

**IDAHO DEPARTMENT OF FISH AND GAME**

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**Surveys and Inventories**

**SFY2015/2016 Statewide Report**



**MOUNTAIN GOAT**

July 1, 2014 to June 30, 2016

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2016  
Boise, Idaho

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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, 2014 to June 30, 2016

### **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 2014 with 48 either-sex tags (Figures 1 and 2). Populations appear to be declining slightly, although data are limited. 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.

#### **2014 Season**

Demand for the few (48) tags offered was high with 825 applications received in April 2014 for the 30 August – 12 November 2014 hunting season. Drawing success statewide averaged 5.6%. Among the 825 applicants were 636 resident hunters (77%) and 189 non-resident hunters (23%). All tags were filled in the first drawing.

Fifty-one (51) tags (including 3 rainchecks) were issued for mountain goats of either sex. Hunters harvested 43 mountain goats, for a harvest success rate of 84%. Seventy-nine percent of harvested mountain goats were males (Table 12). Age of mountain harvested goats averaged 4.8 years (based on reported counts of horn annuli), and length of the longest horn in harvested mountain goats averaged 8.5 inches. Most mountain goat harvests were reported in the Salmon Region (22), 2 mountain goats were reported in the Panhandle Region, 4 in the Clearwater Region, 7 in the Southwest Region, 1 in the Magic Valley Region, and 7 in the Upper Snake Region.

#### **2015 Season**

A total of 8,230 applications were received in April 2015 for the 30 August – 12 November 2015 hunting season. Drawing success statewide averaged 6.0%. Among the 830 applicants were 610 resident hunters (73%) and 220 non-resident hunters (27%). All tags were filled in the first drawing.

Forty-eight (48) tags were issued for mountain goats of either sex for the 2015 hunting season. Hunters harvested 47 mountain goats, for a harvest success rate of 98%. Seventy-four percent of harvested mountain goats were males (Table 12). Age of mountain goats harvested averaged 4.8 years (based on reported counts of horn annuli), and length of the longest horn averaged 8.4 inches. Most mountain goat harvests were reported in the Salmon Region (24), 2 mountain goats were reported in the Panhandle Region, 4 in the Clearwater

Region, 7 in the Southwest Region, 1 in the Magic Valley Region, and 7 in the Upper Snake Region.

Table 1. Statewide Mountain Goat hunter participation and harvest for the 2014/2015 season.

<b>Season</b>	<b>Hunters</b>	<b>Hunter Days</b>	<b>Total Harvest</b>	<b>Males</b>	<b>Females</b>	<b>% Change in Total Harvest from Previous Year</b>
2014	51	200	43	34	8	-4%
2015	50	181	47	35	12	+9%





## **PANHANDLE REGION**

### **GMUs 1, 4A, 7, 9**

#### **Abstract**

Mountain goats were hunted in 2 different locations in Idaho's panhandle in 2014/2015. No aerial surveys were conducted during this reporting period to assess regional mountain goat populations. An aerial survey was planned in January 2016 in GMUs 7 and 9 but no flights were conducted due to weather and helicopter availability. A ground-based effort in GMU 7 was conducted in the summer of 2015.

#### **Management Direction**

The statewide management policy for mountain goats is to introduce mountain goats into all suitable ranges, maintain or increase all herds, and harvest under a conservative management framework. Harvest is allowed if the total population is at least 50 mountain goats. Harvest shall not exceed 5% of the adult segment 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. Combined, the Selkirk and West Cabinet mountain goat herds in GMU 1 should remain stable to increasing with the addition of one tag in 2011, especially if hunters target different areas over the coming years. If harvest is targeted at one specific herd or a high proportion of nannies, the mountain goat hunts in the Panhandle will be re-evaluated.

#### **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. No hunting is allowed on this population.

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).

### **Population Surveys**

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).

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. The Green Monarchs are essentially devoid of mountain goats, with only occasional sightings. Occasionally goats are observed 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 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.

### **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 2014/2015. Drawing odds were 1:47 in Hunt Area 1 and 1:49 in Hunt Area 7 for 2014 and 1:44 for Hunt Area 1 and 1:36 for Hunt Area 7 in 2015. The 2 permittees harvested 2 male mountain goats in both years, respectively (Table 4).

### **Conflict with Humans**

Some of the mountain goats inhabiting the Scotchman Peaks area of GMU 1 have become habituated to humans. The Scotchman Peak trail is a very popular hiking trail. 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, but additional measures may need to be taken in the future to discourage the goats from approaching people.

### **Management Implications**

Regionally, mountain goat numbers are showing an improvement, but progress is slow (Figure 3). Current numbers are likely at least 50% lower than 40-50 years ago, and may be considerably worse when compared to the early 1900s. A population survey has not been conducted in the Panhandle since 2001. A survey is needed to reevaluate the current hunting season permit levels.

### **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.

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 <sup>a</sup>	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 <sup>a</sup>	0	0	0	0	0.0
		1963 <sup>c</sup>	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 <sup>a</sup>	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 <sup>a</sup>	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 <sup>a</sup>	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 <sup>a</sup>	0	0	195	195 <sup>b</sup>	
		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	

Table 1 Continued

Inclusive location	Year	Adults	Kids	Unknown	Total	Kids/100 adults
	1995	30	3	0	33	10.0
	2001	26	8	0	34	30.8
West Cabinet Range, GMU 1						
Wiggletail to W. Fk. Blue Cr.	1971	0	0	0	0	0.0
	1979 <sup>d</sup>	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 <sup>e</sup>	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 <sup>e</sup>	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 <sup>e</sup>	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 <sup>e</sup>	27	4	0	31	14.8
	2001	14	1	0	15	7.1

<sup>a</sup> Summer estimates from ground surveys.

<sup>b</sup> 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.

<sup>c</sup> Not specifically mentioned in the survey.

<sup>d</sup> Montana Fish, Wildlife and Parks data, August survey.

<sup>e</sup> 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 <sup>a</sup>	31	12	0	43	38.7
	1976	16	3	0	19	18.8
	1981	30	7	0	37	23.3
	1985 <sup>b</sup>	42	10	0	52	23.8
	1991	9	4	0	13	44.4
	1991 <sup>c</sup>	11	7	0	18	63.6
	1992	15	2	0	17	13.3
	1995 <sup>d</sup>	13	2	0	15	15.4
	2001	27	4	0	31	14.8
Green Monarchs	1973	2	0	0	2	0.0
	1975 <sup>a</sup>	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 <sup>c</sup>	0	0	0	0	0.0
	1992	0	0	0	0	0.0
	1995 <sup>d</sup>	0	0	0	0	0.0
	2001	0	0	0	0	0.0
	Pend Oreille population	1973	13	3	0	16
1975 <sup>a</sup>		31	12	0	43	38.7
1976		20	3	0	23	15.0
1981		32	7	0	39	21.9
1985 <sup>b</sup>		42	10	0	52	23.8
1991		11	4	0	15	36.4
1991 <sup>c</sup>		11	7	0	18	63.6
1992		15	2	0	17	13.3
1995 <sup>d</sup>		13	2	0	15	15.4
2001		27	4	0	31	14.8

<sup>a</sup> Ground survey.

<sup>b</sup> Population estimate based on capture/recapture with ground surveys during spring.

<sup>c</sup> Ground survey during October.

<sup>d</sup> Helicopter survey during August.

Table 3. 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	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 <sup>a</sup>					
	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 <sup>a</sup>	32	5	0	37	15.6
	1981	48	8	0	56	16.7
	1988	26	2	0	28	7.7
	1991 <sup>b</sup>	13	3	0	16	23.1
	1993	23	8	0	31	34.8
	2001	18	6	0	24	33.3
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	
	1976	8	0	0	8	0.0
	1979 <sup>a</sup>					
	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

Table 3 Continued.

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

<sup>a</sup> Area flown only identified as "Snow Peak." It is unknown what area was actually flown.

<sup>b</sup> Weather conditions precluded complete coverage of the Canyon Creek portion of the flight.

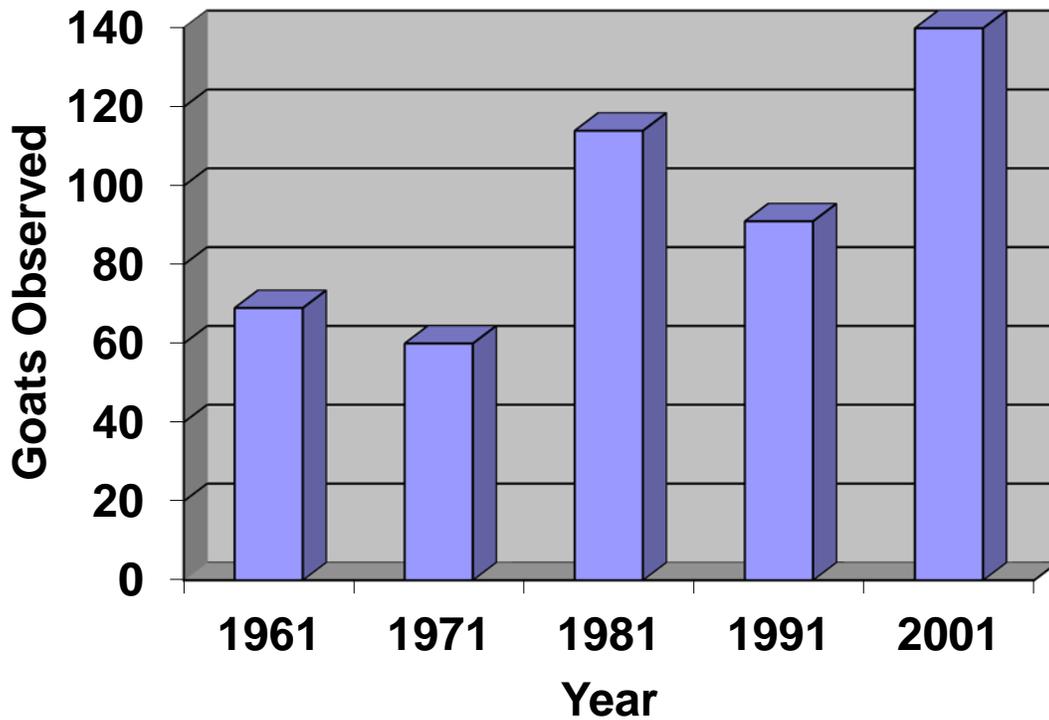


Figure 3. Comparison of aerial surveys for mountain goats, Panhandle Region, 1961-2001. Note: data from 1991 includes only a partial survey of Canyon Creek.

