

2006 JOB COMPLETION REPORT

SPECIES : Pronghorn
 HERD UNIT : Dwyer
 HERD UNIT # : 524
 HUNT AREAS : 103

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

	<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	35	39	39	39	66
Males	50	48	40	52	50
Yearling Males	0	12	15	19	18
Mature Males	0	36	25	33	32
Total Sample Size	619	802	796	870	745
Adequate Sample Size	1,090	1,138	1,511	1,018	650

2. HARVEST					
Adult Males	310	284	313	281	226
Yearling Males	0	0	0	0	0
Total Males	310	284	313	281	226
Females	140	177	175	166	153
Juveniles	14	25	17	23	46
Totals	464	486	505	470	425

	#	%	#	%	#	%	#	%	#	%
3. AGE STRUCTURE OF FIELD CHECKED ANIMALS										
Juvenile Female	2	11	0		0		2	10	1	3
Yearling Female	2	11	0		0		0		3	10
Adult Female	4	21	9	33	3	12	3	15	13	42
Juvenile Male	0		1	4	1	4	0		3	10
Yearling Male	0		0		2	8	2	10	2	6
Adult Male	11	58	17	63	20	77	13	65	9	29
Total Sample Size	19		27		26		20		31	

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:	4,425	4,248	4,000	4,000	4,500
Line Trans Pop Est:	0	0	3,812	0	0

SEX AND AGE COUNT REPORT

SPECIES : Pronghorn

HERD UNIT : Dwyer

YEAR : 2006

PREPARED BY : Martin Hicks

PREHUNT CLASSIFICATION DATES : Sept 06

Hunt Area	----- MALES -----			Females	Juveniles	Total
	Yearlings	Adults	Total			
103	63	111	174	345	226	745
Total Sample	63	111	174	345	226	745
Adequate Sample			275	545	357	1,177
Precision	@ 80 C.L.					

Juveniles / 100 Females : 66 ± 7
Total Males / 100 Females : 50 ± 6
Adult Males / 100 Females : 32
Yearlings / 100 Females : 18

SPECIES : Pronghorn

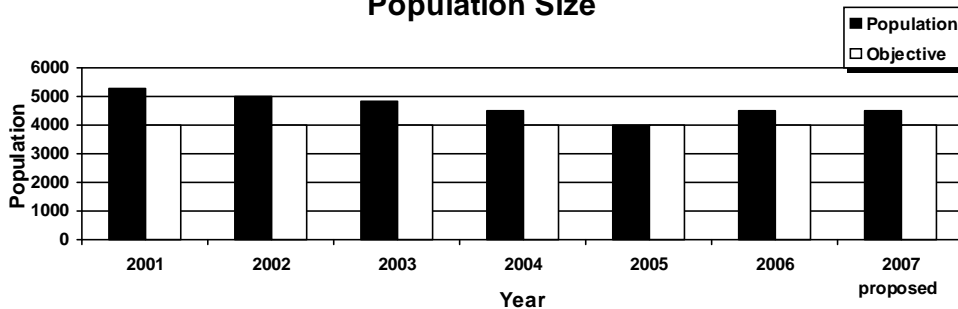
MODEL DATE :

HERD UNIT : Dwyer

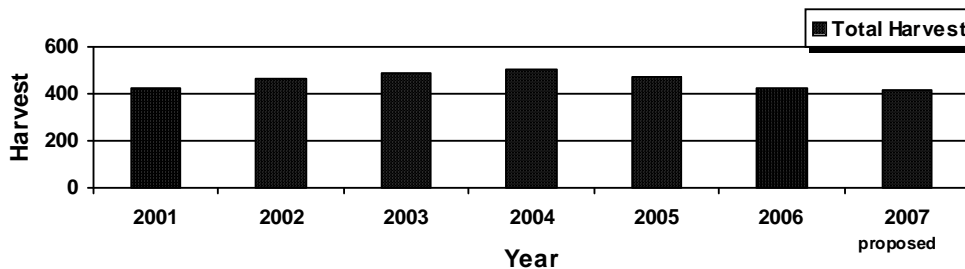
YEAR : 2006

	Averages 2001 - 2005	2006	Proposed 2007	Objective
Population (Est.)	4,713	4,500	4,500	4,000
Harvest	470	425	420	
Hunters	498	492	490	
Hunter Success	94.5%	86.4%	85.7%	
Active Licenses	569	553	550	
Active Licenses Success	82.6%	76.9%	76.4%	
Recreation Days	1,579	2,212	1,683	
Days/Animal	3.4	5.2	4.0	

