

2006 JOB COMPLETION REPORT

SPECIES : Pronghorn
 HERD UNIT : Meadowdale
 HERD UNIT # : 522
 HUNT AREAS : 11,12

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	56	67	63	60	61
Males	35	44	35	38	59
Yearling Males	0	22	10	14	25
Mature Males	35	22	24	24	34
Total Sample Size	1,614	947	888	1,053	1,425
Adequate Sample Size	1,600	1,500	1,700	1,700	1,222

2. HARVEST					
Adult Males	192	290	292	308	310
Yearling Males	0	0	0	0	0
Total Males	192	290	292	308	310
Females	116	160	124	266	263
Juveniles	21	32	40	37	32
Totals	329	482	456	611	605

	#	%	#	%	#	%	#	%	#	%
3. AGE STRUCTURE OF FIELD CHECKED ANIMALS										
Juvenile Female	0		1	6	0		1	8	0	
Yearling Female	0		0		0		0		0	
Adult Female	1	11	1	6	1	7	0		2	29
Juvenile Male	1	11	2	13	1	7	0		0	
Yearling Male	4	44	6	38	4	27	5	42	1	14
Adult Male	3	33	6	38	9	60	6	50	4	57
Total Sample Size	9		16		15		12		7	

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:	5,500	7,200	7,400	7,000	8,000
Line Trans Pop Est:	0	5,700	0	0	0

SEX AND AGE COUNT REPORT

SPECIES : Pronghorn

HERD UNIT : Meadowdale

YEAR : 2006

PREPARED BY : Martin Hicks

PREHUNT CLASSIFICATION DATES : Aug 06

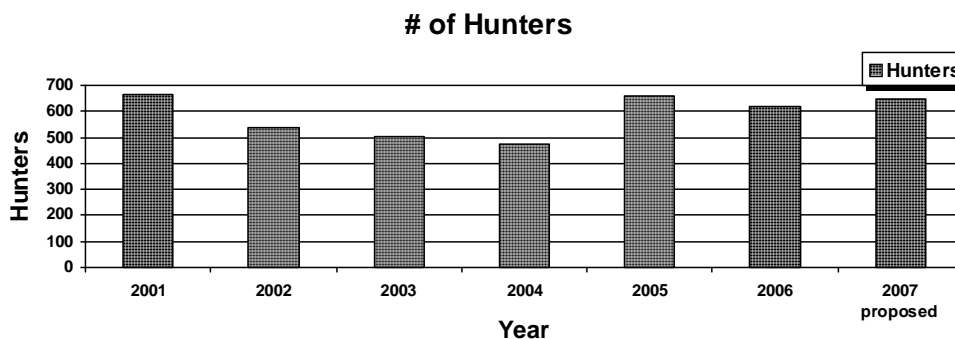
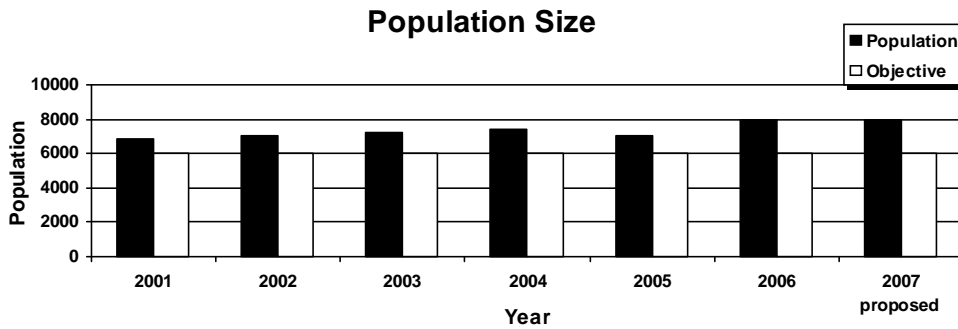
Hunt Area	----- MALES -----			Females	Juveniles	Total
	Yearlings	Adults	Total			
11	88	105	193	357	218	768
12	77	113	190	291	176	657
Total Sample	165	218	383	648	394	1,425
Adequate Sample			328	556	338	1,222
Precision	@ 80 C.L.					

