

Mountain Goat Management Report and Plan, Game Management Unit 1B:

Report Period 1 July 2013–30 June 2018, and
Plan Period 1 July 2018–30 June 2023

W. Frank Robbins



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PREPARED BY:

W. Frank Robbins
Area Wildlife Biologist

APPROVED BY:

Richard Nelson
Management Coordinator

REVIEWED BY:

Tessa Hasbrouck
Wildlife Biologist

PUBLISHED BY:

Patricia Harper
Technical Reports Editor

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Alaska Department of Fish and Game
Division of Wildlife Conservation
PO Box 115526
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Species management reports and plans provide information about species that are hunted or trapped and management actions, goals, recommendations for those species, and plans for data collection. Detailed information is prepared for each species every 5 years by the area management biologist for game management units in their areas, who also develops a plan for data collection and species management for the next 5 years. This type of report is not produced for species that are not managed for hunting or trapping or for areas where there is no current or anticipated activity. Unit reports are reviewed and approved for publication by regional management coordinators and are available to the public via the Alaska Department of Fish and Game's public website.

This species management report and plan was reviewed and approved for publication by Richard Nelson, Management Coordinator for Region I for the Division of Wildlife Conservation.

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Purpose of this Report

This report provides a record of survey and inventory management activities for mountain goats in Game Management Unit 1B for the 5 regulatory years 2013–2017 and plans for survey and inventory management activities in the next 5 regulatory years, 2018–2022. A regulatory year (RY) begins 1 July and ends 30 June (e.g., RY14 = 1 July 2014–30 June 2015). This report is produced primarily to provide agency staff with data and analysis to help guide and record agency efforts but is also provided to the public to inform it of wildlife management activities. In 2016 the Alaska Department of Fish and Game's (ADF&G, the department) Division of Wildlife Conservation (DWC) launched this 5-year report to report more efficiently on trends and to describe potential changes in data collection activities over the next 5 years. It replaces the mountain goat management report of survey and inventory activities that was previously produced every 2 years.

I. RY13–RY17 Management Report

Management Area

Game Management Unit 1B (an administrative subunit of Unit 1) consists of approximately 7,770 km² (3,000 mi²) of land area on the central Southeast Alaska mainland, extending from Cape Fanshaw south to Lemesurier Point and northeast of those points to the Canadian Border. Most land area in Unit 1B is within the Tongass National Forest and under federal ownership, with smaller parcels under tribal, state, and private ownership. There are no large communities in Unit 1B, although private in-holdings and small settlements exist at Point Agassiz and Farm Island. The unit is accessible only by boat or airplane although some local logging roads provide limited road access.

The Stikine River is a transboundary mainland river system that originates in the Spatsizi Plateau of British Columbia and transects the Coast Range before flowing into Sumner Strait near Wrangell, Alaska. About 30 miles of the river lie within the boundaries of Alaska and it flows through a steep valley 2–3 km wide. The Stikine Delta is the largest intertidal wetland in Southeast Alaska and consists of 200 km² (77 mi²) of marsh and tidal flats. Elevation within Unit 1B ranges from sea level to 2,767 meters (9,078 ft). Predominant vegetative communities occurring at low-moderate elevations include Sitka spruce (*Picea sitchensis*) western hemlock (*Tsuga heterophylla*) coniferous forest, mixed-conifer muskeg, and deciduous riparian forests. Mountain hemlock (*Tsuga mertensiana*) dominated forest comprises a subalpine, timberline band occupying elevations between 457 and 762 meters (1,500–2,500 ft). In addition to deer, big game species present and widely distributed throughout Unit 1B include moose (*Alces alces andersoni*), mountain goats (*Oreamnos americanus*), wolves (*Canis lupus ligoni*), black bears (*Ursus americanus*), and brown bears (*Ursus arctos*).