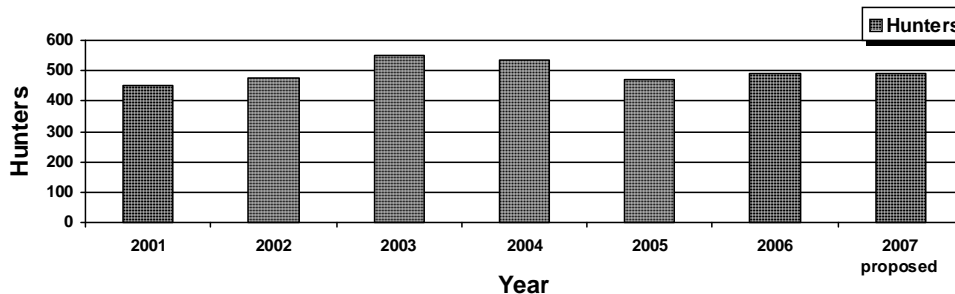
Population Size

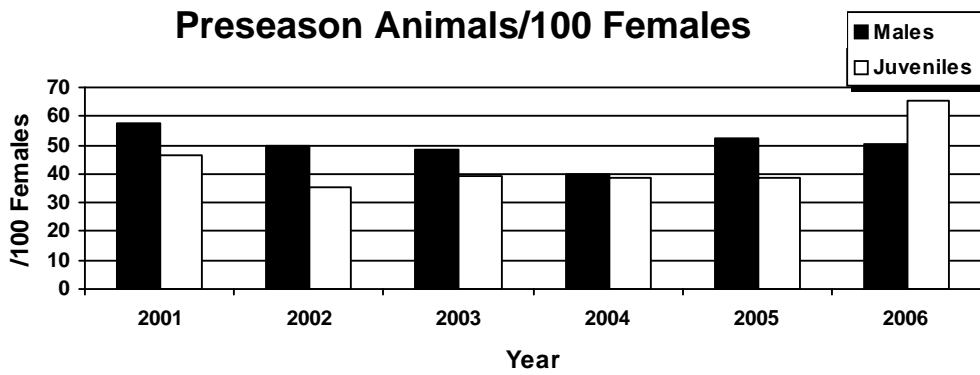
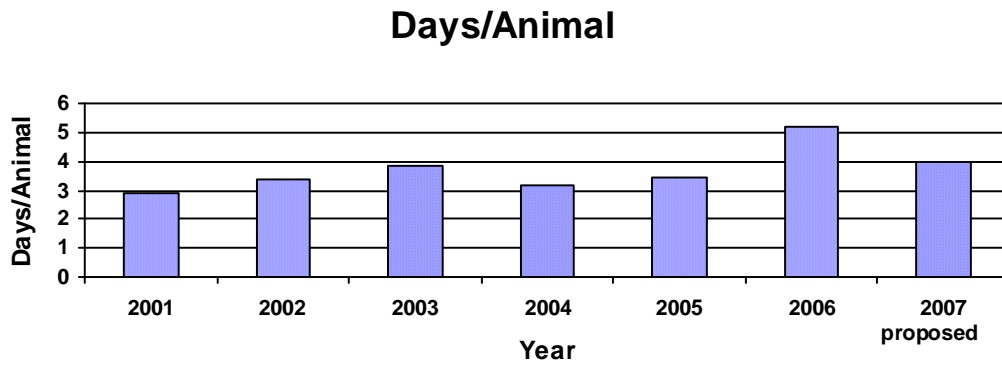
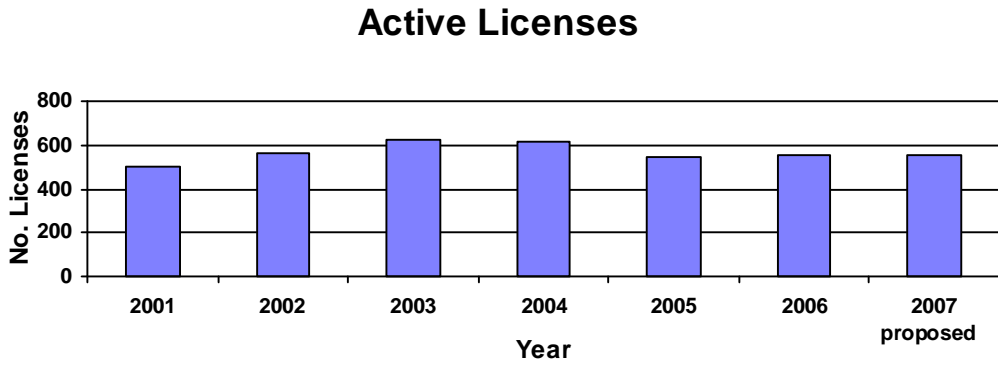
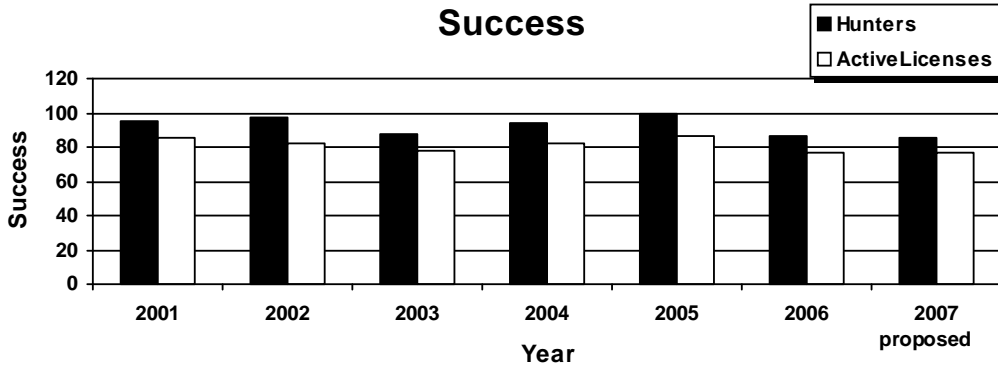


