

IDAHO DEPARTMENT OF FISH AND GAME

Ed Schriever, Director

Surveys and Inventories

SFY2019 Statewide Report



MOUNTAIN GOAT

July 1, 2018 to June 30, 2019

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STATEWIDE REPORT SURVEYS AND INVENTORY

JOB TITLE: Mountain Goat Surveys and Inventories

STUDY NAME: Big Game Population Status, Trends, Use, and Associated Habitat Studies

PERIOD COVERED: July 1, 2018 to June 30, 2019

STATEWIDE

Mountain goat populations are small and fragmented, with animals scattered throughout central Idaho as well as in the Panhandle, Hells Canyon, and the Snake River Range. Twenty hunt areas were available in 2018 with 48 either-sex tags (Figures 1 and 2). The IDFG Commission closed Hunt Area 10-3 in 2018 due to data that suggested a large decrease in that mountain goat population. Hunters may harvest 1 mountain goat in Idaho in their lifetime. Hunters are required to present harvested mountain goats to Idaho Fish and Game (Department) for inspection within 10 days of harvest.

Demand for the few (48) tags offered was high with 863 applications received in April 2017 for the 30 August – 12 November 2018 hunting season. Drawing success statewide averaged 5.6%. Among the 863 applicants were 639 resident hunters (74%) and 224 non-resident hunters (26%). All tags were filled in the first drawing.

Forty-eight (48) tags were issued for mountain goats of either sex. Hunters harvested 37 mountain goats, for a harvest success rate of 77%. Seventy-six percent of harvested mountain goats were males (28). Age of mountain harvested goats averaged 4.4 years (based on reported counts of horn annuli), and length of the horn in harvested mountain goats averaged 8.5 inches. Sixteen (16) mountain goats were harvested in the Salmon Region, 0 in the Panhandle Region, 8 in the Clearwater Region, 3 in the Southwest Region, 3 in the Magic Valley Region, and 7 in the Upper Snake Region.

Table 1. Statewide Mountain Goat hunter participation and harvest for the 2014 to present.

Season	Hunters	Hunter Days	Total Harvest	Males	Females	% Change in Total Harvest from Previous Year
2014	51	200	43	34	8	-4%
2015	50	181	47	35	12	+9%
2016	50	132	46	31	15	-2%
2017	50	124	35	21	14	-22%
2018	48	163	37	28	9	+7%

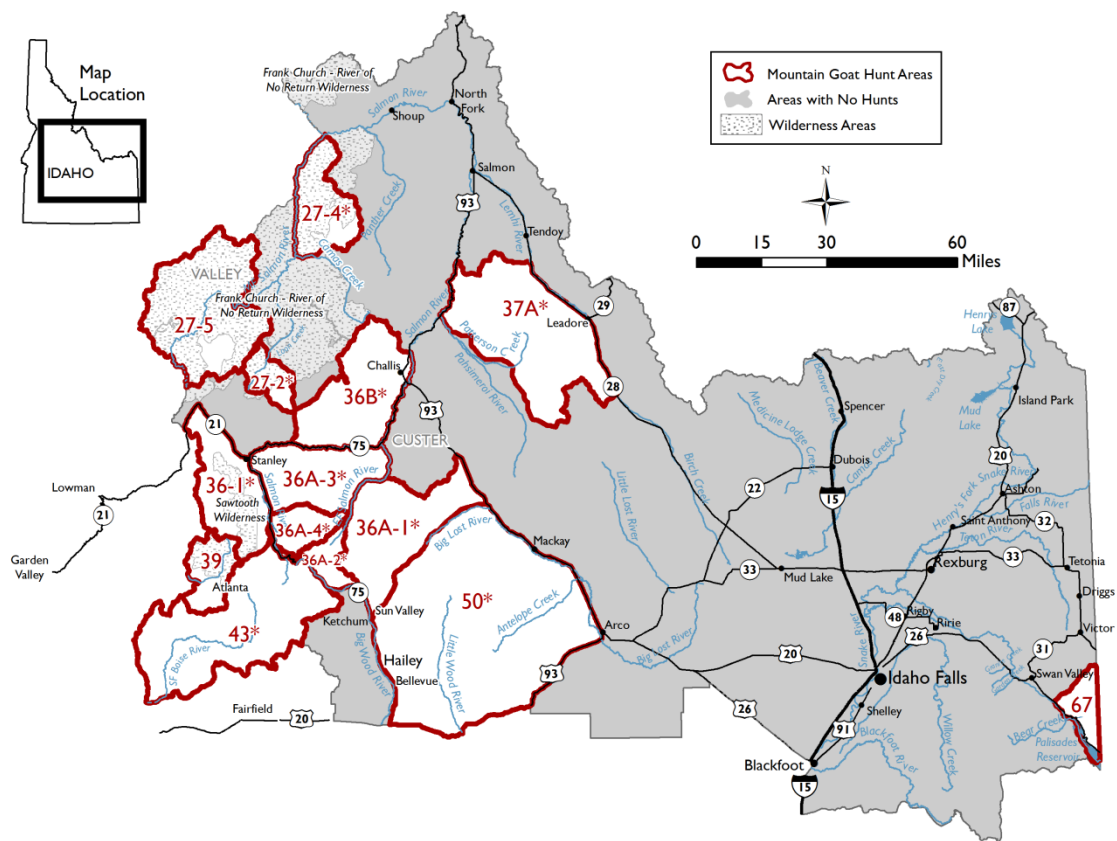


Figure 2. Central Idaho Mountain Goat Hunts

PANHANDLE REGION

GMUs 1, 4A, 7, 9

Historical Background

Three native populations (Selkirk, West Cabinets, and Little North Fork Clearwater River) and one introduced population (Pend Oreille) of mountain goats inhabit Panhandle Region. All populations are relatively small, but 2 mountain goat tags have been offered since 2011. The Pend Oreille population of mountain goats has a particularly high public value for watchable wildlife, with excellent access by boat to this yearlong, low-elevation range.

Anecdotal information indicates that mountain goat populations in the Panhandle had dropped substantially prior to 1950. Brandborg (1955) cites personal communications of U.S. Forest Service (USFS) employees in the Selkirk Range who specifically noted a drop in numbers and restriction in distribution during 1928-1950.

Brandborg (1955) attributed these declines to increased access to mountain goat habitat, and implicated unregulated hunting. By 1950, general mountain goat seasons were reduced to 11 days during September. Controlled hunts were used 1952-1955 and 1966-1976 when most mountain goat hunting was closed in the Panhandle. Since then, the allowable mountain goat harvest in Panhandle Region has ranged from 0-2 mountain goats annually. However, 57 mountain goats have been translocated out of Panhandle Region since 1961 (Hayden and Spicer 1993).

Management Objectives

The statewide management policy for mountain goats is to maintain or increase all mountain goat populations and harvest under a conservative management framework. Harvest is allowed if the total population is at least 100 mountain goats. Harvest shall not exceed 3% of the population except during periods of high recruitment, usually during the early phases of a newly introduced population.

The Pend Oreille population of GMU 4A is specifically identified as having non-consumptive values, with wildlife viewing as the primary focus of this population. The population in the Little North Fork of the Clearwater River was used as a translocation source in the past. One tag was added to GMUs 7 and 9 in 2011. A tag for the Selkirk and West Cabinet mountain goat herds in GMU 1 was offered 2011-2018, but the new management plan called to manage mountain goats by population units instead of GMUs..

Habitat Management and Monitoring

There was no habitat monitoring completed during this time period.

Biological Objectives

The Department's objectives are to maintain secure mountain goat habitat and increase or maintain mountain goat populations.

Capture, Radio-mark, and/or Telemetry

There were no mountain goats captured or monitored during this period.

Population Surveys and Monitoring

In 2001, observations in the Selkirk Mountains (Table 1) were similar to those of the prior (1995) flights, although numbers of adults was slightly lower, and number of kids slightly higher. There has been a near complete loss of mountain goats in the southern and eastern portions of the Selkirk Mountains. Most of the recent population increase is attributable to translocations into the Selkirk Mountains. Subsequent to a count of only 3 mountain goats in the Selkirk Mountains in 1981, a total of 28 mountain goats were translocated into this range, primarily from Snow Peak (GMU 9).

Idaho includes the minor portion of mountain goat range in the West Cabinet Mountains. Here, counts can be substantially affected by localized movements across state and drainage borders, and the main value in surveys is assessing occupancy of winter range and general recruitment trends. A decline of mountain goats in the Wiggletail/Blue Creek areas is apparent and of concern (Table 1). A population growth rate analysis for the Montana portion of the West Cabinets found a declining population from 2000-2015 with a growth rate of 0.95 (Smith and DeCesare 2017).

The Pend Oreille mountain goat population has experienced some growth despite low winter recruitment (Table 2). Numbers appeared to have stabilized at about 60% of those estimated in the mid-1980s. Occasionally goats are observed in the Green Monarchs and in Dry Creek, a tributary of the Clark Fork River, to the east of the Green Monarchs.

Mountain goat numbers in the Little North Fork Clearwater River have changed little over the past 40 years (Table 3), despite removal of 88 mountain goats since 1960. However, there has been a noticeable change in distribution, with far fewer mountain goats near the capture site (Snow Peak on Canyon Creek) and more in Foehl Creek and Sisters Creek drainages. Other mountain goats are seen scattered throughout GMU 7, mainly south of the St. Joe River. A ground-based survey was attempted during July of 2015. Observers were sent out in pairs to observe likely mountain goat habitat in GMU 7. The survey was focused in the Sisters Creek drainage including Siwash, Shoepack Point, and Sisters Peaks. Nine mountain goats were observed. Fog and rain made glassing difficult and summer may be too warm of a season to effectively spot mountain goats during the day.

An aerial survey of GMUs 7 and 9 was conducted May 8-9, 2017. A total of 66 mountain goats were observed in both GMUs. Eighteen mountain goats, including 3 kids, were observed in GMU 7, primarily in Fishhook and Sisters Creeks. There were 48 mountain goats with a kid:adult ratio of 0.23 in GMU 9. The majority of mountain goats were found in Sawtooth and Foehl Creeks. A spring survey with snow only at upper elevations made it difficult to find goats that could quickly hide in nearby timber.

Hunting and Harvest Characteristics

One tag was offered in GMU 1 (Hunt Area 1) and one tag was offered in GMUs 7 and 9 (Hunt area 7) during 2018. Drawing odds were 2% in Hunt Area 1 and 2% in Hunt Area 7 for 2018. Neither mountain goat permittees were successful in 2018 (Table 5).

Capture and Translocation

No mountain goats were captured and translocated during this period.

Disease Monitoring

Hunters have been asked to provide nasal and throat swabs as well as blood samples to test for a variety of diseases.

Management Discussion

Regionally, mountain goat numbers appear stable to declining. Current numbers are likely at least 50% lower than 40-50 years ago, and may be considerably worse when compared to the early 1900s. All of the Hunt Area 7 (GMU 7 and 9) hunters have harvested mountain goats in GMU 7 for the past 7 years. The hunt area boundary will be reevaluated to reduce pressure from that small herd. Due to small isolated populations in the Selkirks and Cabinets, the GMU 1 hunt was discontinued after the 2018 season.

Recently, there have been issues with habituated mountain goats in the Scotchman Peaks area of GMU 1. The Scotchman Peak trail is a very popular hiking trail. Mountain goats have been attracted to the area due to intentional and unintentional feeding by hikers as well as the salt in urine left near the trail. Some goats have become aggressive towards people. Volunteers have signed the trail and patrol to educate people about the danger of feeding mountain goats which has helped reduce human-goat interactions, but additional measures may need to be taken in the future to discourage the mountain goats from approaching people.

Literature Cited

- Brandborg, S. M. 1955. Life history and management of the mountain goat in Idaho. Wildlife Bulletin No. 2. Idaho Department of Fish and Game, Boise, USA.
- Hayden, J., and D. Spicer. 1993. Pages 3-16 *in* L. E. Oldenburg (ed.). Mountain Goat Job Progress Report W-170-R-17. Idaho Department of Fish and Game, Boise, USA.
- Smith, B. L., and N. J. DeCesare. 2017. Status of Montana's mountain goats: A synthesis of management data (1960-2015) and field biologists' perspectives. Montana Fish, Wildlife & Parks.

Table 1. Mountain goat surveys, GMU 1, Panhandle Region, 1955-2001.

Inclusive location	Year	Adults	Kids	Unknown	Total	Kids/100 adults
Selkirk Range, GMU 1 Smith to Parker Creek	1955 ^a	0	0	65	65	
	1963	15	3	0	18	20.0
	1971	0	0	0	0	0.0
	1981	0	0	0	0	0.0
	1988	0	0	0	0	0.0
	1991	2	1	0	3	50.0
	1995	0	0	0	0	0.0
	2001	0	0	0	0	0.0
Fisher to Farnham Creek	1955 ^a	0	0	0	0	0.0
	1963 ^c	0	0	0	0	0.0
	1971	0	0	0	0	0.0
	1981	0	0	0	0	0.0
	1988	0	0	0	0	0.0
	1991	0	0	0	0	0.0
	1995	3	0	0	3	0.0
	2001	6	1	0	7	16.7
Indian to Two Mouth Creek	1955 ^a	0	0	50	50	
	1963	5	1	0	6	20.0
	1971	0	0	3	3	
	1981	0	0	0	0	0.0
	1988	1	1	0	2	100.0
	1991	0	0	0	0	0.0
	1995	0	0	0	0	0.0
	2001	0	0	0	0	0.0
Lion Creek	1955 ^a	0	0	35	35	
	1963	0	0	0	0	0.0
	1971	0	0	0	0	0.0
	1981	0	0	3	3	
	1988	4	2	0	6	50.0
	1991	9	1	0	10	11.1
	1995	13	0	0	13	0.0
	2001	5	1	0	6	20.0
Caribou Creek	1955 ^a	0	0	55	55	
	1963	9	2	0	11	22.2
	1971	0	0	0	0	0.0
	1981	0	0	0	0	0.0
	1988	6	2	0	8	33.3
	1991	2	0	0	2	0.0
	1995	14	3	0	17	21.4
	2001	15	6	0	21	40.0
Total Selkirk population	1955 ^a	0	0	195	195 ^b	
	1963	29	6	0	35	20.7
	1971	0	0	3	3	
	1981	0	0	3	3	
	1988	11	5	0	16	45.5
	1991	13	2	0	15	15.4
	1995	30	3	0	33	10.0

Table 1 Continued

Inclusive location	Year	Adults	Kids	Unknown	Total	Kids/100 adults
	2001	26	8	0	34	30.8
West Cabinet Range, GMU 1	1971	0	0	0	0	0.0
Wiggletail to W. Fk. Blue Crk.	1979 ^d	9	2	0	11	22.2
	1981	0	0	0	0	0.0
	1988	23	1	0	24	4.3
	1991	11	1	0	12	9.1
	1993	11	2	0	13	18.2
	1998 ^e	11	3	0	14	27.3
	2001	3	0	0	3	0.0
Regal to Sam Morris Creek	1971	0	0	0	0	0.0
	1981	0	0	0	0	0.0
	1988	0	0	0	0	0.0
	1991	0	0	0	0	0.0
	1993	2	0	0	2	0.0
	1998 ^e	5	0	0	5	0.0
	2001	2	0	0	2	0.0
East Fork Lightning Creek (Includes Savage and Char)	1971	0	0	5	5	
	1981	3	0	0	3	0.0
	1988	20	3	0	23	15.0
	1991	4	3	0	7	75.0
	1993	12	5	0	17	41.7
	1998 ^e	11	1	0	12	9.1
	2001	9	1	0	10	11.1
West Cabinet (Idaho Only)	1971	0	0	5	5	
	1981	3	0	0	3	0.0
	1988	43	4	0	47	9.3
	1991	15	4	0	19	26.7
	1993	25	7	0	32	28.0
	1998 ^e	27	4	0	31	14.8
	2001	14	1	0	15	7.1

^a Summer estimates from ground surveys.

^b Includes 20 mountain goats estimated in the Pack River-Myrtle Creek area and 10 mountain goats on Snowytop Mountain. Both areas were flown 1971 and 2001 winters with neither tracks nor mountain goats observed. The Pack River-Myrtle Creek area was flown winters 1963 and 1981 as well, with no tracks nor mountain goats observed.

^c Not specifically mentioned in the survey.

^d Montana Fish, Wildlife and Parks data, August survey.

^e August survey of summer range.

Table 2. Mountain goat surveys, GMU 4A, Panhandle Region, 1973-2001.

Inclusive location	Year	Adults	Kids	Unknown	Total	Kids/100 adults
Pend Oreille Population, GMU 4A Buttonhook to Lakeside	1973	11	3	0	14	27.3
	1975 ^a	31	12	0	43	38.7
	1976	16	3	0	19	18.8
	1981	30	7	0	37	23.3
	1985 ^b	42	10	0	52	23.8
	1991	9	4	0	13	44.4
	1991 ^c	11	7	0	18	63.6
	1992	15	2	0	17	13.3
	1995 ^d	13	2	0	15	15.4
	2001	27	4	0	31	14.8
Green Monarchs	1973	2	0	0	2	0.0
	1975 ^a	0	0	0	0	0.0
	1976	4	0	0	4	0.0
	1981	2	0	0	2	0.0
	1991	2	0	0	2	0.0
	1991 ^c	0	0	0	0	0.0
	1992	0	0	0	0	0.0
	1995 ^d	0	0	0	0	0.0
	2001	0	0	0	0	0.0
Pend Oreille population	1973	13	3	0	16	23.1
	1975 ^a	31	12	0	43	38.7
	1976	20	3	0	23	15.0
	1981	32	7	0	39	21.9
	1985 ^b	42	10	0	52	23.8
	1991	11	4	0	15	36.4
	1991 ^c	11	7	0	18	63.6
	1992	15	2	0	17	13.3
	1995 ^d	13	2	0	15	15.4
	2001	27	4	0	31	14.8

^a Ground survey.

