

2006 JOB COMPLETION REPORT

SPECIES : Pronghorn
 HERD UNIT : IRON MOUNTAIN
 HERD UNIT # : 523
 HUNT AREAS : 38,39,40,104,

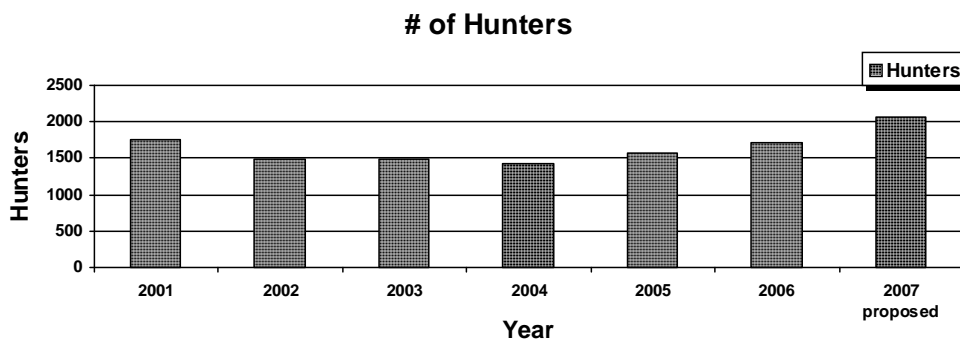
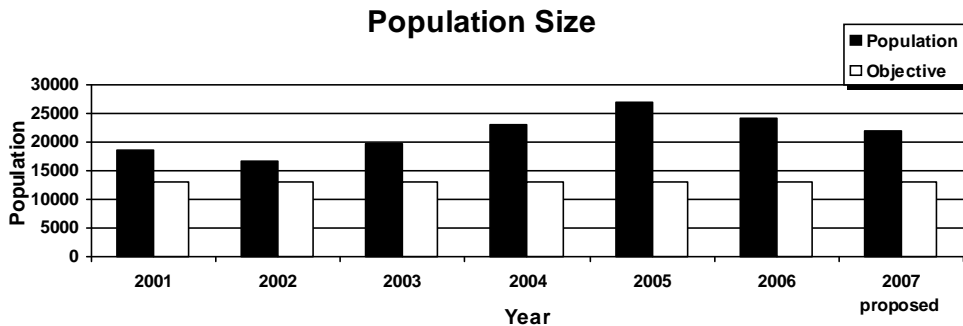
PERIOD COVERED : 06/01/2006 - 05/31/2007
 WYOMING PROJECT NO. : W-27-R
 PREPARED BY : Rich Guenzel