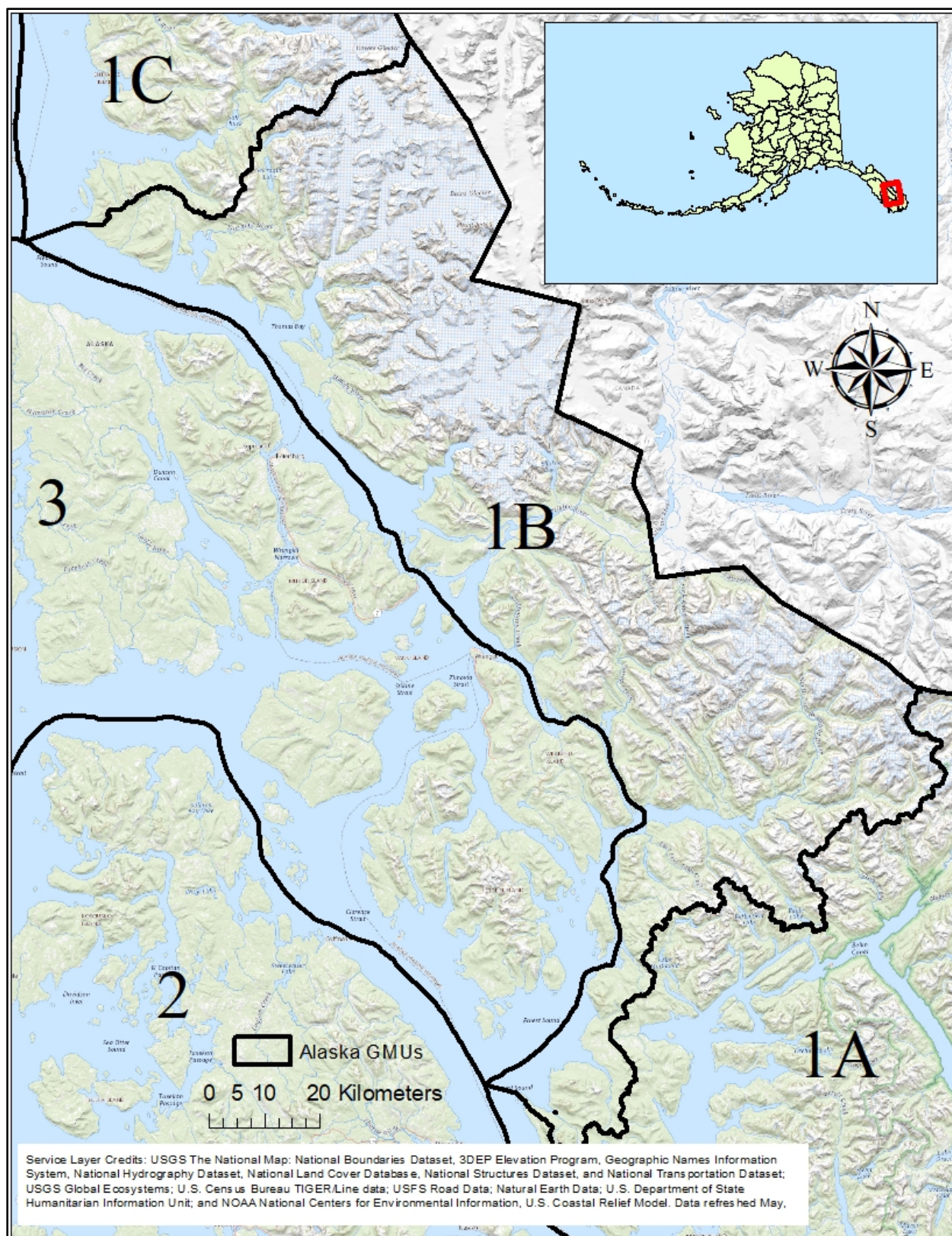


Figure 1. Map of Game Management Unit 1B in Alaska.

Summary of Status, Trend, Management Activities, and History of Mountain Goat in Unit 1B

Mountain goats in Southeast Alaska use alpine, subalpine, and heavily forested habitats (Fox 1983, Schoen and Kirchhoff 1982, Smith 1986), typically in proximity to steep escape terrain that provides security from predators. Considered generalist feeders (Dailey et al. 1984), goats consume a wide variety of plant types (Geist 1971, Adams and Bailey 1982). The Alaska Department of Fish and Game (ADF&G) does not have an estimate of suitable goat habitat in Unit 1B. About 850 square miles is forest habitat, some of which serves as important goat winter range, particularly during periods of severe winter weather. In spring, goats occupy avalanche chutes and low elevation south-facing slopes, where they forage on alder, rhizomes, and new shoots of ferns. As snow melts in the summer, goats move to high elevation alpine and subalpine habitats where they feed on newly exposed and highly nutritious sedges and forbs (Fox et al. 1989). During winter, goats in the colder mainland areas of Southeast Alaska occupy steep or windswept slopes with little snow cover, whereas those in the warmer coastal areas typically descend to forest habitats during periods of heavy snowfall. Winter is a period of severe nutritional deprivation and food scarcity for mountain goats (Fox et al. 1989). Forage availability and selection are influenced to a large extent by snowpack depth and density. During winter, goats feed on conifers, mosses, and lichens, and to lesser degree shrubs, forbs, ferns, and grasses (Smith 1986). As a result of high annual precipitation, most goat winter range in Southeast Alaska is limited to forested habitats. During periods of severe winter weather and heavy snowfall goats may even descend to forested coastal shorelines.