^b Population estimate based on capture/recapture with ground surveys during spring.

^c Ground survey during October.

^d Helicopter survey during August.

Table 3. Mountain goat surveys, GMU 7, Panhandle Region, 2015 and 2017.

Inclusive location	Year	Adults	Kids	Unknown	Total	Kids/100 adults
Fishhook to Mosquito Creek	2015 ^a	7	2	0	9	28.6
Skookum Creek	2017	14	4	0	18	28.6

Table 4. Mountain goat surveys, GMU 9, Panhandle Region, 1957-2001.

Inclusive location	Year	Adults	Kids	Unknown	Total	Kids/100 adults
Little North Fork of the Clearwater River, GMU 9 Hoodoo Peak to Spotted Louis	1957	2	0	0	2	0.0
	1958	6	0	0	6	0.0
	1961	0	0	0	0	0.0
	1964	2	0	0	2	0.0
	1965	0	0	3	3	
	1966	0	0	1	1	
	1971	0	0	3	3	
	1972	0	0	0	0	0.0
	1976	4	0	0	4	0.0
	1979 ^a					
	1981	4	0	0	4	0.0
	1988	15	5	0	20	33.3
	1991	4	3	0	7	75.0
	1993	3	0	0	3	0.0
	2001	4	2	0	6	50.0
Culdesac to Canyon Creek	1957	53	3	0	56	5.7
	1958	27	6	0	33	22.2
	1961	27	3	0	30	11.1
	1964	41	4	0	45	9.8
	1965	0	0	49	49	
	1966	0	0	43	43	
	1971	0	0	29	29	
	1972	0	0	18	18	
	1976	24	8	0	32	33.3
	1979 ^a	32	5	0	37	15.6
	1981	48	8	0	56	16.7
	1988	26	2	0	28	7.7
	1991 ^b	13	3	0	16	23.1
	1993	23	8	0	31	34.8
	2001	18	6	0	24	33.3
	2017	8	1	0	9	11.1
Sawtooth Creek	1957	26	7	0	33	26.9
	1958	17	4	0	21	23.5
	1961	20	5	0	25	25.0
	1964	12	1	0	13	8.3
	1965	0	0	10	10	
	1966	0	0	13	13	
	1971	0	0	4	4	
	1972	0	0	9	9	

Inclusive location	Year	Adults	Kids	Unknown	Total	Kids/100 adults
	1976	8	0	0	8	0.0
	1979 ^a					
	1981	5	0	0	5	0.0
	1988	7	2	0	9	28.6
	1991	9	1	0	10	11.1
	1993	6	2	0	8	33.3
	2001	9	0	0	9	0.0
	2017	12	5	0	17	41.7
Foehl Creek	1957	0	0	0	0	0.0
	1958	0	0	0	0	0.0
	1961	9	5	0	14	55.6
	1964	17	0	0	17	0.0
	1965	0	0	7	7	
	1966	0	0	0	0	0.0
	1971	0	0	0	0	0.0
	1972	0	0	2	2	
	1976	0	0	0	0	0.0
	1979 ^a					
	1981	3	1	0	4	33.3
	1988	5	0	0	5	0.0
	1991	8	2	0	10	25.0
	1993	12	4	0	16	33.3
	2001	16	5	0	21	31.3
	2017	19	3	0	22	15.8
Larkin to Devil's Club Creek	1957	2	0	0	2	0.0
	1958	0	0	0	0	0.0
	1961	0	0	0	0	0.0
	1964	0	0	0	0	0.0
	1965	0	0	0	0	0.0
	1966	0	0	0	0	0.0
	1971	0	0	0	0	0.0
	1972	0	0	0	0	0.0
	1976	0	0	0	0	0.0
	1979 ^a					
	1981	0	0	0	0	0.0
	1988	1	0	0	1	0.0
	1991	0	0	0	0	0.0
	1993	1	1	0	2	100.0
	2001	0	0	0	0	0.0
Little North Fork Clearwater population	1957	83	10	0	93	12.0
	1958	50	10	0	60	20.0
	1961	56	13	0	69	23.2
	1964	72	5	0	77	6.9
	1965	0	0	69	69	
	1966	0	0	57	57	
	1971	0	0	36	36	

Inclusive location	Year	Adults	Kids	Unknown	Total	Kids/100 adults
	1972	0	0	29	29	
	1976	36	8	0	44	22.2
	1979 ^a	32	5	0	37	15.6
	1981	60	9	0	69	15.0
	1988	54	9	0	63	16.7
	1991 ^b	34	9	0	43	26.5
	1993	45	15	0	60	33.3
	2001	47	13	0	60	27.7
	2017	39	9	0	48	23.1

^a Area flown only identified as “Snow Peak.” It is unknown what area was actually flown.

^b Weather conditions precluded complete coverage of the Canyon Creek portion of the flight.

^c Ground Survey

Table 5. Mountain goat harvest and drawing odds by hunt area, Panhandle Region, 2011-present.

Hunt area	Year	Tags	Harvest		Hunter success (%)	Days/hunter	First-choice applicants	Drawing odds %
			M	F				
1	2011	1	1	0	100	3.0	95	1.1
7	2011	1	1	0	100	14.0	63	1.6
1	2012	1	1	0	100	4.0	21	4.8
7	2012	1	1	0	100	6.0	34	2.4
1	2013	1	1	0	100	2.0	47	2.1
7	2013	1	1	0	100	4.0	46	2.1
1	2014	1	1	0	100	2.0	47	2.1
7	2014	1	1	0	100	8.0	49	2.0
1	2015	1	1	0	100	2.0	44	2.3
7	2015	1	1	0	100	2.0	36	2.8
1	2016	1	0	0	0	n/a	46	2.1
7	2016	1	1	0	100	15.0	38	2.6
1	2017	1	0	0	0	0	59	1.7
7	2017	1	1	0	100	14.0	32	3.1
1	2018	1	0	0	0		49	2.0
7	2018	1	0	0	0		42	2.4

CLEARWATER REGION

GMUs 10, 12, 15, 16, 16A, 17

Historical Background

Historically, mountain goats were hunted on a general-hunt basis in Idaho north of Salmon River. As a result, some of the easily accessible herds were over-hunted or eliminated. From 1966 to present, all mountain goat hunts have been offered as controlled hunts. Hunt areas were originally quite large, often including several discrete populations of mountain goats. In general, the more accessible populations still received the brunt of the harvest. In 1972, hunts were divided into smaller, more easily manageable controlled hunts to control and more evenly distribute hunting pressure.

Harvest levels have changed little during the last 10-year period (Table 2). For the 2007 season, Hunt Areas 10-1 and 10-2 were combined into 1 hunt area (Hunt Area 10) and tags reduced from 4 to 2. Hunt Area 10 was renamed Hunt Area 10-1 in 2011 when the former GMU 10/12 (the upper Kelly Creek hunt) hunt was reinstated as Hunt 10-2. In 2015 the 10-1 was again split into 2 hunts (10-1 and 10-2) and the number of tags increased back to 4. The upper Kelly Creek was named 10-3 at that time. Then in 2018 the 10-3 was closed again due to lack of mountain goats counted during an aerial survey.

Management Objectives

Goals for managing mountain goats in GMUs 10, 12, 15, 16, 16A, and 17 include; increasing populations through conservative hunting seasons; capturing and translocation into vacant habitat or to augment existing populations; maintaining harvest and recreational opportunity; emphasizing non-consumptive values, inventorying all mountain goat populations at a maximum interval of 5 years; and collecting information on mountain goat diseases.

Habitat Management and Monitoring

Mountain goat habitat in GMUs 10, 12, 15, 16, 16A, and 17 is located mainly along the Idaho-Montana border and in rocky cliffs of North Fork Clearwater, Lochsa, and Selway river drainages. Nearly all of the areas that support mountain goats are under U.S. Forest Service (USFS) ownership and management. Some commercial timberlands are located near mountain goat habitat; however, the majority of mountain goat habitat is in designated wilderness.

Long term global warming impacts are forecast for the region to include warmer winters, earlier run off, and more precipitation coming as rain. These have potential impacts for mountain goats and their range that are currently not well understood.

Biological Objectives

The Department's objectives are to maintain secure mountain goat habitat and increase or maintain mountain goat populations.

Capture, Radio-mark, and or Telemetry

No mountain goats were captured or marked during this reporting period.

Population Surveys and Monitoring

GMU 12 has not been surveyed since 1996 (Table 1). A paintball mark-resight survey in April-May 2010 revealed a population estimate of 100 ± 7 mountain goats in Hunt Area 10-1(now 10-1 and 10-2); the previous survey in April 2005 accounted for 85 ± 17 mountain goats. The mountain goats were again surveyed in 2017 with similar timing as the 2 mark-resight surveys (the mark-resight surveys were discontinued because of risk). In 2017 a total of 54 goats were observed. This compares to 36 marked and 43 surveyed (18 resights) in 2005. The 2010 mark-resight marked 55 and 79 resighted (44 with marks). Neither of these numbers is likely directly comparable to the 2017 count and sightability between years varied from 50% to 81% but at this time we believe this population is stable.

Additionally in 2010, a survey was conducted in the old Blacklead hunt area [S.F. Kelly Creek to Williams Creek (GMU 10) and Boulder Creek/Crooked Fork (GMU 12)] where 47 goats were observed. This was repeated in 2017 as well. Only 7 mountain goats were observed but extensive tracks from illegal snowmobiles and snow bikes were observed all over the mountain goat winter range. In 1996, 136 mountain goats were observed over both hunt areas prompting the decision to suspend future translocation removals. During September 2014, an aerial survey was conducted in GMU 17 and the Black Canyon/Moose Mountain area of GMU 10. Mountain goats were surveyed in GMU 17 from Sept 7-9, 2014.

All subunits were surveyed where goats were previously observed during the 1970's, 1980's, and on the most recent full survey in 1994. There were an observed total of 19 goats, including 15 adults and 4 kids. This compares to 166 goats in 1991 and 151 goats observed in 1994. Goats were in widely scattered, small groups with the exception of 9 goats observed in upper Wilkerson Creek. Data were collected to conduct a sightability analysis with the Washington goat sightability model, but this was inappropriate given the small number of observed animals. Mountain goats were surveyed in the Black/Canyon/Moose Mountain area of GMU 10 on September 10, 2014. There were an observed total of 16 goats including 14 adults, 1 yearling, and 1 kid.

Hunting and Harvest Characteristics

During 2018, 2 of 2 tag holders were successful in Hunt Area 10-1 and none of 2 tag holders were successful in 10-2 and 10-3(Table 3) was closed in 2018. Drawing odds in 2018 for Hunt Area 10-1 was 4%, Hunt Area 10-2 was 7% and Hunt Area (Table 3).

Capture and Translocation

Since 1962, mountain goats have been captured on several occasions on Black Mountain (Clearwater Region) and Snow Peak (Panhandle Region) to provide stock for translocation within the state. Clearwater Region began capturing mountain goats in the Seven Devils range in 1999 with helicopter darting. From 1962 to 2003, 102 mountain goats were translocated in Clearwater Region (Table 4). Plans to capture mountain goats at Black Mountain in 2000 were

canceled because of the population decline revealed by the 2000 survey. During March 2003, 16 mountain goats were captured in GMU 18 and translocated into GMU 20 (Sheep Hill)

Disease Monitoring

No disease monitoring was conducted on live mountain goats in these GMUs during this reporting period. Samples were collected from hunter- harvested mountain goats to monitor for presence of respiratory disease pathogens.

Management Discussion

Lack of population growth in Hunt Area 10 will lead to more conservative and cautious management of exploitation. Current harvest levels (5-year average = 2.0 mountain goats/year) are below the maximum Mountain Goat Management Plan level of 5% (5 mountain goats). However, it is unlikely that removal of additional mountain goats for translocation would be practical or prudent. Trapping will be suspended until future surveys reveal a positive growth trend and sufficient numbers to sustain removals. Tag levels in Hunt Area 10 will remain conservative to avoid over-exploitation.

In other areas where populations have been severely reduced, hunts will not be offered until those populations recover to satisfactory levels and exhibit an acceptable level of population growth. Translocation into areas where mountain goats are absent or severely reduced in numbers will continue as mountain goats become available.

Additional effort needs to be put into figuring out where the upper Kelly Creek mountain goat population is wintering. Currently the Department is asking the USFS to put more effort in enforcing the winter off road travel in upper Kelly Creek. This needs to include an effort on the Montana side of the State line as that is where most of these winter travelers are coming from. Failure to get a handle on this issue might jeopardize this population.

GMUs 14, 18, 19, 20

Historical Background

Historically, mountain goats were hunted on a general-hunt basis in Idaho north of Salmon River. As a result, some of the easily accessible herds were over-hunted or eliminated. From 1966 to present, all mountain goat hunts have been offered as controlled hunts. Hunt areas were originally quite large, often including several discrete populations of mountain goats. In general, the more accessible populations still received the brunt of the harvest. In 1972, hunts were divided into smaller, more easily manageable controlled hunts to control and more evenly distribute hunting pressure.

Five tags were offered each year in Hunt Area 18 from 1983 to 2002. In 2003, tag numbers were reduced to 4 (Appendix A). Many of the mountain goat hunts remained closed in 2010 because of low population levels or absence of mountain goats (see Clearwater Region portion of the Department's 1986-1991 Mountain Goat Management Plan).

Management Objectives

Goals for managing mountain goats in GMUs 14, 18, 19, and 20 include; increasing populations through conservative hunting seasons; capturing and translocation into vacant habitat or to augment existing populations; maintaining harvest and recreational opportunity; emphasizing non-consumptive values, inventorying all mountain goat populations at a maximum interval of 5 years; and collecting information on mountain goat diseases.

Habitat Management and Monitoring

The deep, rugged canyons of the Snake and Salmon rivers dominate the topography of GMUs 14, 18, 19, and 20. Mountain goat populations in this area are found almost exclusively in habitat designated as wilderness and managed by USFS. Mountain goats in GMU 18 are found in the Seven Devils area, while those in GMUs 19 and 20 are found on the breaks of the Salmon River in the Gospel Hump and Frank Church River-of-No-Return wilderness areas. Habitats in both areas are generally drier and more open than mountain goat habitat found in GMUs 10 and 17.

Biological Objectives

The Department's objectives are to maintain secure mountain goat habitat and increase or maintain mountain goat populations.

Capture, Radio-mark, and or Telemetry

Two mountain goats were captured and radio-marked in January 2018. The goal was to mark 10 goats and collect data to modify existing habitat use models that don't perform well in our region. Our helicopter vendor crashed while working in Washington State before finishing the job so work was suspended.

Population Surveys and Monitoring

Mountain goats were last surveyed 2013 in Hunt Area 18, like GMU 10 surveys mentioned earlier were discontinued. This has left us with data that is not directly comparable. The 2013 survey found 90 adults and 26 kids which was only surpassed in 1993 when a total of 137 mountains were surveyed. A paintball mark-resight survey was conducted in Hunt Area 18 (GMUs 18 and 22) in April and May 2007. An estimate of 194 ± 29 (90% bound) goats was obtained. Using the same technique in 2002 generated an estimate of 196 ± 22 (90% bound) goats in Hunt Area 18. The trend in Hunt Area 18 appears to be stable.

GMUs 19 and 20 have not been surveyed since 1993 (Table 5).

Hunting and Harvest Characteristics

Drawing odds for Hunt Area 18 were 4% in 2018. In 2018 a total 4 hunters harvested 4 goats (100% success, Table 3).

Capture and Translocation

Twenty-five mountain goats captured at Snow Peak, GMU 9, and at Olympic National Park, Washington, have been translocated into GMU 18 since 1962 (Table 4). With growth in the mountain goat population in the Seven Devils area, the Dry Diggins lookout was evaluated as a potential capture site for mountain goats as early as 1987. Subsequent efforts with clover traps in 1991 and 1993 resulted in the capture of only 1 mountain goat.

Mountain goats were captured in GMU 18 with darts fired from a helicopter in 1999, 2001, and 2003. Capture efforts were patterned after the protocol at Olympic National Park where over 300 mountain goats had been captured and removed via darting with the drug Carfentanil. Given the mark-resight estimates of population size and a reasonably conservative approach to exploitation rates, it was determined that up to 12 mountain goats (6 nannies) could be removed every other year for translocation.

Eighteen goats were captured and subsequently released along Big Mallard Creek in GMU 20 in 1999 and 2001. Ten of the goats were collared with radio transmitters. Of these, 8 have died since release while the remaining 2 radio transmitters have gone inactive. Sixteen goats were captured and translocated in 2003 to Sheep Hill in GMU 20. Six were released with radio transmitters that are no longer active.

Disease Monitoring

Disease monitoring was conducted on all hunter harvested mountain goats in 2017 and 2018. Nasal and pharyngeal swabs were collected to try and test for *Mycoplasma ovipneumoniae*.

Management Discussion

Given the Mountain Goat Management Plan guidelines and the 2002 Hunt Area 18 mark-resight population estimate, with continued harvest, up to 12 mountain goats (6 nannies) could be available for removal for translocation every other year. The total exploitation level would be at 5%.

In other areas where populations have been severely reduced, no hunts will be offered until those populations recover to satisfactory levels. Translocation to reestablish or augment populations will continue as mountain goats become available.