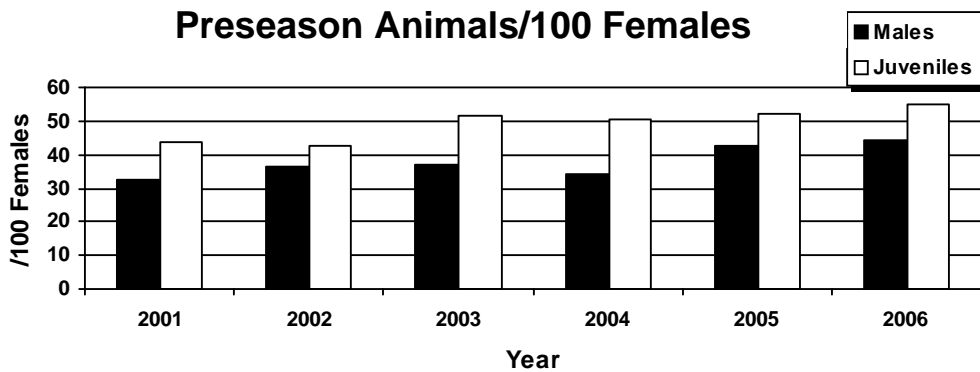
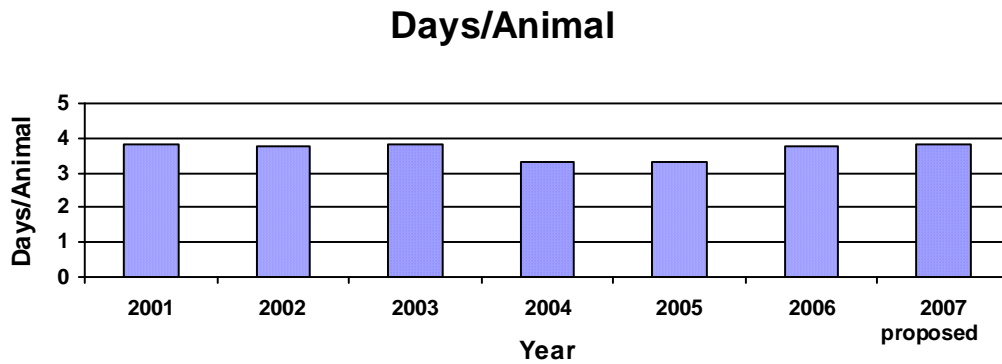
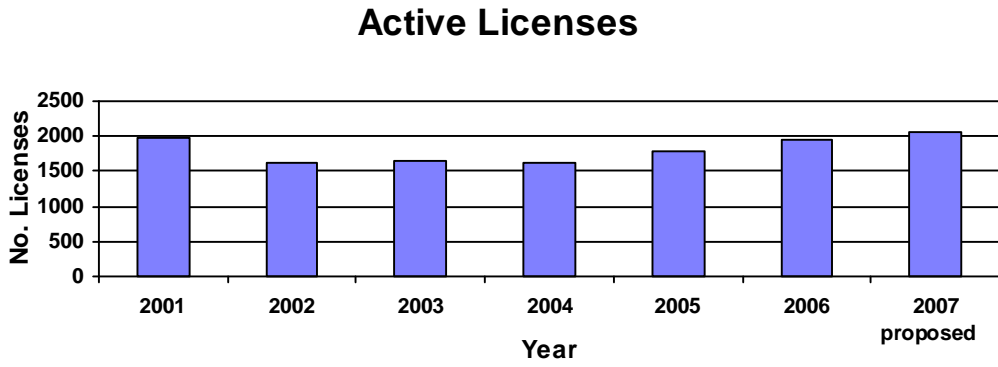
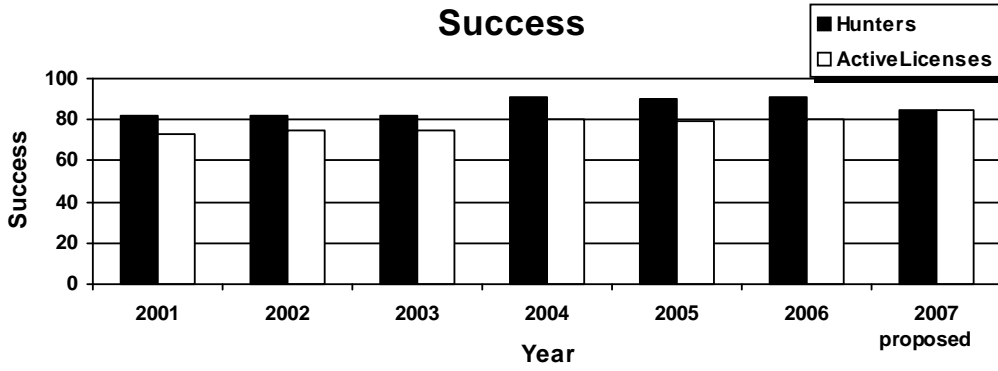
	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>					
1. PREHUNT SEX AND AGE RATIO COUNT (per 100 females)										
Juveniles	42	51	51	52	55					
Males	36	37	34	43	44					
Yearling Males	0	11	13	13	19					
Mature Males	0	26	21	29	25					
Total Sample Size	2,345	1,861	2,853	2,774	1,224					
Adequate Sample Size	1,113	1,441	1,511	1,571	1,707					
2. HARVEST										
Adult Males	779	736	772	705	825					
Yearling Males	0	0	0	0	0					
Total Males	779	736	772	705	825					
Females	379	415	459	645	680					
Juveniles	60	68	67	68	66					
Totals	1,218	1,219	1,298	1,418	1,571					
3. AGE STRUCTURE OF FIELD CHECKED ANIMALS										
	#	%	#	%	#	%	#	%	#	%
Juvenile Female	6	9	5	7	3	5	6	9	1	3
Yearling Female	0		4	6	1	2	3	4	1	3
Adult Female	10	15	16	22	19	30	19	28	16	42
Juvenile Male	2	3	3	4	7	11	0		2	5
Yearling Male	10	15	6	8	8	13	5	7	5	13
Adult Male	38	58	38	53	25	40	35	51	13	34
Total Sample Size	66		72		63		68		38	
4. POSTHUNT SEX AND AGE RATIO COUNT (per 100 females)										
Juveniles	0				0		0		0	
Males	0				0		0		0	
Yearling Males	0				0		0		0	
Mature Males	0				0		0		0	
Total Sample Size	0				0		0		0	
Adequate Sample Size	0		0		0		0		0	
5. POPULATION TRENDS										
Trend Count Dates:										
Trend Count:	0		0		0		0		0	
Herd Model Pop Est:	16,114		18,959		22,133		19,784		17,957	
Line Trans Pop Est:	0		0		23,199		0		0	