Until recently, quantitative data on goat movement patterns and winter diet were limited to data obtained from radiotelemetry studies conducted in Unit 1C (Schoen 1979), Unit 1A, and the extreme southern portion of Unit 1B (Smith 1982). Radiotelemetry studies in Units 1A, 1B, 1C, and 1D have provided valuable information on the seasonal movement patterns and survival rates of goats on the Unit 1 mainland (White 2006; White et al. 2007; White and Barten 2008, 2009; White et al. 2012*a, b, c*; White et al. 2013). Southeast Alaska mountain goats occur on most mainland ridge complexes. Goat distribution information in Unit 1B is limited to observations made during ADF&G aerial surveys, observations by staff, and anecdotal reports from the public. Although widely distributed across the unit, in some areas goats are notably absent or present in small numbers despite the availability of apparently suitable habitat.

The largest threats to mountain goat habitat are development activities associated with logging, mining, and hydroelectric power (Fox et al. 1989). To date, an estimated 14,000 acres of forested habitat in the unit have been logged and are now clearcuts in various stages of seral habitat that include some logging roads. Clearcuts and pole stands are considered poor goat winter habitat and roads can make goats vulnerable to exploitation due to increased human access.

Mountain goats are indigenous to Unit 1B and are distributed throughout appropriate habitat. They have traditionally been hunted for food and trophies. Prior to 1975, all Unit 1 subunits were managed under the same goat season and bag limit. After statehood in 1959, season dates varied and normally fell between 1 August and 31 January, and the resident and nonresident bag limit was 2 goats. Since 1973, the Unit 1B goat season has remained 1 August–31 December. In the late 1960s and early 1970s, a succession of severe winters greatly reduced the goat population in

the unit. Since 1975, Unit 1B has been managed separately from the remainder of Unit 1 and the bag limit has fluctuated between 1 and 2 goats.

Since 1980, a registration permit has been required to hunt goats in Unit 1B. From 1991 to the present the unit has been divided into 2 separate registration hunts. In RG001 (formerly 801), that portion of Unit 1B south of the North Fork Bradfield River, a 2-goat bag limit was established. A 1 goat bag limit was established for the RG004 (formerly 804) hunt area, or that portion of the unit north of the North Fork Bradfield River.

Due to concerns about a population decline, from 1987 to 1989 the Muddy River, Horn Cliffs, and LeConte Bay areas were managed via a separate registration hunt (807). In 1987 and 1988, the bag limit was restricted to 1 male goat. From 1989 to 1991, the bag limit was changed to 1 goat of either sex; however, the taking of kids or nannies with kids was prohibited. Although the separate registration hunt for the Horn Cliffs area was abolished in 1991, the regulation prohibiting the taking of kids or nannies with kids remained in effect for that portion of Unit 1B north of the North Fork Bradfield River until 1994. In July 1989, a law was enacted requiring all nonresident goat hunters to employ the services of a big game guide. Since then, the percentage of goats taken by guided nonresidents has increased annually, with significant increases during the mid to late 1990s. In 1997, the Federal Subsistence Board determined that all rural residents of Units 1B and 3 qualify as subsistence users of goats. In that portion of Unit 1B between LeConte Bay and the North Fork of the Bradfield River, federal regulations require a state permit for the taking of the first goat and a federal registration permit for the taking of a second goat. Immediately prior to the fall 2000 hunting season, under discretionary permit hunt requirements, ADF&G shortened the period within which successful goat hunters must report their take from 10 to 5 days regionwide.

Due to conservation concerns, in fall 2002 the Alaska Board of Game (BOG) closed the resident and nonresident mountain goat season (RG001) in that portion of Game Management Units 1(A) and 1(B) on the Cleveland Peninsula south of the divide between Yes Bay and Santa Anna Inlet. In a separate action, the board also reduced the bag limit from 2 goats to 1 goat in that portion of Unit 1B south of the Bradfield Canal and the north fork of the Bradfield River. However, federal subsistence regulations continue to allow rural residents of Units 1B and 3 to harvest a second goat, by federal permit, in that portion of Unit 1B located south of LeConte Bay and north of the North Fork of the Bradfield River.

In fall 2004, an Emergency Order (EO) was issued for the early closure of the resident and nonresident mountain goat season (RG004) in that portion of Game Management Unit 1(B) located within the drainages of LeConte Bay and the Wilkes Range. This closure was the result of the goat harvest objective having been achieved in those drainages before the season's end.

