

2006 JOB COMPLETION REPORT

SPECIES : Pronghorn
 HERD UNIT : UINTA-CEDAR MOUNTAIN
 HERD UNIT # : 411
 HUNT AREAS : 95,99

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

	2002	2003	2004	2005	2006
1. PREHUNT SEX AND AGE RATIO COUNT (per 100 females)					
Juveniles	53	54	81	68	53
Males	51	53	51	39	48
Yearling Males	16	13	18	18	18
Mature Males	35	40	34	22	30
Total Sample Size	1,593	1,399	1,637	1,801	1,827
Adequate Sample Size	1,505	1,555	2,661	2,030	1,505

2. HARVEST

Adult Males	408	429	434	387	400
Yearling Males	0	0	0	0	0
Total Males	408	429	434	387	400
Females	222	303	83	62	109
Juveniles	26	22	10	21	19
Totals	656	754	527	470	528

3. AGE STRUCTURE OF FIELD CHECKED ANIMALS

	#	%	#	%	#	%	#	%	#	%
Juvenile Female	1	2	2	4	0		1	6	3	7
Yearling Female	3	6	1	2	0		1	6	1	2
Adult Female	16	32	17	31	3	11	1	6	19	42
Juvenile Male	6	12	2	4	0		0		1	2
Yearling Male	3	6	1	2	0		4	25	1	2
Adult Male	21	42	32	58	24	89	9	56	20	44
Total Sample Size	50		55		27		16		45	

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

5. POPULATION TRENDS

Trend Count Dates:	June '03		June '05	
Trend Count:	0	0	0	0
Herd Model Pop Est:	6,600	6,300	6,700	7,100
Line Trans Pop Est:	6,300	0	4,254	0*

* Line transects not flown in '07

SEX AND AGE COUNT REPORT

SPECIES : Pronghorn

HERD UNIT : UINTA-CEDAR MOUNTAIN

YEAR : 2006

PREPARED BY : GRANT FROST

PREHUNT CLASSIFICATION DATES : August

Hunt Area	----- MALES -----			Females	Juveniles	Total
	Yearlings	Adults	Total			
95	85	151	236	574	221	1,031
99	77	125	202	333	261	796
Total Sample	162	276	438	907	482	1,827
Adequate Sample			358	741	394	1,492
Precision	@ 90 C.L.					

Juveniles / 100 Females : 53 ± 4
Total Males / 100 Females : 48 ± 4
Adult Males / 100 Females : 30
Yearlings / 100 Females : 18

SPECIES : Pronghorn

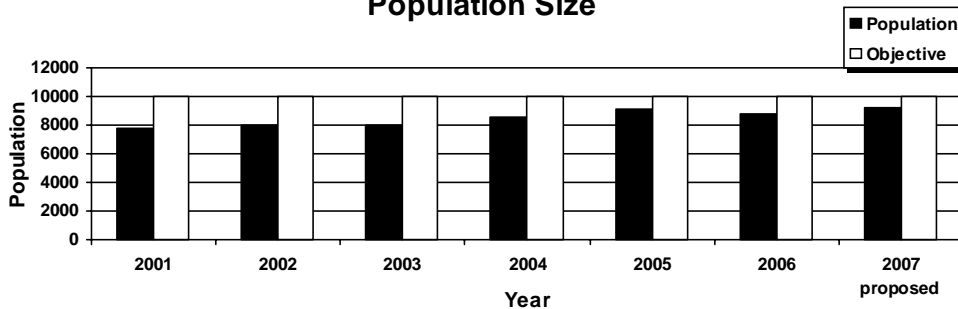
MODEL DATE : 2/2007

HERD UNIT : UINTA-CEDAR MOUNTAIN

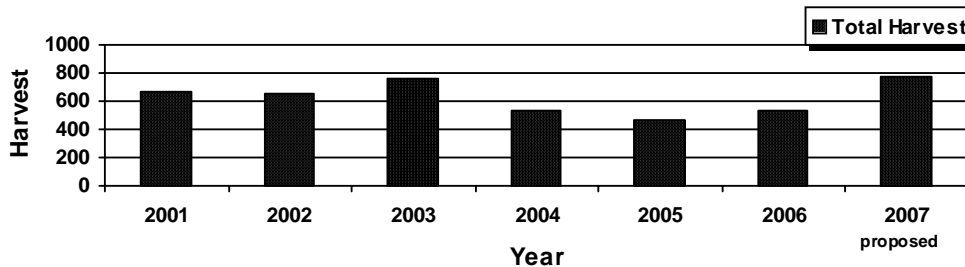
YEAR : 2006

	Averages 2001 - 2005	2006	Proposed 2007	Objective
Population (Est.)	8,300	8,800	9,200	10,000
Harvest	614	528	780	
Hunters	714	544	800	
Hunter Success	86.0%	97.1%	97.5%	
Active Licenses	767	614	800	
Active Licenses Success	80.1%	86.0%	97.5%	
Recreation Days	2,697	2,058	3,000	
Days/Animal	4.4	3.9	3.8	