Table 1. Mountain goat surveys, GMUs 10, 12, and 17, Clearwater Region, 1981-2010.

GMU	Year	Inclusive location	Adults	Kids	Total	Kids/100 adults
10	1991	Flat Mtn to Elizabeth Mtn	14	3	17	21.4
		Pot Mountain	2	0	2	0.0
		Moose Mountain	27	1	28	3.7
		S.F. Kelly Creek to Williams Creek	34	6	40	17.6
		Isabella Creek (10-1)	50	13	63	26.0
		Collins to Quartz Creek (10-2)	73	15	88	20.5
		1991 Total	200	38	238	19.0
	1996	Flat Mtn to Elizabeth Mtn	12	1	13	8.3
		Pot Mountain	4	0	4	0.0
		Moose Mountain	24	3	27	12.5
		S.F. Kelly Creek to Williams Creek	14	0	14	0.0
		Isabella Creek (10-1)	48	13	61	27.1
		Collins to Quartz Creek (10-2)	61	14	75	23.0
		1996 Total	163	31	194	19.0
	2002 ^a	Isabella Creek (10-1)	54±12		54±12	
		Collins to Quartz Creek (10-2)	44±5		44±5	
	2005 ^a	Isabella Creek (10-1)	38±6		38±6	
		Collins to Quartz Creek (10-2)	47±18		47±18	
	2010	Pot Mountain ^c	6	2	8	33.3
		S.F. Kelly Creek to Williams Ck	39	8	47	20.5
		Isabella to Quartz Creek (10)	100±7		100±7	
		2002-2010 Total	146	10	156	
	2014	Flat Mtn to Elizabeth Mtn	1	0	1	0.0
		Moose Mtn	14	1	15	7.1
		2014 Total	15	1	16	6.7
	2017	Isabella to Quartz Crk (10-1, 10-2)	47	7	54	14.9
		S.F. Kelly Crk to Williams Crk (10-3)	7	0	7	0
		2017 Total	54	7	61	14.9
12	1981	Old Man Creek	18	3	21	16.7
		Boulder Creek	9	3	12	33.3
		Noseeum Creek	6	2	8	33.3
		Skookum Creek	2	0	2	0.0
		Grave Butte	2	0	2	0.0
		Stanley Creek	5	1	6	20.0
		Lone Knob	1	0	1	0.0
		Squaw Creek	2	0	2	0.0
		Fish Creek ^b				
		Boulder/Crooked Fork	4	1	5	25.0
		1981 Total	49	10	59	20.4
	1987	Old Man Creek	18	4	22	22.2
		Boulder Creek	9	1	10	11.1
		Noseeum Creek	11	3	14	27.3
		Skookum Creek	6	0	6	0.0
		Grave Butte	0	0	0	0.0
		Stanley Creek	5	0	5	0.0
		Lone Knob ^b				
		Squaw Creek	8	6	14	75.0

Table 1 Continued

GMU	Year	Inclusive location	Adults	Kids	Total	Kids/100 adults
		Fish Creek	1	0	1	0.0
		Boulder/Crooked Fork	10	3	13	30.0
		1987 Total	68	17	85	25.0
	1996	Old Man Creek	21	3	24	14.3
		Boulder Creek	0	0	0	0.0
		Noseeum Creek	3	0	3	0.0
		Skookum Creek	2	1	3	50.0
		Grave Butte	0	0	0	0.0
		Stanley Creek	4	0	4	0.0
		Lone Knob	0	0	0	0.0
		Squaw Creek	11	0	11	0.0
		Fish Creek	0	0	0	0.0
		Boulder/Crooked Fork	2	1	3	50.0
		1996 Total	43	5	48	11.6
17	1991	E.F. Moose Creek	25	7	32	28.0
		White Cap Creek	23	6	29	26.1
		Canyon Creek	21	12	33	57.1
		Copper Creek	3	0	3	0.0
		Paradise Creek	8	0	8	0.0
		Cub Creek	10	5	15	50.0
		Brushy Fork Creek	10	5	15	50.0
		Bear Creek	4	3	7	75.0
		Upper Selway (above Magruder Crossing)	14	5	19	35.7
		Little Clearwater R to Echo Creek	4	1	5	25.0
		Snake Creek	0	0	0	0.0
		Goat Creek ^b				
		Grouse Creek/Running Creek	0	0	0	0.0
		Stewart Creek	0	0	0	0.0
		1991 Total	122	44	166	36.1
	1994	E.F. Moose Creek	25	5	30	20.0
		White Cap Creek	25	2	27	8.0
		Canyon Creek	14	6	20	42.9
		Copper Creek	0	0	0	0.0
		Paradise Creek	4	0	4	0.0
		Cub Creek	3	0	3	0.0
		Brushy Fork Creek	12	4	16	33.3
		Bear Creek	9	2	11	22.2
		Upper Selway (above Magruder Crossing)	16	2	18	12.5
		Little Clearwater R to Echo Creek	6	0	6	0.0
		Snake Creek	1	0	1	0.0
		Goat Creek	11	3	14	27.3
		Grouse Creek/Running Creek	0	0	0	0.0
		Stewart Creek	1	0	1	0.0
		1994 Total	127	24	151	18.9
	2014	E.F. Moose Creek	1	0	1	0.0

Table 1 Continued

GMU	Year	Inclusive location	Adults	Kids	Total	Kids/100 adults
		White-Cap Creek	2	1	3	50.0
		Canyon Creek	0	0	0	0.0
		Cooper Creek	1	0	1	0.0
		Paradise Creek	0	0	0	0.0
		Cub Creek	0	0	0	0.0
		Brushy-Fork Creek	0	0	0	0.0
		Bear Creek	0	0	0	0.0
		Upper Selway (above Magruder Crossing)	10	3	13	30.0
		Little Clearwater River to Echo Crk	1	0	1	0.0
		Snake River	0	0	0	0.0
		Goat Creek	0	0	0	0.0
		Grouse & Running Creek	0	0	0	0.0
		Stewart Creek	0	0	0	0.0
2014 Total			15	4	19	3.75

^a Paintball mark-resight survey (Apr-May).

^b Drainage not included in survey.

Table 2. Mountain goat harvest and drawing odds, Clearwater Region, 2004-present.

Year	Tags	Harvest			Hunter success (%)	First-choice applicants	Drawing odds %
		M	F	Total			
2004	8	3	3	6	75	118	6.8
2005	8	6	0	6	75	129	6.2
2006	8	6	0	6	75	134	6.0
2007	6	4	1	5	83	118	5.1
2008	6	1	4	5	83	127	4.7
2009	6	5	1	6	100	139	4.3
2010	6	3	3	6	100	118	5.1
2011	8	5	0	5	63	157	5.1
2012	8	3	2	5	63	167	4.8
2013	8	7	1	8	100	174	4.6
2014	8	4	0	4	50	160	5.0
2015	10	8	2	10	100	202	5.0
2016	10	5	4	9	90	202	5.0
2017	10	5	1	6	60	202	5.0
2018	8	6	2	8	100	190	4.2

Table 3. Mountain goat harvest and drawing odds by hunt area, Clearwater Region, 2008-present.

Hunt area	Year	Tags	Harvest		Hunter success (%)	Days/hunter	First-choice applicants	Drawing odds %
			M	F				
10-1 ^a	2011	2	2	0	100	3.0	49	4.1
	2012	2	0	1	50	3.0	34	5.9
	2013	2	2	0	100	2.0	58	3.4
	2014	2	2	0	100	1.0	40	5.0
	2015	2	1	1	100	4.0	66	3.0
	2016	2	0	1	50	5.0	50	4.0
	2017	2	1	1	100	3.5	55	3.6
	2018	2	1	1	100	6.5	53	3.8
10-2 ^b	2011	2	0	0	0	ND	41	4.9
	2012	2	0	1	50	ND	24	8.3
	2013	2	1	1	100	2.0	32	6.3
	2014	2	0	0	0	0.0	40	5.0
	2015 ^c	2	2	0	100	3.0	42	4.8
	2016	2	0	2	100	3.5	36	5.5
	2017	2	0	0	0	0	45	4.4
	2018	2	1	1	100	5.0	30	6.7
10-3 ^{cd}	2015	2	2	0	100	2.0	30	6.7
	2016	2	0	2	100	3.5	36	5.5
	2017	2	0	0	0	0	45	4.4
18	2008	4	1	3	100	1.75	73	5.5
	2009	4	3	1	100	3.0	96	4.2
	2010	4	3	1	100	1.5	74	5.4
	2011	4	3	0	75	9.3	67	6.0
	2012	4	3	0	74	2.5	109	3.7
	2013	4	4	0	100	8.0	84	4.8
	2014	4	2	0	50	4.5	80	5.0
	2015	4	3	2	100	12.0	64	6.3
	2016	4	3	1	100	4.8	91	4.4
	2017	4	4	0	100	3.0	72	5.5
	2018	4	4	0	100	7.5	107	3.7

^a Hunt area 10-1 and 10-2 were combined in 2007 to form hunt area 10; Hunt area 10 was renamed hunt area 10-1 in 2011 regulations.

^b Hunt area 10-2 was reinstated in 2011 from a historical hunt from the 1990s.

^c Hunt area 10-2 was split with the addition of hunt area 10-3 for fall 2015.

^d Hunt Area 10-3 closed for 2018 season.

Table 4. Mountain goat translocation, Clearwater Region, 1962-2003^a.

Year	Capture site-GMU	Release site-GMU	Adults		Kids		Total
			M	F	M	F	
1962	Snow Peak-9	Seven Devils-18	2	3	3	0	8
1964	Snow Peak-9	Seven Devils-18	2	5	0	2	9
1966	Snow Peak-9	Dome Hill-15	4	4	0	0	8
1967	Snow Peak-9	Dome Hill-15	1	2	0	0	3
1986	Black Mtn-9A	Boulder Creek-12	2	5	0	0	7
1987	Snow Peak-9	Oregon Butte-19	0	8	0	0	8
	Black Mtn-9A	Oregon Butte-19	2	2	0	0	4
1989	Olympic NP, WA	Seven Devils-18	8	0	0	0	8
1991	Black Mtn-10	Ship Island Cr-27	4	4	0	0	8
1994	Black Mtn-10	Big Squaw Cr-20	4	4	0	0	8
1996	Black Mtn-10	Big Squaw Cr-20	0	1	0	0	1
1998	Black Mtn-10	Johns Creek-15	1	0	0	0	1
	Black Mtn-10	Big Squaw Cr-20	1	2	0	0	3
1999	Seven Devils-18	Big Mallard Falls-20	4	3	0	0	7
2001	Seven Devils-18	Big Mallard Falls-20	5	6	0	0	11
2003	Seven Devils-18	Sheep Hill-20	5	5	2	4	16

^a No transplants conducted since 2003.

Table 5. Mountain goat surveys, GMUs 18, 19, and 20, Clearwater Region, 1981-2007.

GMU	Year	Inclusive location	Adults	Kids	Total	Kids/100 adults
18	1981	Dry Gulch	20	0	20	0.0
		Bernard Creek	29	4	33	13.8
		Bernard Creek to Three Creek	0	0	0	0.0
		Sheep Creek	3	0	3	0.0
		Three Creek	12	2	14	16.7
		Granite Creek	1	0	1	0.0
		Three Creek to Granite Creek	0	0	0	0.0
		1981 Total	65	6	71	9.2
	1987	Dry Gulch	0	0	0	0.0
		Bernard Creek	15	2	17	13.3
		Bernard Creek to Three Creek	28	7	35	25.0
		Sheep Creek	1	0	1	0.0
		Three Creek	3	0	3	0.0
		Granite Creek	19	3	22	15.8
		Three Creek to Granite Creek	4	0	4	0.0
		1987 Total	70	12	82	17.1
	1993	Dry Gulch	49	5	54	10.2
		Bernard Creek	3	2	5	66.7
		Bernard Creek to Three Creek	11	4	15	36.4
		Sheep Creek	1	0	1	0.0
		Three Creek	20	3	23	15.0
		Granite Creek	13	3	16	23.1
		Three Creek to Granite Creek	20	3	23	15.0
		1993 Total	117	20	137	17.1
	1996	Dry Gulch	0	0	0	0.0
		Bernard Creek	19	1	20	5.3
		Bernard Creek to Three Creek	12	1	13	8.3
		Sheep Creek	4	0	4	0.0
		Three Creek	16	4	20	25.0
		Granite Creek	9	1	10	11.1
		Three Creek to Granite Creek	1	0	1	0.0
		1996 Total	61	7	68	11.5
	1999 ^a	1999 Total	171±48	61±44	237±67	34.5
	2002	2002 Total	196±22			
	2007	2007 Total			194±29	11.9
	2013	2013 Total	90	26	116	28.9
19	1982	Wind River	5	2	7	40.0
		Crooked River	7	1	8	14.3
		Sheep Creek	0	0	0	0.0
		Elk Creek	2	1	3	50.0
		Upper Johnson Creek ^b				

Table 5 Continued.

GMU	Year	Inclusive location	Adults	Kids	Total	Kids/100 adults
		1982 Total	14	4	18	28.6
	1986	Wind River	1	0	1	0.0
		Crooked River	11	3	14	27.3
		Sheep Creek	24	9	33	37.5
		Elk Creek	9	4	13	44.4
		Upper Johnson Creek ^b				
		1986 Total	45	16	61	35.6
	1993	Wind River	7	3	10	42.9
		Crooked River	4	0	4	0.0
		Sheep Creek	8	0	8	0.0
		Elk Creek	2	0	2	0.0
		Upper Johnson Creek	3	1	4	33.3
		1993 Total	24	4	28	16.7
20	1982	Blowout Creek	2	0	2	0.0
		Rhett Creek	10	4	14	40.0
		Sabe Creek	10	3	13	30.0
		Rattlesnake Creek	3	1	4	33.3
		Bargamin Creek	2	0	2	0.0
		1982 Total	27	8	35	29.6
	1987	Blowout Creek	4	0	4	0.0
		Rhett Creek	12	1	13	8.3
		Sabe Creek	30	8	38	26.7
		Rattlesnake Creek	2	0	2	0.0
		Bargamin Creek	2	0	2	0.0
		1987 Total	50	9	59	18.0
	1993	Blowout Creek	1	0	1	0.0
		Rhett Creek	1	0	1	0.0
		Sabe Creek	15	2	17	13.3
		Rattlesnake Creek	2	0	2	0.0
		Bargamin Creek	0	0	0	0.0
		1993 Total	19	2	21	10.5

^a Paintball mark-resight estimates include all of Hunt Area 18 (GMUs 18 and 22).

^b Drainage not included in survey.

SOUTHWEST (McCall) REGION

(GMUs 19A, 20A, 22, 23, 24, 25, 26)

Historical Background

Mountain goats in the McCall subregion can be divided into 4 primary populations. Mountain goats in the lower portion of the Salmon River (GMUs 19A and 20A) likely interact with mountain goats north of the river in Clearwater GMUs 19 and 20. Mountain goats in GMU 22 and a small portion of GMU 23 are contiguous with populations in GMU 18, and share a hunt area in Hells Canyon. Mountain goats in GMUs 25 and 26 share contiguous habitat throughout the Big Creek and Upper South Fork Salmon River drainage, while goats in the easternmost portions of GMUs 26 and 20A are more connected to populations along the Middle Fork Salmon River in GMU 27.

In the Lower Salmon River (GMUs 19A and 20A), the Department managed mountain goats through controlled hunts during the 1950s-1970s. However, all hunts have been closed in this area since 1983, due to dwindling populations.

In Hells Canyon, increasing populations throughout the 1970s and 1980s resulted in expanded hunting opportunities. Mountain goat Hunt Area 18 was expanded south in 1997 to include the Brush Creek drainage of GMU 22. Based on the aerial survey in 2000, which indicated the goat population continued to expand, the Commission approved a separate hunt area for all of GMU 22 with 4 tags (Appendix A) beginning in 2003.

Mountain goats in Big Creek, the Upper South Fork Salmon River, and the eastern portions of GMUs 20A and 26 supported several controlled hunts totaling over 15 tags throughout the 1960s and 1970s. However, these hunts were closed in the 1980s, due to declining goat numbers. While there are goat hunts in portions of GMU 27, none overlap GMUs 25, 26, or 20A.

Management Objectives

Management will be consistent with the statewide management direction delineated in the 1991-1995 Mountain Goat Management Plan.

Habitat Management and Monitoring

Data from habitat models, historic population performance, and recent observations suggest that habitat is not limiting in these GMUs.

Biological Objectives

The Department's objectives throughout these GMUs is to maintain secure mountain goat habitat and increase mountain goat populations.

Capture, Radio-mark, and or Telemetry

No mountain goats were captured, radio-marked, or monitored during this reporting period.

Population Surveys and Monitoring

A population survey was conducted in the northern part of GMU 25 and western part of GMU 26 during June 2018. During this survey, 47 goats (37 adults, 8 kids, 2 yearlings) were observed. Past surveys are summarized in Table 1. Incidental observations during an elk survey in 2019 suggest goat the population in Hunt Area 22 is continuing to increase.

Hunting and Harvest Characteristics

Mountain goats are hunted in a small portion of GMU 23 of the Southwest (McCall) Region and harvest is reported with the GMU 18 harvest in Clearwater Region. Four tags were issued for a goat hunt in GMU 22 in 2018. A total of 2 goats (both males) were harvested for a 50% success rate (Table 2). The maximum horn length recorded from this harvest was 9 inches.

