

2006 JOB COMPLETION REPORT

SPECIES : Pronghorn
 HERD UNIT : MEDICINE BOW
 HERD UNIT # : 525
 HUNT AREAS : 30,31,32,41,42,46,47,48

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	62	66	63	66	62
Males	42	52	65	51	43
Yearling Males	14	0	21	17	15
Mature Males	28	0	44	34	28
Total Sample Size	5,090	5,346	6,008	4,959	4,372
Adequate Sample Size	2,142	2,472	2,537	2,482	2,177

2. HARVEST					
Adult Males	2,680	3,119	3,373	3,420	3,600
Yearling Males	0	0	0	0	0
Total Males	2,680	3,119	3,373	3,420	3,600
Females	1,222	1,930	2,026	2,432	2,913
Juveniles	217	296	425	270	347
Totals	4,119	5,345	5,824	6,122	6,860

	#	%	#	%	#	%	#	%	#	%
3. AGE STRUCTURE OF FIELD CHECKED ANIMALS										
Juvenile Female	33	5	34	4	75	8	165	16	27	5
Yearling Female	22	3	34	4	32	3	53	5	24	5
Adult Female	147	21	210	26	289	29	220	22	144	27
Juvenile Male	24	3	26	3	46	5	22	2	19	4
Yearling Male	45	6	51	6	53	5	67	7	34	6
Adult Male	437	62	454	56	489	50	489	48	283	53
Total Sample Size	708		809		984		1,016		531	

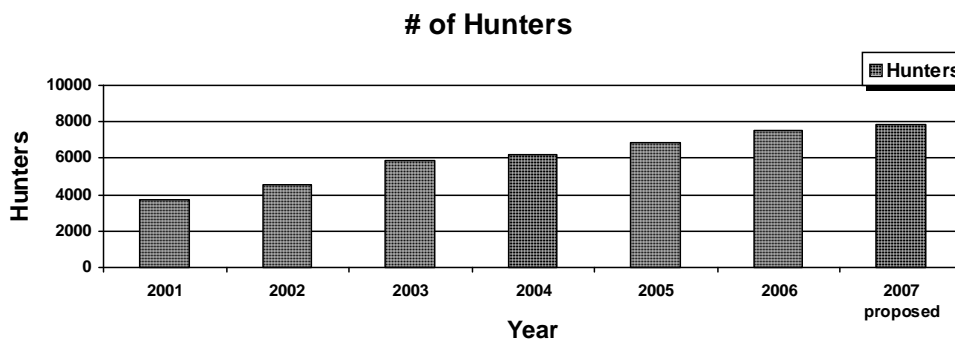
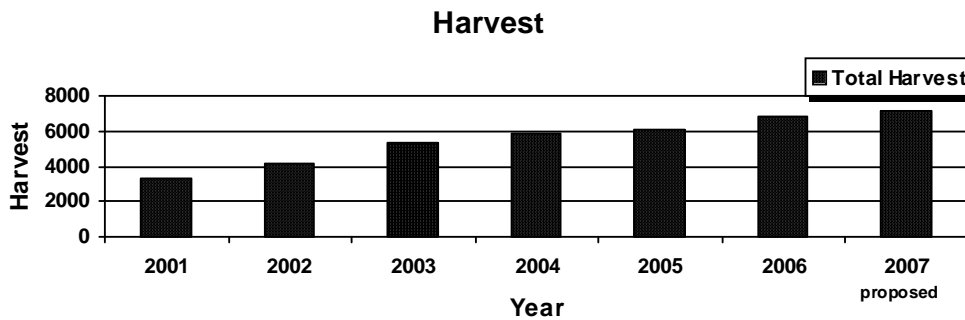
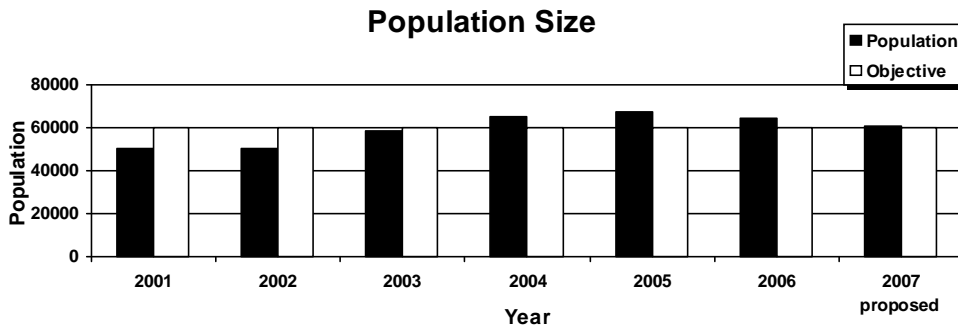
4. POSTHUNT SEX AND AGE RATIO COUNT (per 100 females)					
Juveniles	0	0	0	0	0
Males	0	0	0	0	0
Yearling Males	0	0	0	0	0
Mature Males	0	0	0	0	0
Total Sample Size	0	0	0	0	0
Adequate Sample Size	0	0	0	0	0