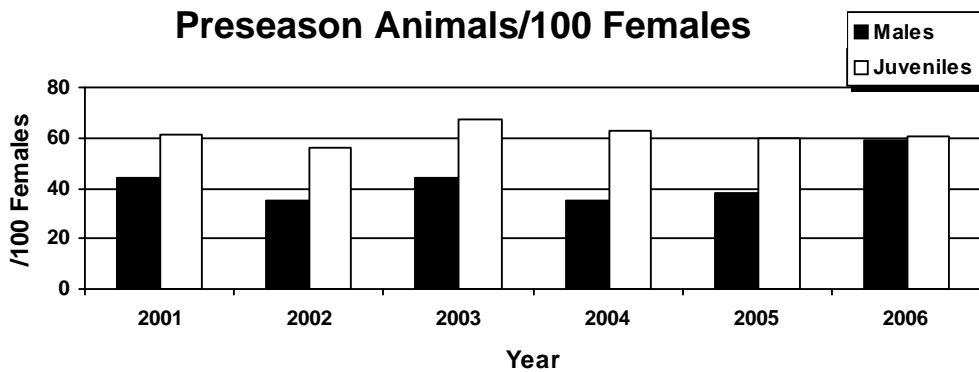
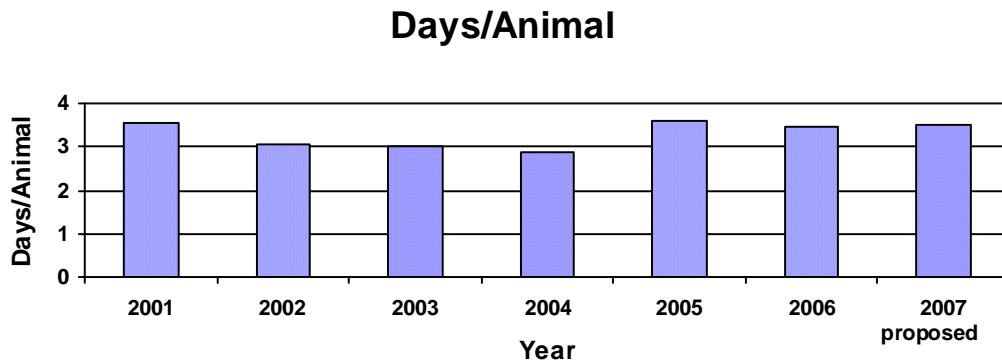
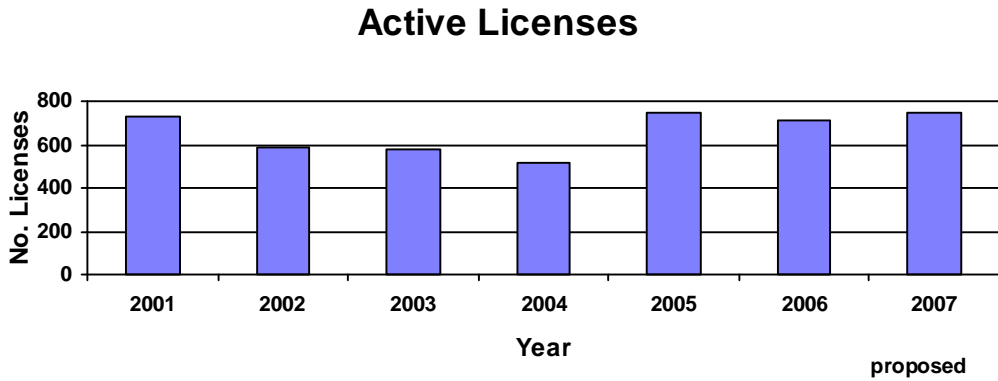
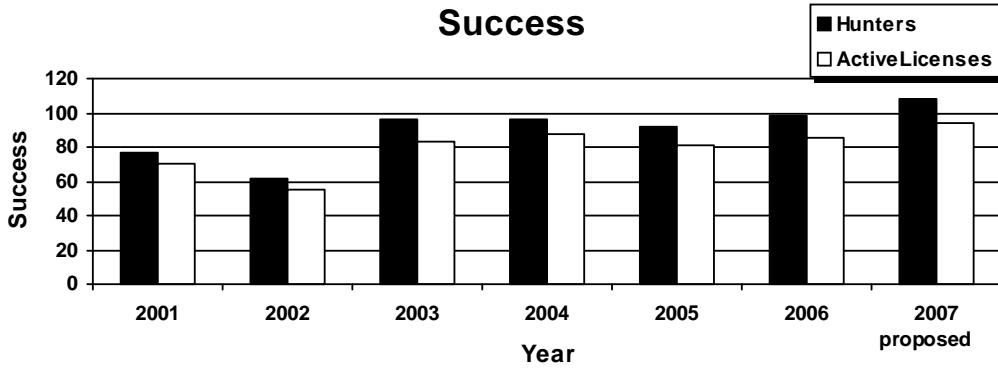
Juveniles / 100 Females : 61 ± 5
Total Males / 100 Females : 59 ± 4
Adult Males / 100 Females : 34
Yearlings / 100 Females : 25