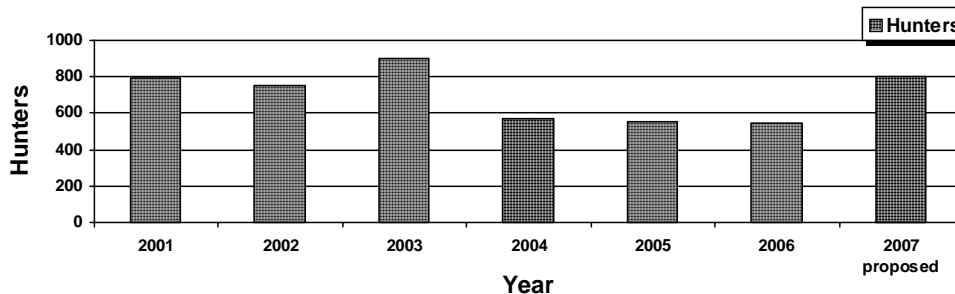
Population Size

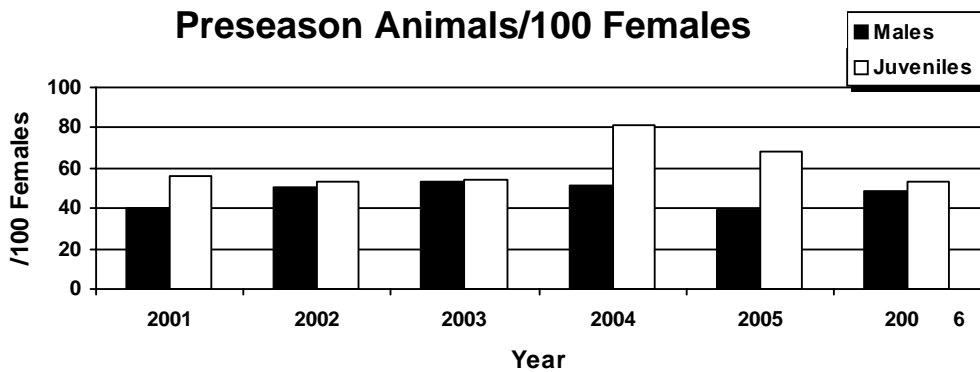
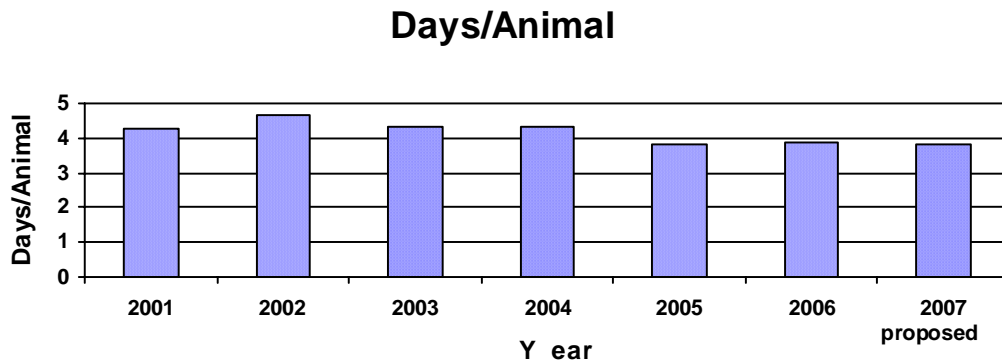
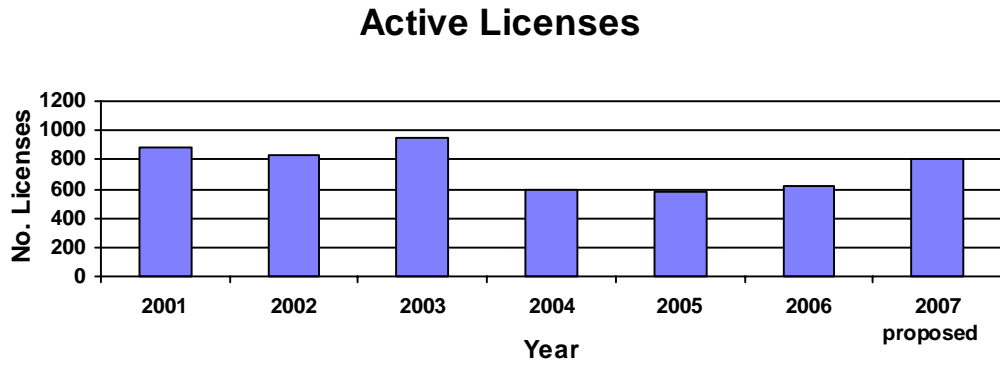
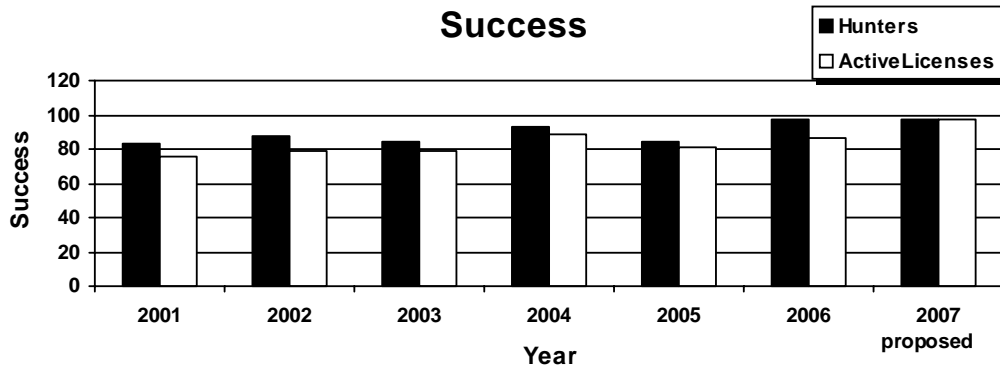