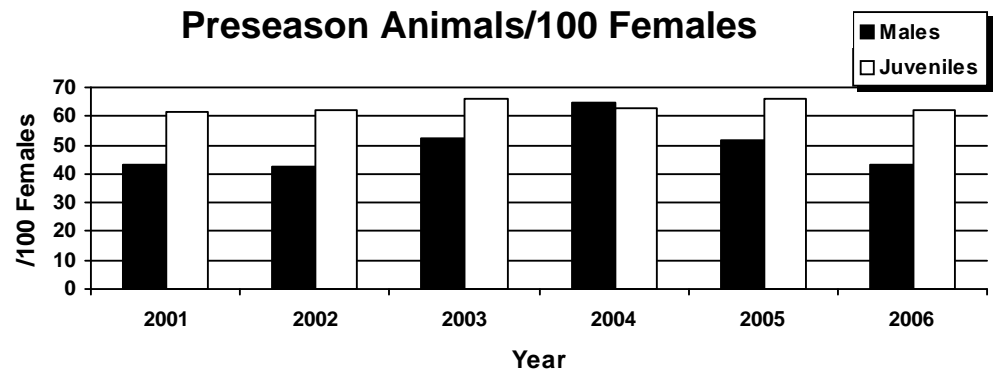
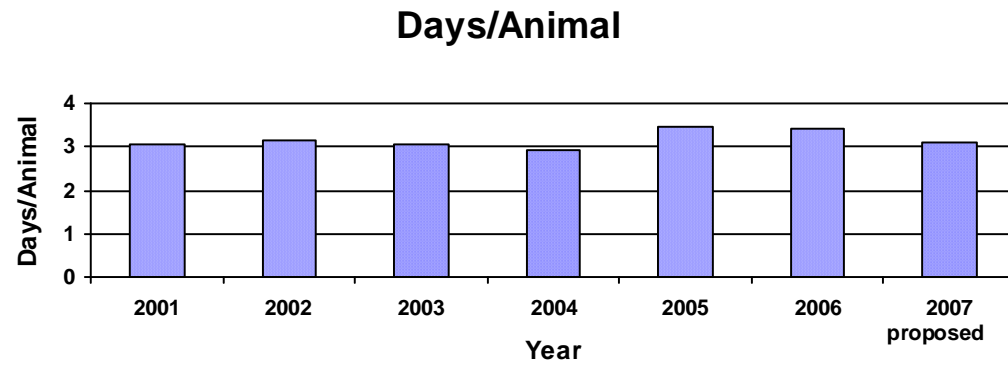
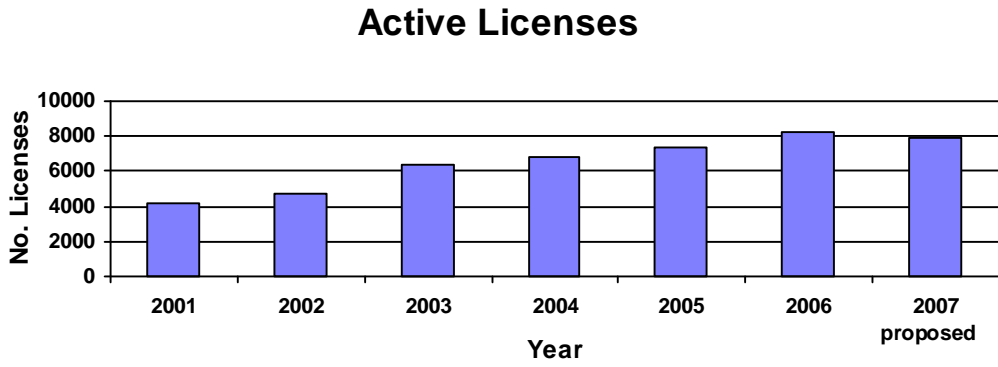
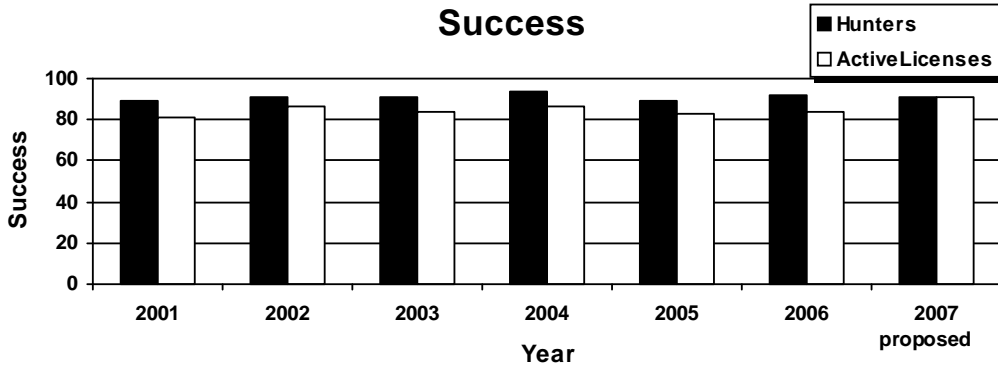
5. POPULATION TRENDS					
Trend Count Dates:					
Trend Count:	0	0	0	0	0
Herd Model Pop Est:	45,441	51,550	52,910	51,128	50,290
Line Trans Pop Est:	39,551				0