Table 4. 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

## CLEARWATER REGION

### Abstract

Current management direction allows for limited-entry hunting of mountain goats with conservative tag levels. Many of the mountain goat hunt areas in the Clearwater Region remain closed because of low population levels or loss of mountain goats entirely from previously occupied range. During controlled hunts in 2015, 10 tag holders harvested 10 mountain goats between 4 controlled hunts. A recent paintball mark-resight survey in April-May 2010 revealed a population estimate of  $100 \pm 7$  adult mountain goats in Hunt Area 10-1; the previous survey in April 2005 accounted for  $85 \pm 17$  adult mountain goats. During early September of 2014, mountain goats were surveyed in GMU 17 and 10. There were 19 and 16 mountain goats observed in GMU 17 and the Black Canyon/Moose Mountain area of GMU 10, respectively.

### Management Direction

Goals for managing mountain goats in GMUs 10, 12, 14, 15, 16, 16A, 17, 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.

### Climatic Conditions

According to the United States Department of Agriculture Natural Resources Conservation Service, the Salmon and Clearwater drainages were below long term averages for snow pack? in 2015 with 85% and 90% averages respectively. In 2016, these drainages had average precipitation. In both years, warm springs caused early melting of the snow pack. 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.

### 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.

Tag numbers were reduced from 20 hunts with 51 tags in 1977 to 3 hunts with 6 tags in 1984, and then increased to 4 hunts with 12 tags in 1989. This opportunity was reduced to 3 hunts with 8 tags in 1997, and again in 2007 to 2 hunts with 6 tags. Beginning in 2011, 3 hunts with 8 tags were offered when the former GMU 10/12 was reinstated as Hunt 10-2 (Appendix A).

## **Controlled Hunt Area 10 (GMUs 10, 12, 15, 16, 16A, 17)**

### **Population Surveys**

GMU 12 has not been surveyed since 1996 (Table 1). During April and May 2010, a paintball, mark-resight survey of the Black Mountain (GMU 10) goat population was conducted. Data suggest a slight increase since the last survey in 2005 (Table 1). At that time,  $85 \pm 17$  mountain goats were observed over both hunt areas compared to  $100 \pm 7$  in 2010. Additionally, 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. 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 was 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 was an observed total of 16 goats including 14 adults, 1 yearling, and 1 kid.

### **Harvest Characteristics 2014-2015**

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. During 2014, 2 of 2 tag holders were successful in Hunt Area 10-1 (Table 3). Drawing odds for Hunt Area 10-1 was 1:20 in 2014 and in 2015 drawing odds were 1:33. In 2015 the 10-1 (Hunt Area 10) was split back into 2 hunt areas with 2 tags each as it had been prior to 2007. In 2015 the reinstated hunt area 10-2 had drawing odds of 1:21 and both hunters' harvested goats (100% success rate). GMU 10/12 (10-3 currently) was closed to mountain goat hunting in 1997 due to the decline in mountain goat numbers revealed by the 1996 survey. After observing substantial numbers of goats during elk surveys, a separate goat survey of this area was conducted in 2010. Sufficient numbers of goats were observed in this area to reinstate the hunt (old GMU 12 hunt) with 2 tags. This hunt was 10-2 from 2011 through 2014 and is hunt 10-3 from 2015 to present. During 2014 neither of the tag holders harvest a goat but in 2015 the success rate 100% with both hunters harvesting. The drawing odds in 2014 were 1:20 and in 2015 they were 1:15 (Table 3).

### **Habitat Conditions**

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.

### **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)

### **Management Implications**

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.

## **Controlled Hunt Area 18 (GMUs 14, 18, 19, 20)**

### **Population Surveys**

A paintball mark-resight survey was conducted in Hunt Area 18 (GMUs 18 and 22) in April and May 2007. An estimate of  $194 \pm 29$  (90% bound) goats was obtained. Using the same technique in 2002 generated an estimate of  $196 \pm 22$  (90% bound) goats in Hunt Area 18, suggesting a potential increase in abundance from the 1999 estimate of  $171 \pm 48$  (Table 5). However, the 1999 estimate was imprecise, and there was concern over potential bias caused by questionable ability to identify marks. The trend in Hunt Area 18 appears to be stable.

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

### **Harvest Characteristics 2014-2015**

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). Drawing odds for Hunt Area 18

were 1:20 in 2014, 1:16 in 2015. In 2014 4 hunters harvested 2 goats (50% success). In 2015 the success rate was 100% with all 4 hunters harvesting goats (Table 3).

### **Habitat Conditions**

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.

### **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.

### **Management Implications**

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 <sup>a</sup>	Isabella Creek (10-1)	54±12		54±12	
		Collins to Quartz Creek (10-2)	44±5		44±5	
	2005 <sup>a</sup>	Isabella Creek (10-1)	38±6		38±6	
		Collins to Quartz Creek (10-2)	47±18		47±18	
	2010	Pot Mountain <sup>c</sup>	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	
		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	
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 <sup>b</sup>				
		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 <sup>b</sup>				
		Squaw Creek	8	6	14	75.0
		Fish Creek	1	0	1	0.0
Boulder/Crooked Fork		10	3	13	30.0	

Table 1 Continued

GMU	Year	Inclusive location	Adults	Kids	Total	Kids/100 adults	
			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 <sup>b</sup>					
		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	
		White-Cap Creek	2	1	3	50.0	
		Canyon Creek	0	0	0	0.0	
		Cooper Creek	1	0	1	0.0	

Table 1 Continued

GMU	Year	Inclusive location	Adults	Kids	Total	Kids/100 adults
		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

<sup>a</sup> Paintball mark-resight survey (Apr-May).

<sup>b</sup> Drainage not included in survey.

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

Year	Tags	Harvest			Hunter success (%)	First-choice applicants	Drawing odds %
		M	F	Total			
2003	8	3	2	5	63	125	6.4
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

Table 3. Mountain goat harvest and drawing odds by hunt area, Clearwater Region, 2003-present.

Hunt area	Year	Tags	Harvest		Hunter success (%)	Days/hunter	First-choice applicants	Drawing odds %
			M	F				
10-1 <sup>a</sup>	2003	2	1	0	50	7.0	42	4.8
	2004	2	1	0	50	14.0	43	4.7
	2005	2	1	0	50	8.5	41	4.9
	2006	2	1	0	50	1.0	46	4.3
10-2 <sup>a</sup>	2003	2	0	1	50	9.0	28	7.1
	2004	2	1	1	100	5.5	27	7.4
	2005	2	2	0	100	3.0	34	5.9
	2006	2	2	0	100	12.0	35	5.7
10 <sup>a</sup>	2007	2	1	1	100	3.0	60	3.3
	2008	2	0	1	50	8.0	54	3.7
	2009	2	2	0	100	1.5	43	4.7
	2010	2	0	2	100	2.0	44	4.5
10-1 <sup>a</sup>	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
10-2 <sup>b</sup>	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 <sup>c</sup>	2	2	0	100	3.0	42	4.8
10-3 <sup>c</sup>	2015	2	2	0	100	2.0	30	6.7
18	2003	4	2	1	75	2.3	55	7.3
	2004	4	1	2	75	4.0	48	8.3
	2005	4	3	0	75	9.0	54	7.4
	2006	4	3	0	75	6.7	53	7.5
	2007	4	3	0	75	2.0	58	6.9
	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

<sup>a</sup> 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.

<sup>b</sup> Hunt area 10-2 was reinstated in 2011 from a historical hunt from the 1990s.

<sup>c</sup> Hunt area 10-2 was split with the addition of hunt area 10-3 for fall 2015.

Table 4. Mountain goat translocation, Clearwater Region, 1962-2003<sup>a</sup>.

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

<sup>a</sup> 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 <sup>a</sup>	1999 Total	171±48	61±44	237±67	34.5	
	2002	2002 Total	196±22				
	2007	2007 Total			194±29	11.9	
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 <sup>b</sup>					
			1982 Total	14	4	18	28.6
	1986	Wind River	1	0	1	0.0	

Table 5 Continued.

GMU	Year	Inclusive location	Adults	Kids	Total	Kids/100 adults
20	1993	Crooked River	11	3	14	27.3
		Sheep Creek	24	9	33	37.5
		Elk Creek	9	4	13	44.4
		Upper Johnson Creek <sup>b</sup>				
		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
	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	

<sup>a</sup> Paintball mark-resight estimates include all of Hunt Area 18 (GMUs 18 and 22).

<sup>b</sup> Drainage not included in survey.

## **SOUTHWEST (McCall) REGION**

### **Controlled Hunt Area 22 (GMUs 19A, 20A, 22, 23, 24, 25, 26)**

#### **Abstract**

A new hunt was created with 4 tags in GMU 22 beginning with the 2003 mountain goat hunting season. Hunters harvested 4 goats in 2014 and 2015, for a 100% success rate in both years. No population surveys were conducted during the reporting period.