Harvest



of Hunters





2006 HUNTING SEASON

SPECIES : Pronghorn

HERD UNIT : UINTA-CEDAR MOUNTAIN

HUNT AREA	TYPE	SEASON DATES	LIMITATIONS
95	1	09/10-10/14	Limited quota; 325 licenses any antelope
	7	09/10-10/14	Limited quota; 50 licenses doe or fawn valid in that portion of Area 95 west of Cottonwood Creek or the Smiths Fork River
99	1	09/10-10/14	Limited quota; 125 licenses any antelope
	6	09/10-10/14	Limited quota; 50 licenses doe or fawn valid in that portion of Area 99 west of Wyoming Highway 410 and Uinta County Road 283 (US Forest Service Road 075)
	7	09/10-10/14	Limited quota; 50 licenses doe or fawn valid in that portion of Area 99 east of Wyoming Highway 410 and Uinta County Road 283 (US Forest Service Road 075)
	8	09/01-09/30	Limited quota; 50 licenses any antelope, muzzleloading firearms only
ARCHERY:	08/15		Refer to Section 3.

June 5, 2007

HARVEST REPORT

SPECIES **PRONGHORN**

HERD UNIT : **UINTA-CEDAR MOUNTAIN**

YEAR : **2006**

PERIOD COVERED :

Prepared By : **GRANT FROST**

Hunt Area	License Type	L.Q. Licenses	No. Hunters		Ylg. Males	Adult Males	Females	Juveniles	Total	Percent Success	Days/Animal Taken
	Resident	0	248		0	201	11	0	212	85.5	3.8
95	Non-Resident	0	84		0	63	24	0	87	103.6	3.5
	Total	0	332	(348)*	0	264	35	0	299	90.1 (85.9)*	3.7
	Resident	0	153		0	108	24	4	136	88.9	5.0
99	Non-Resident	0	73		0	28	50	15	93	127.4	2.9
	Total	0	226	(266)*	0	136	74	19	229	101.3 (86.1)*	4.1
	Resident	0	391		0	309	35	4	348	89.0	4.3
Total	Non-Resident	0	153		0	91	74	15	180	117.6	3.2
	Total	0	544	(614)*	0	400	109	19	528	97.1 (86.0)*	3.9

* Active Licenses

2006 AGE STRUCTURE OF FIELD CHECKED ANIMALS

SPECIES : PRONGHORN
 HERD UNIT : UINTA-CEDAR MOUNTAIN

PREPARED BY : GRANT FROST

Hunt Area	Sex	Young	1+	2+	3+	4+	5+	6+	7+	Older	Unaged Adults *	Total
95	Male	1	1	2	3	5	0	0	0	0	9	21
	Female	3	1	0	0	0	0	0	0	0	7	11
99	Male	0	0	0	0	1	0	0	0	0	0	1
	Female	0	0	0	0	2	0	0	0	0	10	12
Totals :	Male	1	1	2	3	6	0	0	0	0	9	22
	Female	3	1	0	0	2	0	0	0	0	17	23