SPECIES : Pronghorn
 HERD UNIT : Meadowdale
 YEAR : 2006

MODEL DATE :

	Averages 2001 - 2005	2006	Proposed 2007	Objective
Population (Est.)	7,093	8,000	8,000	6,000
Harvest	478	605	705	
Hunters	568	617	650	
Hunter Success	84.1%	98.1%	108.5%	
Active Licenses	633	707	750	
Active Licenses Success	75.5%	85.6%	94.0%	
Recreation Days	1,559	2,087	2,467	
Days/Animal	3.3	3.4	3.5	





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

Year: **2006** Species: **Pronghorn** Herd Unit: **Meadowdale** Herd unit #: **522** Biologist: **Hicks**

Management strategy: Recreational Special

	5-year average	Current year	Proposed
Population:	7,093	8,000	8,000
Harvest:	478	605	705
Hunters:	568	617	650
% Success:	84%	98%	108%
Rec. Days:	1,559	2,087	2,467
Days/animal:	3.26	3.46	3.50
Population objective			6,000
Percent population is above (+) or below (-) objective:			33%
Number of years population has been + <input checked="" type="checkbox"/> or - <input type="checkbox"/> objective in recent trend:			20
Population estimates tracking with trend counts or line transect results?			Yes
Population trend (incr., stable, decr.):			Increasing
Most recent classification ratio (j/100f/m):			61/100/59
(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:		Stable
Most recent 5-year average classification ratio (j/100f/m):		61/100/42	
(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 type="checkbox"/>			
	JCR Year	Proposed	
Females ≥ 1 year old:	6.60%	7.80%	
Males ≥ 1 year old:	12.50%	13.70%	
Juveniles (< 1 year old):	1.40%	1.50%	
Total:	6.88%	785.00%	

Moose: Average age of male harvest:

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

The highest densities of pronghorn occur in the northern 1/3 of the hunt areas. As access improves the number of licenses issued will increase.

2006 HUNTING SEASON

SPECIES : **Pronghorn**

HERD UNIT : **Meadowdale**

HUNT	AREA	TYPE	SEASON DATES	LIMITATIONS
11				
	1		Oct 1 - Oct 15	Limited quota; 200 licenses any antelope
	6		Oct 1 - Oct 15	Limited quota; 300 licenses doe or fawn
12				
	1		Oct 1 - Oct 15	Limited quota; 200 licenses any antelope
	6		Oct 1 - Oct 15	Limited quota; 250 licenses doe or fawn
ARCHERY :				
11			Aug 15- Sept 30	Refer to Section 3 of this Chapter
12			Aug 15- Sept 30	Refer to Section 3 of this Chapter