SPECIES : Pronghorn
 HERD UNIT : MEDICINE BOW
 YEAR : 2006

MODEL DATE : 02/27/07

	Averages 2001 - 2005	2006	Proposed 2007	Objective
Population (Est.)	58,346	64,160	60,885	60,000
Harvest	4,952	6,860	7,120	
Hunters	5,451	7,482	7,858	
Hunter Success	90.9%	91.7%	90.6%	
Active Licenses	5,886	8,226	7858	
Active Licenses Success	84.1%	83.4%	90.6%	
Recreation Days	15,556	23,465	21,920	
Days/Animal	3.1	3.4	3.1	





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

Year: **2006** Species: **Pronghorn** Herd Unit: **Medicine Bow** Herd unit #: **525** Biologist: **Rich Guenzel**

Management strategy: Recreational Special

	5-year average	Current year	Proposed
Population:	58,346	64,160	60,885
Harvest:	4,952	6,890	7,120
Hunters:	5,451	7,488	7,858
% Success:	91%	92%	91%
Rec. Days:	15,556	23,373	21,920
Days/animal:	3.02	3.47	3.19
Population objective			60,000
Percent population is above (+) or below (-) objective:			7%
Number of years population has been + <input checked="" type="checkbox"/> or - <input type="checkbox"/> objective in recent trend:			3
Population estimates tracking with trend counts or line transect results?			Yes
Population trend (incr., stable, decr.):			Stable
Most recent classification ratio (j/100f/m):			62/100/51
(This classification is: at or above adequate <input checked="" type="checkbox"/> or well below adequate <input type="checkbox"/>)			
Ratio trends (incr., stable, decr.): m/100f:			Increasing
J/100f:			Increasing
Most recent 5-year average classification ratio (j/100f/m):			63/100/43
(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:	8.00%	9.10%	
Males ≥ 1 year old:	17.70%	21.10%	
Juveniles (< 1 year old):	1.30%	2.40%	
Total:	25.40%	26.50%	

Moose: Average age of male harvest:

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

Model revised from 2005 version. Reevaluation pending resumption of line transect surveys. Observed buck:doe ratio of 2004 is an outlier and probably unrealistic. It appears hunter densities are affecting success.

SEX AND AGE COUNT REPORT

SPECIES : Pronghorn

HERD UNIT : MEDICINE BOW

YEAR : 2006

PREPARED BY : Rich Guenzel

PREHUNT CLASSIFICATION DATES : Aug

Hunt Area	----- MALES -----			Females	Juveniles	Total
	Yearlings	Adults	Total			
30	56	80	136	359	216	711
31	11	15	26	130	88	244
32	25	84	109	355	285	749
41	30	36	66	169	121	356
42	35	82	117	279	123	519
46	33	105	138	204	100	442
47	103	121	224	470	322	1,016
48	23	78	101	163	71	335
Total Sample	316	601	917	2,129	1,326	4,372
Adequate Sample			457	1,060	660	2,178
Precision	@ 90 C.L.					

