

2015 - JCR Evaluation Form

SPECIES: Mountain Goat

PERIOD: 6/1/2015 - 5/31/2016

HERD: MG201 - BEARTOOTH

HUNT AREAS: 1, 3, 514, 999

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MCWHIRTER

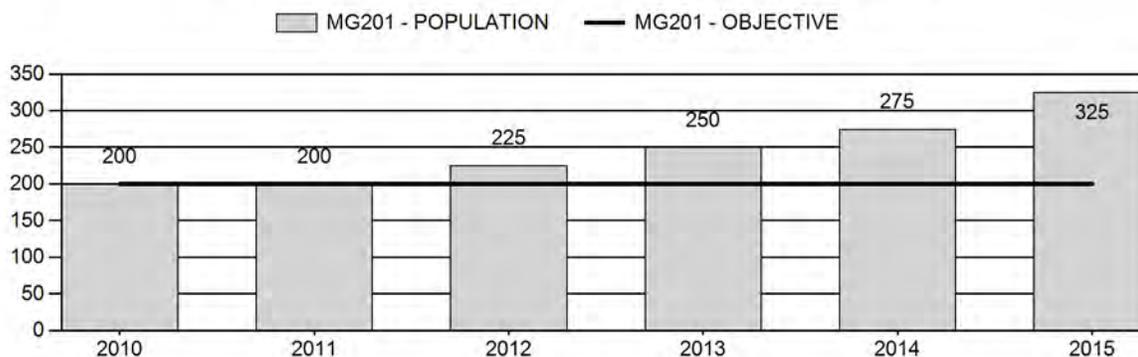
	<u>2010 - 2014 Average</u>	<u>2015</u>	<u>2016 Proposed</u>
Population:	230	325	300
Harvest:	16	19	25
Hunters:	17	19	28
Hunter Success:	94%	100%	89%
Active Licenses:	17	19	28
Active License Success:	94%	100%	89%
Recreation Days:	91	111	175
Days Per Animal:	5.7	5.8	7
Males per 100 Females	0	0	
Juveniles per 100 Females	32	40	

Population Objective (\pm 20%) :	200 (160 - 240)
Management Strategy:	Special
Percent population is above (+) or below (-) objective:	62%
Number of years population has been + or - objective in recent trend:	6
Model Date:	None

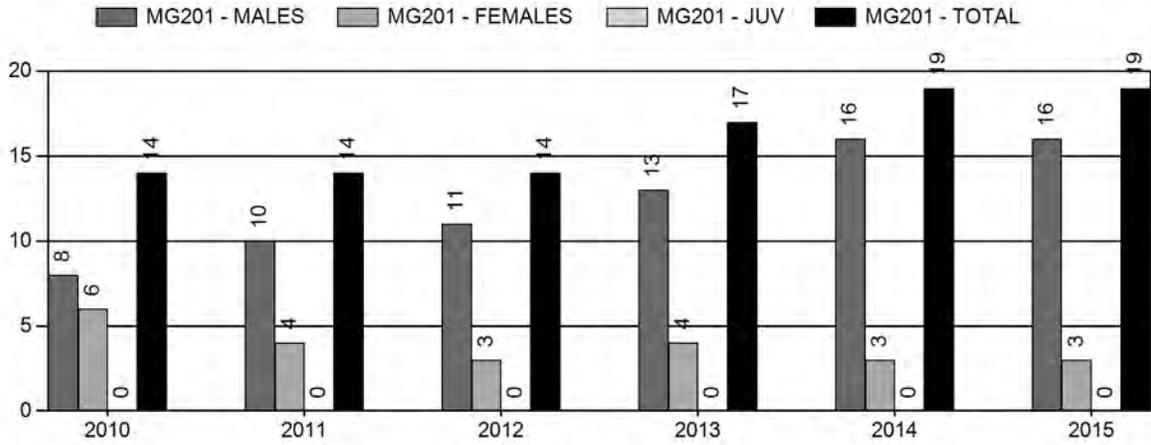
Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	<u>JCR Year</u>	<u>Proposed</u>
Females \geq 1 year old:	N/A%	N/A%
Males \geq 1 year old:	N/A%	N/A%
Juveniles (< 1 year old):	N/A%	N/A%
Total:	N/A%	N/A%
Proposed change in post-season population:	N/A%	N/A%