HARVEST REPORT

SPECIES **Pronghorn**

HERD UNIT : **Meadowdale**

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	119	0	60	52	3	115	96.6	3.4
11	Non-Resident	0	292	0	95	153	23	271	92.8	4.1
	Total	0	411	(470)*	0	155	26	386	93.9 (82.1)*	3.9
	Resident	0	36	0	30	11	0	41	113.9	3.0
12	Non-Resident	0	171	0	125	47	6	178	104.1	2.6
	Total	0	207	(237)*	0	155	6	219	105.8 (92.4)*	2.7
	Resident	0	155	0	90	63	3	156	100.6	3.3
Total	Non-Resident	0	462	0	220	200	29	449	97.2	3.5
	Total	0	617	(707)*	0	310	32	605	98.1 (85.6)*	3.4

* Active Licenses

2006 AGE STRUCTURE OF FIELD CHECKED ANIMALS

SPECIES : Pronghorn
 HERD UNIT : Meadowdale

PREPARED BY : Martin Hicks

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

* Unaged animals older than yearlings

Total Aged : 7

**MEADOWDALE PRONGHORN
(A522)
HUNT AREAS 11, 12
2007 HUNTING SEASONS**

HUNT AREA	TYPE	OPENS	CLOSES	LIMITATIONS
11	1	OCT. 1	OCT. 15	L.Q.; 250 licenses any antelope
	6	OCT. 1	OCT. 15	L.Q.; 300 licenses doe or fawn
		OCT. 16	OCT. 31	Unused Area 11 Type 6 licenses valid for doe or fawn antelope in that portion of Area 11 in Niobrara County
12	1	OCT. 1	OCT. 15	L.Q.; 200 licenses any antelope
	6	OCT. 1	OCT. 15	L.Q.; 250 licenses doe or fawn
		OCT. 16	OCT. 31	Unused Area 12 Type 6 licenses valid for doe or fawn antelope in that portion of Area 12 in Converse and Niobrara County
ARCHERY				
11,12		AUG 15	SEPT. 30	Refer to Section 3 of this Chapter

CHANGES FOR 2007

Changes for the 2007 season include: 1) Increase Area 11 Type 1 licenses from 200 to 250. 2) Extend Areas 11 and 12 Type 6 licenses from October 15 to October 31 and only valid in the northern 1/3 of the hunt area.

MANAGEMENT EVALUATION

Population: Population simulations run slightly over the last five end-of-the-year line transect point estimates, reliably putting the 2006 post-season population around 8,000 pronghorn. This estimate is 33% over the objective of 6,000. Consistently high fawn production and the above average 2006 buck:doe ratio are the main reasons this population was simulated well above objective. The 2006 season was designed to try and slow down production by providing more doe/fawn licenses realizing that access continues to be limited throughout the herd unit.