SPECIES : Pronghorn
 HERD UNIT : IRON MOUNTAIN
 YEAR : 2006

MODEL DATE : 2/26/07

	Averages 2001 - 2005	2006	Proposed 2007	Objective
Population (Est.)	21,006	24,184	21,829	13,000
Harvest	1,318	1,571	1,740	
Hunters	1,546	1,720	2,060	
Hunter Success	85.3%	91.3%	84.5%	
Active Licenses	1,729	1,956	2060	
Active Licenses Success	76.2%	80.3%	84.5%	
Recreation Days	4,752	5,903	6,612	
Days/Animal	3.6	3.8	3.8	





JCR **Season Setting** **Evaluation Form** (2004)
(check one)

Year: **2006** Species: **Pronghorn** Herd Unit: **Iron Mountain** Herd unit #: **523** Biologist: **Rich Guenzel**

Management strategy: Recreational Special

	5-year average	Current year	Proposed
Population:	21,006	24,184	21,829
Harvest:	1,318	1,583	1,740
Hunters:	1,729	1,952	2,060
% Success:	76%	92%	91%
Rec. Days:	4,752	5,906	6,612
Days/animal:	3.61	3.73	3.80
Population objective			13,000
Percent population is above (+) or below (-) objective:			86%
Number of years population has been + <input type="checkbox"/> or - <input checked="" type="checkbox"/> objective in recent trend:			10
Population estimates tracking with trend counts or line transect results?			Yes
Population trend (incr., stable, decr.):			Stable
Most recent classification ratio (j/100f/m):			54/100/44
(This classification is: at or above adequate <input type="checkbox"/> or well below adequate <input checked="" type="checkbox"/>)			
Ratio trends (incr., stable, decr.): m/100f:			Increasing
	J/100f:		Increasing
Most recent 5-year average classification ratio (j/100f/m):		49/100/38	
(Generally, these classifications have been: at <input type="checkbox"/> or above adequate <input checked="" type="checkbox"/> or well below adequate <input type="checkbox"/>)			
Proposed harvest rates (percent of pre-season estimate of each sex/age group): <input checked="" type="checkbox"/>			
	JCR Year	Proposed	
Females ≥ 1 year old:	5.60%	5.90%	
Males ≥ 1 year old:	12.00%	14.00%	
Juveniles (< 1 year old):	1.00%	1.80%	
Total:	6.10%	6.93%	

Moose: Average age of male harvest:

Rationale provided for season proposals or management data that appear unusual?

Model revised from 2006 version. Harvest is predominantly on private lands where access is tightly restricted. Questions exist about the reliability of the 2004 EOY line transect estimate on which this version is aligned. Previous model ignored that estimate.

SEX AND AGE COUNT REPORT

SPECIES : Pronghorn

HERD UNIT : IRON MOUNTAIN

YEAR : 2006

PREPARED BY : Rich Guenzel

PREHUNT CLASSIFICATION DATES : Aug

Hunt Area	----- MALES -----			Females	Juveniles	Total
	Yearlings	Adults	Total			
104	29	37	66	132	76	274
38	39	56	95	244	122	461
39	39	46	85	169	89	343
40	10	16	26	70	50	146
Total Sample	117	155	272	615	337	1,224
Adequate Sample				379	470	1,707
Precision	@ 90 C.L.					

Juveniles / 100 Females : 55 ± 6
Total Males / 100 Females : 44 ± 5
Adult Males / 100 Females : 25
Yearlings / 100 Females : 19