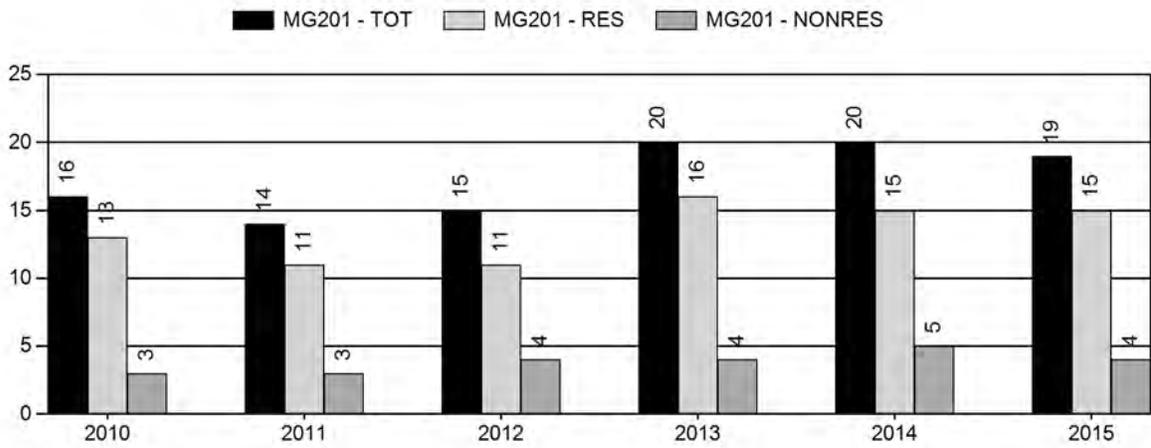
Population Size - Postseason



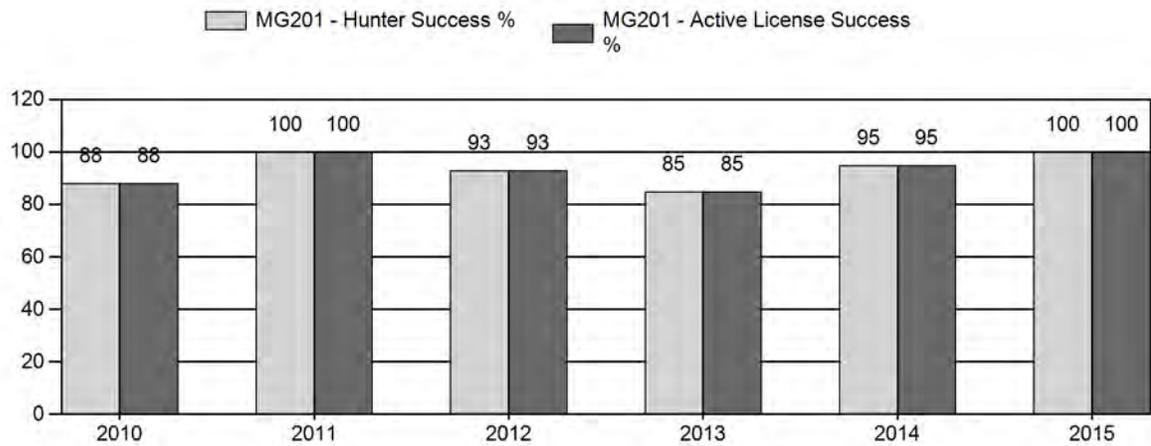
Harvest



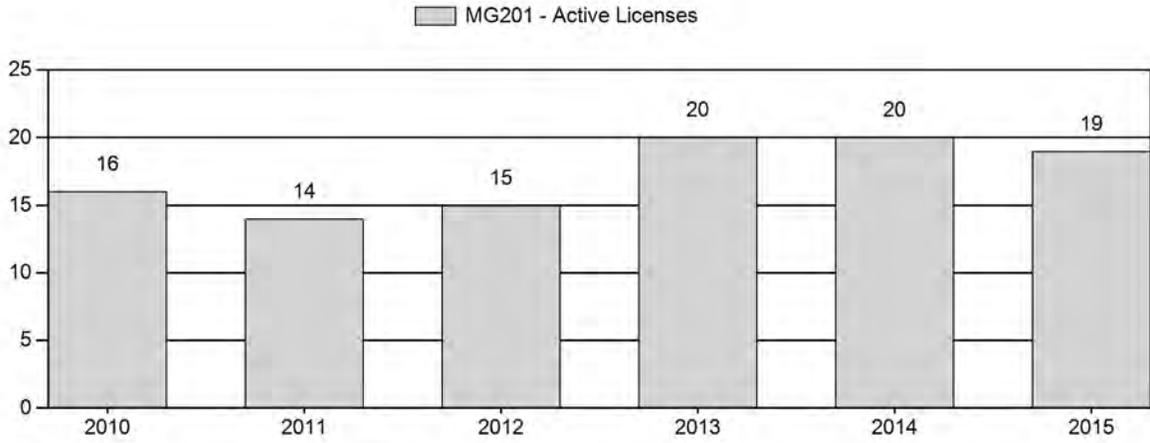
Number of Hunters



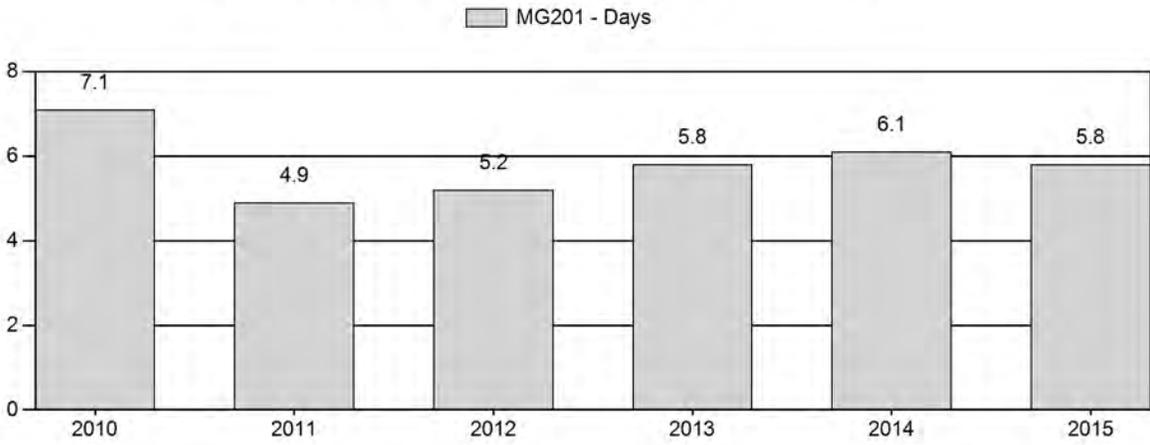
Harvest Success



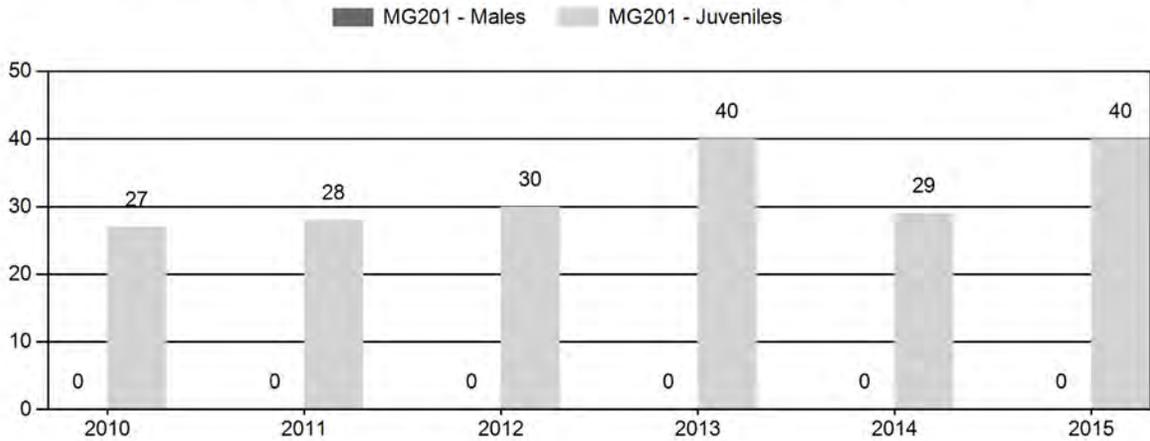
Active Licenses



Days Per Animal Harvested



Preseason Animals per 100 Females



2010 - 2015 Preseason Classification Summary

for Mountain Goat Herd MG201 - BEARTOOTH

Year	Pre Pop	MALES				FEMALES		JUVENILES		Tot Cls	Cls Obj	Males to 100 Females				Young to		
		Ylg	Adult	Total	%	Total	%	Total	%			YIng	Adult	Total	Conf Int	100 Fem	Conf Int	100 Adult
2010	225	0	0	0	0%	37	79%	10	21%	47	165	0	0	0	± 0	27	± 0	27
2011	225	0	0	0	0%	76	78%	21	22%	97	179	0	0	0	± 0	28	± 0	28
2012	250	0	0	0	0%	60	77%	18	23%	78	179	0	0	0	± 0	30	± 0	30
2013	275	0	0	0	0%	125	71%	50	29%	175	167	0	0	0	± 0	40	± 0	40
2014	300	0	0	0	0%	56	78%	16	22%	72	155	0	0	0	± 0	29	± 0	29
2015	350	0	0	0	0%	216	71%	87	29%	303	207	0	0	0	± 0	40	± 0	40

**2016 HUNTING SEASONS
BEARTOOTH MOUNTAIN GOAT HERD (MG201)**

Hunt Area	Type	Season Dates		Quota	License	Limitations
		Opens	Closes			
1	1	Sep. 1	Oct. 31	12	Limited quota	Any mountain goat
3	1	Sep. 1	Oct. 31	8	Limited quota	Any mountain goat
3	2	Oct. 1	Oct. 31	8	Limited quota	Any mountain goat

