MOUNTAIN GOAT
ANNUAL SURVEY AND INVENTORY

STATE: Alaska

GRANT AND SEGMENT NUMBER: AKW-4 Wildlife Restoration FY2015

PROJECT NUMBER: 12.0

PERIOD: 1 July 2014 – 30 June 2015

PROJECT LOCATION: Statewide

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

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

The Status of Alaska Mountain Goat and Factors Influencing Their Populations in Region I

Regionwide Activities:

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

Data from goat harvest and survey information will be provided to the Alaska Board of Game and Regional Advisory Council at their next regularly scheduled meeting (winter 2015). Data was also provided to the federal managers during this reporting period to assist them with justification for goat season closures that we believed were important.

ACTIVITY 2: Conduct mountain goat surveys, including sex and age composition in key management areas within the region.

Unit 1A: Ketchikan staff conducted several mountain goat surveys during fall 2014. Surveys were concentrated in areas that receive the highest levels of hunting pressure. Counts were highly variable between survey areas. The Deer Mountain drawing permit hunt area had the highest survey count on record with 291 observed goats (192 adults and 99 kids). Goat numbers in Unit 1A appear stable overall though we have continued concerns for the Cleveland Peninsula and Yes Bay areas.
Unit 1B: The Petersburg staff conducted aerial surveys in 4 of 27 established trend-count areas during the report period. Fall aerial surveys were concentrated in the Horn Cliffs, Thunder Mountain and northern Le Conte Bay areas, which because of their proximity to the community of Petersburg, typically receive the highest levels of hunting pressure. A total of 150 goats were observed, including 117 adults and 33 kids.

Unit 1C: Staff conducted aerial surveys in several areas:
- Mount Bullard to Taku North (362 goats: 291 adults and 71 kids),
- North Tracy Arm (129 goats: 103 adults and 26 kids),
- Mendenhall Glacier to Herbert Glacier (15 goats: 13 adults, 2 kids),
- Herbert Glacier to Sawmill Creek (84 goats: 65 adults and 19 kids),

Unit 1D: No aerial surveys were conducted by management staff in this unit during the report period.

Unit 4: The Sitka staff conducted limited aerial surveys in the northern half of the Baranof Island. Four hundred and sixty goats were observed with 366 adults and 94 kids. This represented a 10% increase in the number of kids observed from the previous year.

Unit 5: No surveys were conducted in this unit during this 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. Forty permittees participated in the hunt.
- Unit 1A: 18 goats were harvested (12M, 6F) and most were sampled from hunt RG001
- Unit 1A: 15 goats were harvested (12M, 3F) and most were sampled from hunts DG005-007.

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. Forty four permittees participated in the hunt.
- Unit 1B: 192 goats were harvested.
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. One hundred forty-eight permittees participated in the hunts.

Unit 1C: 40 goats were harvested, and none were sampled.
Unit 1D: 33 goats were harvested and 21 were sampled.
Unit 5: No goats were harvested.

Unit 4: 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. Fifty four permittees participated in the hunt.

Unit 4: 20 goats were harvested and all were sampled.

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

Efforts continue across the region to manage goats at finer scales dictated by hunter access. This has become necessary to prevent localized overharvest.

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

We monitor incidence of contagious ecthyma through conversation with hunters while measuring horns and aging goats. We also maintain dialog with a number of commercial guides who spend a great deal of time in goat country and keep a look out for any oddities with goats. No cases of contagious ecthyma were identified during this report period.

ACTIVITY 6: Work with relevant agencies (USFS and BLM), community leaders and helicopter operators to address concerns about helicopter tourism on mountain goats.

These efforts continued during this reporting period, in particular, in the Haines and Skagway areas, and with the community of Haines.

Unit Specific Activities

Unit 1B

ACTIVITY 1: Identify discrete geographic areas for use as goat trend count areas.

This activity was completed during previous report periods.

ACTIVITY 2: Conduct aerial surveys to establish the minimum number of goats needed to maintain harvest opportunities for the LeConte Bay management area.
Goat surveys were conducted in this area and sufficient goats were observed to increase harvest opportunities.

**ACTIVITY 3**: Conduct aerial surveys to establish the minimum number of goats needed to maintain harvest opportunities for the Thomas Bay management area.

No goat surveys were conducted in the Thomas Bay area during the report period.

**ACTIVITY 4**: Conduct aerial surveys to establish the minimum number of goats needed to maintain harvest opportunities for the Cleveland Peninsula management area.

Several goat surveys including sightability surveys were completed on the Cleveland Peninsula. During the most recent survey, 20 goats total were observed (13 adults, 7 kids). No harvest opportunities are warranted at this time.

We are continuing to monitor collared goats on the Cleveland and retrieve collars as goats die or drop collars. Currently there are 4 collared goats in this area.

**Unit 1C**

**ACTIVITY 1**: Identify discrete geographic areas for use as goat trend count areas.

This effort had been accomplished during previous report periods.

**ACTIVITY 2**: Monitor, as information becomes available while talking to people traveling in goat habitat, the impact of sightseeing helicopter flights on selected populations.

This is an informal effort that takes place spontaneously during discussions with goat hunters, hikers, campers, etc.

**ACTIVITY 3**: Monitor, as information becomes available the course of contagious ecthyma (ORF) in northern southeast populations in case we want to develop a separate research study.