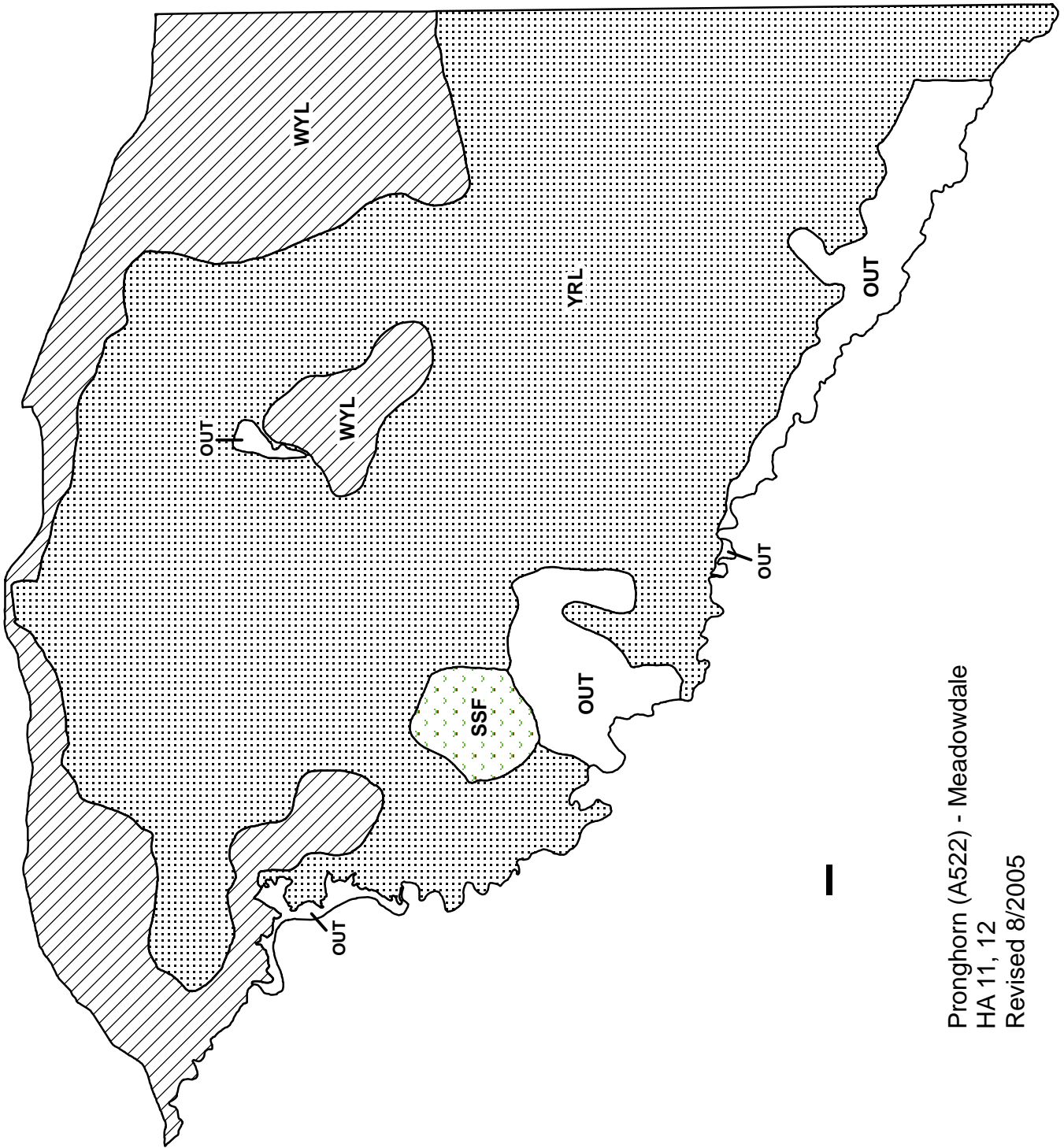
According to the POP-II model and past line-transect estimates, this population has slowly increased over the last ten years, which somewhat mirrors classification and harvest survey data over the same time period. The model is considered plausible since it is anchored to 5 line-transect estimates, and tracks observed buck ratios well.

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 (59:100) remained right around the five-year average of 61 fawns:100 does. 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.

Harvest: The 2006 season was designed to do two things: 1) reduce the population by having more doe/fawn licenses available, and 2) increase buck ratios by decreasing licenses in Hunt Area 11, where the majority of pronghorn inhabit. Pre-season buck ratios almost doubled from 36:100 in 2005 to 60:100 in 2006. Doe/fawn harvest went from 106 in 2005 to 153 in 2006 helping to slow down herd growth. Effort (3.5 days/harvest) was similar and active license success (85%) increased compared to the five-year average lending some credence to simulated estimates. Line-transect data, model simulation estimates and harvest statistics all indicate that this herd could sustain more harvest, but limited access and undersold licenses are preventing a dramatic increase in proposed licenses.

2007 Season: The 2007 season is designed to do two things: 1) Address the recent surplus number of bucks by increasing the Area 11 Type 1 licenses from 200 to 250. 2) Increase doe/fawn harvest by increasing the season length of the Type 6 licenses by 16 days. Only 55% of the Area 12 licenses sold, indicating access is still an issue, therefore no increase is proposed. Given the recent license sales history it is expected that the season should result in a harvest of about 360 males, 310 females and 35 juveniles for a total of 705 pronghorn. Following the 2007 season, this population should be around 8,000 pronghorn, about the same as the 2006 population estimate.



Pronghorn (A522) - Meadowdale
 HA 11, 12
 Revised 8/2005