2006 HUNTING SEASON

SPECIES : **Pronghorn**

HERD UNIT : **IRON MOUNTAIN**

HUNT AREA	TYPE	SEASON DATES	LIMITATIONS
38			
	1	Oct 5 - Oct 25	Limited quota; 550 licenses any antelope
	6	Oct 5 - Oct 31	Limited quota; 600 licenses doe or fawn
39			
	1	Oct 5 - Oct 25	Limited quota; 300 licenses any antelope
	6	Oct 5 - Oct 31	Limited quota; 250 licenses doe or fawn valid in that portion of Area 39 south of the Tunnel Road (Platte County Road 226, Albany County Road 721)
40			
	1	Oct 5 - Oct 25	Limited quota; 200 licenses any antelope
	6	Oct 5 - Oct 31	Limited quota; 150 licenses doe or fawn
104			
	1	Oct 20 - Nov 5	Limited quota; 200 licenses any antelope
	6	Oct 20 - Nov 5	Limited quota; 175 licenses doe or fawn; Nov 6 - Dec 31 unused Area 104 Type 6 licenses valid in that portion of Area 104 off national forest
ARCHERY :			
38		Aug 15 - Oct 4	Refer to Section 3 of this Chapter
39		Aug 15 - Oct 4	Refer to Section 3 of this Chapter
40		Aug. 15 - Oct 4	Refer to Section 3 of this Chapter
104		Aug 15 - Oct 19	Refer to Section 3 of this Chapter

HARVEST REPORT

SPECIES **PRONGHORN**

HERD UNIT : **IRON MOUNTAIN**

YEAR : **2006**

PERIOD COVERED :

Prepared By : **Rich Guenzel**

Hunt Area	License Type	L.Q. Licenses	No. Hunters	Ylg. Males	Adult Males	Females	Juveniles	Total	Percent Success	Days/Animal Taken
104	Resident	0	119	0	58	15	4	77	64.7	5.3
	Non-Resident	0	157	0	65	83	9	157	100.0	4.9
	Total	0	276	(326)*	0	123	98	13	234	84.8 (71.8)*
38	Resident	0	291	0	135	120	7	262	90.0	4.7
	Non-Resident	0	451	0	221	201	13	435	96.5	3.6
	Total	0	742	(826)*	0	356	321	20	697	93.9 (84.4)*
39	Resident	0	135	0	62	26	5	93	68.9	3.2
	Non-Resident	0	301	0	136	115	5	256	85.0	3.4
	Total	0	436	(473)*	0	198	141	10	349	80.0 (73.8)*
40	Resident	0	48	0	17	17	0	34	70.8	3.1
	Non-Resident	0	218	0	131	103	23	257	117.9	2.5
	Total	0	266	(331)*	0	148	120	23	291	109.4 (87.9)*
Total	Resident	0	593	0	272	178	16	466	78.6	4.4
	Non-Resident	0	1,127	0	553	502	50	1,105	98.0	3.5
	Total	0	1,720	(1956)*	0	825	680	66	1,571	91.3 (80.3)*

* Active Licenses

2006 AGE STRUCTURE OF FIELD CHECKED ANIMALS

SPECIES : Pronghorn
 HERD UNIT : IRON MOUNTAIN

PREPARED BY : Rich Guenzel

Hunt Area	Sex	Young	1+	2+	3+	4+	5+	6+	7+	Older	Unaged Adults *	Total
104	Male	0	0	0	1	0	0	0	0	0	0	1
	Female	0	0	0	0	0	0	0	0	0	0	0
38	Male	0	0	0	1	0	0	0	0	0	0	1
	Female	0	0	0	0	0	0	0	0	0	0	0
39	Male	0	0	1	2	0	0	0	0	0	0	3
	Female	0	1	0	2	0	0	0	0	0	0	3
40	Male	2	5	8	0	0	0	0	0	0	0	15
	Female	1	0	6	4	0	0	0	0	0	4	15
Totals :	Male	2	5	9	4	0	0	0	0	0	0	20
	Female	1	1	6	6	0	0	0	0	0	4	18

* Unaged animals older than yearlings

Total Aged : 38

**IRON MOUNTAIN PRONGHORN
(A523)
Hunt Areas 38, 39, 40, 104
2007 Hunting Seasons**

Hunt Area	Type	Dates of Opens	Season Closes	Limitations
38	1	Oct. 5	Oct. 31	Limited Quota; 550 licenses, any antelope
	6	Oct. 5	Oct. 31	Limited Quota; 500 licenses, doe or fawn
39	1	Oct. 5	Oct. 31	Limited Quota; 300 licenses, any antelope
	6	Oct. 5	Oct. 31	Limited Quota; 100 licenses, doe or fawn
40	1	Oct. 5	Oct. 31	Limited Quota; 200 licenses, any antelope
	6	Oct. 5	Oct. 31	Limited Quota; 200 licenses, doe or fawn
104	1	Oct. 20	Nov. 4	Limited Quota; 200 licenses, any antelope
	6	Oct. 20	Nov. 4	Limited Quota; 175 licenses, doe or fawn
		Nov. 5	Dec. 31	Unused Area 104 Type 6 Licenses valid in that portion of Area 104 off national forest
<u>Archery</u> 38,39,40,104		Aug. 15	Refer to Section 3 of this Chapter	