Juveniles / 100 Females : 62 ± 3
Total Males / 100 Females : 43 ± 3
Adult Males / 100 Females : 28
Yearlings / 100 Females : 15

2006 HUNTING SEASON

SPECIES : **Pronghorn**

HERD UNIT : **MEDICINE BOW**

HUNT AREA	TYPE	SEASON DATES	LIMITATIONS
30	1	Oct 10 -Oct.31	Limited quota; 600 licenses any antelope
	6	Oct. 10 -Oct.31	Limited quota; 700 licenses doe or fawn
31	1	Sept 25 -Oct 25	Limited quota; 400 licenses any antelope
	6	Sept 25- Oct 25	Limited quota; 450 licenses doe or fawn
32	1	Sept 25 -Oct 25	Limited quota; 450 licenses any antelope
	2	Oct 5 - Oct 25	Limited quota; 450 licenses any antelope
	6	Sept 25- Oct 25	Limited quota; 650 licenses doe or fawn
41	1	Sept 25 -Oct 25	Limited quota; 50 licenses any antelope
	6	Sept 25- Oct 25	Limited quota; 50 licenses doe or fawn
42	1	Sept 25 -Oct 25	Limited quota; 650 licenses any antelope
	6	Sept 25- Oct 25	Limited quota; 300 licenses doe or fawn
46	1	Sept 25 -Oct 25	Limited quota; 500 licenses any antelope
	6	Sept 25- Oct 25	Limited quota; 300 licenses doe or fawn
47	1	Sept 25 -Oct 25	Limited quota; 1000 licenses any antelope
	2	Oct 5 - Oct 25	Limited quota; 350 licenses any antelope
	6	Sept 25- Oct 25	Limited quota; 700 licenses doe or fawn
48	1	Sept 25 -Oct 25	Limited quota; 350 licenses any antelope
	2	Oct 5 - Oct 25	Limited quota; 150 licenses any antelope
	6	Sept 25- Oct 25	Limited quota; 375 licenses doe or fawn

HUNT		SEASON DATES	LIMITATIONS
AREA	TYPE		
ARCHERY :			
30		Sept.1-Oct. 9	Refer to Section 3 or this Chapter
31		Sept.1-Sept.24	Refer to Section 3 or this Chapter
32		Sept 1-Sept 24	Refer to Section 3 or this Chapter
41		Sept 1-Sept 24	Refer to Section 3 or this Chapter
42		Sept.1-Sept.24	Refer to Section 3 or this Chapter
46		Sept.1-Sept.24	Refer to Section 3 or this Chapter
47		Sept.1-Sept.24	Refer to Section 3 or this Chapter
48		Sept.1-Sept.24	Refer to Section 3 or this Chapter

HARVEST REPORT

SPECIES **Pronghorn**

HERD UNIT : **MEDICINE BOW**

YEAR : **2006**

PERIOD COVERED : **9/1/06-10/31/06**

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	
	Resident	0	144	0	49	43	43	135	93.8	4.0	
30	Non-Resident	0	654	0	335	226	70	631	96.5	3.8	
	Total	0	798	(921)*	0	384	269	766	96.0 (83.2)*	3.8	
	Resident	0	231	0	91	48	28	167	72.3	4.6	
31	Non-Resident	0	441	0	243	194	16	453	102.7	3.3	
	Total	0	672	(745)*	0	334	242	620	92.3 (83.2)*	3.7	
	Resident	0	317	0	198	27	0	225	71.0	3.4	
32	Non-Resident	0	1,004	0	423	456	73	952	94.8	4.2	
	Total	0	1,321	(1414)*	0	621	483	73	1,177	89.1 (83.2)*	4.1
	Resident	0	27	0	18	1	0	19	70.4	2.4	
41	Non-Resident	0	45	0	14	39	2	55	122.2	3.6	
	Total	0	72	(94)*	0	32	40	2	74	102.8 (78.7)*	3.3
	Resident	0	145	0	93	27	0	120	82.8	2.8	
42	Non-Resident	0	719	0	420	260	6	686	95.4	4.3	
	Total	0	864	(945)*	0	513	287	6	806	93.3 (85.3)*	4.1
	Resident	0	216	0	120	40	3	163	75.5	3.7	
46	Non-Resident	0	523	0	238	236	24	498	95.2	2.8	
	Total	0	739	(819)*	0	358	276	27	661	89.4 (80.7)*	3.0
	Resident	0	1,033	0	543	238	0	781	75.6	2.6	
47	Non-Resident	0	1,048	0	411	577	58	1,046	99.8	2.8	
	Total	0	2,081	(2189)*	0	954	815	58	1,827	87.8 (83.5)*	2.7
	Resident	0	344	0	265	51	5	321	93.3	2.5	
48	Non-Resident	0	627	0	139	450	19	608	97.0	3.5	
	Total	0	971	(1099)*	0	404	501	24	929	95.7 (84.5)*	3.2
	Resident	0	2,458	0	1,377	475	79	1,931	78.6	3.0	
Total	Non-Resident	0	5,024	0	2,223	2,438	268	4,929	98.1	3.6	
	Total	0	7,482	(8226)*	0	3,600	2,913	347	6,860	91.7 (83.4)*	3.4

