

**FEDERAL AID
FINAL PERFORMANCE REPORT**

ALASKA DEPARTMENT OF FISH AND GAME
DIVISION OF WILDLIFE CONSERVATION
PO Box 25526
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**MOUNTAIN GOAT
SURVEY AND INVENTORY**

STATE: Alaska

GRANT AND SEGMENT NR.: W-33-5

PROJECT NR.: 12.0

PERIOD: 1 July 2006 – 30 June 2007

PROJECT TITLE: The Status of Alaska Mountain Goats and Factors Influencing Their Populations

Project Location: Statewide

REPORT DESCRIPTION: This performance report describes mountain goat survey and inventory activities. Region-wide activities are listed before specific activities by game management unit.

**The Status of Mountain Goats
and Factors Influencing Their Populations in Region I**

Region-wide Activities

ACTIVITY 1: Provide information to state and federal regulatory processes on mountain goat management.

Information on goat harvest and management was supplied to state and federal regulatory bodies in response to proposals to change regulations within the region. This included 12 proposals to the State Board of Game.

ACTIVITY 2: Survey goat populations including sex and age composition in key management areas within the region.

Unit 1B: The Petersburg staff conducted aerial surveys in 15 of 27 established trend-count areas in during three days in early October. Aerial surveys were concentrated in those trend count areas that typically receive the highest levels of hunting pressure. A total of 370 goats were observed, including 308 adults and 62 kids.

Unit 1C: Staff conducted aerial surveys of the Chilkat Range from the Endicott River, south to Point Couverdon (236 goats: 203 adults and 33 kids); from Mt. Juneau to the Antler River (449 goats: 358 adults and 91 kids); and from Lion's Head mountain to Eldred Rock (65 goats: 54 adults and 11 kids).

Unit 1D: beginning at Eldred Rock, north to and including Mt. Villard (348 goats: 287 adults and 61 kids).

Unit 5: Beginning at Harlequin Lake, north to the Hubbard Glacier (155 goats: 134 adults and 21 kids).

The Sitka staff conducted aerial surveys with the focus of transitional areas on the southern end of Baranof Island where goats continue to expand their range as far south as Port Herbert. A total of 760 goats were tallied in 11 hours during the late July and early August surveys. Poor weather conditions prevented extensive aerial surveys over much of the goat habitat on Baranof Island during the reporting period.

ACTIVITY 3: Monitor results from registration permit hunts and analyze the data.

Unit 1A: The Ketchikan Area office collected hunter information through a mandatory registration permit report. Staff continues to monitor horn growth characteristics through a voluntary hunter system. Annual growth patterns were measured on 10 of 14 goats harvested.

Unit 1B: Petersburg Area staff collected hunter information from goat hunters via a mandatory registration permit reporting requirement. The mandatory hunt reports include information on successful and/or unsuccessful hunt locations, method of transportation, days of effort and commercial services used.

Units 1C, 1D & 5: The Douglas Area office collected hunter information through a mandatory registration permit report. Hunt report data included location of hunt, mode of access used, days hunted, and commercial services used. If the hunter was successful the report also queried the location of the kill. In both Unit 5 and Unit 1D hunters are required to bring in horns for aging and sex identification. From the horns, we collected data on length, base circumference, length of growth during each year, sex of goat, and age of goat. We examined 3 and 31 sets of goat horns for Unit 5 and Unit 1D, respectively. In Unit 1C the presentation of horns is voluntary so we were able to inspect approximately 25% of the 42 goats taken.

Unit 4: The Sitka Area staff collected horn measurements and growth characteristics on 44 of the 54 goats harvested. Staff also collected horn measurements and growth characteristics on 47 of the 55 goats harvested. Hunt report data included location of hunt, mode of access used, days hunted, and commercial services used. If the hunter was successful the report also queried the location of the kill. Within-unit hunters were asked to voluntarily bring in horns for aging and sex identification. From the horns, we collected data on length, base circumference, length of growth during each year, sex of goat, and age of goat.

ACTIVITY 4: Update guideline harvest level objectives for selected goat herd based on a review of long-term harvests on the herds.

Harvest guidelines were discussed among staff, with Forest Service personnel, and guides during the year. Units 1A, 1B, 1C, and 4 have all experienced a rising interest in goat hunting especially by commercial guides. This has intensified the department's efforts to minimize the harvest of females in order to avoid population level concerns due to loss in productivity.

The Petersburg, harvest guidelines were adjusted for each discrete goat population in accordance with long-term harvest levels and the number of goats observed during aerial counts. In order to minimize potential conflicts between State and Federally qualified subsistence hunters, the area biologist cooperated with the Petersburg Ranger District to

restrict guided nonresident goat hunting activity in the Horn Cliff, Thunder Mountain and LeConte Bay drainages. This restriction on guided nonresident hunt activity in the Horn Cliff and LeConte Bay drainages was eased during the late-season when it became apparent that the goat population could withstand additional harvest without compromising subsistence opportunity or exceeding the harvest guideline.

