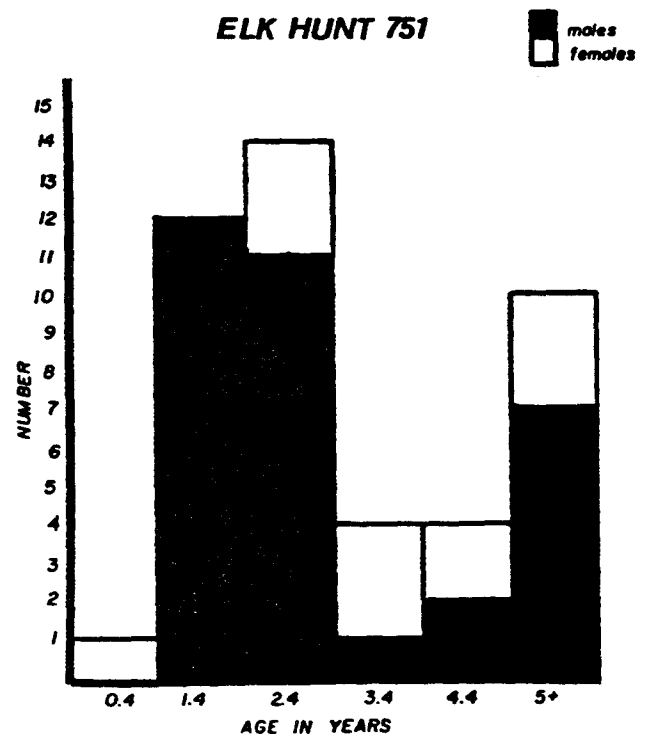

Fig. 2. Age distribution of elk harvest in Hunt 751, southwest Afognak Island, 1985.

Table 1. Summary of elk composition counts in Game Management Unit 8, Raspberry and Afognak Islands, Alaska, 1985.

Hunt area	Males	Females	Calves	Calves: 100 cows	Total
Raspberry Island (Hunt No. 702)	2	125	56	45:100	183
SW Afognak Island (Hunt No. 751)	4	200	65	32:100	268
N&E Afognak Island (Hunt No. 750)	53	467	144	31:100	664
Totals	59	792	264	33:100	1,115