* Active Licenses

2006 AGE STRUCTURE OF FIELD CHECKED ANIMALS

SPECIES : Pronghorn
 HERD UNIT : MEDICINE BOW

PREPARED BY : Rich Guenzel

Hunt Area	Sex	Young	1+	2+	3+	4+	5+	6+	7+	Older	Unaged Adults *	Total
31	Male	0	0	1	0	0	0	0	0	0	0	1
	Female	0	0	0	0	0	0	0	0	0	0	0
32	Male	1	0	0	1	0	0	0	0	0	0	2
	Female	4	2	0	0	0	0	0	0	0	8	14
41	Male	1	3	0	1	0	0	0	0	0	0	5
	Female	0	0	0	5	0	0	0	0	0	0	5
42	Male	4	6	12	30	0	0	0	0	0	3	55
	Female	2	1	0	7	0	0	0	0	0	3	13
46	Male	3	9	12	32	0	0	0	0	0	2	58
	Female	8	7	1	11	0	0	0	0	0	2	29
47	Male	9	11	39	120	0	0	0	0	0	12	191
	Female	13	14	15	44	0	0	0	0	0	25	111
48	Male	1	5	1	17	0	0	0	0	0	0	24
	Female	0	0	4	12	0	0	0	0	0	7	23
Totals :	Male	19	34	65	201	0	0	0	0	0	17	336
	Female	27	24	20	79	0	0	0	0	0	45	195

* Unaged animals older than yearlings

Total Aged : 531

**MEDICINE BOW PRONGHORN
(A525)
Hunt Areas 30, 31, 32, 41, 42, 46, 47, 48
2007 Hunting Seasons**

Hunt Area	Type	Dates of Opens	Season Closes	Limitations
30	1	Oct. 10	Oct. 31	Limited quota; 600 licenses any antelope
	6	Oct. 10	Oct. 31	Limited quota; 700 licenses doe or fawn
31	1	Sept. 25	Oct. 25	Limited quota; 400 licenses any antelope
	6	Sept. 25	Oct. 25	Limited quota; 450 licenses doe or fawn
32	1	Sept. 25	Oct. 25	Limited quota; 450 licenses any antelope
	2	Oct. 5	Oct. 25	Limited quota; 250 licenses any antelope
	6	Sept. 25	Oct. 25	Limited quota; 650 licenses doe or fawn
41	1	Sept. 25	Oct. 31	Limited quota; 50 licenses any antelope
	6	Sept. 25	Oct. 31	Limited quota; 50 licenses doe or fawn
42	1	Sept. 25	Oct. 31	Limited quota; 650 licenses any antelope
	6	Sept. 25	Oct. 31	Limited quota; 300 licenses doe or fawn
	7	Oct. 5	Oct. 31	Limited quota; 200 licenses doe or fawn
46	1	Sept. 25	Oct. 25	Limited quota; 500 licenses any antelope
	6	Sept. 25	Oct. 25	Limited quota; 300 licenses doe or fawn
	7	Oct. 5	Oct. 25	Limited quota; 200 licenses doe or fawn
47	1	Sept. 25	Oct..31	Limited quota; 1,000 licenses any antelope
	2	Oct. 5	Oct. 31	Limited quota; 350 licenses any
	6	Sept. 25	Oct. 31	Limited quota; 700 licenses doe or fawn
	7	Oct. 5	Oct. 31	Limited quota; 400 licenses doe or fawn
48	1	Sept. 25	Oct. 31	Limited quota; 350 licenses any antelope
	2	Oct. 5	Oct. 31	Limited quota; 150 licenses any antelope
	6	Sept. 25	Oct. 31	Limited quota; 375 licenses doe or fawn
	7	Oct. 5	Oct. 31	Limited quota; 475 licenses doe or fawn valid in that portion of Area 48 north of Medicine Bow River
			Nov. 1	Nov. 30
<u>Archery</u> 30,31,32,41, 42,46,47,48		Aug. 15		Refer to Section 3 of this Chapter