In fall 2005, for the second consecutive year, an EO was issued for the early closure of the season (RG004) in the Unit 1(B) drainages of LeConte Bay and the Wilkes Range. In this instance, however, the closure was expanded to include the drainages of Horn Cliffs and Thunder Mountain. This emergency closure was again the result of the goat harvest objective having been achieved early in the season in those drainages.

In fall 2006, the Board of Game adopted a department-sponsored proposal prohibiting the taking of nannies accompanied by kids in Units 1–5. Since 2006, no additional changes to goat hunting regulations in Unit 1B have taken place.

From 1973 to 2000, the Unit 1B harvest averaged 30 goats per year, ranging from a low of 15 goats in 1975 to a high of 50 goats in 1990. The harvest has remained relatively stable, averaging 21 goats per year for the 5-year period through 2017. The overwhelming majority of the annual harvest occurs in RG004, that portion of the subunit north of the North Fork of the Bradfield River.

Petersburg and Wrangell residents have historically represented the largest group of hunters and traditionally harvested the majority of goats taken in Unit 1B. However, those trends have weakened in recent years. The harvest by nonresidents exceeded that of local residents (residents of Petersburg, Wrangell, or Kake) for the first time in 2001, and that occurred for 9 of the next 16 years. In 2004, for first time since at least 1984, the number of goats harvested by nonlocal residents also exceeded the number taken by local residents, which also occurred in 2012.

Annual differences in fall and winter weather conditions and the number of guided hunts can have a profound influence on harvest chronology in the unit. Between 1985 and 1998, most goat harvest during the 5-month season occurred during September and August. Since then, however, there has been an increase in the percentage of the annual harvest taken during the late season. This appears to be the result of an increasing desire on the part of hunters to harvest goats with prime winter pelage, and/or take advantage of easier hunting opportunities when goats are frequenting lower elevations.

In 2000, the proportion of the annual harvest taken in December surpassed that of any other month for the first time. This trend was alleviated somewhat in 2003, 2004 and 2005, partly because winter weather conditions were not conducive to late-season goat hunting, but also because of the early season closures within the drainages of LeConte Bay and the Wilkes Range in 2004, and of Horn Cliffs, Thunder Mountain, LeConte Bay and Wilkes Range in 2005. In recent years, interagency efforts to limit the number of guided hunts during the late season have reduced the percentage of the harvest occurring during the late season during most years.

Since 1985, the largest percentages of the annual Unit 1B goat harvest have occurred in LeConte Bay, Stikine River, and Thomas Bay. Hunters have limited access to most goat habitat in the unit, so hunting pressure tends to be focused near saltwater access points. Hunters access goat habitat by hiking up from saltwater, river drainages, or logging roads, or by using floatplanes to fly into a few usable subalpine and alpine lakes in the unit. The few high elevation lakes suitable for landing aircraft are generally accessible only during the early season before lakes freeze over. Goats can become increasingly accessible to hunters from saltwater later in the season, when snow typically forces them to lower elevation winter range. In Unit 1B these areas include Horn Cliffs, LeConte Bay, and Thomas Bay, and the Patterson River. Because of increased accessibility and vulnerability to harvest in some areas, we monitor the late season harvest closely.

Management Direction

EXISTING WILDLIFE MANAGEMENT PLANS

- Southeast Alaska Mountain Goat Management Plan in 1976 Alaska Wildlife Management Plans (ADF&G 1976).

Management objectives and harvest management strategies that may have changed since the plan was written based on public comment, staff recommendations, and BOG actions have been reported through the years in the division's previous mountain goat management reports for Unit 1B.

GOALS

- To provide for a sustainable harvest of mountain goats in Unit 1B.
- To provide the greatest opportunity to participate in hunting of mountain goats in Unit 1B while maintaining aesthetically pleasing hunt conditions.
- Provide an opportunity for nonconsumptive uses (viewing and photographing) of mountain goats in Unit 1B.
- Discourage land use practices that adversely affect mountain goat habitat.

CODIFIED OBJECTIVES

Amounts Reasonably Necessary for Subsistence Harvest

The Alaska Board of Game has made a positive customary and traditional use determination for mountain goats in Unit 1B with the amount reasonably necessary for subsistence established as 5–10 (5 AAC 99.025(7)).

Intensive Management

Not applicable.