Harvest



of Hunters





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

Year: **2006** Species: **Pronghorn** Herd Unit: **Dwyer** Herd unit #: **524** Biologist: **Hicks**

Management strategy: Recreational Special

	5-year average	Current year	Proposed
Population:	4,718	4,500	4,500
Harvest:	470	425	420
Hunters:	498	492	490
% Success:	94%	86%	86%
Rec. Days:	1,579	2,212	1,683
Days/animal:	3.36	5.20	4.01

Population objective 4,000

Percent population is above (+) or below (-) objective: 13%

Number of years population has been + or - objective in recent trend: 16

Population estimates tracking with trend counts or line transect results? Yes

Population trend (incr., stable, decr.): Decreasing

Most recent classification ratio (j/100f/m): 66/100/50

(This classification is: at or above adequate or well below adequate)

Ratio trends (incr., stable, decr.): m/100f: Increasing

J/100f: Increasing

Most recent 5-year average classification ratio (j/100f/m): 43/100/48

(Generally, these classifications have been: at or above adequate or well below adequate)

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

	JCR Year	Proposed
Females ≥ 1 year old:	6.50%	6.20%
Males ≥ 1 year old:	18.10%	17.20%
Juveniles (< 1 year old):	3.00%	2.60%
Total:	8.32%	8.48%

Projected change in post-season population: (+ or -)0.10% (+ or -) 3.20%

Moose: Average age of male harvest:

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

DWYER PRONGHORN ANTELOPE (A524)
HUNT AREA 103
2006 HUNTING SEASONS

HUNT AREA	TYPE	OPENS	CLOSES	LIMITATIONS
103	1	OCT. 5	OCT. 31	L.Q.; 350 licenses any antelope
	6	OCT. 5	OCT. 31	L.Q.; 50 licenses doe or fawn
	7	OCT. 5	OCT. 31	L.Q.; 200 licenses doe or fawn valid in that portion of Area 103 south of Cottonwood Creek.
 ARCHERY				
103		SEPT. 1	OCT. 4	Refer to Section 3 of this Chapter

HARVEST REPORT

SPECIES **Pronghorn**

HERD UNIT : **Dwyer**

YEAR : **2006**

PERIOD COVERED :

Prepared By : **Martin Hicks**

Hunt Area	License Type	L.Q. Licenses	No. Hunters	Ylg. Males	Adult Males	Females	Juveniles	Total	Percent Success	Days/Animal Taken
	Resident	0	281	0	122	70	24	216	76.9	7.1
103	Non-Resident	0	211	0	104	83	22	209	99.1	3.3
	Total	0	492	(553)*	226	153	46	425	86.4 (76.9)*	5.2
	Resident	0	281	0	122	70	24	216	76.9	7.1
Total	Non-Resident	0	211	0	104	83	22	209	99.1	3.3
	Total	0	492	(553)*	226	153	46	425	86.4 (76.9)*	5.2