Disease Monitoring

No disease monitoring was conducted on live mountain goats in these GMUs during this reporting period. Samples were collected from hunter- harvested mountain goats in GMU 22 to monitor for presence of respiratory disease pathogens.

Management Discussion

The McCall sub-region accounted for 8 mountain goat controlled hunt areas in 1977. All mountain goat hunting in the region was discontinued in 1980. Since these hunts were discontinued, the Department has collected intermittent data on goat populations in GMUs 20A, 25, and 26. Surveys in 2003, 2015, and 2018 indicate that mountain goat populations in this area are still not sufficient to support hunting opportunity. An exception to this is the GMU 22 mountain goat population, which is contiguous with the GMU 18 population. The GMU 22 population has been increasing as a result of mountain goats pioneering out from the GMU 18 hunt area. Based on the aerial survey in 2000, the Commission approved a separate hunt area for all of GMU 22 with 4 tags beginning with the 2003 hunting season. This hunt has a high success rate. The 2007 population survey in GMU 22 indicated that the mountain goat population was capable of supporting this level of harvest.

Mountain goat translocation sites were identified and prioritized during the 1988-1990 reporting period. Authorization from the appropriate land management agencies was obtained during the 1989-1990 reporting period. These sites were incorporated into the Department's 1991-1995 Mountain Goat Management Plan and revised in August 2000. Recent data indicates a scarcity of goats in the lower South Fork Salmon River portion of GMU 20A, as well as in Monumental Creek, upper Big Creek, and the Pinnacles. Habitat potential for sustaining a goat population should be assessed in this area, which is considered the highest priority for reintroduction or supplementation in the McCall sub-region.

Table 1. Mountain goat surveys, Southwest (McCall) Region, 1982-2010.

GMU	Year	Adults	Kids	Total	Kids/100 adults
20A	1982	35	11	46	31.4
	1990	35	5	40	14.3
	2003	9	2	11	22.2
22	1996	44	5	49	11.4
	2002	45	9	54	20.0
	2007	34	7	41	20.5
25	1982	52	7	59	13.5
	1990	21	6	27	28.6
	2003	7	2	9	28.6
26	1982	34	6	40	17.6
	1990	35	6	41	17.1
	2003	24	10	34	41.7

Table 2. Mountain goat harvest and drawing odds, Southwest (McCall) Region, 2003-present.

Hunt area	Year	Tags	Harvest			Hunter success (%)	Days/hunter	First-choice applicants	Drawing odds %
			M	U	F				
22	2003	4	3		1	100	1.8	51	7.8
	2004	4	3		0	75		32	12.5
	2005	4	4		0	100	3.3	23	17.4
	2006	4	4		0	100		78	5.1
	2007	4	1		2	75		46	8.7
	2008	4	0	2	2	100		42	9.5
	2009	4	3		1	100	7.0	72	5.6
	2010	4	2		2	100	4.0	52	7.7
	2011	4	3		1	100	2.8	56	7.1
	2012	4	2		2	100	7.25	47	8.5
	2013	4	4		0	100	2.25	86	4.7
	2014	4	4		0	100	4.0	65	6.2
	2015	4	3		1	100	3.5	56	7.1
	2016	4	3		1	100	3.0	66	6.1
	2017	4	2		1	75	4.0	88	4.5
	2018	4	2		0	50	2.0	65	6.2

SOUTHWEST (Nampa) REGION

GMUs 33, 34, 35, 39

Historical Background

Historically, controlled hunts for mountain goats occurred in GMUs 35 and 39 until 1981. GMU 35 had 3 hunt areas with 15 any-weapon tags and 15 archery tags. Average annual harvest for the last 5 years of the hunt (1977-1981) was 8 mountain goats. GMU 39 had 3 hunt areas with 17 any-weapon tags. Average annual harvest for the last 5 years of the hunt was 7 mountain goats. Mountain goat seasons in both GMUs were discontinued between 1981 and 2004. A hunt with 2 tags was reopened in GMU 39 in 2005 and a portion of GMU 35 was added to the 36-1 Hunt in 2011.

Management Direction

- Maintain harvest opportunities through controlled hunts
- Increase goat populations where feasible
- Conduct disease testing of all harvested and captured goats

Habitat Management and Monitoring

Mountain goat habitat in GMU's 35 and 39 encompasses the rocky, jagged mountains of portions of the Sawtooth range. Land ownership is primarily USFS (Boise National Forest). Mountain goats occupy detached rocky cliffs along Eightmile, Tenmile, Warm Springs, and Canyon Creeks in GMU 35 and Steel Mountain and North Fork Boise River in GMU 39. They are otherwise found along the main Sawtooth range that divides GMU 36 from GMUs 35 and 39.

During summer 2003, wildfire burned through the forested habitat surrounding most mountain goat range in the North Fork Boise River and Steel Mountain areas. Habitat disturbance may have been responsible for the observed declines in these areas in 2004. No major habitat disturbances occurred in the Warm Springs or Grand Jean areas during the past 10 years.

Biological Objectives

The primary objective in GMU's 35 and 39 is to maintain a stable population with secure habitat.

Capture, Radio-mark, and or Telemetry

No capture or monitoring of mountain goats occurred in the area during the reporting period.

Population Surveys and Monitoring

Population surveys were conducted in February 2019 in GMU's 35 and 39. The survey was conducted in a Bell 47 Soloy helicopter with a pilot and 2 observers. We observed 149 goats (131 adults, 4 yearlings, and 15 kids) in GMU 39, up 24% compared to the previous survey conducted in 2017 (115 goats; 96 adults, 16 kids, and 2 yearlings). We observed 52 goats (45 adults, 5 kids, and 2 yearlings) in GMU 35, up 30% compared to 2017 when 38 goats were observed. The goat population in GMU 35 is down considerably compared to 2009, but is likely not changed since the survey was conducted in 2017. In 2017, heavy snows and poor weather

may have contributed to the low numbers of goats observed. Only 2 goats have been harvested in GMU 35 since 2011 when GMU 35 was added to the 36-1 hunt area. Overharvest is unlikely to be the cause of the 50% decline in the goat population in GMU 35 between 2009 and 2019. Surveys prior to 2004 were flown during spring when intermixed snow and green-up conditions persisted. The 2004 survey was conducted during winter following fresh snowfall when conditions were ideal. The 2009 survey had ample snow, but no fresh snow for tracking. The 2017 survey occurred during one of the highest snow packs on record, but also occurred in late winter compared to 2004 and 2009.

Total numbers of mountain goats observed by area in 2019 were 8% higher in the North Fork Boise River and Atlanta areas compared to 2009. They were considerably lower (50%) in Warm Springs Creek and Grand Jean compared to 2009. Counts were similar to 2017 counts in GMU 35 and much higher in GMU 39 compared to 2017. The lack of goats observed in historic goat location in GMU 35 during 2017 and 2019 was perplexing. Steel Mountain (GMU 39) was not surveyed in 2017 or 2019, but hunter reports during the past 5 years confirmed nannies and kids continue to occupy the area between Steel Mountain and Sheep Creek.

Canyon Creek and Eightmile Creek were added to the survey in 2009 and goats were observed in both drainages. Only Canyon Creek was surveyed in 2019 due to time constraints and weather threats. In 2017, 3 goats were observed in Eightmile Creek during an elk survey. Additional goat tracks were also observed in the drainage during that survey.

Hunting and Harvest Characteristics

A new hunt with 2 tags was established in 2005 for that portion of GMU 39 in the Middle Fork Boise River drainage upstream from, and including, Queen's River and Yuba River drainages. Both tags in the GMU 39 controlled hunt were filled in 2005, 2006, 2008, 2009 and 2010. One tag was filled in 2007. The portion of GMU 35 within the Sawtooth National Recreation Area (SNRA) was included in the 36-1 goat hunt in 2011. One goat was harvested in GMU 35 in 2011. The Trinity Ridge fire in the Boise National Forest closed much of GMU 39 during summer and fall 2012. The two tags issued in 2012 were reissued in 2013. However, fires during 2013 also impacted goat hunters and 3 hunters took rainchecks for their tag in 2014 (one hunter was able to hunt and harvested a goat in 2013). Only one tag was issued in the controlled hunt application process in 2014 to maintain hunt quality; while the remaining 3 raincheck hunters were also allowed to hunt in 2014. Since 2014, both tags have been filled. Only 2 females have been harvested in the 39-1 hunt during the past 10 years (Table 2).

Disease Monitoring

Blood, nasal, and oral pharyngeal samples are taken from hunter harvested goats. Only 1 goat was harvested in GMU 39 in 2018 and DNA samples were the only samples taken.

Management Discussion

We will consider providing additional mountain goat hunting opportunities in hunt areas that meet minimum requirements as defined in the 2019 Mountain Goat Management Plan. All other areas will remain closed.

Table 1. Mountain goat surveys, Southwest (Nampa) Region, 1976-2009.

GMU	Inclusive location	Year	Adults	Kids	Total	Kids/100 adults
35	Grandjean/Head SF Payette	1976	119	29	148	24.4
		1981	106	23	129	21.7
		1988	61	10	71	16.4
		1994	18	4	22	22.2
		2004	71	16	87	22.5
		2009	56	12	68	21.4
		2017	25	3	28	12.0
		2019	31	3	34	10.3
	Warm Springs Crk.	1980	23	10	33	43.5
		1988	32	14	46	43.8
		1994	2	1	3	50.0
		2004	6	2	8	33.3
		2009	18	4	22	22.2
		2017	7	0	7	N/A
		2019	11	2	13	18.2
	Tenmile Crk.	1980	6	1	7	16.7
		1988	11	4	15	36.4
		1994	1	0	1	0.0
		2004	2	0	2	0.0
		2009	1	0	1	0.0
		2017/2019	N/C	N/C	N/C	N/C
	Eightmile Crk.	2009	3	1	4	33.3
		2017	3	0	3	N/A
		2019	NC	NC	NC	N/A
	Canyon Crk.	2009	5	3	8	14.3
		2017	2	0	2	N/A
		2019	5	0	5	N/A
39	Atlanta	1977	65	14	79	21.5
		1981	47	9	56	19.1
		1988	41	9	50	22.0
		1994	25	1	26	4.0
		2004	75	21	96	28.0
		2009	78	15	93	19.2
		2017	66	6	67	9.1
		2019	91	10	101	10.0
	Steel Mountain	1977	4	1	5	25.0
		1981	12	2	14	16.7
		1988	14	5	19	35.7
		2004	0	0	0	0.0
		2009	0	0	0	0.0
		2017/2019	N/C	N/C	N/C	N/C
	N Fork Boise River	1977	17	6	23	35.3

GMU	Inclusive location	Year	Adults	Kids	Total	Kids/100 adults
		1981	37	10	47	27.0
		1994	23	4	27	17.4
		2004	16	2	18	12.5
		2009	31	6	37	19.4
		2017	31	10	43	32.3
		2019	44	5	49	12.2

Table 2. Mountain goat harvest and drawing odds, Southwest Region, 2005-present.

Hunt area	Year	Tags	Harvest		Hunter success (%)	Days/ hunter	First-choice applicants	Drawing odds %
			M	F				
39-1	2005	2	2	0	100	1.0	30	6.7
39-1	2006	2	2	0	100	4.0	7	28.6
39	2007	2	1	0	50	5.0	40	5.0
39	2008	2	2	0	100	3.0	21	9.5
39	2009	2	2	0	100	6.5	6	33.3
39	2010	2	2	0	100	4.0	44	4.5
39	2011	2	2	0	100	22.5	23	8.7
39	2012	2	0	0	0	0	18	11.1
39	2013	2	0	1	50	3.0	20	10.0
39	2014 ^a	4	3	0	75	3.7	14 ^b	7.1 ^b
39	2015	2	1	1	100	6.0	11	18.2
39	2016	2	2	0	100	2.5	18	11.0
39	2017	2	2	0	100	4.5	43	4.7
39	2018	2	1	0	50	12.0	16	1.3

^a includes 3 rainchecks

^b excludes rainchecks

MAGIC VALLEY REGION

GMUs 36, 43, 48

Historical Background

Previous reports detail the numerous changes that have been made in goat survey areas and hunt areas since the 1970s. Hunt Area 43 currently includes the southwestern portion of GMU 36, all of GMU 43, and the northwest portion of GMU 48. Hunt Areas 50, 36A-1, and 36A-2 include portions of GMUs 48 and 49. Information on these hunts is presented in the Upper Snake and Salmon sections of this report.

During the 2006-2007 regulation process, mountain goat hunt area boundaries underwent substantial changes in the Pioneer, Smoky, Sawtooth, and Boulder-White Cloud Mountains to better reflect population structure, improve harvest distribution, and allow more hunting opportunity while ensuring healthy mountain goat populations.

Management Objectives

Current statewide management direction is to encourage the USFS to reduce livestock/human/mountain goat conflicts in favor of mountain goats and maintain current hunts and tag levels.

Habitat Management and Monitoring

Mountain goats within this population are becoming increasingly exposed to human disturbance as extreme backcountry sports such as Heli-skiing and snowmobiling become more popular. It will be important for managers to work with land management agencies to monitor activities which diminish the inaccessible nature of mountain goat habitat, and to minimize both motorized and non-motorized disturbance, particularly during lambing and over-wintering months. Additionally, habitat improvement projects designed to increase forage value and return late seral habitats to early successional stages may benefit mountain goats in this area.

Biological Objectives

Maintain a stable population with secure habitat within Hunt Area 43.

Capture, Radio-mark, and or Telemetry

No mountain goats were captured or radiocollared during this reporting period.

Population Surveys and Monitoring

The most recent survey of Hunt Area 43 was conducted in February 2017. One hundred seventy four goats were observed (134 Adults, 24 Kids, and 10 Yearlings). Observed ratios were 18 juveniles:100 adults. The number of goats observed was up considerably from the previous survey, conducted in 2009. During the 2009 survey, 107 mountain goats (21 juveniles:100 adults) were observed in Hunt Area 43.

Hunting and Harvest Characteristics

In 2017, 2 of the 3 tag holders in Hunt Area 43 harvested mountain goats. Both mountain goats were harvested in GMU 43; a 3.5 year old male and a 6.5 year old female.

Capture and Translocation

Potential release sites have been identified in GMUs 43 and 48. No translocations occurred in the region during the reporting period.

Disease Monitoring

Sample kits were distributed to hunters to assist in disease monitoring efforts. Additional disease samples were taken from harvested goats during mandatory harvest reporting. Results of these sampling efforts will be available in the next reporting period.

Management Discussion

Results of the 2004, 2009, and 2017 surveys suggest that overall mountain goat numbers are increasing but also suggest that the distribution of mountain goats is patchy. While hunters have enjoyed relatively high success rates and relatively good drawing odds in these GMUs, research suggests that small, patchy mountain goat populations can sustain only minimal harvest. In addition, because Hunt Area 43 is close to the Ketchum/Sun Valley area and State Highway 75, mountain goats in these hunt areas are frequently observed by the general public and have important non-consumptive value. During the next review of mountain goat hunting regulations, we plan to review location, survey, and harvest data and will continue to refine tag numbers and hunt area boundaries to best fit the dynamics of the mountain goat populations in GMUs 43 and 48.

Human recreation in the form of Heli-skiing and extreme snowmobiling are becoming more popular along the Blaine/Camas county border between GMUs 36, 43, and 48. Regulation of these activities needs to be closely monitored to assess possible impacts to wintering mountain goats. Managers will continue to collaborate with Sawtooth National Forest staff to alleviate potential effects of winter recreation on mountain goats.

Table 1. Mountain goat surveys, Magic Valley Region, 1981-2009.

GMU	Year	Inclusive location	Adults	Kids	Unknow n	Total	Kids/100 adults
36	2009	That portion of GMU 36 west of State Highway 75 and south of Alturas Lake Creek	18	6	0	26	33.3
	2017		6	1	0	7	16.7
43	1981		69	20	0	89	29.0
	1990		67	21	0	88	31.3
	1994		21	4	0	25	19.0
	1996		25	7	0	32	28.0
	2001		26	2	0	28	7.7
	2004		21	6	0	27	28.6
	2009		50	10	0	60	20.0
	2017		69	17	3	89	25.0
48	1981	That portion west of N. Fork Big Wood River and north of Hwy 75	18	3	0	21	16.7
		That portion west of Hwy 75 and north of Baker Creek	19	2	0	21	10.5
		That portion east of Hwy 75 and south of Trail Creek Road, and that portion of GMU 49 west of the Little Wood River	21	1	5	27	4.8
	1985	That portion west of N. Fork Big Wood River and north of Hwy 75	26	8	0	34	30.8
	1990		43	16	0	59	37.2
	1994		52	13	0	65	25.0
	2001		55	14	0	69	25.5
	2004		44	12	0	56	27.3
	2009	That portion of GMU 48 south and west of State Highway 75 and upstream from and including the Baker Creek drainage	19	2	0	21	10.5
	2017		64	9	5	78	14.1

Table 2. Mountain goat harvest and drawing odds by hunt area, Magic Valley Region, 2000-present.