MANAGEMENT OBJECTIVES

- Conduct aerial surveys to establish the minimum number of goats needed to maintain harvest opportunities for the LeConte Bay management area.
- Conduct aerial surveys to establish the minimum number of goats needed to maintain harvest opportunities for the Thomas Bay management area.
- Conduct aerial surveys to establish the minimum number of goats needed to maintain harvest opportunities for the Cleveland Peninsula management area.
- Maintain a guideline harvest not to exceed 6 points per 100 goats observed (where male goats = 1 point, and female goats = 2 points) during at least 2 consecutive surveys in management areas.

MANAGEMENT ACTIVITIES

1. Population Status and Trend

ACTIVITY 1.1. Monitor the mountain goat population in Unit 1B.

Data Needs

Mountain goat abundance data are necessary to determine population status in relation to management objectives.

Methods

Aerial surveys were conducted within established trend count areas to obtain the number of goats and the percentage of kids in the population. ADF&G used the results of the aerial surveys to establish harvest objectives for specific mountain goat populations within registration hunt areas. These objectives allow for a harvest quota of 5–6 points per 100 goats observed based on the most recent aerial survey and population trend data. Male goats count as 1 point and females 2 points toward the allowable harvest quota. Once the harvest quota has been achieved for a specific goat population, emergency orders are issued closing the goat hunting season in that area. To avoid localized depletion of goats, the 5–6 point harvest quota may be applied to small discrete areas within larger registration hunt areas.

Results and Discussion

Precise population estimates are not available for goats in Unit 1B. U.S. Forest Service (USFS) and ADF&G biologists estimated that Unit 1B could support approximately 1,219 goats, based on the availability of suitable winter habitat indicated by a mountain goat habitat capability model (Suring 1993). Although data are insufficient to determine precise goat population trends, available information indicates that except for the Cleveland Peninsula, most Unit 1B goat populations have remained relatively stable, with some increasing, since RY00.

Table 1 shows the recent 5 years of age composition data from aerial trend counts, 2013–2017. Differences in sample size occur because of annual differences in survey coverage and because inclement weather frequently makes complete surveys difficult. In the September 2016 surveys, 180 goats were observed and 19% of the goats classified were kids. In the September 2017 surveys, 183 goats were observed and 25% of the goats classified were kids. Annual differences in survey coverage and uncertainties about the sightability of goats during aerial surveys make it difficult to develop precise population estimates for the entire unit. Nonetheless, aerial surveys provide valuable information with which to establish harvest guidelines and to monitor population trends within select portions of the broader unitwide goat population. Because not all the 27 individual trend count areas in Unit 1B can be surveyed annually, survey efforts typically focus on trend count areas that receive the most hunting pressure.

Recommendations for Activity 1.1

Continue.

Table 1. Unit 1B, Alaska, aerial mountain goat composition counts, regulatory years 2013–2017.

Regulatory year ^a	Adults	(%)	Kids	(%)	Unknown	Kids: 100 adults	Total goats observed	Goats /hour
2013 (Oct)	197	(85)	35	(15)	0	18	232	89
2014 (Sep)	117	(78)	33	(22)	0	28	150	97
2015 (Oct)	244	(83)	51	(17)	0	21	295	96
2016 (Sep)	145	(81)	35	(19)	0	24	180	118
2017 (Sep)	138	(75)	45	(25)	0	33	183	— ^b

^a Different portions of the unit are flown in different years; data are not directly comparable.

^b Survey duration information is not available for 2017.

2. Mortality-Harvest Monitoring and Regulations

ACTIVITY 2.1. Monitor mountain goat harvest in Unit 1B.

Data Needs

Unit 1B mountain goats are managed during the season using quotas based on recent population estimates. Therefore, timely reporting of harvest is crucial for not exceeding harvest objectives, particularly for the harvest of females.

Methods

We monitored hunter harvest through a registration permit system. All permit holders are required to report, and those hunting reported the location and duration of their hunts and/or kills, transportation used, and date and sex of kill. We also recorded anecdotal information from hunters and guides.

Season and Bag Limit

Season and bag limit

Unit 1B, that portion
north of Bradfield Canal
and the north fork of the
Bradfield River

1 goat by registration
permit only

Units 1(A) and 1(B), that portion
on the Cleveland Peninsula
south of the divide between
Yes Bay and Santa Anna Inlet

Remainder of Unit 1B

1 goat by registration
permit only

Resident and nonresident hunters

1 Aug–31 Dec
(General hunt only)

No open season

1 Aug–31 Dec
(General hunt only)

Results and Discussion

Harvest by Hunters

The average annual harvest of 21 goats during this report period represented an increase from the average annual harvest of 11 goats during the preceding 5-year period (Table 2). The harvest of 24 goats in RY15 was the highest goat harvests in Unit 1B since 2005. During the report period the overall success rate for those permittees who hunted was 44%, with annual success ranging from 37% to 51%. This rate of success was an increase from the 35% overall success during the previous 5-year period. During this report period males composed 85% of the harvest, ranging from 68% to 95%. The sex of harvested goats was obtained from registration hunt reports and was not verified by checking hunter kills. We distributed literature and made available videotapes designed to help hunters identify male goats in the field and encouraged them to select males.