Changes for 2007

- Decreasing Type 2 licenses in Hunt Area 32 from 450 to 250 due to reduced pronghorn availability later in the season and lower success rate
- Extending regular season to Oct. 31 in Areas 41, 42, 47 and 48
- Area 42 Type 7 area restriction is eliminated and quota is lowered to 200 since only half were selling
- Increasing Area 47 Type 7 quota by 100 in part to increase pressure later in the season adjacent to Area 32
- Increasing Area 48 Type 7 quota by 100 to compensate partly for decrease in Area 32 Type 2s and to increase harvest on new Leo HMA and some adjacent lands
- Extending the season for the month of November for Area 48 Type 6 and Type 7 licenses to concentrate harvest on and near the Leo HMA.
- Adjust archery season to standard statewide opener of August 15.

Management Evaluation

Current habitat conditions warrant a reduction in population size below objective level. Habitat evaluations on key sites within the herd indicated that browse production has been declining since 2003 (Appendix 1). The 2006 measurement was the second lowest since transects were established in 2001. On the other hand, utilization was within acceptable limits on 6 of 7 transects, perhaps due to better pronghorn distributions during winter. The population occurs within the Upper Platte and Lower Climatic Regions (Appendix 2). Palmer Drought Severity Indices show that the population has endured drought conditions over the past several years. Precipitation at the start of the 2006 biological year was below normal. The 2006-2007 winter had periods of extreme cold and deep snow and may have caused increased winter mortality. However, spring was characterized by generally warmer weather than normal.

In recent years, hunter densities have hindered harvests and so additional licenses types have been authorized to better spread hunting pressure. In some areas, we may have exceeded the harvest threshold as hunters have more difficulty finding pronghorn (e.g., Area 32, success rates are declining (e.g., Area 47 Type 1), and more licenses went unsold. The 2007 proposal is designed to increase harvest to help bring the population down. The new Leo HMA in Area 48 may help increase doe or fawn harvest in that part of the population. Browse production was lower than in 2005. The 2006-2007 winter has been more severe and may lead to increased winter mortality. Hunters are finding it more difficult to harvest animals within most of this Unit because of increasingly limited hunting access. To address these issues, the Department has initiated a Medicine Bow Pronghorn Habitat Initiative to develop a comprehensive strategy to bring populations closer in balance with existing habitat conditions.

Population

The goal of population management for the Medicine Bow Pronghorn Herd is to reduce pronghorn numbers in order to address habitat concerns. The Medicine Bow Pronghorn Herd has been near or above the objective of 60,000 since 2004. Between habitat, weather and increased harvest, it appears the herd is starting to come down. The 2006 postseason estimate is over 64,140. The 2007 season should further reduce the herd to perhaps 60,885. An exceptionally high buck:doe ratio was observed in 2004 and is treated as an outlier for modeling purposes. Unrealistically low postseason MSIs would be needed to model that observation. Buck:doe ratios are declining with the increased harvest pressure placed on this population. A line transect survey was conducted in June of 2007. The full analysis will be presented in the comprehensive narrative for the 2007 Completion Report. This should help us better estimate the status of the herd. Future population management will be guided by a long-range plan generated from the Medicine Bow Pronghorn Initiative.

Harvest

Some 8,251 hunters participated in the hunt in 2006, almost 1200 more than participated in 2005.. Success averaged 84%, which is 5% lower than the 2005 rate. We did not sell all available licenses in Hunt Areas 30 (Types 1 and 6), 31 (Type 6), 42 (Type 7), 46 (Type 7) and 48 (Type 7). In Area 32 hunter success was down and hunters again expressed dissatisfaction with hunting opportunities. Hunter numbers have doubled since 2000 to increase harvest. Hunter densities and pronghorn distributions are becoming bigger concerns. Success rates are declining. For example, success for Area 47 Type 1 hunters was about 77% in 2006 compared to 88 and 89 percent in 2004 and 2005, respectively. The 2007 harvest should increase hunters by 370 and harvest by 230 by extending the season in some areas, reallocating quotas, and by increasing access to private ranches such as through the new Leo HMA.

PH525 - Medicine Bow
HA 30-32, 41, 42, 46-48
Revised - 6/04