Changes for 2007

- Extend Area 38, 39 and 40 Type 1 licenses to October 31 to coincide with the extended mule deer season.
- Decrease the Area 38 Type 6 quota by 100 since they were not selling and there appear to be fewer pronghorn on the HMA.
- Reduce the Area 39 Type 6 quota but make them valid area-wide since there are much fewer pronghorn on the accessible public lands in the eastern part of the unit and accessible lands in the western part of Area 39 receive too much pressure and displace pronghorn to already limited access lands.
- Increase the Area 40 Type 6 quota by 50 since some landowners are interested in increasing harvest.
- Adjust the Area 104 closing date to the first Sunday in November.
- Adjust Area 40 archery to statewide opening date of August 15.

Management Evaluation

Management for a population objective in the Iron Mountain Pronghorn Herd is quite a challenge due to limited access to much of the area and too much pressure on accessible lands. Hunt Area 38 has received the greatest pressure due to access and the willingness of landowners to reduce the herd. However, that strategy has decreased hunting quality in that hunt area. The

population exhibits some wide variability in recruitment and fawn:doe ratios typically run lower than herds to the west. A large portion of the population lives in the western part of the herd where access is highly restricted. Assessing the status of this herd has been a challenge because pronghorn occupy habitats interspersed within some rugged portions of the Laramie Range that are difficult to survey. There have been questions about the reliability of some estimates and herd simulations.

In 2006, we backed off Type 1 licenses in Area 38 to reduce buck harvest over the declining buck/doe ratios. We have been unable to sell most of the Area 38 Type 6 licenses so we are proposing a quota reduction. However, the proposed quota will still exceed the number we have been able to sell. It remains difficult to place hunters in Area 39. Our attempt in 2006 to focus doe and fawn harvest to the western part of Area 39 within Albany County was not successful because those hunters could only hunt on very few lands. The pressure tended to displace pronghorn to less accessible areas rather than increase harvest. Therefore, we are eliminating the area restriction but also reducing the quota. A major ranch in Area 40 would like to see more harvest so we propose to increase the Type 6 quota by 50. We do not propose any changes for Area 104. Success rates tend to be low in that hunt area. The season dates have been adjusted to close again on the first Sunday in November in Area 104.

POPULATION:

The postseason population objective for the Iron Mountain Pronghorn Herd is 13,000. When the objective was revised, the population had well exceeded that level. Managing the herd toward objective by harvest has been very difficult to achieve. The population has shown some wide variations related to drought, poor forage conditions, and sensitivity to extreme weather. Large segments of the population must migrate from the Laramie Basin through the Laramie Range to reach lower elevation winter ranges. Subdivisions and increased fencing hinder access to many winter ranges. Our assessment of the population's status has varied as abruptly as the fluctuations reflected in the herd simulations. The current modeling effort reflects some higher population levels from previous versions. In retrospect, some apparent declines may not have been as drastic as first thought. However, observed fawn:doe ratios have remained relatively low since 2000, although they have been gradually increasing since 2004. In 2006, we observed 54 fawns/100 does/44 bucks, which are the highest ratios seen since 1999.

With the revised simulation, the herd is predicted to have increased from 16,625 in 2002 to a peak of about 27,000 in 2005. As shown in Appendix 1, sagebrush production measured along Highway 34 was extremely low in 2004, 2005 and 2006. This corresponds to the long-term drought as reflected in Palmer Drought Severity Indices in the Upper Platte and Lower Platte Climatic Regions (Appendix 2). Between drought and harvest, the herd declined to 24,184 after the 2006 hunt and is expected to decline further to under 22,000 after the 2007 season. The winter of 2006-2007 had periods of extreme cold and wind, and crusted and drifted snow in December and January, followed by periods of above average temperatures. It is possible that above normal winter mortality may further reduce the herd from what is currently projected.

HARVEST:

The 2006 season resulted in a harvest of 1,583 with an overall success rate of 81%. Doe and fawn harvests have been substantially increased since the 2004 season. About 48% of the 2006 harvest was made up of does and fawns. The 2007 season is expected to increase harvest about 10% over 2006. We seem to be approaching the upper threshold for hunters, access and harvest given current landowner attitudes. The areas where we can get the bulk of the harvest now have relatively low densities. We are unable to adequately harvest pronghorn in the western portion of the herd.

Pronghorn (A523) - Iron Mountain
HA 38-40, 104
Revised 8/2005