* Active Licenses

2006 AGE STRUCTURE OF FIELD CHECKED ANIMALS

SPECIES : Pronghorn
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Hunt Area	Sex	Young	1+	2+	3+	4+	5+	6+	7+	Older	Unaged Adults *	Total
103	Male	3	2	3	6	0	0	0	0	0	0	14
	Female	1	3	1	12	0	0	0	0	0	0	17
Totals :	Male	3	2	3	6	0	0	0	0	0	0	14
	Female	1	3	1	12	0	0	0	0	0	0	17

* Unaged animals older than yearlings

Total Aged : 31

**DWYER PRONGHORN (A524)
HUNT AREA 103
2007 HUNTING SEASONS**

HUNT AREA	TYPE	OPENS	CLOSES	LIMITATIONS
103	1	OCT. 5	OCT. 31	L.Q.; 350 licenses any antelope
	6	OCT. 5	OCT. 31	L.Q.; 50 licenses doe or fawn
	7	OCT. 5	OCT. 31	L.Q.; 200 licenses doe or fawn valid in that portion of Area 103 south of Cottonwood Creek.
ARCHERY				
103		AUG 15	OCT. 4	Refer to Section 3 of this Chapter

PROPOSED CHANGES FOR 2007

There are no changes for the 2007 season.

MANAGEMENT EVALUATION

Population: The 2006 post-season population estimate was approximately 4,500, about 12% above the objective of 4,000. This population has experienced a decline since 1994. Four consecutive years of low fawn production (2005= 38 fawns:100 does, 2004= 38 fawns:100 does, 2003= 39:100, 2002= 35:100), was the main factor in driving the population down. The 2006 season was designed to bring the population towards or at objective. However, above average fawn production in 2006 (65:100) helped to keep the herd slightly above objective. Model simulations are anchored to the 2001 and 2004 end-of-the-year line-transect point estimates. Simulations track well with observed buck ratios providing reliable confidence in the population estimate.

Data collection efforts decreased for this DAU in 2006 and this herd will no longer be managed by objective. Based on a number of factors (ability to manage, access, cost of flying) the Hawk Springs Herd Unit will be the "index" herd to compare adjacent pronghorn herds with similar habitat to. A carrying capacity objective range is the most logical way to manage non-index herds in the future. However, to draw any inferences on carrying capacity based on the limited data collected is premature at this time. More data needs to be collected and analyzed to determine a range of carrying capacity and to make any recommendations other than to say production was down. In the mean time it is recommended that the current objective be used to manage the population.

A lack of precipitation in 2006 resulted in a decrease of plant production available for lactating does, however fawn ratios increased compared to 2005. Irrigated crops and some timely moisture in certain parts of the DAU most likely helped to sustain does and fawns during the spring and summer. Shrub transect data from adjacent herds also indicates that there was a decrease in plant production compared to 2005. However, to draw any inferences on carrying capacity based on the limited data collected is premature at this time. More data needs to be collected and analyzed to determine a range of carrying capacity and to make any recommendations other than to say production was down.

Harvest: The 2006 season was designed to slightly decrease harvest by issuing 50 less Type 7 licenses. However, fawn harvest increased for the Type 7 licenses in 2006 there by increasing doe/fawn harvest for the Type 7 licenses compared to 2006. It appears that hunters that have access are purchasing up to 4 reduced price licenses based on harvest data and field observations. Harvest data would seem to support population simulations prior that the herd is declining. Success (87%) decreased and effort (5.1 days/harvest) increased compared to the five-year average. However, the above average fawn production in 2006 helped to keep the herd slightly above objective.

2007 Season: If licenses sell, the proposed 2007 season is designed to again try and slow down the population decline. The Type 7 permit will again be available to focus harvest in areas of higher pronghorn density (south of Cottonwood Creek). Type 6 permits will also be available to address localized damage concerns in other parts of the herd unit, but will remain at 50. Buck ratio still fall within the upper end of the recreation maximum guidelines, again offering hunters a good chance to harvest a male pronghorn in 2007. A maximum of 4 additional licenses will be proposed for the 2007 season. Typically all type 1 licenses sell, but the Type 7 licenses usually go unsold. Given that, if license sales are typical of previous years the season should result in a harvest of 240 bucks, 150 does, and 30 fawns, for a total of 420 pronghorn. Given predicted harvest and average fawn production, the 2007 post-season population estimate for this herd will be around 4,500 pronghorn, putting the herd slightly above objective.