Hunt area	Year	Tags	Harvest		Hunter success (%)	Days/hunter	First-choice applicants	Drawing odds %
			M	F				
43	2005 ^a	2	1	1	100	1.5	24	8.3
	2006	2	2	0	100	4.5	14	14.3
	2007 ^c	3	0	2	67	1.5	54	5.6
	2008	3	3	0	100	10.2	25	12.0
	2009	3	1	1	67	3.0	48	6.3
	2010	3	3	0	100	7.3	28	10.7
	2011	3	2	1	100	11.0	33	9.1
	2012	3	3	0	100	1.7	28	10.7
	2013	3	1	0	33	10.0	45	6.7
	2014	3	2	1	100	4.0	43	7.0
	2015	3	1	2	100	9.0	27	11.1
	2016	3	3	0	100	1.7	52	5.8
	2017	3	1	1	67	1.0	51	5.8
48	2000	2	1	1	100	2.5	13	15.4
	2001	2	2	0	100	4.5	8	25.0
	2002	2	1	0	50	3.0	25	8.0
	2003	2	2	0	100	3.0	24	8.3
	2004	2	1	0	50	3.0	18	11.1
	2005	2	2	0	100	5.0	13	15.4
	2006 ^b	2	1	0	50	3.0	12	16.7

^a Data is for Hunt Area 43, which includes portions of GMUs 43 and 36.

^b After 2006, Hunt Area 48 was incorporated into Hunt Area 43.

^c In 2007, Hunt Area 43 was redrawn to include GMU 43 and portions of GMUs 36 and 48.

UPPER SNAKE REGION

GMUs 49, 50

Historical Background

Five distinct populations of mountain goats traditionally occurred in Upper Snake Region. These populations include Pioneer Mountains (GMUs 49 and 50). Hunt Areas 50-1 and 50-2 were closed in 1982 because of a low kid:adult ratio. Hunt Area 50 (that portion of GMU 50 south and east of Trail Creek Road and south and west of U.S. Highway 93) was reopened with 5 tags in 1986 after 92 mountain goats with 30 kids:100 adults were counted on a 1985 survey. This hunt area was previously identified as 50-2 and was closed when only 45 mountain goats with 22 kids:100 adults were counted during a helicopter survey in winter 1981-1982. GMU 49 was added to this hunt in 2001.

Mountain goat hunting opportunity has been reduced substantially in recent years across the area. These reductions had been in response to dramatic population declines in many of our GMUs. These declines had led to the closure of 3 of the 5 hunt areas in 2014 and 2015. The Upper Snake Region has gone from a high of 5 hunt areas and 40 total tags in the late 1980s and early 1990s to 2 hunts with 7 total tags offered beginning 2013. During the season setting process in 2019 and in response to mountain goat population surveys, the Lemhi mountain goat hunt was re-opened and more tags were allocated in the Hunt Area 50 hunt. The Upper Snake Region now includes parts of 4 Hunt Areas (36A-1, 50, 51, and 67) with 10 permits available.

Management Objectives

The 1991-1995 Mountain Goat Management Plan authorizes hunts in GMUs having a minimum of 50 adult mountain goats, requires that hunted GMUs be inventoried at least once every 5 years, and sets tag levels to not exceed 5% of the adults in any population.

Habitat Management and Monitoring

The 2014 winter had below average snow accumulations, but timely spring and late summer rains maintained some quality forage across the region. In 2015, winter snow accumulations were about average, but spring and summer rains were less than in 2014 and as a result forage quality was marginal. During both winters, average temperatures were observed with many south facing slopes free of snow for much of the winter. Snowpack receded faster than the previous years with vegetation growing earlier in the spring. The winter of 2016-2017 saw near record snow levels for this area and the winter of 2018 and 2019 was well above average for snowfall and was followed up by a cool, wet spring.

Mountain goats in Hunt Area 50 occupy the higher elevation peaks and ridges of the Pioneer Range. Habitat in this area is discontinuous and appears less productive than other occupied mountain goat habitat in Upper Snake Region. The two habitat components that are most limited are alpine meadow summer range and mountain mahogany stands for winter range. Tracks observed on aerial surveys indicate mountain goats, either solitary or in small groups, shift several miles to find suitable habitats following winter storms. Water may also be limiting in some parts of the summer range.

Biological Objectives

The Department's objectives are to maintain secure mountain goat habitat and increase or maintain mountain goat populations.

Capture, Radio-mark, and or Telemetry

There has been no capture, radio-marking or telemetry work done on the hunt area 50 mountain goat population.

Population Surveys and Monitoring

GMUs 49 and 50 were surveyed in August 2017: this was the first survey since August of 2010 when 74 mountain goats were counted. The survey in 2017 resulted in a total of 172 goats being counted, 32 of which were kids. This is a 132% increase over this time frame, which is reflective of the increasing kid:adult ratios (Table 2) observed in the 2010 survey. This large increase in the observed goat population is likely not entirely tied to herd productivity, but is likely a combination of slight changes to survey protocols and increased recruitment. Worth noting was the observation of 23 goats in the White Knob portion of the area. This increase in mountain goats observed in the 2017 Pioneer survey resulted in an increase to 4 goat permits in 2019.

Hunting and Harvest Characteristics

Two tags were issued in Hunt Area 50 in 2087, resulting in the harvest of 2 male mountain goats (100% hunter success). Drawing odds were 5% in 2018 with 39 hunters applying.

Capture and Translocation

No capture and/or translocation operations have been conducted in GMU 50.

Disease Monitoring

Disease monitoring for this area consists of taking nasal and oral-pharyngeal samples on all harvested animals that are checked in (if possible) and then sampling other individuals as needs, concerns, or opportunities dictate.

Management Discussion

Tags in Hunt Area 50 were reduced from 5 to 2 in 1993 based upon results of the 1992 population survey. Mountain goat population surveys in February 1992, August 1999, August 2004, August 2010, and August 2017 indicate this hunt area has experienced significant population growth over the last several years (132% increase from the 2010 survey). This growth and the application of the management guidelines outlined above resulted in a tag allocation of 4 for this Hunt Area in 2019.

Controlled Hunt Area 51 (GMUs 51, 58, 59, 59A)

Historical Background

Mountain goats are native to these ranges. Reports of observations of one to a few mountain goats date back to the early 1950s. Numbers remained low, however, until about the mid-1970s. Aerial surveys in 1982 indicated that populations in Hunt Areas 51 and 59A had increased enough to increase tags in Hunt Area 51 and initiate Hunt Area 59A. Hunt Area 59 was initiated in 1987 after a 1986 survey found 46 mountain goats with a ratio of 44 kids:100 adults. This hunt was closed after a 1994 population survey accounted for only 25 mountain goats. Hunt Area 59A was closed in 2002 because the population had declined below the minimum number to support a hunt (Table 2).

From 1983-1986, Hunt Area 51 was split into 51-1 (north of Rocky Canyon drainage) and 51-2 (south of and including Rocky Canyon drainage). These hunts were combined in 1987 when observations showed mountain goats moved freely between the hunt areas and hunter densities were not a problem.

Mountain goats have typically not been found on the west side of GMU 51 (Lost River Range) but in recent years, sightings of a few animals have been reported.

Habitat Management and Monitoring

The 2014 winter had below average snow accumulations, but timely spring and late summer rains maintained some quality forage across the region. In 2015, winter snow accumulations were about average, but spring and summer rains were less than in 2014 and as a result forage quality was marginal. During both winters, average temperatures were observed with many south facing slopes free of snow for much of the winter. Snowpack receded faster than the previous years with vegetation growing earlier in the spring.

Mountain goat habitat in these GMUs consists of alpine meadows interspersed with scree and talus, conifers, and mountain mahogany. Water and alpine meadow habitat is limited in these ranges and may be limiting goat distribution and population growth. Sporadic winter and late summer precipitation likely influence goat populations across the Lemhi Range.

Biological Objectives

The Department's objectives are to maintain secure mountain goat habitat and increase or maintain mountain goat populations.

Capture, Radio-mark, and or Telemetry

There have been no captures, transplants, or marking of mountain goats in Hunt Area 51.

Population Surveys and Monitoring

A population survey was flown in Hunt Area 51 in August 2005. A total of 67 mountain goats with a kid:adult ratio of 20.8:100 were counted. This number is down significantly from the

previous and historical high count for the area of 157. This information prompted a tag reduction from 6 to 3 for the 2007 season. The most recent population survey was flown in Hunt Area 51 in July 2012. A total of 65 mountain goats with a kid:adult ratio of 35:100 was counted.

Population surveys were conducted in GMUs 59 and 59A in August 2001 and again in September 2002 (Table 2). A Bell G47 helicopter was used to conduct the surveys. No goats were found in GMU 59 in 2001 or 2002 despite good counting conditions and the same areas being surveyed by the same observer as in the previous (1994) survey. A total of 25 mountain goats were counted in GMU 59 in 1994. The observed kid:adult ratio was 79:100, and no twin sets were identified. The 25 mountain goats counted on this survey represented a decrease of 46% from the next most recent survey (1986). No goats could be found on the Montana side of the range (Garfield Peak, Lima Peaks, and upper Shineberger Creek) in 2002.

The 2001 survey of GMU 59A accounted for only 25 mountain goats. This total represents an 80% decrease from the previous survey (1994). Counting conditions were good during this survey, and again, the same areas were surveyed by the same observer, pilot, and aircraft as the previous surveys. The 1994 survey results included a total count of 128 mountain goats with 39 kids:100 adults (4 sets of twins identified). This total represented an increase of 44% from the 1991 survey and represented the most mountain goats ever counted in this GMU.

Despite good counting conditions during early September 2002 in Hunt Areas 59 and 59A, counts were down dramatically in all areas. Winds prevented getting close to rocks in some places to get precise GIS locations; however, the area was surveyed adequately to count and classify the goats. The survey was conducted by the same observer, but a different pilot and aircraft than the 1994 and 2001 surveys. No goats were observed in GMU 59 (25 goats were counted in 1994) and only 22 goats were tallied in GMU 59A, compared to 128 in 1994. The declines in these populations resulted in the closure of both hunts (59 in 1995 and 59A in 2002). During the 2002 survey, an attempt was made to survey the entire population of goats in both Idaho and Montana. In addition to the traditional area surveyed (Beaverhead Range from Italian Peak to Ten Mile Creek), the mountain range from Ten Mile Creek, Idaho, and Morrison Lake, Montana, was surveyed. Within this area, an additional 6 adult goats were observed above Morrison Lake on the Montana side of the range and a nanny and kid observed in upper Clear Creek, GMU 30A on the Idaho side of the range. The kid:100 adult ratio had declined from 39.1 in 1994 to 22.2 in 2002. Reasons for these declines are still poorly understood.

The most recent surveys in GMUs 59 and 59A were conducted in August 2006. This survey resulted in observations of 2 adult goats and 0 kids in GMU 59 and 20 adults and 7 kids in GMU 59A/58.

A survey for the GMU 51 hunt area was conducted in August of 2012. The results of this survey was concerning for biologists. The total number of goats on the 2012 survey was 65. For comparison 157 goats were counted in 2000. This area is a priority for the Region to fly again as soon as possible.

In August of 2018 staff flew a survey for the entire Lemhi Mountain Range. The results of this survey were very positive with a total 165 goats being observed. 131 adults and 34 kids were counted resulting in an adult to kid ratio of 100:26. The 2018 count indicates a 60% increase from the 2012 survey. This is likely not entirely a change in herd productivity, but rather a combination of area surveyed and goat production over the last number of years.

Hunting and Harvest Characteristics

Based on the survey completed in GMU 51 in 2012, it was determined that the decreasing amount of goats observed could not support harvest. Total numbers of goats in the 2000 survey was 157 compared to the 2012 survey total of 65. No tags have been issued in GMU 51 since 2012.

As a result of the 2018 mountain goat survey, Hunt Area 51 will be re-opened in 2019 with 2 tags being available for hunters.

Capture and Translocation

No capture and/or translocation operations were conducted during this reporting period.

Disease Monitoring

Disease monitoring for this area consists of taking nasal and oral-pharyngeal samples on harvested animals and then sampling other individuals as needs, concerns, or opportunities dictate.

Management Discussion

The 1991-1995 Mountain Goat Management Plan authorizes hunts in GMUs having a minimum of 50 adult mountain goats, requires that hunted GMUs be inventoried at least once every 5 years, and sets tag levels to not exceed 5% of the adults in any population. Based on the most recent survey data, season framework modifications were implemented beginning in 1995. The tag level in GMU 51 was decreased from 6 to 3 due to reduced populations in the most recent survey. The dramatic decrease in goats counted in both GMUs 59 and 59A have resulted in the closure of these hunts (GMU 59 in 1995 and GMU 59A in 2002). Reasons for these declines and differences in population performance of relatively close populations are unknown.

GMU 67

Historical Background

The Snake River Range lies outside the historical range of mountain goats. Five mountain goats were introduced in 1969 (Hayden 1989) (Table 4). The mountain goat population in GMU 67 grew rapidly in the 1970s and 1980s. Hunts were initiated in 1983. Each of Hunt Areas 67-1, 67-2, 67-3, and 67-4 had 4 tags in 1986, resulting in a net increase of 6 tags over the 1985 season. Two new hunts (67-5 and 67-6) were created in 1987. Due to decreasing population trends and plans to continue capturing mountain goats from the Mt. Baldy and Mt. Baird populations for statewide translocation, seasons were restructured in 1991. Total tags were reduced from 24 to 13. Hunt Areas 67-2, 67-4, and 67-6 were combined and renumbered to 67-1. Additionally, Hunt

Area 67-1 became 67-2; 67-3 remained 67-3; and 67-5 became 67-4. The continued downward population trend resulted in the further restructuring of the GMU 67 goat hunts in 2001 to consist of only 1 hunt with 3 permits encompassing all of GMU 67.

Hunt Area 67 was closed to harvest in 2003 and 2004. Only 2 tags were issued in 2005 and 2006. In 2007, permits were increased to 4 and remained at 4 tags until 2011. Permits were increased to 5 for the 2011 season as a result of the 2010 population survey, which supported the increase in permit levels. Population surveys have continued to be conducted every two years in this hunt area, due in large part to research projects that have been going on since 2013. The surveys conducted in 2012, 2014, and 2016 have also indicated stable and healthy goat numbers in GMU 67.

The winter of 2016-2017 was fairly harsh and Wyoming documented increased mortality on adults and significant loss of kids due to the winter conditions. This mortality likely carried over to the Idaho side of the population. The impacts of this winter will likely be reflected in goat numbers over the next number of years and is something that managers should take into consideration.

Habitat Management and Monitoring

The 2014 winter had below average snow accumulations, but timely spring and late summer rains maintained some quality forage across the region. In 2015, winter snow accumulations were about average, but spring and summer rains were less than in 2014 and as a result forage quality was marginal. During both winters, average temperatures were observed with many south facing slopes free of snow for much of the winter. Snowpack receded faster than the previous years with vegetation growing earlier in the spring.

GMU 67 mountain goat habitat is productive, with a good complex of alpine meadows, mountain mahogany, and conifers. In summer, the mountain goats use lush, alpine meadows and cirque basins. Examination of harvested mountain goats from this area indicates they are in extremely good body condition going into winter.

Domestic sheep graze the Mt. Baird area and may be impacting mountain goat summer range. This area is heavily used by mountain goats prior to sheep use, but they leave and move onto winter range when domestic sheep are present. It is not known if this mountain goat movement is due to forage or spatial competition, or disturbance created by herders and dogs. The Targhee National Forest, who administers the area, has continued to evaluate the conflict.

The Bridger-Teton National Forest is currently going through the NEPA process to evaluate the impacts of a proposal for heli-skiing in the area. If approved, this could have negative impacts for this goat population.

Biological Objectives

The Department's objectives are to maintain secure mountain goat habitat and increase or maintain mountain goat populations.

Capture, Radio-mark, and or Telemetry

As part of a research project that was implemented back in 2013, Upper Snake staff continued to monitor 4 VHF radio collars within this population. There were no additional capture or radio-marking activities in hunt area 67 over this reporting time frame.

Population Surveys and Monitoring

Productivity and survival have historically been high in this introduced population. In 1982 and 1983, the percent of adult females producing young was 71% and 83%, respectively, and twinning rates were 25% and 33%, respectively. Annual survival from 1982 to 1983 was calculated to be 88% among kids, 95% among yearlings, and 93% among adult/subadults (Hayden 1989). Even in the face of declining populations, kid:adult ratios remained high through 2000, but showed a marked decline in the 2002 count.

Surveys have been conducted in GMU 67 on a fairly frequent basis, usually in conjunction with Wyoming mountain goat surveys. An aerial population survey was conducted on this mountain goat population with a Bell G47 helicopter in early August 2002. A total of only 42 mountain goats with a kid:adult ratio of 20:100 was counted in the Mt. Baird portion of GMU 67. This was the fewest goats counted in this area since before 1982. This survey was disappointing in that no goats could be found in the Mt. Baldy portion of GMU 67. What was even more disappointing was that the goat dust beds and trails so prominent 10 years ago no longer exist; suggesting goats no longer use this area. The count previous to 2002 in this area was a helicopter count conducted in 2000 that accounted for 90 mountain goats. This population had shown a steady decline from 217 (the historical high count) down to 42 since 1996. Kid:100 adult ratios had declined from over 40 to 20. Goat numbers on the Wyoming side of the area also declined from 76 in 2000 to 55 in 2002. As with the GMU 59 and 59A goats, the reason for these declines is poorly understood. Reasons for this decline are largely unknown and the hunt was closed in 2003.

The August 2004 population survey had some surprising results. Mountain goat numbers had increased substantially to 114 animals; a 171% population increase in 2 years. The increase seems unrealistic and may be inflated due to changes in survey effort and methodology; however, Wyoming biologists noted a similar change in this population from their survey. The state line runs across the mountain range and the goat populations in the 2 states could biologically be considered as one. The Wyoming goats originated from Idaho introductions. Wyoming counted 55 goats in 2002 and 121 goats in 2004, a 120% increase. Surveys in the 2 states were timed and conducted similarly but with different pilots and observers. During the 2004 Idaho survey, goats were again observed in the Mt. Baldy area with a total of 6 animals. The increased count prompted the Department to reopen the GMU 67 hunt with a conservative 2 permits beginning fall 2005 in the Mt. Baird area between Palisades Creek and the Wyoming border.