We talked to many goat hunters during the season about this disease, but did not have any positive observations.

**ACTIVITY 4**: Monitoring and of populations in areas where road construction, hydro projects or mining development may occur.

We continue to work with our research staff to monitor goats in areas in northern Southeast Alaska where there is mining activity underway and where road construction is a possibility in the near future.

**Unit 1D**

**ACTIVITY 1**: Identify discrete geographic areas for use as goat trend count areas.

We completed this activity during previous report periods.

**ACTIVITY 2**: Conduct aerial surveys to establish the minimum number of goats needed to provide harvest opportunities for the Skagway management area.
No surveys were conducted, but we plan to get a good survey in during RY15.

ACTIVITY 3: Monitoring and some capturing and radio-collaring of populations in areas where road construction or mining development may occur.

Management staff did not assist research staff in the capture and radio collaring of goats during this fiscal year.

Unit 4

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

This was accomplished.

Submitted by: Tom Schumacher, Region I Management Coordinator

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

Region wide Activities:

ACTIVITY : Prepare a biennial regional mountain goat management report.

Area staff prepared information and produced the 2014 management report and submitted for publication. The department is transitioning to a 5-year report and plan. The next report will be published in 2019.

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

Surveys were completed in selected hunt areas within individual GMUs. See area specific activities.

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

These are standard activities accomplished in each office. See area specific activities.

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

Staff routinely interact with federal staff and discuss management of mountain goats relative to the respective regulatory systems. Staff prepared and presented information on the status and management of mountain goats to the Board of Game at the Region II meeting.

Activities by Unit:
Unit 6

ACTIVITY: Surveys were performed in the following hunt areas: RG226, RG266, RG232, and RG249. These data represent minimum counts with no adjustments for sightability. Goat densities ranged from 0.5-7.67 goats/square mile. Data for specific hunt areas relative to previous minimum counts show an increase which may not be entirely attributable to exceptional sightability. Kid production has been high the last two years. With 17-37 kids observed per 100 adults.

ACTIVITY: We issued 353 goat hunt permits. Harvest was 78 males, 13 females (14%), and 0 unknowns for a total of 91 goats.

Units 7&15

ACTIVITY: Thirteen count areas were surveyed during the performance period. The count areas surveyed are traditionally known to hold lower numbers of goats than other count areas on the Kenai Peninsula. Within these areas a total of 543 goats were counted of which 443 were adults and 100 were kids. The overall population trend for mountain goats on the Kenai Peninsula is slightly increasing.

ACTIVITY: Sixty-two goats where harvested during the reporting period. Thirty-two percent of these were nannies, slightly more than the five year average, but less than the historic average nanny harvest. Three hundred and forty-five permits were issued of which 151 were hunted. Forty-one percent of hunters were successful.

Unit 8

ACTIVITY: During August 2014, in cooperation with the Kodiak National Wildlife Refuge, we conducted aerial surveys on approximately 80% of known goat habitat on Kodiak Island yielding 2,513 goats including 1,956 adults and 557 kids. Surveys indicate a kid:adult ratio of 28 kids per 100 adults. The island-wide goat population is estimated to be approximately 2,800 goats, up slightly from the 2013 estimate of 2,588 goats. Despite localized declines and increases observed in certain hunt areas, these data suggest the island-wide goat population was stable to slightly increasing during this reporting period.

ACTIVITY: We issued 284 drawing permits and 152 hunters reported hunting with a success rate of 62%. We issued 1,521 registration permits and 653 hunters reported hunting with a success of 38%. A total of 38 hunters successfully harvested 2 goats in registration hunt area RG480. Overall, hunters harvested 344 goats (203 males, 141 females) in 2014–15, up considerably from 255 goats (154 males, 100 females, 1 unknown) harvested during the 2013–14 season. The 2014–15 harvest was the highest on record.

Activity: Fifteen mountain goats (8 males, 7 females) were captured and radio collared on Kodiak Island from 28–30 June 2013. Radio collared goats are monitored regularly and location data downloaded opportunistically as time and weather permits. Mountain goat distribution, movements, and resource use will be analyzed periodically as location data is collected. One
male goat was harvested by a hunter and 1 male goat has either died or slipped its collar. There are currently 13 radio-collared goats (6 males, 7 females) collecting GPS data.

**Unit 14C**

ACTIVITY: No goat surveys were conducted in GMU 14C during this reporting period due to poor survey conditions.

ACTIVITY: Goat harvest was monitored through harvest reports and contacts with hunters.

Goats Harvsted included 26 billies and 6 nannies for 18.8 percent females.

Submitted by: Gino Del Frate, Region II Management Coordinator

The Status of Alaska Mountain Goat and Factors Influencing Their Populations in Region IV

Region wide Activities:

ACTIVITY 1: Prepare biennial regional mountain goat management report.

Biennial goat reports were written and submitted to the region for review.

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

*Unit 11*: Count area 21: 44 adults, 13 kids

*Unit 14A*: Chugach Mountains: 170 adults, 45 kids

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

<table>
<thead>
<tr>
<th>Unit</th>
<th>Male</th>
<th>Female</th>
<th>Unknown</th>
<th>Total Harvest</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>13D</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>14A</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>6</td>
</tr>
</tbody>
</table>

Covers GMUs: 11, 13, and 14A

Submitted by: Lem Butler, Region IV Regional Supervisor