#### **Management Direction**

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

#### **Background**

Historically, GMUs 20A, 25, and 26 had controlled mountain goat hunt areas. GMU 20A had 3 controlled hunt areas with a total of 13 tags the last year hunting was authorized (1979). All 3 hunts were discontinued in 1980. GMU 25 also had 3 controlled hunt areas. Hunting was discontinued in one area in 1979 and 1980 in the other areas. A total of 7 tags were issued the last year hunting was allowed. GMU 26 had 2 controlled hunt areas. By 1980, hunting was discontinued in both hunt areas. A total of 5 tags were issued the last year hunting was allowed in both areas.

The GMU 22 population had been increasing as a result of mountain goats pioneering out from the GMU 18 hunt area. 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.

#### **Population Surveys**

No population surveys were conducted during the reporting period. Past surveys are summarized in Table 1. Incidental observations during an elk survey in 2013 suggest goat the population in Hunt Area 18 is continuing to increase.

#### **Harvest Characteristics 2014**

Mountain goats are hunted in a 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 2014. A total of 4 goats (all male) were harvested for a 100% success rate (Table 2). The maximum horn length recorded from this harvest was 9.375 inches.

#### **Harvest Characteristics 2015**

Mountain goats are hunted in a 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 2015. A total of 4 goats (3 male and 1 female) were harvested for a

100% success rate (Table 2). The maximum horn length recorded from this harvest was 9.375 inches.

### **Management Implications**

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. The data collected for GMUs 20A, 25, and 26 in 2003 do not support any change from this closed status. 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, with only 2 hunt tag holders failing to harvest a goat since the hunt's inception. 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. The 2003 aerial survey data indicate there is a scarcity of goats in the lower South Fork Salmon River portion of GMU 20A. This area burned in 1994 and should be good habitat for mountain goats. It is speculated that maybe the mortality during the 1994 fire was significant and without a colonizing source of goats, the habitat is now near vacant. Habitat potential for sustaining a goat population should be assessed in this area. This area should be considered as one of the top priorities 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

## **SOUTHWEST (Nampa) REGION**

### **Controlled Hunt Area 39 (GMUs 33, 34, 35, 39)**

#### **Abstract**

Mountain goat hunting had not been allowed in GMUs 35 or 39 from 1981 through 2004. A new hunt was created in 2005 with 2 tags in GMU 39. Both tags 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. Trinity Ridge Fires in the Boise National Forest in 2012 closed much of the GMU 39 during summer and the fall hunting season. The two tags issued in 2012 were reissued for the 2013 hunting season. 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. Three of the four tags were filled in the 2014 season. Two tags were issued for the 2015 season and both tags were filled.

#### **Management Direction**

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

#### **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.

#### **Population Surveys**

No population surveys were conducted during this reporting period. The most recent population survey for this area was conducted from 29 January-2 February 2009, in parts of GMUs 35 and 39 (Table 1, refer to 2008 Mountain Goat PR report for location maps). We observed 103 mountain goats (82 adults, 18 kids, 3 yearlings) in GMU 35 and 130 mountain goats (104 adults, 21 kids, 5 yearlings) in GMU 39. The survey was conducted in a Bell 47 Soloy helicopter with a pilot and 2 observers. Surveys prior to 2004 in these areas were conducted during spring when intermixed snow and green-up conditions persisted. The 2004 survey was conducted during winter following fresh snowfall when conditions were ideal. There was sufficient snow for the 2009 survey; however the lack of fresh snowfall in the previous week made tracking conditions more challenging.

Total number of mountain goats observed by area in 2009 varied widely in comparison to previous counts. Counts in the North Fork Boise River and Warm Springs Creek hunt areas were the highest in  $\geq 20$  years; however, populations in other hunt areas appeared to have

declined or remained stable but at low levels (Atlanta, Steel Mountain, Grandjean/Head of South Fork Payette River, Tenmile Creek). During the 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 goats were detected in the Steel Mountain area in the 2009 survey, but goat numbers in the North Fork of the Boise River appeared to be back to historic levels.

Mountain goats were also detected in GMU 35 in areas not previously surveyed (Canyon Creek and Eightmile Creek). These areas will be included in future surveys to determine population trends.

The next population survey for mountain goats in the Sawtooth GMUs was scheduled for the winter of 2013/2014. This survey was not attempted due to helicopter scheduling conflicts and poor snow conditions. This survey will be completed when time and resources allow.

#### **Harvest Characteristics 2014**

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. In 2005, 2006, 2008, 2009, 2010, and 2011 all tag holders harvested males for a 100% success rate (Table 2). In 2007, only 1 male was harvested for a 50% success rate. One of the harvested males in 2011 was 5 years old and the other male's age was 4 with maximum horn lengths of 9 and 8.125 inches respectively. Due to restrictions from forest fires in the Boise National Forest no other mountain goat hunting occurred in the Nampa portion of the Southwest Region during 2012, and only one hunter went afield in 2013, harvesting a 3.5-year old nanny. The two hunters who drew tags in 2012, and the one hunter who did not hunt in 2013 were issued rainchecks. A total of 4 hunters were allowed to hunt during the 2014 season; one tag was issued for the 2014 season and the three raincheck tag holders (2012 and 2013). Three male goats were harvested in 2014 (75% success rate).

#### **Harvest Characteristics 2015**

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. In 2005, 2006, 2008, 2009, 2010, and 2011 all tag holders harvested males for a 100% success rate (Table 2). In 2007, only 1 male was harvested for a 50% success rate. One of the harvested males in 2011 was 5 years old and the other male's age was 4 with maximum horn lengths of 9 and 8.125 inches respectively. Due to restrictions from forest fires in the Boise National Forest, no other mountain goat hunting occurred in the Nampa portion of the Southwest Region during 2012, and only one hunter went afield in 2013, harvesting a 3.5-year old nanny. The two hunters who drew tags in 2012 and the one hunter who did not hunt in 2013 were issued rainchecks. A total of 4 hunters were allowed to hunt during the 2014 season; only one tag was issued for the 2014 season and the three raincheck tag holders (2012 and 2013). Three male goats were harvested in 2014 (75% success rate). In 2015, two tags were issued and both tag holders harvested (100% success rate, 1 male and 1 female goat; Table 2). Draw odds improved in both the 2014 and 2015 season compared to the previous years (2010-2013); probably as a result of the fire and subsequent uncertainty of hunting access and conditions.

### **Management Implications**

We will consider providing additional mountain goat hunting opportunities in hunt areas that meet minimum requirements as defined in the next revision of the 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	
	Warm Springs Cr.	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	
	Tenmile Creek	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	
	Eightmile Creek	2009	3	1	4	33.3	
	Canyon Creek	2009	5	3	8	14.3	
	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	
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	
N Fork Boise River		1977	17	6	23	35.3	
		1981	37	10	47	27.0	
		1994	23	4	27	17.4	
		2004	16	2	18	12.5	
	2009	31	6	37	19.4		

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 <sup>a</sup>	4	3	0	75	3.7	14 <sup>b</sup>	7.1 <sup>b</sup>
39	2015	2	1	1	100	6.0	11	18.2

<sup>a</sup> includes 3 rainchecks

<sup>b</sup> excludes rainchecks

## **MAGIC VALLEY REGION**

### **Controlled Hunt Area 43 (GMUs 36, 43, 48)**

#### **Abstract**

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. During both the 2014 and 2015 hunting seasons, 3 tags for mountain goats were available in Hunt Area 43. Drawing odds were 14% and 9% respectively and hunter success was 100% both years. A population survey was last conducted in Hunt Area 43 in February 2009, 107 goats were observed.

#### **Management Direction**

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

#### **Background**

Previous reports detail the numerous changes that have been made in goat survey areas and hunt areas since the 1970s. In 2007, boundaries were again redesigned to better reflect mountain goat densities and distribution. 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.

#### **Population Surveys**

The most recent survey of Hunt Area 43 was conducted in February 2009. One hundred seven goats were observed (81 Adults, 18 Kids, and 8 Yearlings). Observed ratios were 100 adults:24 juveniles. The number of goats observed was consistent with the previous survey, conducted in 2004. During the 2004 survey, 96 mountain goats (100 adults: 28 juveniles) were observed in Hunt Area 43. Twenty-seven mountain goats (100 adults: 29 juveniles) were observed in the GMU 43 portion of Hunt Area 43. Twenty-four mountain goats (100 adults: 26 juveniles) were observed in the GMU 48 portion of Hunt Area 43, and 45 mountain goats (100 adults: 29 juveniles) were observed in the GMU 36 portion of Hunt Area 43.

#### **Harvest Characteristics 2014**

In 2014, all the 3 tag holders in Hunt Area 43 harvested mountain goats. Two mountain goats, a 5.5 year old male and a 4.5 year old female, were harvested in the GMU 36. The third mountain goat was a 10.5 year old male taken in GMU 43.

### **Harvest Characteristics 2015**

In 2015, all the 3 tag holders in Hunt Area 43 harvested mountain goats. One mountain goat, a 2.5 year old female was harvested in the GMU 36,. One mountain goat was a 13.5 year old female taken in GMU 43 and one mountain goat, a 5.5 year old male was taken in GMU 48.

### **Capture and Translocation**

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

### **Management Implications**

Results of the 2004 and 2009 surveys suggest that overall mountain goat numbers are slowly 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.

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
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
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

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 <sup>a</sup>	2	1	1	100	1.5	24	8.3
	2006	2	2	0	100	4.5	14	14.3
	2007 <sup>c</sup>	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
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 <sup>b</sup>	2	1	0	50	3.0	12	16.7

<sup>a</sup> Data is for Hunt Area 43, which includes portions of GMUs 43 and 36.

<sup>b</sup> After 2006, Hunt Area 48 was incorporated into Hunt Area 43.

<sup>c</sup> In 2007, Hunt Area 43 was redrawn to include GMU 43 and portions of GMUs 36 and 48.

## UPPER SNAKE REGION

### Abstract

Five distinct populations of mountain goats traditionally occurred in Upper Snake Region. These populations include Pioneer Mountains (GMUs 49 and 50), South Lemhi Range (GMUs 51 and 58), Red Conglomerates (GMU 59), Italian Peaks (GMU 59A), and Snake River Range which is the result of translocation efforts (GMU 67).