Special Archery Season Hunt Areas	Season Dates		Limitations
	Opens	Closes	
1, 3	Aug. 15	Aug. 31	Refer to Section 7 of this Chapter

Hunt Area	Type	Quota change from 2015
3	2	+8
Total		+8

Management Evaluation

Current Management Objective: 200

2015 Postseason Population Estimate:

2016 Proposed Postseason Population Estimate:

Herd Unit Issues

Mountain goats were introduced into the Rock Creek drainage of the Beartooth Mountains of Montana, adjacent to the Wyoming border, in 1942. The first hunting season in Wyoming was in 1969. Since then mountain goats populated all available habitat in the Beartooth Mountains of Wyoming, and have colonized portions of the Absaroka Mountains as well, presumably from the Absaroka Mountains in Montana. To accommodate this expansion, Hunt Area 1 was enlarged in 1996 (to include the Sunlight Creek drainage) and again in 2009 (to include the area south to the North Fork of the Shoshone River). In 2011, Hunt Area 3 was carved out of Hunt Area 1 to direct hunting pressure at goats that inhabited the more remote areas of the Absaroka Mountains. In addition, expansion has taken place in Yellowstone National Park, where currently 75-100 goats reside. Hunting of this population of goats also occurs in Montana (Hunt District 514) adjacent to the Wyoming portion of the Beartooth Mountains. Both of these factors (Montana harvest and goats unavailable for harvest in YNP) must be taken into account when managing this herd.

Weather

Snow depths and snow water equivalents at high elevation monitoring sites during the 2015-2016 winter were not excessive, with most sites 75%-90% of normal. Temperatures were also near normal, with cooler temperatures in early winter, followed by a very warm periods in February and March. Both annual precipitation and growing season precipitation at higher elevations were slightly below normal.

Habitat

No habitat monitoring data is collected in this herd unit.

Field Data

A pre-season classification and trend survey conducted in summer 2015 yielded a total of 303 mountain goats. A total of 102 (34%) of these were seen in Area 1, while 93 (31%) were seen in Area 3. Another 108 were seen in Yellowstone National Park. Goat observations in Hunt Area 3 and in YNP represent the highest recorded goat numbers for these areas. The kid:adult ratio was 40:100, which is higher than the long-term (1986-2013) average of 33.5 kids:100 adults.

Harvest Data

A total of 19 goats were harvested by 19 hunters in Wyoming in 2015, including 16 males and 3 females (100% success). Two licenses were issued in Montana for Hunt Area 514 in 2012, and 1 nanny was taken. Hunter effort for Wyoming goat hunters in 2015 was 5.8 days per goat harvested, which is slightly greater than the average for goat hunters in this area, as the long-term average (1970-2014) average is 4.6 days per goat taken.

The average age of all harvested goats in 2015 was 5.0 years for billies and 5.8 years for nannies, compared to the long-term average of 4.7 years for billies and 4.6 years for nannies since age records were first kept in 1998. The total number of goats seen by hunters in 2015 (average 21.1) was slightly less than the most recent 10-year average of 28.9 goats seen.

Various studies have shown that goat populations are sensitive to female harvest. The 3 nannies killed in 2008 represented 55% of the total Wyoming harvest for Hunt Area 1, which is considered high. In 2009 and 2010, nannies comprised 38.5% and 45.5% of the harvest, respectively. Three of the six highest nanny harvest percentages recorded for this herd unit have been recorded in the last 5 years (2008, 2009, 2010). In 2011 and 2012, the percentage of nannies in the Area 1 harvest was 36.4% and 27.3%, respectively. In 2013, nannies comprised 35% of the total harvest in this herd unit. In 2014 and 2015, this figure dropped to 15.8%.

Population

Due to the difficulty of distinguishing males and females during aerial surveys, mountain goats are classified as either kids or non-kids. Only from close observation can males and yearlings be determined. Therefore, pre-season classification information for this herd unit (although graphed as juveniles:100 females) is actually kids:100 non-kids. Due to the inability to distinguish between males and females, construction and validation of a functional population model is difficult.

Based on an evaluation of recent trend counts and productivity estimates, the Beartooth Mountain Goat Herd is currently estimated to be above the post-season population objective of

200 goats. Due to concerns over expanding mountain goats on high elevation non-migratory bighorn sheep, it is felt that decreasing mountain goats densities in Hunt Area 3 are warranted. Therefore, it is recommended that 12 licenses be issued in Area 1 and 16 licenses be issued in Area 3 for the 2016 season, which should result in the harvest of approximately 25 goats.