Table 2. Unit 1B, Alaska, harvest data by permit hunt, regulatory years 2013–2017.

Hunt	Year	Permits issued	No. hunted	(%) did not hunt	No. successful hunters	(%) successful hunters	No. males	(%) males	No. females	Total harvest
RG001 in Unit 1B ^a	2013	—	—	—	—	—	0	(0)	0	0
	2014	—	—	—	—	—	0	(0)	0	0
	2015	—	—	—	—	—	0	(0)	0	0
	2016	—	—	—	—	—	0	(0)	0	0
	2017	—	—	—	—	—	0	(0)	0	0
RG004	2013	112	47	(58)	21	(45)	20	(95)	1	21
	2014	103	44	(57)	19	(43)	13	(68)	6	19
	2015	102	47	(54)	24	(51)	21	(88)	3	24
	2016	111	47	(57)	22	(47)	19	(86)	3	22
	2017	121	57	(53)	21	(37)	18	(86)	3	21

^a This hunt occurs in both Unit 1A and Unit 1B and this table provides only what is known about harvest in Unit 1B. For RY13–RY17, no hunter reported harvesting a goat in Unit 1B. An en dash in a cell indicates that the information is unavailable or cannot be determined specifically for Unit 1B. For more information about the RG001 hunt, see the Unit 1A mountain goat report.

During this report period a total of 58 nonresidents hunted goats in Unit 1B, averaging 12 nonresident hunters annually (Table 3). Of those, 50 hunters used a big game guide and 8 were accompanied by next-of-kin. Thirty-four goats were harvested by guided hunters during RY13–RY17.

Table 3. Unit 1B, Alaska, mountain goat hunter residency and success, regulatory years 2013–2017.

Regulatory Year	Successful hunters					Unsuccessful hunters					Total hunters
	Local ^a resident	Nonlocal resident	Nonresident	Total	%	Local ^a resident	Nonlocal resident	Nonresident	Total	%	
2013	9	2	10	21	44	23	2	2	27	56	48
2014	8	4	7	19	43	16	5	4	25	57	44
2015	12	5	7	24	51	15	4	4	23	49	47
2016	11	2	9	22	47	17	5	3	25	53	47
2017	8	7	6	21	37	16	14	6	36	63	57

^a Residents of Petersburg, Wrangell, and Kake.

Local participation in goat hunting increased from an average of 22 hunters during the previous 5-year period, to 27 during this report period, and the number of local residents who reported hunting goats in Unit 1B each year ranged 24–32.

Federal subsistence regulations allow qualified local residents to take a second goat in that portion of Unit 1B located south of LeConte Bay and north of the North Fork of the Bradfield River. During the report period, 3 federal permits (FG0103) were issued for the taking a second goat in the unit, and no goats were harvested.

Permit Hunts

All mountain goat hunting in Unit 1B is by registration permit only. During this reporting period an average of 110 permits were issued annually (range 102–121). Of those permits issued, 56% of permit holders reported that they did not hunt mountain goats. Hunters that did participate enjoyed a 44% success rate (Table 2).

Hunter Residency and Success

During this reporting period harvest by local residents exceeded nonresident harvest, except in RY13 (Table 3).

Local residents traditionally represent the largest group of unsuccessful hunters, and this was the case during this report period. During this report period, local residents had 36% success and nonlocal residents had 40% success. Many local residents hunt primarily from the beach during the late season, hoping for an easy opportunity to harvest a goat. During this report period the overall success rate for guided nonresident hunters was 67%, with annual success ranging from 50% to 83%. Because of the guide requirement, nonresident hunters typically enjoy the highest success rate (67%), and this was the case during the report period.

Harvest Chronology

Weather, particularly during the late season, can have a profound influence on harvest chronology. The greatest proportions of the harvest during this report period occurred in August, November, and September in descending order. While 24% of the harvest occurred in December during RY13, only 11% of the harvest occurred in December across the entire reporting period. (Table 4).

Table 4. Unit 1B, Alaska, mountain goat harvest chronology, percent by month, regulatory years 2013–2017.