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 in 2014 and 2015 (Table 1).

In 2014, there were 7 mountain goat tags in the Upper Snake Region. In 2014, out of the 7 tags offered, 6 mountain goats were harvested (86% success, 5 males and 1 female) as determined by mandatory harvest reports. Drawing odds were 1:13.5 (Hunt Area 50), and 1:26.2 (Hunt Area 67).

In 2015, 7 mountain goats were harvested (100% success, 7 males) as determined by mandatory harvest reports. Drawing odds were 1:20.5 (Hunt Area 50), and 1:25.8 (Hunt Area 67).

### Climatic Conditions

Habitat conditions were about average throughout the 2014-2015 reporting period. 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.

### Controlled Hunt Area 50 (GMUs 49, 50)

#### Background

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 (Appendix A) in 2001.

#### Population Surveys

GMUs 49 and 50 were surveyed in August 2010; this was the first survey since 2004 because the 2008 survey was canceled (contracting difficulties). A total of 74 mountain goats were counted (48 adults, 16 kids, 11 yearlings). Again, as in the 2004 survey, no goats were counted in the

White Knob Mountains. Although the total number of goats in this population appears to be stable in recent history, the kid:adult ratio has increased substantially; from 16:100 in 2004 to 27:100 in 2010.

#### **Harvest Characteristics 2014**

Two tags were issued in Hunt Area 50 in 2014 (Table 3), resulting in the harvest of 2 male mountain goats (100% hunter success). Drawing odds were 1:7.4 in 2014.

#### **Harvest Characteristics 2015**

Two tags were issued in Hunt Area 50 in 2015 (Table 3), resulting in the harvest of 2 male mountain goats (100% hunter success). Drawing odds were 1:4.8 in 2015.

#### **Habitat Conditions**

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.

#### **Capture and Translocation**

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

#### **Management Implications**

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, and August 2010 indicate this hunt area has been and still is near the minimum population level to sustain a hunt according to the 1991-1995 Mountain Goat Management Plan. The plan calls for no more than 5% harvest of the adult population which calculates to 2.4 animals. Therefore, no tag number changes are planned.

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

#### **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.

### **Population Surveys**

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 (Table 2). 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 (Table 2).

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 (Table 2). 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.

The last 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.

### **Harvest Characteristics 2014/2015**

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 were issued in GMU 51 in 2014/2015.

### **Habitat Conditions**

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. Current drought conditions over the last two years coupled with overgrazing of public land could affect populations.

### **Capture and Translocation**

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

### **Management Implications**

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.

## **Controlled Hunt Area 67 (GMU 67)**

### **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. The increase to 5 tags is a reflection of stable goat populations observed during the last 4 surveys (Table 2).

### **Population Surveys**

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 (Table 2).

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 (Table 2). 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 (Table 2). 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 (Table 2). 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 most recent survey was conducted in August 2012. Mountain goats counted totaled 113 with 87 adults and 23 kids. The kid:adult ratio on this survey was 26:100 (Table 2). 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. 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 (Table 2).

#### **Harvest Characteristics 2014**

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 (Table 2). In 2014, 5 tags were issued with a harvest of 3 males and 1 female goat (80% hunter success). Drawing odds were 1:26.2 for hunt area 67 in 2014.

#### **Harvest Characteristics 2015**

In 2015, 5 tags were issued with a harvest of 5 males (100% hunter success). Drawing odds were 1:25.8 for hunt area 67 in 2015.

#### **Habitat Conditions**

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.

### **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 2014 and 2015, there were still 9 radio-marked goats remaining and these animals were monitored from the ground and air.

### **Management Implications**

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. Currently there are 5 permits offered for GMU 67.

## **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

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 <sup>a</sup>	31	3	0	34	9.6		
		2010 <sup>a</sup>	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 <sup>a</sup>	13	3	0	16	23.1		
		1985 <sup>a</sup>	9	2	0	11	22.2		
		1992 <sup>a</sup>	13	0	0	13	0.0		
		1999 <sup>a</sup>	26	4	0	30	15.4		
		2004 <sup>c</sup>	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 (in Hunt Area 50)	1982 <sup>a</sup>	37	8	0	45	21.6		
		1985 <sup>a</sup>	66	20	6	92	30.3		
		1992 <sup>a</sup>	45	4	0	49	8.9		
		1999 <sup>a</sup>	40	10	0	50	25.0		
		2004 <sup>a</sup>	31	7	0	38	22.6		
51	Lemhi Range South of the Big Timber Creek drainage	2010 <sup>a</sup>	27	8	0	35	29.6		
		1982 <sup>a</sup>	75	22	0	97	29.3		
		1986 <sup>a</sup>	68	15	17	101	22.1		
		1987 <sup>b</sup>	100	30	0	130	30.0		
		1992 <sup>a</sup>	54	7	0	61	13.0		
		2000 <sup>a</sup>	125	32	0	157	25.6		
		2005 <sup>a</sup>	67	14	0	82	20.8		
		2012 <sup>a</sup>	48	17	0	65	35.4		
		59	Red Conglomerates	1986 <sup>a</sup>	32	14	0	46	43.8
				1994 <sup>a</sup>	14	11	0	25	78.6
2001 <sup>a</sup>	0			0	0	0			
2002 <sup>a</sup>	0			0	0	0			
2006 <sup>a</sup>	2			0	0	2	0.0		
59A	Italian Peaks	1982 <sup>a</sup>	46	13	0	59	28.3		
		1986 <sup>a</sup>	10	3	0	13	30.0		
		1991 <sup>b</sup>	61	24	4	89	39.3		
		1994 <sup>a</sup>	92	36	0	128	39.1		
		2001 <sup>a</sup>	16	4	0	20	25.0		
		2002 <sup>a</sup>	18	4	0	22	22.2		
		2006 <sup>a</sup>	20	7	0	27	35.0		
67	South of Palisades Creek (Mt. Baird area)	1982 <sup>a</sup>	33	13	0	46	39.4		
		1985 <sup>a</sup>	35	16	0	51	45.7		
		1986 <sup>b</sup>	0	0	104	104			
		1986 <sup>a</sup>	37	15	0	52	40.5		
		1988 <sup>b</sup>	71	21	0	92	29.6		

Table 2. Continued.

GMU	Inclusive location	Year	Adults	Kids	Unknown	Total	Kids/100 adults
		1990 <sup>b</sup>	45	18	0	63	40.0
		1993 <sup>b</sup>	104	33	16	153	31.7
		1994 <sup>a</sup>	73	42	0	115	57.5
		1996 <sup>a</sup>	151	66	0	217	43.7
		1998 <sup>a</sup>	118	45	0	163	38.1
		2000 <sup>a</sup>	61	29	0	90	47.5
		2002 <sup>a</sup>	35	7	0	42	20.0
		2004 <sup>a</sup>	84	24	0	108	28.5
		2005 <sup>c</sup>	47	15	0	62	31.9
		2006 <sup>a</sup>	100	19	0	119	19.0
		2008 <sup>a</sup>	71	19	0	90	26.8
		2010	96	33	0	129	34.4
		2012 <sup>a</sup>	70	22	0	93	31.4
	North of Palisades Creek (Mt. Baldy area)	1982 <sup>a</sup>	45	12	0	57	26.7
		1985 <sup>a</sup>	31	8	0	39	25.8
		1986 <sup>b</sup>	0	0	126	126	
		1986 <sup>a</sup>	38	19	49	106	50.0
		1987 <sup>b</sup>	72	28	0	100	38.9
		1988 <sup>b</sup>	91	31	0	122	34.1
		1989 <sup>b</sup>	35	12	0	47	34.3
		1990 <sup>b</sup>	73	22	0	95	30.1
		1994 <sup>a</sup>	41	20	0	61	48.8
		1996 <sup>a</sup>	47	17	0	64	36.2
		1998 <sup>a</sup>	26	7	0	33	26.9
		2000 <sup>a</sup>	9	5	0	14	55.6
		2002 <sup>a</sup>	0	0	0	0	
		2004 <sup>a</sup>	4	2	0	6	50.0
	2005 <sup>c</sup>	8	4	0	12	50.0	
	2006 <sup>a</sup>	13	3	0	16	23.0	
	2008 <sup>a</sup>	25	8	0	33	32.0	
	2010 <sup>a</sup>	19	7	0	26	36.8	
	2012 <sup>a</sup>	17	1	0	20	5.8	

<sup>a</sup> Summer Helicopter count.

<sup>b</sup> Ground count.

<sup>c</sup> Winter Helicopter count.

Table 3. Mountain goat harvest and drawing odds by hunt area, Upper Snake Region, 2003-present.

Hunt area	Year	Tags	Harvest		Hunter success (%)	Days/hunter	First-choice applicants	Drawing odds %
			M	F				
50	2003	2	2	0	100	1.0	35	5.7
	2004	2	1	1	100	2.0	19	10.5
	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
	51 <sup>a</sup>	2003	6	4	2	100	3.9	82
2004		6	2	2	66	4.5	71	8.5
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 <sup>b</sup>		2005	2	2	0	100	1.0	69
	2006	2	0	2	100	4.5	46	4.3
	2007	4	3	1	100	3.75	71	5.6
	2008	4	4	0	100	2.75	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

<sup>a</sup> GMU 51 was closed in 2013

<sup>b</sup> GMU 67 was closed in 2003 and 2004

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

### **Controlled Hunt Areas 27-2, 27-4, 27-5, 36-1, 36A-1, 36A-2, 36A-3, 36A-4, 36B, 37A (GMUs 21, 21A, 27, 28, 29, 30, 30A, 36, 36A, 36B, 37, 37A)**

#### **Abstract**

During 2014 and 2015, 22 tags for mountain goats were available in 10 hunt areas. In 2014, 22 (100%) hunters were successful and 15 (68%) harvested animals were males. In 2015, 19 of 22 hunters were successful (86%) and 13 of the harvested animals were male (68%).