Another survey was conducted in February 2005 to address impacts of a proposed expansion of a heli-skiing operation. During this survey, 74 goats were observed in Idaho and data was gathered on locations of wintering goats and signs of winter recreation. We not only learned where heli-skiing activities would be detrimental to mountain goats but that snowmobiling activity is

reaching far into mountain goat wintering habitat and is a serious concern. The lower count from summer to winter is most likely due to sightability differences between summer and winter.

A population survey of mountain goats occurred in August 2010. The survey suggests the population is slightly larger than it was during the previous survey in 2006. Total goats counted were 155 with 115 adults and 40 kids. Biologists counted 129 animals south of Palisades Creek with kid:adult ratio of 34:100 and 26 animals north of Palisades Creek with a kid:adult ratio of 37:100.

The August 2012 survey yielded 113 goats with 90 adults and 23 kids. The kid:adult ratio on this survey was 26:100. Tags for 2011 were increased from 4 to 5 in Hunt Area 67 due to findings from August 2010 survey.

A population survey was conducted in August 2014 and a total of 135 goats were counted, with 109 adults and 26 kids. During this effort biologists counted 112 goats south of Palisades Creek with a kid:adult ratio of 13.3:100 and 23 goats on the north side of Palisades Creek with a kid:adult ratio of 21.1:100.

The GMU 67 mountain goat population was surveyed again in August of 2016. This survey yielded a population total of 143 goats, 104 adults and 39 kids. (kid:adult ratio of 37.5:100). As in other years data was split into two different areas; the area south of Palisades Creek (Baldy Area) and the habitat North of Palisades Creek (Baird Area). In 2016 the Baldy Area totaled 23 goats with 18 adults and 5 kids. The Baird Area had 120 goats with 86 adults and 34 kids. This population seems to be doing very well.

The Palisades population was surveyed again in 2018. This survey was largely implemented to partner with a graduate research project that was going on during the same time frame. The survey resulted in the observation of 128 total goats (110 adults and 18 kids) with an adult to kid ratio of 100:16. The decline in total goats is not good, but it also is not too alarming in that it could merely be the result of missed observations. Of concern is the decline in the kid ratio. Staff will continue to monitor this. In fact, the area is slated for survey again in the summer of 2019 and managers are eager to see the results of this survey.

Hunting and Harvest Characteristics

Hunt Area 67 was closed to harvest in 2003 and 2004. Only 2 tags were issued in 2005 and 2006. In 2007, permits were increased to 4 and remained at 4 tags until 2011. Permits were increased to 5 for the 2011 season as a result of the 2010 population survey, which supported the increase in permit levels. In 2011, 5 tags were issued with a harvest of 3 males and 1 female goat (80% hunter success). Drawing odds were 3.8% for hunt area 67 in 2014. In 2015, 5 tags were issued with a harvest of 5 males (100% hunter success). Drawing odds were 3.9% for hunt area 67 in 2015.

In 2016, 5 tags were issued with a harvest of 4 goats, 2 males and 2 females (80% hunter success). Drawing odds were 3.4% for hunt area 67 in 2016. Monitoring female harvest for this hunt over time will continue to be a priority and warrant attention.

In 2018, 5 tags were once again issued for hunt area 67 with 4% drawing odds. In 2018, 4 of 5 hunters were successful (80% hunter success) and all 4 goats harvested were male. Female harvest continues to be a point of interest in monitoring this goat population.

Capture and Translocation

Several efforts to translocate mountain goats from the Mt. Baldy and Mt. Baird populations were made between 1989 and 1997. Mountain goats were captured in clover traps using salt as bait and some were net-gunned. A total of 46 mountain goats were removed from the area during 6 capture efforts (Table 4). In August of 2011, 3 mountain goats were captured and radio collared in the Palisades area. They were fitted with store on board GPS collars and a micro VHF collar. This should add up to 6 years of data collection from these goats. This project is part of a multi-state national park effort (Mountain Ungulate Project) to look at habitat use and competition between mountain goats and bighorn sheep. In July of 2013, an additional 9 radio collars were deployed in this population. Regional staff has maintained monitoring efforts for all collared goats in GMU 67. The Department continues to work closely with the Wyoming Game and Fish Department on this collaborative project. In, there were still 9 radio-marked goats remaining and these animals were monitored from the ground and air.

Disease Monitoring

Disease monitoring for this area consists of taking nasal and oral-pharyngeal samples on harvested animals and then sampling other individuals as needs, concerns, or opportunities dictate.

Management Discussion

The past heavy harvest strategy (pre-1992) was dictated by the rapidly increasing, productive nature of this introduced herd. Subsequent downward population trends, along with plans to continue capturing mountain goats for translocation operations, precipitated a reduction in permits and a restructuring of GMU 67 mountain goat hunts in 1991. The 2 hunts were combined in 2001 and permits were reduced to 3.

The largest number of mountain goats (217) counted in the Mt. Baird area of GMU 67 was observed on the 1996 survey flight. The population objective after the 1996 survey was to reduce this population to a level thought to be more in balance with available habitat. A more aggressive harvest strategy (20 permits) was adopted beginning with the 1997 hunting season and an additional 10 goats were captured and provided for statewide translocation operations. However, the Mt. Baird goat population has declined more precipitously than management actions would dictate, and the lack of goats found in the Mt. Baldy portion of GMU 67 during the 2002 survey was very disappointing. However in 2010, 26 goats were counted in the Mt. Baldy area. The survey of 2012 saw a slight decrease with 20 counted. Survey results for the Mt. Baird area subsequent to 1996 indicated a decrease to 163 in 1998, 90 in 2000, 42 in 2002, and a jump to 108 in 2004. The survey of this area in 2010 resulted in a count of 129 goats. The most recent survey in 2012 counted 93. Reasons for that decline and rebound are still unknown. The hunt was closed during 2003 and 2004 and reopened in 2005. The 2016 survey in Idaho when

combined with Wyoming information indicates that this population is still performing very well. Currently there are 5 permits offered for GMU 67.

GMU 61 Mountain Goat Herd

There is a small group of mountain goats that inhabit the Targhee Creek drainage in the northeastern portion of GMU 61 and recently a few goats have been observed in the Sawtelle Peak area. Very little is known about this population, but we get steady reports of these goats and have picked them up on our wolf monitoring cameras in the area. This population has no hunting opportunity in Idaho. Over the years there have been varying reports for the number of goats observed. Damon Keen, a Fish and Game employee has recorded as many as 22 goats in this group. Investing some kind of effort in monitoring this group of goats would be worth the effort. These goats likely spend time in both Idaho and Montana and so coordinating information and data with Montana would likely give us a better idea as to what happens with this population.

In August of 2018 staff conducted an aerial survey of the Unit 61 mountain goat populations. In the Targhee Creek area a total of 57 mountain goats were observed with 43 adults and 14 kids. A total of 3 goats were observed in the Sawtelle Peak area with 2 adults and 1 kid.

Department staff needs to keep these goats in mind when discussing or addressing Forest Management Plans or other activities that might have impacts.

Literature Cited

Hayden, J. A. 1989. Status and population dynamics of mountain goats in the Snake River Range, Idaho. Thesis, University of Montana, Missoula.

Table 1. Mountain goat harvest and drawing odds, Upper Snake Region, 2003-present.

Year	Tags	Harvest			Hunter/ Days	First-choice applicants	Drawing odds %
		M	F	Success%			
2003	8	6	2	100	3.6	117	6.8
2004	8	3	3	75	4.4	90	8.9
2005	10	7	2	90	3.5	210	4.8
2006	10	6	2	80	4.4	192	5.2
2007	9	6	1	77	7.9	169	5.3
2008	9	5	2	77	6.7	158	5.7
2009	9	5	3	88	19.1	203	4.4
2010	9	5	1	67	4.4	160	5.6
2011	10	5	3	80	4.3	194	5.2
2012	10	7	0	70	4.0	165	6.1
2013	7	5	2	100	2.7	154	4.5
2014	7	5	1	86	8.2	158	4.4
2015	7	7	0	100	3.1	170	4.1
2016	7	4	2	86	3.7	178	3.9
2017	7	4	0	57	8.5	172	3.9
2018	7	6	0	86	5.5	165	4.2

Table 2. Mountain goat surveys, Upper Snake Region, 1982-2012.

GMU	Inclusive location	Year	Adults	Kids	Unknown	Total	Kids/100 adults
49	(in Hunt Area 50)	1992	8	2	0	10	25.0
		2000	22	1	0	23	4.5
		2004 ^a	31	3	0	34	9.6
		2010 ^a	20	8	0	28	40.0
50	That portion north and west of the Trail Creek Road and south and west of U.S. Highway 93 (in Hunt Area 36A-1)	1982 ^a	13	3	0	16	23.1
		1985 ^a	9	2	0	11	22.2
		1992 ^a	13	0	0	13	0.0
		1999 ^a	26	4	0	30	15.4
		2004 ^c	13	3	0	16	23.1
	That portion south and east of the Trail Creek road and south and west of U.S. Highway 93 (Hunt Area 50)	1982 ^a	37	8	0	45	21.6
		1985 ^a	66	20	6	92	30.3
		1992 ^a	45	4	0	49	8.9
		1999 ^a	40	10	0	50	25.0
		2004 ^a	31	7	0	38	22.6
		2010 ^a	27	8	0	35	29.6
	In 2004 we surveyed hunt Area 50 (GMUs 49 and 50)	2004 ^a	62	10	0	72	16.1
		2010 ^a	47	16	0	63	34
		2017 ^a	140	32	0	172	22.8
51	Lemhi Range South of the Big Timber Creek drainage	1982 ^a	75	22	0	97	29.3
		1986 ^a	68	15	17	101	22.1
		1987 ^b	100	30	0	130	30.0
		1992 ^a	54	7	0	61	13.0
		2000 ^a	125	32	0	157	25.6
		2005 ^a	67	14	0	82	20.8
		2012 ^a	48	17	0	65	35.4
	See note d below for details about the 2018 survey area.	2018 ^d	88	22	0	110	25.0
29,51, 58, 37A	Entire Lemhi Range	2018 ^a	131	34	0	165	26.0
59	Red Conglomerates	1986 ^a	32	14	0	46	43.8
		1994 ^a	14	11	0	25	78.6
		2001 ^a	0	0	0	0	
		2002 ^a	0	0	0	0	
		2006 ^a	2	0	0	2	0.0
59A	Italian Peaks	1982 ^a	46	13	0	59	28.3
		1986 ^a	10	3	0	13	30.0
		1991 ^b	61	24	4	89	39.3
		1994 ^a	92	36	0	128	39.1

Table 2. Continued.

GMU	Inclusive location	Year	Adults	Kids	Unknown	Total	Kids/100 adults
		2001 ^a	16	4	0	20	25.0
		2002 ^a	18	4	0	22	22.2
		2006 ^a	20	7	0	27	35.0
67	South of Palisades Creek (Mt. Baird area)	1982 ^a	33	13	0	46	39.4
		1985 ^a	35	16	0	51	45.7
		1986 ^b	0	0	104	104	
		1986 ^a	37	15	0	52	40.5
		1988 ^b	71	21	0	92	29.6
		1990 ^b	45	18	0	63	40.0
		1993 ^b	104	33	16	153	31.7
		1994 ^a	73	42	0	115	57.5
		1996 ^a	151	66	0	217	43.7
		1998 ^a	118	45	0	163	38.1
		2000 ^a	61	29	0	90	47.5
		2002 ^a	35	7	0	42	20.0
		2004 ^a	84	24	0	108	28.5
		2005 ^c	47	15	0	62	31.9
		2006 ^a	100	19	0	119	19.0
		2008 ^a	71	19	0	90	26.8
		2010	96	33	0	129	34.4
		2012 ^a	71	22	0	93	31.4
		2014 ^a	90	22	0	112	24.4
		2016 ^a	86	34	0	120	39.5
		2018 ^a	88	13	0	101	14.8
	North of Palisades Creek (Mt. Baldy area)	1982 ^a	45	12	0	57	26.7
		1985 ^a	31	8	0	39	25.8
		1986 ^b	0	0	126	126	
		1986 ^a	38	19	49	106	50.0
		1987 ^b	72	28	0	100	38.9
		1988 ^b	91	31	0	122	34.1
		1989 ^b	35	12	0	47	34.3
		1990 ^b	73	22	0	95	30.1
		1994 ^a	41	20	0	61	48.8
		1996 ^a	47	17	0	64	36.2
		1998 ^a	26	7	0	33	26.9
		2000 ^a	9	5	0	14	55.6
		2002 ^a	0	0	0	0	
		2004 ^a	4	2	0	6	50.0
		2005 ^c	8	4	0	12	50.0
		2006 ^a	13	3	0	16	23.0
		2008 ^a	25	8	0	33	32.0
		2010 ^a	19	7	0	26	36.8
		2012 ^a	19	1	0	20	5.2

Table 2. Continued.

GMU	Inclusive location	Year	Adults	Kids	Unknown	Total	Kids/100 adults
		2014 ^a	19	4	0	23	21.0
		2016 ^a	18	5	0	23	27.7
		2018 ^a	21	4	0	25	19.0
61	Targhee Creek	2018 ^a	41	13	0	54	31.7
61	Sawtelle Peak	2018 ^a	2	1	0	3	50.0

^a Summer Helicopter count.

^b Ground count.

^c Winter Helicopter count.

^d This summer survey includes the area south of Big Timber Creek (GMUs 29 and 58) and south and east of Sawmill Creek (GMU 51).

Table 3. Mountain goat harvest and drawing odds by hunt area, Upper Snake Region, 2005-present.

Hunt area	Year	Tags	Harvest		Hunter success (%)	Days/hunter ^c	First-choice applicants	Drawing odds %
			M	F				
50	2005	2	1	1	100	3.0	26	7.7
	2006	2	1	0	50	7.0	15	13.3
	2007	2	1	0	50	10.0	25	8.0
	2008	2	0	1	50	2.0	29	6.9
	2009	2	1	1	100	6.5	17	11.8
	2010	2	1	1	100	5.2	21	9.5
	2011	2	0	2	100	6.3	26	7.7
	2012	2	1	0	50	1	27	7.4
	2013	2	1	1	100	1	23	8.7
	2014	2	2	0	100	15.0	27	7.4
	2015	2	2	0	100	5.0	41	4.9
	2016	2	2	0	100	3.5	29	6.9
	2017	2	1	0	50	15	35	5.7
	2018	2	2	0	100	6.5	39	5.1
51 ^a	2005	6	4	1	83	3.2	115	5.2
	2006	6	5	0	83	4.8	111	5.4
	2007	3	2	0	66	15.0	73	4.1
	2008	3	1	1	66	16.5	51	5.9
	2009	3	2	0	66	17.5	60	5.0
	2010	3	1	0	33	1.0	46	6.5
	2011	3	0	1	33	6.0	39	7.7
	2012	3	3	0	100	7.0	31	9.7
67 ^b	2005	2	2	0	100	1.0	69	2.9
	2006	2	0	2	100	4.5	46	4.3
	2007	4	3	1	100	3.8	71	5.6
	2008	4	4	0	100	2.8	78	5.1
	2009	4	2	2	100	21.5	125	3.2
	2010	4	3	0	75	2.0	93	4.3
	2011	5	5	0	100	1.8	129	3.9
	2012	5	3	0	60	2.0	107	4.7
	2013	5	4	1	100	3.4	131	3.8
	2014	5	3	1	80	6.5	131	3.8
	2015	5	5	0	100	2.4	129	3.9
	2016	5	2	2	80	3.8	149	3.4
	2017	5	3	0	60	6.3	143	3.5
	2018	5	4	0	80	5.0	126	4.1

^a GMU 51 was closed in 2013

^b GMU 67 was closed in 2003 and 2004

^c Successful hunters only

Table 4. Mountain goat translocation, Upper Snake Region, 1969-1997.

Year	Capture site-GMU	Release site-GMU	Adults		Kids		Total
			M	F	M	F	
1969	Snow Peak-9	Palisades Creek-67	2	1	0	0	3
	Black Mtn-9A	Palisades Creek-67	1	1	0	0	2
1970	Snow Peak-9	Black Canyon-67	3	0	0	0	3
	Snow Peak-9	Black Canyon-67	1	2	1	0	4
1989	Mt Baldy-67	Williams Creek-28	1	1	0	0	2
1990	Mt Baldy-67	Panther Creek-28	2	4	0	1	7
1991	Mt Baldy-67	Panther Creek-28	1	4	0	1	6
1992	Mt Baldy-67	Panther Creek-28	2	9	0	0	11
1994	Mt Baird-67	Square Top-21	4	6	0	0	10
1997	Mt Baird-67	Corn Lakes-21	4	6	0	0	10

SALMON REGION

GMUs 21, 21A, 27, 28, 29, 30, 30A, 36, 36A, 36B, 37, 37A

Historical Background

As with other mountain goat herds in Idaho, population trends over the past 20-25 years have varied considerably among individual herds. Some herds, particularly in accessible areas, have been drastically reduced or eliminated. Other herds have declined and then recovered to near or above historical high numbers.

Tag numbers and harvest have become more restricted over the years. Up until around the mid-seventies mountain goat seasons were very liberal and resulted in high harvests. As more information was gained on goat response to harvest and disturbance, harvest management became much more conservative.

Translocations have been attempted with mixed success.