Unit 4: Extensive work was done with Forest Service staff and registered guides to make sure the harvest guidelines were understood and observed. High quality photos of billies and nannies were obtained and posted at the front counter to enable hunters to better identify differences between the sexes in the field. The management guideline of 78 points was exceeded by 1 point due to an illegal kill.

ACTIVITY 5: Monitor cases of contagious ecthyma (ORF) and other diseases in goat populations.

ADF&G biologists conducted numerous interviews with goat hunters inquiring about any evidence of ORF in goat populations being hunted. During this report period, Contagious Ecthyma was documented in Unit 1C (1 case) and Unit 5 (2 cases). Although generally rare, there seems to be periodic occurrences of this disease in southeast Alaska. No occurrences of contagious ecthyma were reported in Unit 1B during the report period

Activities by Unit

Unit 1C

ACTIVITY 1: Monitor the impact of sightseeing helicopter flights on selected populations.

No work was done on this activity because of limitations of staff time and expense of surveys.

Unit 4

ACTIVITY 1: Capture and radio-collar up to six goats on Baranof Island to study movement and habitat utilization.

No progress was made on this activity due to a lack of funding anticipated from the Forest Service.

ACTIVITY 2: Monitor habitat change in high concentrations goat areas.

The late and extensive snowpack experienced in March 2007 prevented monitoring during the report period.

Submitted by: Dale L. Rabe, Region I Management Coordinator

The Status of Mountain Goats and Factors Influencing Their Populations in Region II

Region-wide Activities

ACTIVITY 1: Prepare a biennial regional mountain goat management report.

In 2006, we completed biennial reports for *Unit 11, 13D, 14A* and *14C*.

ACTIVITY 2: Conduct summer aerial sex and age population composition surveys to determine status, trend, productivity and mortality.

Unit 6: We conducted four aerial surveys indicating stable goat populations. Extremely poor weather precluded additional surveys.

Units 7 and 15: Six count areas were surveyed resulting in the classification of 430 goats. The composition was 343 adults/subadults, and 87 kids (20%).

Unit 8: During August 2006, we surveyed about 35% of the goat habitat on Kodiak Island. We counted 577 goats, classified as 472 adults and 105 kids. The kid: adult ratio (23:100) was comparable to the average ratio noted during the previous five years (22:100). This suggests the island-wide goat productivity was stable during this reporting period, with localized fluctuations. The estimated unit-wide population was 1,780 during this reporting period, down from the 2005 estimate of 1,900.

Unit 11: Count area 21, May 2006, 55 adults, 16 (23%) kids

Unit 13D: Count area 1, July 2006, zero.

Count area 2, July 2006, 29 adults, 5 kids (15%)

Count area 3, July 2006, 35 adults, 10 kids (22%)

Count area 4, July 2006, zero.

Count area 5, July 2006, 16 adults, 8 kids (33%).

Unit 14: In *14A* we completed surveys for count areas A-F classified 131 goats as 102 adults and 29 kids. In *subunit 14C* no surveys were conducted due to inclement weather.

ACTIVITY 3: Monitor the goat harvest through field observations, hunter harvest reports and contact with hunters.

Unit 6: Preliminary 2006/07 harvest: 69 goats including 52 males and 17 females.

Unit 8: Expansion of goat populations into virtually all available habitats around Kodiak Island allowed us to increase hunter opportunity. The number of drawing permits increased during the 2006/07 season to 497. Registration hunts also occurred after the drawing hunt season in seven of the nine hunt areas where an allowable surplus remained. We issued Emergency Orders to close registration permit hunts RG473 and RG479 on Oct. 26, 2006, prior to the hunt opening Nov. 1. Preliminary data indicate that in 2006/07 hunters harvested 171 goats (103 males, 68 females), up from the 2005/06 harvest of 149 goats, and above the 5-year average of 120.4 goats. Of the 497 drawing permits issued, 282 hunters went into the field, and hunter success was 55%. During the registration hunt, we issued 133 permits, 45 hunters went into the field, and hunter

success was 38%. The harvest ranged from 3-41 goats for each of the nine permit hunt areas.

Units 7 and 15: harvest for all permit hunts was: billies = 34, nannies = 18, Total = 52.

Unit 11: Preliminary harvest in RG580: 35 permits issued, 18 hunters took six billies.

Unit 13D: Preliminary harvest: 10 permits were issued for DG718, six hunters took two billies and three nannies. In DG719, 25 permits were issued, 14 hunters killed one billy.

Unit 14: In *14A*, preliminary harvest 2006-07 was six, five of them billies. In *14C*, preliminary harvest 2006-07 was 22, 16 of them billies.

Activities by Unit

Units 7 and 15

ACTIVITY 1: In cooperation with the US Forest Service Chugach National Forest capture and radio collar up to 20 mountain goats to determine habitat use and movements.

We captured and radio-collared seven goats on July 27, 2006; five on July 28, 2006; and four on June 29, 2007.

Submitted by: Gino DelFrate, Region II Management Coordinator