Aerial surveys specifically for mountain goats were flown for GMUs 21A, 29, and 30. Observers counted 66 individuals with an overall kid ratio of 44:100 adults. The Beaverhead area (21A and 30), represent an area with steadily declining population. In GMUs 21A and 30 combined, observers sighted 85 goats (81A:4K) in 1996, 42 goats (39A:4K) in 2006, and 35 goats (24A:10K) in 2013. While there was increase in reproductive success in 2013 there is a declining population trend over the past 20 years.

#### **Management Direction**

Follow statewide management direction. Increase population, increase non-consumptive use of mountain goat herds, maintain harvest and recreational opportunity, and translocate mountain goats.

#### **Climatic Conditions**

Rainfall and snowpack during 2014 and 2015 was generally warmer and drier than average. During 2014 and 2015, winter conditions were relatively mild, with normal to above normal temperatures and below normal precipitation, at least at mid to lower elevations. The warmer and drier conditions for this high elevation species is potentially a contributing factor to the declining population trend in some areas.

#### **Background**

Most herds winter at low elevations on south-facing cliffs, where curl-leaf mountain-mahogany (*Cercocarpus ledifolius*) is a dominant forage species. These mountain goats move to higher elevations during summer where alpine, subalpine, or north-slope habitats are preferred. 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.

As with other 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.

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.

Suitable mountain goat habitats are often widely separated. Thus, movement of mountain goats into low-density areas is slow and erratic. Translocating animals may accelerate processes of repopulating vacant habitats and stimulating increases in stagnant herds.

### **Population Surveys**

Historical survey information indicates relatively wide fluctuations in mountain goat populations (Table 1). During early 2012, 492 mountain goats were observed during aerial surveys in Hunt Areas 27-1, 27-2, 36A-1, 36A-2, 36A-3, 36A-4, and 36B. Observed age ratio was 27.3 kids per 100 adults. Variables that may affect detection bias were recorded for all groups for future sightability estimation when a viable model is developed. Compared to previous surveys in these Hunt Areas, total numbers increased 29% and kid:adult ratios increased 24%. All individual Hunt Areas showed increases in numbers except 36A-1. Most areas reached or exceeded the highest levels in individuals observed in the last 25-30 years.

In 2013 aerial surveys specifically for mountain goats were flown for GMUs 21A, 29, and 30. Observers counted 66 individuals with an overall kid ratio of 44:100 adults. The Beaverhead area (21A and 30), represent an area with steadily declining population. In GMUs 21A and 30 combined, observers sighted 85 goats (81A:4K) in 1996, 42 goats (39A:4K) in 2006, and 35 goats (24A:10K) in 2013. While there was increase in reproductive success in 2013 there is a declining population trend over the past 20 years.

Twenty of 24 goats translocated to GMU 29 in 2007 were fitted with radio collars. As a result, goats have been surveyed to detect observation bias for future development of a sightability model. Sightability trials planned for 2012 were postponed due to poor weather. Model development will include habitat and animal variables (habitat, vegetative cover, snow cover, level of snow tracking conducted, group size, activity) to determine impact on observation bias.

Unfortunately, the translocated goats have had low survival and poor recruitment. In the first year after the translocation, 3 goats died (1 = capture myopathy, 1 = mt lion predation, 1 = unk). From July 2008 – June 2009, 9 radio-collared goats died (3 = malnutrition, 2 = mt lion predation, 1 = falling, 1 = hunter harvest, 2 = unk). From July 2009 – June 2010, 5 goats died (2 = malnutrition, 3 = unk). During spring 2008, 2 kids were seen with nannies; however neither kid was seen after September 2008. In the spring of 2009, 3 of the remaining 7 nannies produced a kid, but only 1 kid survived until spring 2010. One of the remaining 5 nannies produced a kid in spring 2010. Radio-collar batteries have failed on the remaining translocated goats.

### **Harvest Characteristics 2014**

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  $\geq 50$  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 both 2014 and 2015 in Salmon Region. Hunters could harvest a mountain goat of either sex, except females accompanied by kids were protected.

Prior to 1986, chances of drawing a Salmon Region mountain goat tag were very low, averaging 5%. Since 1986, hunters applying for a mountain goat tag have been restricted to only that controlled hunt application. From 1986 to 1994, drawing success substantially increased, averaging 20%. When mountain goat tag numbers were reduced in 1995, applicant numbers did not drop proportionally and chances of drawing were <14%. Since 2003, drawing success has stabilized at approximately 12%. Drawing odds for individual hunts vary widely from year to year.

### **Harvest Characteristics 2014**

In 2014, the chance of drawing a mountain goat tag in Region 7 was 13.6% overall. There were 299 first choice applicants for the 22 tags. However, the hunt areas received different demand. Hunt area 27-2 has gained popularity with 24 applicants for 1 tag while hunt area 36A-3 has only 34 applicants for 3 tags. In 2014, 22 (100%) hunters were successful and 15 (68%) harvested animals were males. Hunt area 36A-3 was the only hunt without 100% success.

### **Harvest Characteristics 2015**

In 2015, the chance of drawing a mountain goat tag in Region 7 was 12.9% overall. There were 284 first choice applicants for the 22 tags. However, the hunt areas received different demand. Hunt area 27-2 has gained popularity with 19 applicants for 1 tag while hunt area 27-4 has only 10 applicants for 2 tags. In 2015, 19 of 22 hunters were successful (86%) and 13 of the harvested animals were male (68%). For the second year in a row hunt area 36A-3 had less than 100% success. In 2015, only 1 of the 3 tags was filled in 36A-3. Hunt GMU 37A had 1 tag left unfilled.

### **Habitat Conditions**

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 20<sup>th</sup> 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.

### **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).

### **Management Implications**

With the exception of the Beaverhead Mountains, most mountain goat herds in Salmon Region generally are stable, whether or not herds are hunted. 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.

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	
27	1993 <sup>a</sup>	Waterfall Cr. - Goat Cr.	15	1	0	16	6.7
		Big Cr. - Soldier Cr.	0	0	0	0	0.0
1999 <sup>a</sup>	Rapid River - Headwaters	Waterfall Cr. - Goat Cr.	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
		Marble Cr. - Indian Cr.	6	1	0	7	16.7
2002 <sup>b</sup>	Upper Middle Fork	Waterfall Cr. - Goat Cr.	11	2	0	13	18.2
		Waterfall Cr. - Goat Cr.	15	2	0	17	13.3
2004	Big Cr. - Soldier Cr.	Waterfall Cr. - Goat Cr.	4	0	0	4	0.0
		Big Cr. - Soldier Cr.	35	6	0	41	17.1
2006	Rapid River - Headwaters	Waterfall Cr. - Goat Cr.	10	1	0	11	10.0
		Waterfall Cr. - Goat Cr.	3	1	0	4	33.0
		Big Cr. - Soldier Cr.	28	5	0	33	17.9
		Marble Cr. - Pistol Cr.	6	0	0	6	0.0
2008 <sup>d</sup>	Waterfall Cr. - Goat Cr.	Waterfall Cr. - Goat Cr.	1	0	0	1	0.0
		Big Cr. - Soldier Cr.	1	1	1	3	100.0
2011 <sup>b</sup>	Waterfall Cr. - Goat Cr.	Waterfall Cr. - Goat Cr.	1	1	4	6	100.0
		Big Cr. - Soldier Cr.	1	1	4	6	100.0
		Big Cr. - Soldier Cr.	17	4	0	21	23.5
27-1	1988	E. Fork Mayfield Cr.	10	1	0	11	10.0
	1994	E. Fork Mayfield Cr.	16	4	0	20	25.0
	1995	E. Fork Mayfield Cr.	17	2	0	19	11.8
	1997	E. Fork Mayfield Cr.	7	1	0	8	14.3
	1999 <sup>a</sup>	E. Fork Mayfield Cr.	8	2	0	10	25.0
	2002 <sup>a</sup>	Mayfield Cr. - Yankee Fork	5	1	0	6	20.0
	2006 <sup>b</sup>	E. Fork Mayfield Cr.	12	3	0	15	25.0
	2007	Mayfield Cr. - Yankee Fork	16	5	0	21	31.3
	2012	Mayfield Cr. - Yankee Fork	54	11	0	65	20.4
	27-2	1988	Trail Cr. - China Cr.	36	5	0	41
1994		Trail Cr. - China Cr.	50	6	0	56	12.0
1995		Trail Cr. - China Cr.	92	10	0	102	10.9
1997		Trail Cr. - China Cr.	37	4	0	41	10.8
1999 <sup>a</sup>		Trail Cr. - China Cr.	38	7	0	45	18.4
2002 <sup>a</sup>		Trail Cr. - China Cr.	40	5	0	45	12.5
2007		Trail Cr. - China Cr.	52	15	0	67	28.8
2012		Trail Cr. - China Cr.					

Table 1. Continued.