Management Objectives

Goals for managing mountain goats in the Salmon Region include: increasing populations through conservative hunting seasons; capturing and translocation into vacant habitat or to augment existing populations; maintaining harvest and recreational opportunity; emphasizing non-consumptive values, inventorying all mountain goat populations at a maximum interval of 5 years; and collecting information on mountain goat diseases.

Habitat Management and Monitoring

The USFS administers most mountain goat habitat, but the Bureau of Land Management also manages small amounts of critical winter range. Portions of GMUs 21, 27, 28, and 36 are designated wilderness, including the newly designated Jim McClure-Jerry Peak Wilderness, Hemingway-Boulders Wilderness, and White Clouds Wilderness areas in GMU 36A.

Mountain goat herds along Panther Creek, Beaverhead Mountains, Lemhi Range, Middle Fork Salmon River, and Squaw Creek are largely migratory. Winter ranges are low-elevation, south-facing cliffs where mountain-mahogany is the dominant forage species. These mountain goats generally move to higher-elevation, subalpine habitats in summer. Mountain goats in GMUs 36 and 36A depend less on mountain-mahogany winter ranges. Some do migrate to south-facing cliffs, but most winter on high elevation ridgelines. Some mountain goats along the Idaho border summer in Montana.

During the latter part of the 20th century, elk numbers increased dramatically throughout Salmon Region. Portions of mountain goat winter ranges in GMUs 21, 21A, 27, 29, 30, and 37A now receive substantial use by elk during winter. Capacity of these ranges to support mountain goats may be reduced because of competition with elk.

There is little overlap between elk and mountain goats on critical winter and summer ranges in GMUs 36 and 36A. Habitat conditions are believed to be stable and able to accommodate some

increase in mountain goat populations, primarily in GMU 36. However, vegetation changes related to succession and climate change may negatively impact carrying capacity in alpine and subalpine habitats. Despite the buffering effect of complex terrain, climate model projections for Idaho and the Pacific Northwest predict progressively warmer and wetter conditions, with worsening summer drought. Given projected temperature increases, the region is expected to transition from a snow-dominated system to one more rain-dominated. Changes in the length and depth of snow cover may influence the composition and distribution of alpine flora and fauna.

Winter conditions during the FY19 reporting period were dry with average temperatures early, then wetter and colder late winter. Upper elevation snowpack was normal to above average and lower snowpack persisted into March and April. Spring and early summer moisture was above average. Forage conditions going into summer were very good.

Biological Objectives

Population management objectives are based on historic documented population levels consistent with suitable range availability. Management is directed at allowing populations to grow to levels determined by the habitat and range conditions. Population estimates and kid:adult ratios are all monitored to determine if population growth objectives are being reached.

Capture, Radio-mark, and or Telemetry

No mountain goats were captured or fitted with radio collars during the reporting period.

Population Surveys and Monitoring

As part of the Department's mountain goat population monitoring program, population surveys are conducted periodically. While there is no specific protocol for timing of aerial surveys, most PMU's are monitored every 4-6 years and sometimes more often if coordinated with a scheduled deer or elk survey. These surveys generate a minimum count estimate as there is no sightability model. Ground counts may be conducted in the future for some PMU's.

Two population surveys were conducted during the reporting period. Mountain goats were surveyed in GMU 36 in February, 2019 and in GMU's 21, 21A, and 30 (Lost Trail PMU) in March, 2019. For GMU 36, a total of 80 goats were observed and the kid:adult ratio was 24.1, an increase over the 2017 survey. For the Lost Trail PMU, a total of 64 goats were observed and the kid:adult ratio was 12.3. This was very similar to the most recent, comparable survey in 2006 (Table 1).

Hunting and Harvest Characteristics

The 1991-1995 Mountain Goat Management Plan set criteria for establishing tag levels: 1) set tag levels so annual harvest does not exceed 5% of adult segment of a herd, except 15% of adults can be harvested in highly productive herds if at least 15% of adult females are producing twins; and 2) authorize hunts only for herds consisting of ≥ 50 individuals.

From 1975-1982, 21 mountain goat hunts were completely closed in response to declining populations. Tags in remaining hunts were reduced to a low of 10 in 1985 (Table 2). From 1986

to 1994, the number of tags increased to 32 as several hunts were reinstated and tag levels were increased in existing hunts. Tags were reduced in 1995 and fluctuated between 21 (1995) to 25 (2002) to 18 in 2003 and 2004 (Tables 2 and 3). Based on increased mountain goat numbers in several hunt areas, tag levels for 2005 were significantly increased. One new hunt area (37A) was opened for harvest and 2 hunts were reinstated (27-2 and 36-1). For the 2007-2008 regulation cycle, 2 hunt areas were closed (27-3 and 30), primarily because of declining goat numbers and high female harvest rates over time. One new hunt area was opened (27-5) in the upper Middle Fork of Salmon River drainage.

Harvest and hunter information was compiled from Big Game Mortality Reports (BGMRs). Successful hunters must present mountain goat horns to a Department representative within 10 days of harvest and complete a Big Game Mortality Report. Ten controlled hunts with 22 tags were authorized for the 2018 season in Salmon Region. Hunters could harvest a mountain goat of either sex, except females accompanied by kids were protected.

In 2018, 290 applicants put in for 22 tags with 8% drawing odds. Success was 77%, similar to 2017, but down considerably from previous years. Eleven males and 6 females were harvested, the opposite proportion from the previous year. The alarming increase in female harvest in 2017 prompted managers to resume hunter education on goat sex identification for both resident and nonresident tag holders by sending letters with some suggested identification resources. Because of the high female harvest and other measures, tag levels were reduced from 22 to 17 for the 2019 and 2020 hunting seasons.

Capture and Translocation

Ten potential release sites have been approved in Salmon Region (Table 4) with more sites pending. Since 1989, 85 mountain goats have been released within the region (Table 5).

Disease Monitoring

Disease monitoring for this area consists of taking nasal and oral-pharyngeal samples on harvested animals and then sampling other individuals as needs, concerns, or opportunities dictate.

Management Discussion

Most mountain goat populations in the region are declining or stable at best. Tag levels have been adjusted to reflect current populations. In the Beaverhead Mountains, where the mountain goat population has declined by 78% in 20 years, the hunting season in both Idaho and Montana has been removed.

GMUs 36 and 36A are very popular areas for human recreation during both summer and winter. Visible mountain goat herds in these GMUs, therefore, fulfill a valuable aesthetic role in addition to providing harvest. A few recreational activities, such as snowmobiling and heli-skiing, have potential to disturb wintering mountain goats in some areas. Regulation of these activities needs to be coordinated with staff of the Sawtooth National Recreation Area.

Due to an increasing proportion of female harvest across the region, Salmon Region will provide hunter education and goat sex identification training for resident and nonresident tag holders.

Table 1. Mountain goat surveys by hunt area, Salmon Region, 1988-present.

Hunt area	Year	Inclusive location	Adults	Kids	Unk.	Total	Kids/100 adults
21	1996	Lost Trail - Hughes Cr.	8	2	0	10	25.0
		Hughes Cr. - Horse Cr.	26	4	0	30	15.4
	2001	Hughes Cr. - Horse Cr.	5	1	0	6	20.0
	2005	Lost Trail - Hughes Cr.	7	2	0	9	28.6
		Hughes Cr. - Horse Cr.	28	8	0	36	28.6
	2010	Lost Trail - Hughes Cr.	14	1	0	15	7.1
		Hughes Cr. - Horse Cr.	19	5	0	24	26.3
	2019	Lost Trail - Hughes Cr.	4	1	0	5	25.0
27	1993 ^a	Waterfall Cr. - Goat Cr.	15	1	0	16	6.7
		Big Cr. - Soldier Cr.	0	0	0	0	0.0
	1999 ^a	Rapid River - Headwaters	21	3	0	24	14.3
		Waterfall Cr. - Goat Cr.	14	1	0	15	7.1
		Big Cr. - Soldier Cr.	5	1	0	6	20.0
		Marble Cr. - Indian Cr.	18	2	0	20	11.1
	2002 ^b	Marble Cr. - Indian Cr.	6	1	0	7	16.7
		Upper Middle Fork	11	2	0	13	18.2
		Waterfall Cr. - Goat Cr.	15	2	0	17	13.3
	2004	Big Cr. - Soldier Cr.	4	0	0	4	0.0
		Rapid River - Headwaters	35	6	0	41	17.1
	2006	Waterfall Cr. - Goat Cr.	10	1	0	11	10.0
		Big Cr. - Soldier Cr.	3	1	0	4	33.0
		Marble Cr. - Pistol Cr.	28	5	0	33	17.9
		Waterfall Cr. - Goat Cr.	6	0	0	6	0.0
	2008 ^d	Big Cr. - Soldier Cr.	1	0	0	1	0.0
		Waterfall Cr. - Goat Cr.	1	1	1	3	100.0
	2011 ^b	Big Cr. - Soldier Cr.	1	1	4	6	100.0
27-1	1988	E. Fork Mayfield Cr.	17	4	0	21	23.5
	1994	E. Fork Mayfield Cr.	10	1	0	11	10.0
	1995	E. Fork Mayfield Cr.	16	4	0	20	25.0
	1997	E. Fork Mayfield Cr.	17	2	0	19	11.8
	1999 ^a	E. Fork Mayfield Cr.	7	1	0	8	14.3
	2002 ^a	Mayfield Cr. - Yankee Fork	8	2	0	10	25.0
	2006 ^b	E. Fork Mayfield Cr.	5	1	0	6	20.0
	2007	Mayfield Cr. - Yankee Fork	12	3	0	15	25.0
	2012	Mayfield Cr. - Yankee Fork	16	5	0	21	31.3
27-2	1988	Trail Cr. - China Cr.	54	11	0	65	20.4
	1994	Trail Cr. - China Cr.	36	5	0	41	13.9
	1995	Trail Cr. - China Cr.	50	6	0	56	12.0
	1997	Trail Cr. - China Cr.	92	10	0	102	10.9
	1999 ^a	Trail Cr. - China Cr.	37	4	0	41	10.8
	2002 ^a	Trail Cr. - China Cr.	38	7	0	45	18.4
	2007	Trail Cr. - China Cr.	40	5	0	45	12.5

Table 1. Continued.

Hunt area	Year	Inclusive location	Adults	Kids	Unk.	Total	Kids/100 adults
27-3	2012	Trail Cr. - China Cr.	52	15	0	67	28.8
	1993 ^a	Meyers Cove - Falconberry	37	7	0	44	18.9
	1999 ^a	Meyers Cove - Falconberry	37	4	0	41	10.8
	2002 ^a	Meyers Cove - Falconberry	15	3	0	18	20.0
	2004	Meyers Cove - Falconberry	16	3	0	19	18.8
	2006	Meyers Cove - Falconberry	18	0	0	18	0
27-4	1993 ^a	Yellowjacket Cr. - Waterfall Cr.	49	8	0	57	16.3
	1999 ^a	Yellowjacket Cr. - Waterfall Cr.	57	6	0	63	10.5
	2001	Camas Cr. - Yellowjacket Cr.	30	7	0	37	23.3
	2002 ^a	Yellowjacket Cr. - Waterfall Cr.	2	3	0	5	150.0
		Camas Cr. - Yellowjacket Cr. ^b	6	0	0	6	0.0
	2004	Yellowjacket Cr. - Waterfall Cr.	36	11	0	47	30.6
	2005 ^b	Camas Cr. - Reservoir Cr.	24	4	0	28	16.7
	2006	Yellowjacket Cr. - Waterfall Cr.	38	12	0	50	31.6
	2008 ^d	Yellowjacket Cr. - Waterfall Cr.	8	1	0	9	12.5
		Camas Cr. - Yellowjacket Cr.	2	0	0	2	0.0
	2011 ^b	Yellowjacket Cr. - Waterfall Cr.	5	0	0	5	0.0
		Camas Cr. - Yellowjacket Cr.	7	0	0	7	0.0
28	1996	Cobalt - Garden Cr.	10	0	0	10	0.0
		Williams Cr.	2	2	0	4	100.0
		Iron Cr. - Moyer Cr.	11	5	0	16	45.5
	1999 ^a	Upper Camas Cr.	5	0	0	5	0.0
		Iron Cr. - Moyer Cr. ^b	21	2	0	23	9.5
	2001	Cobalt - Garden Cr.	2	0	0	2	0.0
		Iron Cr. - Moyer Cr.	17	3	0	20	17.6
		Napias Cr.	3	1	0	4	33.3
	2002	Williams Cr.	4	1	0	5	25.0
	2005	Iron Cr. - Williams Cr.	9	6	0	15	66.6
		Panther Cr.	19	4	0	23	21.1
	2010 ^b	Iron Cr. - Williams Cr.	10	1	0	11	10.0
		Panther Cr.	14	2	0	16	14.3
	2011 ^b	Upper Camas Cr.	9	1	0	10	11.1
		Napias Cr.	2	4	0	6	200.0
30/21A	1988	Sheep Cr. - Goat Mt.	116	22	0	138	19.0
	1996	Sheep Cr. - Goat Mt.	81	4	0	85	4.9
	1997	Sheep Cr. - Goat Mt.	73	16	0	89	21.9
	2002 ^a	Sheep Cr. - Goat Mt.	53	2	0	55	3.8
	2006	Sheep Cr. - Goat Mt.	45	7	0	52	15.6
	2013	4 th of July-Goat Mt.	26	8	1	34	30.7
	2019	Sheep Cr. - Little 8-mile	49	6	0	59	12.2
36	1988	Beaver Cr. - Galena	32	7	0	39	21.9
	1994	Beaver Cr. - Galena	27	2	0	29	7.4
	2003	Beaver Cr. - Galena	38	4	0	42	10.5

Table 1. Continued.

Hunt area	Year	Inclusive location	Adults	Kids	Unk.	Total	Kids/100 adults
	2004	Beaver Cr. - Galena	35	10	0	45	28.6
	2009	Beaver Cr. - Galena	20	6	0	26	30.0
36-1	1988	Elk Cr. - Redfish Lake	27	7	0	34	25.9
	1994	Elk Cr. - Redfish Lake	22	0	0	22	0.0
	2003 ^c	Elk Cr. - Redfish Lake	14	5	0	19	35.7
	2004	Elk Cr. - Redfish Lake	50	13	0	63	26.0
	2009	Elk Cr. - Redfish Lake	26	4	0	30	15.4
	2017	Crooked Cr. To Galena Summit	48	9	0	57	18.7
	2019	McGown Pk. To Galena Summit	58	14	0	80	24.1
36-2	1988	Redfish Lake - Alturas Cr.	39	7	0	46	17.9
	1994	Redfish Lake - Alturas Cr.	28	7	0	35	25.0
	2003	Redfish Lake - Alturas Cr.	44	5	0	49	11.4
	2004	Redfish Lake - Alturas Cr.	51	11	0	62	21.6
	2009	Redfish Lake - Alturas Cr.	40	17	0	57	42.5
36A-1	1988	E Pass Cr. - W Pass Cr.	37	13	0	50	35.1
	1994	E Pass Cr. - W Pass Cr.	38	10	0	48	26.3
	2002 ^a	E Pass Cr. - W Pass Cr.	28	4	0	32	14.3
	2004	E Pass Cr. - W Pass Cr.	61	16	0	77	29.3
	2008	E Pass Cr. - W Pass Cr.	67	13	0	80	19.4
	2012	E Pass Cr. - W Pass Cr.	57	15	1	73	26.3
	2018	E Pass Cr. - W Pass Cr.	36	3	0	40	8.3
36A-2	1988	Above W Pass Cr.	33	9	0	42	27.3
	1994	Above W Pass Cr.	36	7	0	43	19.4
	2002 ^a	Above W Pass Cr.	21	6	0	27	28.6
	2004	Above W Pass Cr.	33	9	0	42	27.3
	2008	Above W Pass Cr.	36	9	0	45	25.0
	2012	Above W Pass Cr.	50	17	0	67	34.0
	2018	Above W Pass Cr.	41	8	0	50	19.5
36A-3	1988	Warm Springs Cr. - Wickiup Cr.	61	18	0	79	29.5
	1994	Warm Springs Cr. - Wickiup Cr.	48	8	0	56	16.7
	2002 ^a	Warm Springs Cr. - Wickiup Cr.	22	1	0	23	4.5
	2004	Warm Springs Cr. - Wickiup Cr.	49	15	0	64	30.6
	2008	Warm Springs Cr. - Wickiup Cr.	44	8	0	52	18.2
	2012	Warm Springs Cr. - Wickiup Cr.	46	12	0	58	26.1
	2018	Warm Springs Cr. - Wickiup Cr.	46	11	0	65	23.9
36A-4	1988	Germania Cr. - 4 th July Cr.	86	21	0	107	24.4
	1994	Germania Cr. - 4 th July Cr.	65	6	0	71	9.2
	2002 ^a	Germania Cr. - 4 th July Cr.	33	5	0	38	15.2
	2004	Germania Cr. - 4 th July Cr.	65	21	0	86	32.3
	2008	Germania Cr. - 4 th July Cr.	47	11	0	58	23.4
	2012	Germania Cr. - 4 th July Cr.	70	12	0	82	17.1
	2018	Germania Cr. - 4 th July Cr.	54	7	0	66	12.9
36B	1985	Mill Cr. - Ramey Cr.	52	23	0	75	44.2

Table 1. Continued.