Year	Month										Total harvest
	August		September		October		November		December		
	<i>n</i>	(%)	<i>n</i>	(%)	<i>n</i>	(%)	<i>n</i>	(%)	<i>n</i>	(%)	
2013	4	(19)	6	(28)	1	(5)	5	(24)	5	(24)	21
2014	4	(21)	2	(10)	3	(16)	8	(42)	2	(10)	19
2015	6	(25)	6	(25)	4	(17)	4	(17)	4	(17)	24
2016	10	(45)	6	(27)	2	(9)	4	(18)	0	(0)	22
2017	5	(26)	4	(21)	3	(16)	6	(32)	1	(5)	19

Transport Methods

In recent years, most successful hunters have reported using boats to access their hunt areas, and this was also the case during the report period. During this report period, 59% of successful hunters reported using boats, 38% reported using airplanes, and 3% reported using 4-wheelers to access goat hunting areas (Table 5).

Table 5. Unit 1B, Alaska, mountain goat harvest, percent by transport methods, regulatory years 2013–2017.

Percent of harvest							
Year	Airplane		Boat		Other		Total harvest
	<i>n</i>	(%)	<i>n</i>	(%)	<i>n</i>	(%)	
2013	4	(19)	17	(81)	0	(0)	21
2014	7	(37)	12	(63)	0	(0)	19
2015	16	(70)	7	(30)	0	(0)	23
2016	7	(32)	13	(59)	2	(9)	22
2017	6	(28)	14	(67)	1	(5)	21

Other Mortality

Although we received no reports of goat mortality unrelated to hunting, other sources of mortality can include predation by wolves, bears, and bald eagles, malnutrition, disease, and injury or death because of mishaps and avalanches.

Although the disease is believed to be rare, goats displaying symptoms of contagious ecthyma, commonly called “orf,” have been occasionally reported in the Horn Cliffs area of Unit 1B. Orf is a virus that causes blisters and scabs to form on the body of infected animals, primarily affecting the head, mainly the lips, mouth, nose, eyelids, and ears. The virus is spread by direct contact with scabs on infected animals but can also be contracted through direct contact with scabs that have fallen to the ground. The disease can be fatal, but no mortalities were documented in Unit 1B because of the disease during this report period.

Alaska Board of Game Actions and Emergency Orders

The Board of Game took no actions affecting Unit 1B goat hunting, and no emergency orders were issued during this report period.

Recommendations for Activity 2.1

Continue.

3. Habitat Assessment-Enhancement

ACTIVITY 3.1. Monitor timber harvest in Unit 1B.

Data Needs

The loss of winter range resulting from timber harvest continues to pose the most serious threat to goat habitat in the unit. Roads associated with logging increase hunter access and can make goats increasingly vulnerable to harvest.

Methods

Department staff routinely review and comment on proposed timber sales to help minimize the effects of logging on important goat winter range.

No habitat enhancement projects for goats have been attempted in Unit 1B.

Recommendations for Activity 2.1

Continue.

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

Data Recording and Archiving

- Aerial Surveys - All records and data analysis related to mountain goat aerial surveys are archived on network servers in the Douglas, Region I office. Hard copies of data sheets are in the Petersburg Area Biologist's office files.
- Hunt Reports – all data derived from mountain goat hunt reports are archived electronically in WinfoNet.

Agreements

The State of Alaska's ADF&G and the federal government's U. S. Fish & Wildlife Service, Office of Subsistence Management, have agreed to manage both the state and federal mountain goat hunt in Unit 1B using the state's RG004 permit hunt and following the state's permit hunt conditions. Season dates are concurrent and the U.S. Forest Service issues emergency orders in conjunction with ADF&G. A second goat may be harvested under federal subsistence regulations south of LeConte Bay to the start of the Cleveland Peninsula by federal registration permit FG0103. Federally qualified hunters can hunt mountain goats for other federally qualified rural residents under the federal designated hunter program (See Federal Subsistence Management Regulations for the harvest of wildlife on federal public lands in Alaska www.doi.gov/subsistence).

Permitting

There are no permits currently.

Conclusions and Management Recommendations

Variation in fall and winter weather conditions can have a profound influence on the annual goat harvest in Southeast Alaska. Following record snowfall in RY06, and the well above average snowfall of RY07–RY08, winter weather has been more moderate in Unit 1B, and total harvest and hunter success has increased.