Hunt area	Year	Inclusive location	Adults	Kids	Unk.	Total	Kids/100 adults
27-3	1993 <sup>a</sup>	Meyers Cove - Falconberry	37	7	0	44	18.9
	1999 <sup>a</sup>	Meyers Cove - Falconberry	37	4	0	41	10.8
	2002 <sup>a</sup>	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 <sup>a</sup>	Yellowjacket Cr. - Waterfall Cr.	49	8	0	57	16.3
	1999 <sup>a</sup>	Yellowjacket Cr. - Waterfall Cr.	57	6	0	63	10.5
	2001	Camas Cr. - Yellowjacket Cr.	30	7	0	37	23.3
	2002 <sup>a</sup>	Yellowjacket Cr. - Waterfall Cr.	2	3	0	5	150.0
		Camas Cr. - Yellowjacket Cr. <sup>b</sup>	6	0	0	6	0.0
	2004	Yellowjacket Cr. - Waterfall Cr.	36	11	0	47	30.6
	2005 <sup>b</sup>	Camas Cr. - Reservoir Cr.	24	4	0	28	16.7
	2006	Yellowjacket Cr. - Waterfall Cr.	38	12	0	50	31.6
	2008 <sup>d</sup>	Yellowjacket Cr - Waterfall Cr.	8	1	0	9	12.5
		Camas Cr. - Yellowjacket Cr.	2	0	0	2	0.0
	2011 <sup>b</sup>	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 <sup>a</sup>	Upper Camas Cr.	5	0	0	5	0.0
		Iron Cr. - Moyer Cr. <sup>b</sup>	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 <sup>b</sup>	Iron Cr. - Williams Cr.	10	1	0	11	10.0
		Panther Cr.	14	2	0	16	14.3
		Upper Camas Cr.	9	1	0	10	11.1
	2011 <sup>b</sup>	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 <sup>a</sup>	Sheep Cr. - Goat Mt.	53	2	0	55	3.8
	2006	Sheep Cr. - Goat Mt.	45	7	0	52	15.6
	2013	4 <sup>th</sup> of July-Goat Mt.	26	8	1	34	30.7
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
	2004	Beaver Cr. - Galena	35	10	0	45	28.6
	2009	Beaver Cr. - Galena	20	6	0	26	30.0

Table 1. Continued.

Hunt area	Year	Inclusive location	Adults	Kids	Unk.	Total	Kids/100 adults
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 <sup>c</sup>	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
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 <sup>a</sup>	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
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 <sup>a</sup>	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
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 <sup>a</sup>	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
36A-4	1988	Germania Cr. - 4 <sup>th</sup> July Cr.	86	21	0	107	24.4
	1994	Germania Cr. - 4 <sup>th</sup> July Cr.	65	6	0	71	9.2
	2002 <sup>a</sup>	Germania Cr. - 4 <sup>th</sup> July Cr.	33	5	0	38	15.2
	2004	Germania Cr. - 4 <sup>th</sup> July Cr.	65	21	0	86	32.3
	2008	Germania Cr. - 4 <sup>th</sup> July Cr.	47	11	0	58	23.4
	2012	Germania Cr. - 4 <sup>th</sup> July Cr.	70	12	0	82	17.1
36B	1985	Mill Cr. - Ramey Cr.	52	23	0	75	44.2
	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 <sup>a</sup>	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

Table 1. Continued.

Hunt area	Year	Inclusive location	Adults	Kids	Unk.	Total	Kids/100 adults
		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 <sup>b</sup>	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

<sup>a</sup> Spring green-up count.

<sup>b</sup> Incidental to deer or elk survey.

<sup>c</sup> Incomplete survey covered Redfish Lake to Fishhook Cr.

<sup>d</sup> Incidental to bighorn sheep 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

<sup>a</sup> 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, 2005-present.

Hunt area	Year	Tags	Harvest		Hunter success (%)	Days/hunter	First-choice applicants	Drawing odds %
			M	F				
27-2 <sup>a</sup>	2005	1	1	0	100	2.0	11	9.1
	2006	1	1	0	100	9.0	10	10.0
	2007	1	1	0	100	2.0	7	14.3
	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	24	4.2
	2015	1	1	0	100	1	19	5.3
27-3 <sup>b</sup>	2003	2	0	2	100	2.0	10	20.0
	2004	2	2	0	100	14.0	9	22.2
	2005	1	0	1	100		8	12.5
	2006	1	1	0	100	2.0	5	20.0
27-4	2005	2	0	0	0	0	15	13.3
	2006	2	0	0	0	0	16	12.5
	2007	2	1	1	100	4.5	13	15.4
	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
27-5 <sup>c</sup>	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
	2007	2	0	2	100	3.0	11	18.2
	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
30 <sup>b</sup>	2015	2	1	1	100	6.0	27	7.4
	2003	2	1	1	100	7.0	14	14.3
	2004	2	2	0	100	4.0	36	5.6
	2005	2	1	1	100	3.5	22	9.1
	2006	2	2	0	100	3.0	23	8.7
	36-1 <sup>a</sup>	2005	4	1	1	50	4.5	26
2006		4	2	0	50	16.0	14	28.6
2007		4	3	0	75	1.3	29	13.8

Table 3. Continued.

Hunt area	Year	Tags	Harvest		Hunter success (%)	Days/hunter	First-choice applicants	Drawing odds %	
			M	F					
36A-1	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	
	2005	5	3	1	80	7.3	56	8.9	
	2006	5	3	1	80	4.0	44	11.4	
	2007	4	3	1	100	3.7	37	10.8	
	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	
36A-2	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	
	2005	3	1	1	67	4.0	33	9.1	
	2006	3	1	1	67	2.0	12	25.0	
	2007	2	2	0	100	2.0	21	9.5	
	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		
36A-3	2015	1	1	0	100	3.0	14	7.1	
	2005	2	2	0	100	6.5	19	10.5	
	2006	2	2	0	100	2.0	17	11.8	
	2007	2	0	0	0	0	28	7.1	
	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	
	36A-4	2005	4	3	1	100	2.8	45	8.9
		2006	4	2	2	100	8.0	36	11.1

Table 3. Continued.

Hunt area	Year	Tags	Harvest		Hunter success (%)	Days/hunter	First-choice applicants	Drawing odds %
			M	F				
36B	2007	3	1	1	67	1.0	29	10.3
	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
	2005	4	3	1	100	5.8	28	14.3
	2006	4	4	0	100	2.0	63	6.3
	2007	3	2	0	67	2.5	39	7.7
	2008	3	2	1	100	2.7	35	8.6
	2009	2	1	1	100	2.0	19	10.5
	37A <sup>a</sup>	2010	2	1	1	100	2.5	25
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
2005		1	1	0	100	3.0	13	7.7
2006		1	1	0	100	16.0	12	8.3
2007		1	1	0	100	4.0	7	14.3
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	

<sup>a</sup> Hunt areas 27-2 and 36-1 reinstated and Hunt Area 37A added in 2005.

<sup>b</sup> Hunt Areas 27-3 and 30 closed in 2007.

<sup>c</sup> 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 <sup>a</sup>	Horse Creek	Helicopter	30	20
21	Beartrap Springs	Vehicle	10	0
27 <sup>a</sup>	Goat Creek	Helicopter	10-20	0
27 <sup>a</sup>	Tumble/Parrot Creek	Helicopter	10	0
27 <sup>a</sup>	Ship Island Creek	Helicopter	20-30	8
27 <sup>a</sup>	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

<sup>a</sup> 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

# **Moose, Bighorn Sheep and Mountain Goat**

**2013 and 2014 Seasons and Rules**



photo©TimChristiePhoto.com

## 2013 - 2014 MOUNTAIN GOAT HUNTING SEASONS

- **Mountain goats of either sex may be taken except nannies accompanied by kids.**

### 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 complies with those requirements and possesses the necessary information to accurately complete the necessary form, see page 33.

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.

<b>2013 &amp; 2014 Mountain Goat Controlled Hunts</b>							
<b>Either Sex - 48 Tags</b>							
<b>⏴ Either sex may be taken except a nanny accompanied by kids</b>							
Hunt No.	Controlled Hunt Area	Tags	Season Dates	Hunt No.	Controlled Hunt Area	Tags	Season Dates
6001	1	1	Aug 30 - Nov 12	6012	36A-2*	1	Aug 30 - Nov 12
6002	7*	1	Aug 30 - Nov 12	6013	36A-3*	3	Aug 30 - Nov 12
6003	10-1	2	Aug 30 - Nov 12	6014	36A-4*	2	Aug 30 - Nov 12
6004	10-2*	2	Aug 30 - Nov 12	6015	36B*	2	Aug 30 - Nov 12
6005	18*	4	Aug 30 - Nov 12	6016	37A*	1	Aug 30 - Nov 12
6006	22	4	Aug 30 - Nov 12	6017	39	2	Aug 30 - Nov 12
6007	27-2*	1	Aug 30 - Nov 12	6018	43*	3	Aug 30 - Nov 12
6008	27-4*	2	Aug 30 - Nov 12	6019	50*	2	Aug 30 - Nov 12
6009	27-5	2	Aug 30 - Nov 12	6020	67	5	Aug 30 - Nov 12
6010	36-1*	4	Aug 30 - Nov 12				
6011	36A-1*	4	Aug 30 - Nov 12				

GOAT



*Photos courtesy of Lucas Swanson*

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

## Mountain Goat Hunt Area Descriptions

Please note that hunt areas are different for each species. For full text of legal description and boundaries for Game Management Units please refer to the current Big Game Regulations or visit, <http://adminrules.idaho.gov/rules/current/13/0108.pdf>

**Hunt Area 1** — All of Unit 1.

**Hunt Area 7** — All of Units 7 and 9.

**Hunt Area 10-1** — That portion of Unit 10 within the Isabella Creek and Collins Creek drainage.

**Hunt Area 10-2** — Those portions of Units 10 and 12 within the following boundary: Beginning at Lolo Pass, then southwest on U.S. 12 to Forest Service Road 569, then north on Forest Service Road 569 to Forest Service Road 500, then west on Forest Service Road 500 to Cayuse Junction, then north and west along Toboggan Ridge Road (Forest Service Road 581) to Rapid Creek Trail (Forest Service Trail 565), then north along Rapid Creek Trail to Kelly Creek Trail (Forest Service Trail 567), then northeast on Kelly Creek Trail to the Idaho-Montana state line, then south along the Idaho-Montana state line to Lolo Pass, the point of beginning.