Hunt area	Year	Inclusive location	Adults	Kids	Unk.	Total	Kids/100 adults
	1986	Mill Cr. - Ramey Cr.	37	16	0	53	43.2
	1988	Mill Cr. - Ramey Cr.	73	20	0	93	27.4
	1994	Mill Cr. - Ramey Cr.	92	23	2	117	25.0
	2002 ^a	Mill Cr. - Ramey Cr.	24	2	0	26	8.3
	2006	Mill Cr. - Ramey Cr.	67	20	0	87	29.9
	2012	Mill Cr. - Ramey Cr.	94	29	1	124	30.9
29/37A	1988	Above Patterson Cr.	9	1	0	10	11.1
		Mahogany - Patterson	21	3	0	24	14.3
		Morse Cr. - Falls Cr.	12	2	0	14	16.7
		McKim Cr. - Tater Cr.	10	1	0	11	10.0
	2003	Above Patterson Cr. & other	9	0	0	9	0.0
		Mahogany - Patterson	13	2	0	15	15.4
		Morse Cr. - Falls Cr.	7	0	0	7	0.0
		Poison Peak - Tater Cr.	13	3	0	16	23.1
	2007	Above Patterson Cr. & other	6	2	0	8	25.0
		Mahogany - Patterson	2	0	0	2	0.0
		Morse Cr. - Falls Cr.	6	1	0	7	16.7
		Poison Peak - Tater Cr.	5	1	0	6	20.0
	2011 ^b	Mahogany - Patterson	3	1	0	4	33.0
		Morse Cr. - Falls Cr.	10	2	0	12	20.0
	2013	Haynes-Poison Cr.	11	5	0	16	45.4
	2018 ^c	Haynes Crk - Sheep Mtn	54	16	0	74	29.6

^a Spring green-up count.^b Incidental to deer or elk survey.^c Incomplete survey covered Redfish Lake to Fishhook Cr.^d Incidental to bighorn sheep survey.^e Summer survey

Table 2. Mountain goat harvest and drawing odds, Salmon Region, 2003-present.

Year	Tags	Harvest			Hunter/ Days	First-choice applicants	Drawing odds %
		M	F	Success%			
2003	18	10	4	78	3.6	171	10.5
2004	18	12	5	94	4.4	160	11.3
2005	29	16	7	79	3.5	237	12.2
2006	29	19	4	79	4.4	252	11.5
2007	24	14	5	79	7.9	221	10.9
2008	24	10	8	75	6.7	308	7.8
2009	22	12	8	91	19.1	206	10.7
2010	22	12	6	82	4.4	193	11.4
2011	22	17	4	95	4.3	195	11.3
2012	22	16	2	82	4.0	267	8.2
2013	22	15	7	100	3.5	299	7.4
2014	22	15	7	100	4.8	299	7.4
2015	22	13	6	86	4.0	284	7.7
2016	22	13	8	95	4.4	317	6.9
2017	22	6	11	77	3.5	316	6.9
2018	22	11	6	77	2.9	290	7.6

^a Two of these tags were deferred until 2001 season because of wildfires.

Table 3. Mountain goat harvest and drawing odds by hunt area, Salmon Region, 2008-present.

Hunt area	Year	Tags	Harvest		Hunter success (%)	Days/hunter ^d	First-choice applicants	Drawing odds %
			M	F				
27-2 ^a	2008	1	0	1	100	1.0	23	4.3
	2009	1	1	0	100	1.0	10	10.0
	2010	1	0	1	100	10.0	11	9.1
	2011	1	0	1	100	1.0	5	20.0
	2012	1	0	0	0	0	18	5.6
	2013	1	1	0	100	1.0	4	25.0
	2014	1	1	0	100	1.0	24	4.2
	2015	1	1	0	100	1.0	19	5.3
	2016	1	1	0	100	4.0	10	10.0
	2017	1	0	1	100	1.0	8	12.5
	2018	1	1	0	100	1.0	26	3.8
27-4	2008	2	1	1	100	5.5	15	13.3
	2009	2	1	1	100	8.5	21	9.5
	2010	2	1	1	100	3.5	14	14.3
	2011	2	1	0	50	1.0	13	15.4
	2012	2	1	0	50	2.0	19	10.5
	2013	2	1	1	100	2.0	14	14.3
	2014	2	1	1	100	5.5	26	7.7
	2015	2	2	0	100	4.5	10	20.0
	2016	2	1	1	100	5.5	22	9.1
	2017	2	1	0	50	4.0	28	7.1
	2018	2	0	0	0		21	9.5
27-5 ^c	2008	2	0	0	0	0	16	12.5
	2009	2	0	2	100	2.0	15	13.3
	2010	2	0	0	0	0	13	15.4
	2011	2	2	0	100	7.0	8	25.0
	2012	2	1	1	100	4.5	13	15.4
	2013	2	1	1	100	2.5	16	12.5
	2014	2	2	0	100	6.0	26	7.7
	2015	2	1	1	100	6.0	27	7.4
	2016	2	1	1	100	8.5	26	7.7
	2017	2	0	1	50	5.0	16	8.0
	2018	2	1	0	50	5.0	27	7.4
36-1 ^a	2008	4	1	2	75	3.7	29	13.8
	2009	4	2	2	100	10.3	23	17.4
	2010	4	3	0	75	9.3	39	10.3
	2011	4	2	2	100	5.8	31	12.9
	2012	4	2	0	50	3.5	27	14.8
	2013	4	2	2	100	3.0	46	8.7
	2014	4	3	1	100	5.3	49	8.2
	2015	4	1	3	100	4.8	27	14.8
	2016	4	1	2	75	3.3	40	10.0

Table 3. Continued.

Hunt area	Year	Tags	Harvest		Hunter success (%)	Days/hunter ^d	First-choice applicants	Drawing odds %
			M	F				
36A-1	2017	4	0	3	75	11.0	58	6.9
	2018	4	3	1	100	3.5	24	16.7
	2008	4	2	1	75	2.3	78	5.1
	2009	4	1	1	50	2.0	33	12.1
	2010	4	3	1	100	4.0	40	10.0
	2011	4	4	0	100	4.8	45	8.9
	2012	4	4	0	100	3.3	47	8.5
	2013	4	2	2	100	3.3	38	10.5
	2014	4	3	1	100	6.0	50	8.0
	2015	4	4	0	100	6.0	60	6.7
	2016	4	4	0	100	3.8	60	6.7
	2017	4	1	2	75	15.3	66	6.1
	2018	4	3	0	75	1.7	42	9.5
36A-2	2008	2	2	0	100	3.0	14	14.3
	2009	1	1	0	100	2.0	16	6.3
	2010	1	0	0	0	0	5	20.0
	2011	1	1	0	100	10.0	12	8.3
	2012	1	1	0	100	3.0	10	10.0
	2013	1	1	0	100	1.0	14	7.1
	2014	1	1	0	100	2.0	15	6.7
	2015	1	1	0	100	3.0	14	7.1
	2016	1	0	1	100	1.0	28	3.6
	2017	1	0	1	100	3.0	15	6.7
	2018	1	1	0	100	3.0	12	8.3
36A-3	2008	2	1	1	100	9.0	14	14.3
	2009	3	2	1	100	1.3	38	7.9
	2010	3	3	0	100	2.5	21	14.3
	2011	3	3	0	100	4.0	24	12.5
	2012	3	3	0	100	4.3	50	6.0
	2013	3	2	1	100	4.3	29	10.3
	2014	3	1	1	67	4.5	34	8.8
	2015	3	1	0	33	4.0	40	7.5
	2016	3	2	1	100	4.7	41	7.3
	2017	3	0	2	50	7.0	37	8.1
	2018	3	1	2	100	2.7	48	6.3
36A-4	2008	3	0	1	33	1.0	36	8.3
	2009	2	2	0	100	3.0	19	10.5
	2010	2	0	2	100	3.0	12	16.7
	2011	2	2	0	100	3.5	22	9.1
	2012	2	2	0	100	2.0	24	8.3
	2013	2	2	0	100	5.0	21	9.5
	2014	2	1	1	100	3.0	25	8.0
	2015	2	1	1	100	2.0	31	6.5

Table 3. Continued.

Hunt area	Year	Tags	Harvest		Hunter success (%)	Days/hunter ^d	First-choice applicants	Drawing odds %
			M	F				
36B	2016	2	2	0	100	3.5	40	5.0
	2017	2	1	1	100	9.0	29	6.9
	2018	2	0	2	100	4.5	34	5.9
	2008	3	2	1	100	2.7	35	8.6
	2009	2	1	1	100	2.0	19	10.5
	2010	2	1	1	100	2.5	25	8.0
	2011	2	1	1	100	3.0	20	10.0
	2012	2	1	1	100	2.5	26	7.7
	2013	2	2	0	100	4.0	35	5.7
	2014	2	1	1	100	3.5	36	5.6
	2015	2	1	1	100	2.0	34	5.9
	2016	2	1	1	100	4.0	27	7.4
	2017	2	2	0	100	2.5	36	5.6
	2018	2	1	1	100	1.5	41	4.8
37A ^a	2008	1	1	0	100	7.0	48	2.1
	2009	1	1	0	100	3.0	12	8.3
	2010	1	1	0	100	1.0	13	7.7
	2011	1	1	0	100	5.0	15	6.7
	2012	1	1	0	100	2.0	33	3.0
	2013	1	1	0	100	7.0	19	5.3
	2014	1	0	1	100	2.0	20	5.0
	2015	1	0	0	0	0	13	7.7
	2016	1	0	1	100	5.0	23	4.3
	2017	1	1	0	100	1.0	23	4.3
	2018	1	0	0	0		15	6.7

^a Hunt areas 27-2 and 36-1 reinstated and Hunt Area 37A added in 2005.

^b Hunt Areas 27-3 and 30 closed in 2007.

^c Hunt area 27-5 added in 2007.

Table 4. Approved mountain goat release sites, Salmon Region.

GMU	Location	Release method	No. goats to release	No. released to date
21 ^a	Horse Creek	Helicopter	30	20
21	Beartrap Springs	Vehicle	10	0
27 ^a	Goat Creek	Helicopter	10-20	0
27 ^a	Tumble/Parrot Creek	Helicopter	10	0
27 ^a	Ship Island Creek	Helicopter	20-30	8
27 ^a	Jack/Wilson Creek	Helicopter	10	7
28	Panther Creek	Vehicle	10-20	23
28	Williams Creek	Vehicle	10	2
29	Warm Springs Creek	Helicopter	10-20	0
29	Haynes Creek	Vehicle	10-20	24

^a Designated wilderness, helicopter use authorized by USFS.

Table 5. Mountain goat translocation, Salmon Region, 1982-2007.

Year	Capture site-GMU	Release site-GMU	Adults		Kids		Total
			M	F	M	F	
1982	Olympic Park, WA	Patterson Cr-37A	8	12	0	0	20
1989	Snow Peak-9	Jack Cr-27	0	2	0	0	2
	Black Mtn-10	Jack Cr-27	2	4	0	0	6
	Mt Baldy-67	Williams Cr-28	1	1	0	0	2
1990	Mt Baldy-67	Pine Cr-28	1	0	0	0	1
	Mt Baldy-67	Panther Cr-28	1	4	0	1	6
1991	Black Mtn-10	Ship Island Cr-27	4	4	0	0	8
	Mt Baldy-67	Panther Cr-28	1	4	0	1	6
1992	Mt Baldy-67	Panther Cr-28	2	9	0	0	11
1994	Mt Baird-67	Square Top Mt-21	4	6	0	0	10
1997	Big Elk Cr-67	Corn Lake-21	4	6	0	0	10
2007	Tushar Mts, UT	Haynes Cr-29	5	18	1	0	24

Idaho Moose, Bighorn Sheep & Mountain Goat

2017 & 2018 Seasons & Rules



Controlled Hunt Application Period
April 1-30
idfg.idaho.gov



2017 & 2018 MOUNTAIN GOAT HUNTING SEASONS

Mandatory Check and Report Requirements

Any hunter killing a mountain goat must present the horns and have a big game mortality report completed at an Idaho Fish and Game regional office or by a conservation officer within 10 days after the date of the kill. Fish and Game's headquarters office is not equipped to check in mountain goats. In the Boise area, these animals can be checked at the Fish and Game regional office in Nampa (3101 S. Powerline Rd, 208-465-8465) weekdays between the hours of 8 a.m. and 5 p.m. or by appointment at the Garden City facility, 109 W. 44th St., 208-327-7095.

A hunter may authorize another person to comply with the above report requirements if that person possesses the necessary information to accurately complete the necessary form, see page 32.

Unsuccessful hunters must present or mail their unused tags to a Fish and Game office within 10 days after the close of the season for which the tag was valid. Tags can be mailed to: Idaho Fish and Game, Attn: Wildlife Bureau, PO Box 25, Boise, ID 83707. Cancelled tags will be returned to the hunter upon request. Failure to report may result in future ineligibility in mountain goat drawings.

No person who has harvested a mountain goat in Idaho since 1977 may apply for a mountain goat tag in Idaho.

Drawing Odds: To review drawing odds and more detailed information about number of applicants please visit our website at <http://idfg.idaho.gov/CHodds>.

GOAT

2017 & 2018 Mountain Goat Controlled Hunts Either Sex - 50 Tags Either sex may be taken except a nanny accompanied by kids

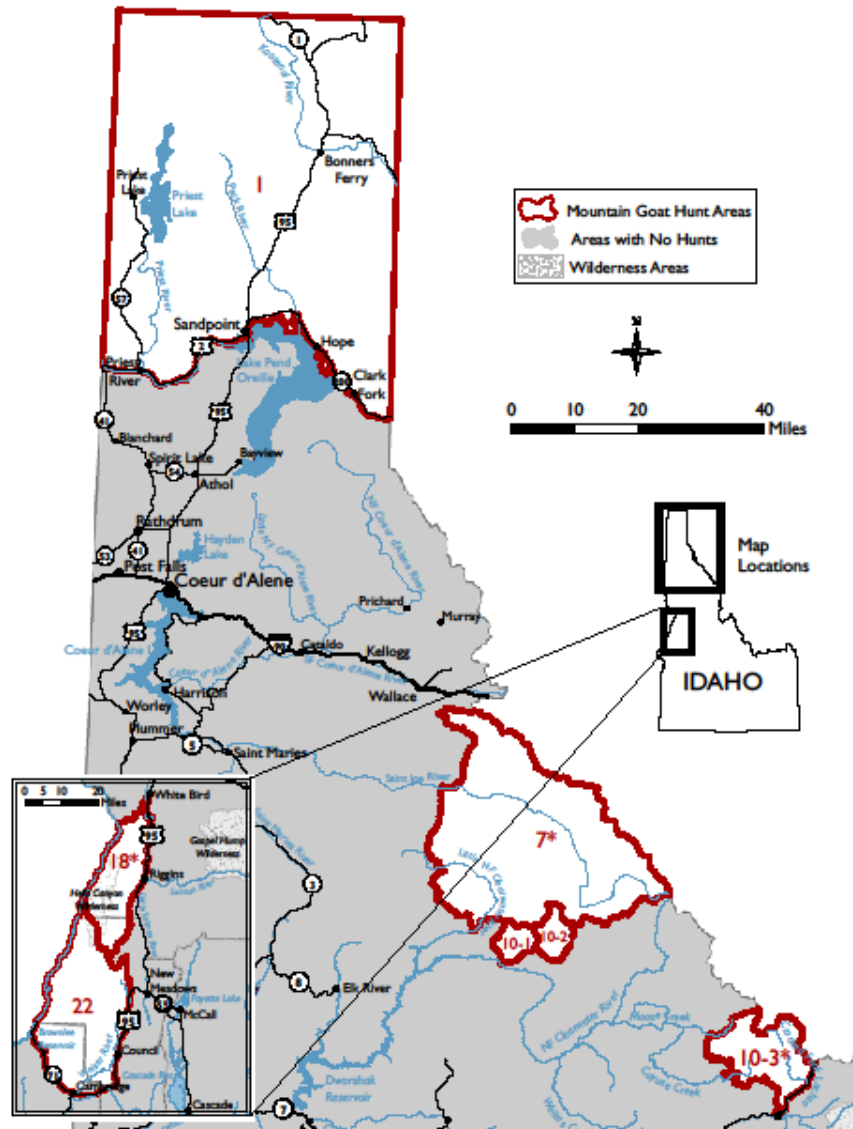
Hunt No.	Controlled Hunt Area	Tags	Season Dates
6001	1	1	Aug 30 - Nov 12
6002	7*	1	Aug 30 - Nov 12
6003	10-1	2	Aug 30 - Nov 12
6004	10-2	2	Aug 30 - Nov 12
6005	10-3*	2	Aug 30 - Nov 12
6006	18*	4	Aug 30 - Nov 12
6007	22	4	Aug 30 - Nov 12
6008	27-2*	1	Aug 30 - Nov 12
6009	27-4*	2	Aug 30 - Nov 12
6010	27-5	2	Aug 30 - Nov 12
6011	36-1*	4	Aug 30 - Nov 12
6012	36A-1*	4	Aug 30 - Nov 12

Hunt No.	Controlled Hunt Area	Tags	Season Dates
6013	36A-2*	1	Aug 30 - Nov 12
6014	36A-3*	3	Aug 30 - Nov 12
6015	36A-4*	2	Aug 30 - Nov 12
6016	36B*	2	Aug 30 - Nov 12
6017	37A*	1	Aug 30 - Nov 12
6018	39	2	Aug 30 - Nov 12
6019	43*	3	Aug 30 - Nov 12
6020	50*	2	Aug 30 - Nov 12
6021	67	5	Aug 30 - Nov 12

* See controlled hunt area descriptions. This hunt includes other units or parts of other units.



Northern Idaho Mountain Goat Hunts



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