The average reported harvest of goats increased by 95% from the previous 5-year period. The harvest of just 6 goats in RY08 and 10 goats in RY13 were the first and second lowest unitwide harvest totals since at least 1984. Since 2012, the total 1B goat harvest has approached or exceeded 20 goats annually. The number of Unit 1B goat hunters has fallen well below the average of 67 hunters per year between RY00 and RY04. From RY05 to RY12 the number of hunters taking to the field averaged 44 hunters per year. The 32 hunters in RY08, and 34 hunters in RY12, were the lowest and second lowest number of goat hunters since at least 1984. However, since then there has been an increasing trend in hunter effort, with an average of 49 hunters during this reporting period, ranging 44–57 hunters.

Uncertainty about the sightability of goats during aerial surveys remains a primary concern for establishing harvest guidelines for individual goat populations. Research conducted in Units 1A, 1B, 1C, and 1D may provide a reliable sightability correction factor for use in estimating the total number of goats present based on the number observed during aerial census flights.

Wounding loss and nonreporting of goats mortally struck by hunters but not recovered due to inaccessible terrain remains a management concern. Because of the increased vulnerability of goats during the late season, and possible localized overharvest in areas easily accessible from saltwater, we will continue to monitor the harvest carefully, particularly within the drainages of Horn Cliffs, Thunder Mountain, LeConte Bay, and Wilkes Range. Based on aerial survey data and hunter reports, goat populations appear stable in most of Unit 1B. Unitwide, hunting pressure is generally low, and tends to be concentrated close to communities in areas with easy access.

II. Project Review and RY18–RY22 Plan

Review of Management Direction

MANAGEMENT DIRECTION

The existing management direction and goals appropriately direct the management of mountain goats in Unit 1B. The management direction for Unit 1B ensures that mountain goats will persist as part of the natural ecosystem and ensures continued hunting and viewing opportunities. There is no indication that the long-term sustainability of the mountain goat population or that goals for human uses cannot be met. Therefore, the RY18–RY22 plan will be to continue management practices outlined in the RY13–RY17 management direction.

GOALS

- To provide for a sustainable harvest of mountain goats in Unit 1B.
- To provide the greatest opportunity to participate in hunting of mountain goats in Unit 1B while maintaining aesthetically pleasing hunt conditions.
- Provide an opportunity for nonconsumptive uses (viewing and photographing) of mountain goats in Unit 1B.
- Discourage land use practices that adversely affect mountain goat habitat.

CODIFIED OBJECTIVES

Amount Reasonably Necessary for Subsistence Uses (ANS)

The Alaska Board of Game has made a positive customary and traditional use determination for mountain goats in Unit 1B with the amount reasonably necessary for subsistence established as 5–10 (5 AAC 99.025(7)).

Intensive Management

Not applicable.

MANAGEMENT OBJECTIVES

- Conduct aerial surveys to establish the minimum number of goats needed to maintain harvest opportunities for the LeConte Bay management area.
- Conduct aerial surveys to establish the minimum number of goats needed to maintain harvest opportunities for the Thomas Bay management area.
- Conduct aerial surveys to establish the minimum number of goats needed to maintain harvest opportunities for the Cleveland Peninsula management area.
- Maintain a guideline harvest not to exceed 6 points per 100 goats observed (where male goats = 1 point, and female goats = 2 points) during at least 2 consecutive surveys in management areas.

REVIEW OF MANAGEMENT ACTIVITIES

1. Population Status and Trend

ACTIVITY 1.1. Monitor the mountain goat population in unit 1B.

Data Needs

Mountain goat abundance data are necessary to determine population status in relation to management objectives. We will continue to collect information on total population, population per management area, and adult to kid ratios.

Methods

Traditional aerial mountain goat surveys will be conducted annually. We will attempt to survey as many count areas as possible, but at a minimum we plan to survey the core area, also referred to as areas consistently surveyed each year.

2. Mortality-Harvest Monitoring

ACTIVITY 2.1. Monitor mountain goat harvest in Unit 1B.

Data Needs

Unit 1B mountain goats are managed during the season using quotas based on recent population estimates. Therefore, timely reporting of harvest is crucial for not exceeding harvest objectives, particularly for the harvest of females.

Methods

We will continue to monitor hunter harvest through a registration permit system. All permit holders are required to report, and those hunting report the location and duration of their hunts and/or kills, transportation used, and date and sex of kill. We will also record anecdotal information from hunters and guides.

3. Habitat Assessment-Enhancement

No activities are planned for RY18–RY22.

NONREGULATORY MANAGEMENT PROBLEMS OR NEEDS

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Management Regulations for the harvest of wildlife on federal public lands in Alaska (www.doi.gov/subsistence).

Permitting

Currently, there are no permits needed for managing mountain goats in Unit 1B during RY18–RY22

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