**Hunt Area 18** — All of Unit 18 and that portion of Unit 23 within the Rapid River drainage.

**Hunt Area 22** — All of Unit 22.

**Hunt Area 27-2** — That portion of Unit 27 south of Forest Service Road 172 from Loon Creek Summit to Loon Creek guard station, Pinyon Peak, and Feltham Creek Point, and that portion of Unit 36 west of Forest Service Road 172 and north of the Pioneer Creek-West Fork Yankee Fork Trail, Forest Service Trail 113-155.

**Hunt Area 27-4** — That portion of Unit 27 east of the Middle Fork of the Salmon River and north of Camas Creek and that portion of Unit 28 within the Yellowjacket Creek drainage.

**Hunt Area 27-5** — That portion of Unit 27 west of the Middle Fork of the Salmon River upstream from and including the Marble Creek drainage, and that part east of the Middle Fork of the Salmon River upstream from and including Little Loon Creek drainage.

**Hunt Area 36-1** — That portion of Unit 36 west of State Highway 75 from Stanley to Alturas Lake Creek and south of State Highway 21, and that portion of Unit 35 within the Sawtooth National Recreation Area Boundary.

**Hunt Area 36A-1** — That portion of Unit 50 north of Trail Creek Road and west of U.S. 93, that portion of Unit 36A south and east of the East Fork of the Salmon River from and including the Herd Creek drainage upstream to and including the West Pass Creek drainage; and that portion of Unit 48 within the Big Wood River

drainage east of State Highway 75 and downstream from and including the North Fork of the Big Wood River drainage.

**Hunt Area 36A-2** — That portion of Unit 36A, including the headwaters of the East Fork of the Salmon River upstream from, but excluding, the Germania Creek drainage on the west and upstream from, but excluding, the West Pass Creek drainage on the east; and that portion of Unit 48 within the Big Wood River drainage east of State Highway 75 upstream from and excluding the North Fork Big Wood River drainage.

**Hunt Area 36A-3** — That portion of Unit 36A north and west of the East Fork of the Salmon River downstream from, but excluding, the Germania Creek drainage, and that portion of Unit 36 on the south and east sides of the main Salmon River downstream from, but excluding, the Fourth of July Creek drainage above Stanley.

**Hunt Area 36A-4** — That portion of Unit 36A within the Germania Creek drainage, and that portion of Unit 36 within the Salmon River drainage east of State Highway 75 from and including the Fourth of July Creek drainage upstream to and including the Pole Creek drainage.

**Hunt Area 36B** — That portion of Unit 36B south of and including the Challis Creek drainage; that portion of Unit 36 east of the Yankee Fork-Mill Creek Summit Road.

**Hunt Area 37A** — All of Unit 37A and that portion of Unit 29 upstream from and including Hayden Creek drainage.

**Hunt Area 39** — That portion of Unit 39 in the Middle Fork Boise River drainage upstream from, and including, the Queen's River and Yuba River drainages.

**Hunt Area 43** — That portion of Unit 36 west of State Highway 75 and south of Alturas Lake Creek; all of Unit 43; and that portion of Unit 48 south and west of State Highway 75 upstream from and including the Baker Creek drainage.

**Hunt Area 50** — All of Unit 49 and that portion of Unit 50 south and east of the Trail Creek Road and south and west of U.S. Highway 93.

**Hunt Area 67** — That portion of Unit 67 south and east of Palisades Creek to the Wyoming line.

GOAT

### The Idaho Hunt Planner is an interactive search & mapping engine for our Hunting Regulations

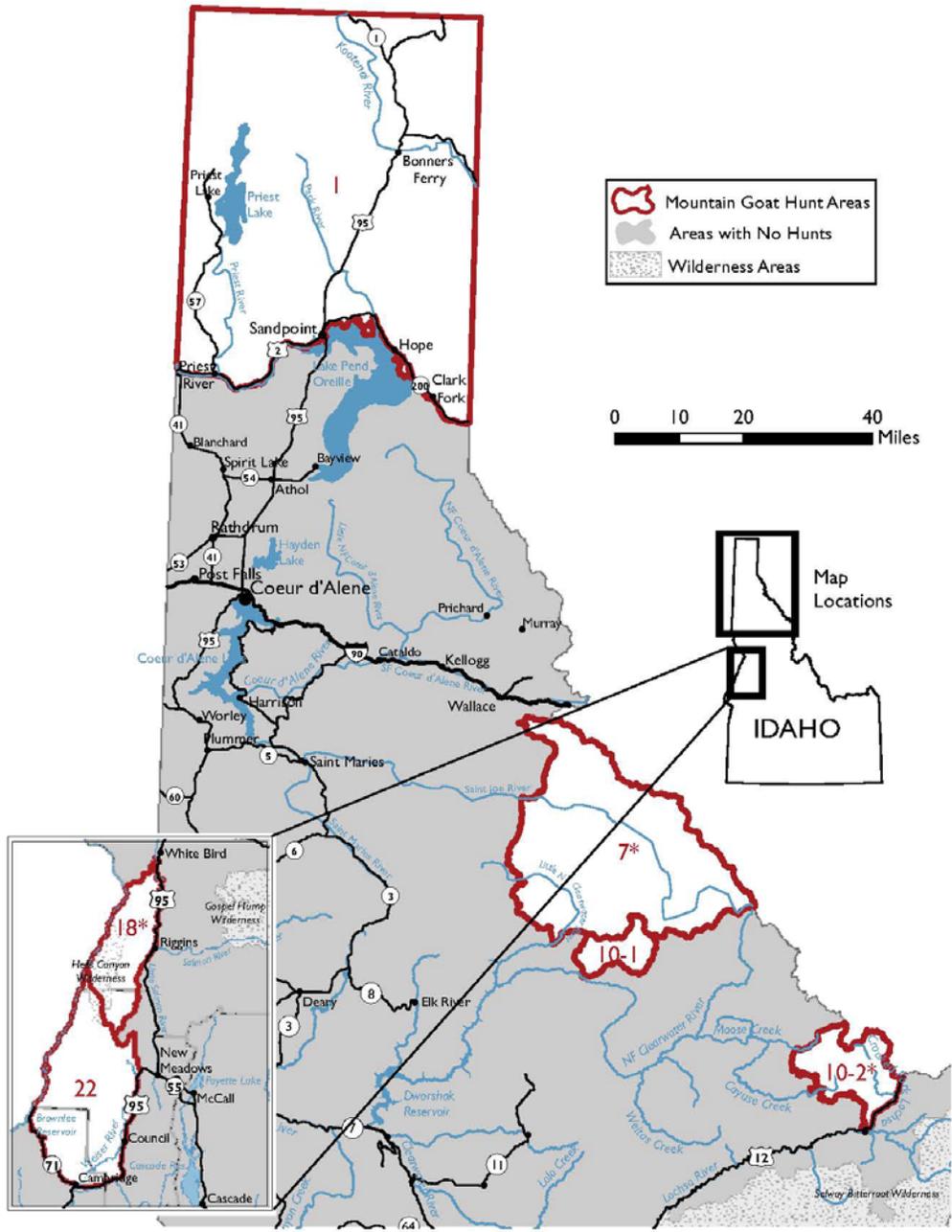


- Search for a Hunt
- Review Hunt Area Maps
- Browse by Fish and Game Region
- View Hunts by Species
- View Hunts with real-time fire and emergency closures
- Download Fish & Game Hunt Areas for viewing offline or in your GPS.



2013 - 2014 MOUNTAIN GOAT HUNTS

Northern Idaho Mountain Goat Hunts

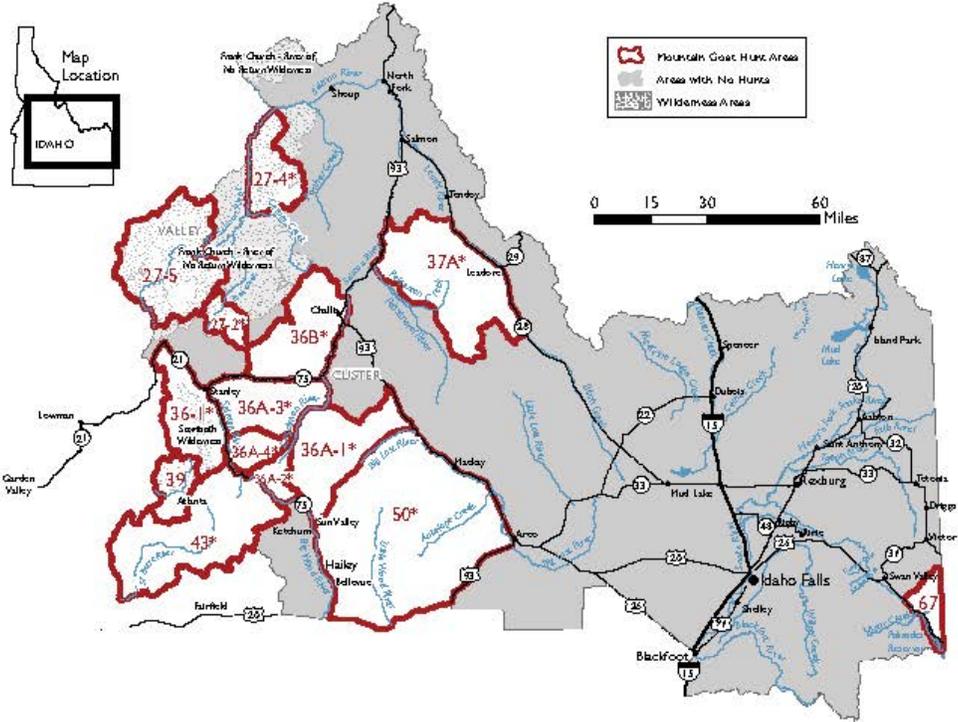


GOAT

<http://fishandgame.idaho.gov>

# 2013 - 2014 MOUNTAIN GOAT HUNTS

## Central Idaho Mountain Goat Hunts



**GOAT**



28

<http://fishandgame.idaho.gov>

# **Moose, Bighorn Sheep and Mountain Goat**

**2015 and 2016 Seasons and Rules**



## 2015 - 2016 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 30.

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:** Drawings odds are an approximation of the probability of drawing a tag for each hunt in 2014 and were calculated by dividing the number of tags offered by the number of first choice applicants for that hunt in the 2014 drawing then converting to a percentage. New Hunts and controlled hunt areas with significant boundary changes for 2015 - 2016 have been designated as "New Hunts."

To review more detailed information about number of applicants or drawing odds for other years, please visit our website at <http://fishandgame.idaho.gov/CHodds>.

### 2015 & 2016 Mountain Goat Controlled Hunts

**Either Sex - 50 Tags**

**Either sex may be taken except a nanny accompanied by kids**

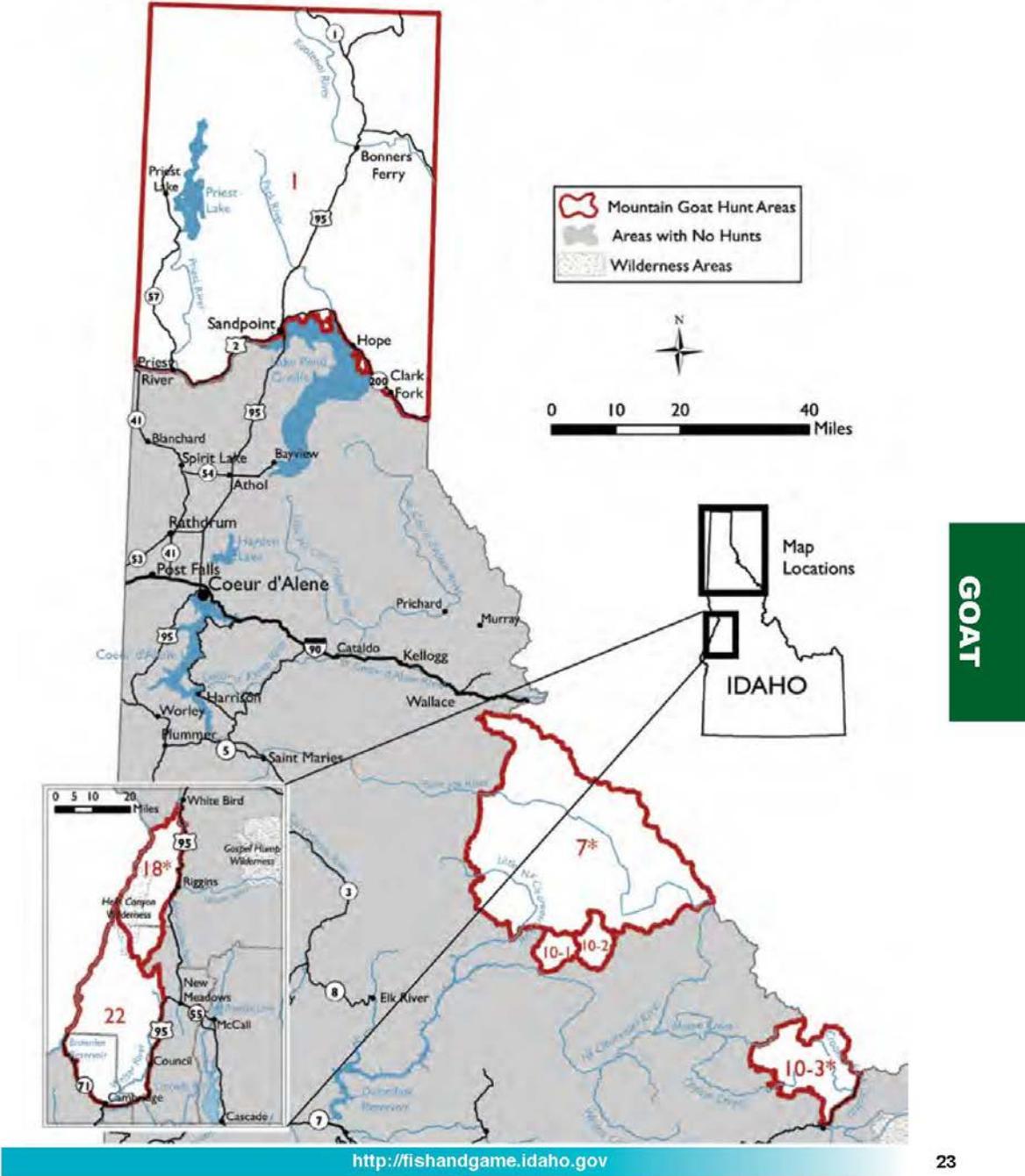
**GOAT**

Hunt No.	Controlled Hunt Area	Tags	Season Dates	Drawing Odds in 2014
6001	1	1	Aug 30 - Nov 12	2%
6002	7*	1	Aug 30 - Nov 12	3%
6003	10-1	2	Aug 30 - Nov 12	New Hunt
6004	10-2	2	Aug 30 - Nov 12	New Hunt
6005	10-3*	2	Aug 30 - Nov 12	5%
6006	18*	4	Aug 30 - Nov 12	5%
6007	22	4	Aug 30 - Nov 12	6%
6008	27-2*	1	Aug 30 - Nov 12	4%
6009	27-4*	2	Aug 30 - Nov 12	8%
6010	27-5	2	Aug 30 - Nov 12	10%
6011	36-1*	4	Aug 30 - Nov 12	8%
6012	36A-1*	4	Aug 30 - Nov 12	8%
6013	36A-2*	1	Aug 30 - Nov 12	7%
6014	36A-3*	3	Aug 30 - Nov 12	9%
6015	36A-4*	2	Aug 30 - Nov 12	8%
6016	36B*	2	Aug 30 - Nov 12	6%
6017	37A*	1	Aug 30 - Nov 12	5%
6018	39	2	Aug 30 - Nov 12	7%
6019	43*	3	Aug 30 - Nov 12	7%
6020	50*	2	Aug 30 - Nov 12	7%
6021	67	5	Aug 30 - Nov 12	4%

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

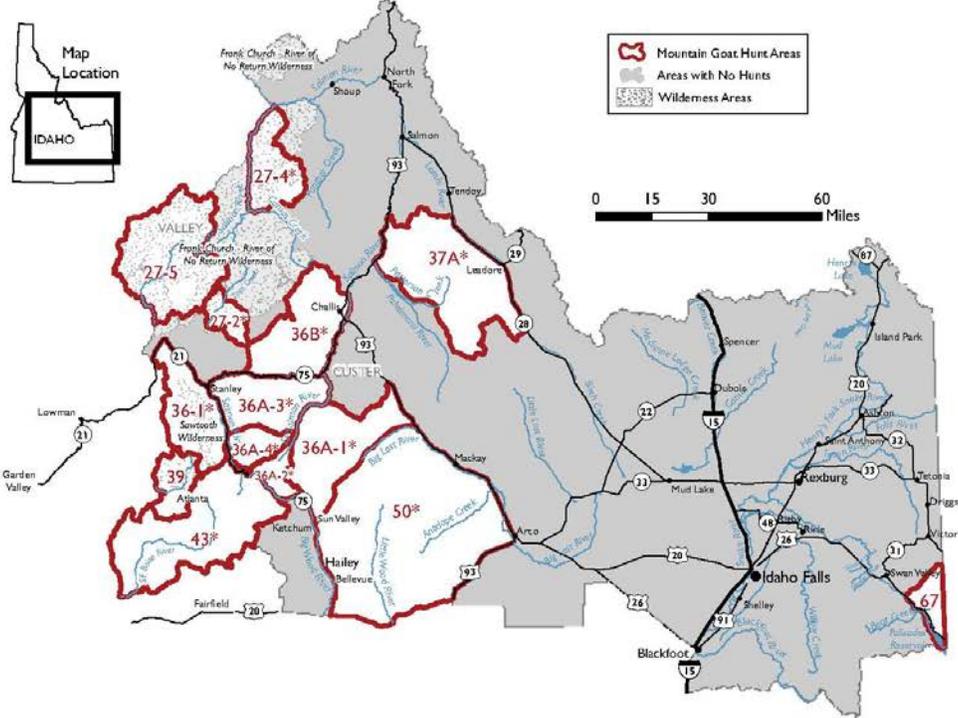
2015 - 2016 MOUNTAIN GOAT HUNTS

Northern Idaho Mountain Goat Hunts

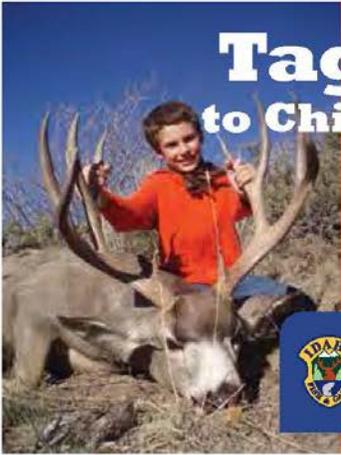


# 2015 - 2016 MOUNTAIN GOAT HUNTS

## Central Idaho Mountain Goat Hunts



GOAT



### Tag Transfer to Child or Grandchild

The holder of a controlled hunt tag for big game or turkey may transfer that tag to his or her minor child or grandchild under the age of 18 who is otherwise qualified to participate in the hunt.

The child or grandchild may be designated only one controlled hunt tag per species per calendar year. The transfer must be made before the opening date of the hunt.

A form provided by Fish and Game must be used to designate the tag, which can only be done at a Fish and Game office, in person or by mail. For more information, please contact your local Fish and Game office or visit [fishandgame.idaho.gov](http://fishandgame.idaho.gov).

Submitted by:

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Regional Wildlife Manager

Clay Hickey  
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Greg Painter  
Regional Wildlife Manager

Approved by: IDAHO DEPARTMENT OF FISH AND GAME



Brad Compton, Asst. Chief  
Bureau of Wildlife



Jeff Gould, Chief  
Bureau of Wildlife