* Unaged animals older than yearlings

Total Aged : 45

2007 HUNTING SEASON

SPECIES : Pronghorn

HERD UNIT : UINTA-CEDAR MOUNTAIN

HUNT		SEASON DATES	LIMITATIONS
AREA	TYPE		
95	1	09/10-10/14	Limited quota; 325 licenses any antelope
	7	09/10-10/14	Limited quota; 50 licenses doe or fawn valid in that portion of Area 95 west of Cottonwood Creek or the Smiths Fork River
99	1	09/10-10/14	Limited quota; 125 licenses any antelope
	6	09/10-10/14	Limited quota; 100 licenses doe or fawn valid in that portion of Area 99 west of Wyoming Highway 410 and Uinta County Road 283 (US Forest Service Road 075)
	7	09/10-10/14	Limited quota; 200 licenses doe or fawn valid in that portion of Area 99 east of Wyoming Highway 410 and Uinta County Road 283 (US Forest Service Road 075)
	8	09/01-09/30	Limited quota; 50 licenses any antelope, muzzleloading firearms only

ARCHERY: 08/15 Refer to Section 3.

The proposed 2007 season includes no changes in Hunt Area 95, and some increases to both Type 6 and Type 7 licenses in HA 99. The objective for the herd is 10,000, and the model indicates it will be just above 9,000 after the 2007 season. The season should result in the harvest of about 390 bucks, 230 does and 30 fawns.

As the herd approaches objective, we will need to increase licenses, especially for doe/fawn. Hunter success for the Type 6 in HA 99 was excellent, which resulted in our proposed increase of 50 licenses. There has been a noticeable increase in the number of pronghorn bounded by the Type 7 license in HA 99. These pronghorn remained there during the moderately severe 2006-07 winter. We want to decrease this population to avoid private land damage problems and winter range impacts for both pronghorn and deer, resulting in the 150 license increase. This will likely take several years to reduce these pronghorn to a more appropriate level.

Because of changes in equipment and procedures to the line transect flights that help estimate the population size, we have been set back one year in the schedule for flights, and this herd will not be flown until 2008. Fawn ratios in last years' classifications were low at 53:100 does, suggesting little to no growth in the herd. Buck ratios were stable. The model for this herd appears to be a reliable tool for management. Good aerial survey estimates for population size have not been available for several years now, and the flight planned for 2008 will be important to reevaluate model reliability.

6/13/2007

PAST STUDIES AND LITERATURE CITED:

Christiansen, Tom. 1990. A method for calculating mortality severity indices for population modeling using weather data. District IV annual big game herd unit reports. Appendix A. Wyoming Game and Fish Department.

Christiansen, Tom. 1995. Uinta-Cedar Mountain pronghorn – herd unit definition and line transect evaluation. 1994 Job Completion Report. Green River Region. W-27-R. Wyoming Game & Fish Department. 29 pp.

Christiansen, Tom. 1996. Uinta-Cedar Mountain antelope herd annual job completion report. Wyoming Game & Fish Department.

Thomas, L., Laake, J.L., Strindberg, S., Marques, F.F.C., Buckland, S.T., Borchers, D.L., Anderson, D.R., Burnham, K.P., Hedley, S.L., Pollard, J.H. and Bishop, J.R.B. 2003. Distance 4.1. Release “x”1. Research Unit for Wildlife Population Assessment, University of St. Andrews, UK. <http://www.ruwpa.st-and.ac.uk/distance/>

Woolley, Tim. 1995. Precision in pronghorn composition surveys in Wyoming. M.S. Thesis, University of Wyoming Department of Zoology and Physiology. 74 pp.

15 AGE CLASS VERSION OF UINTA-CEDAR MTN ANTELOPE

Data from 1984 to 2008

Simulation from 2003 to 2008

Age Class	Init Pop. Prop.		Presn Mort%		Postsn Mort%		Effort Set 1		Effort Set 2	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
0	1850.0	1850.0	55.0	50.0	40.0	40.0	0.10	0.10	1.00	1.00
1	495.0	567.0	4.0	3.0	7.0	5.0	0.10	1.00	1.00	1.00
2	358.0	531.0	2.0	2.0	5.0	5.0	0.50	1.00	1.00	1.00
3	239.0	472.0	2.0	2.0	5.0	5.0	0.70	1.00	1.00	1.00
4	119.0	413.0	2.0	2.0	5.0	5.0	1.00	1.00	1.00	1.00
5	60.0	354.0	2.0	2.0	5.0	5.0	1.00	1.00	1.00	1.00
6	30.0	295.0	2.0	2.0	10.0	10.0	1.00	1.00	1.00	1.00
7	15.0	236.0	2.0	2.0	20.0	15.0	1.00	1.00	1.00	1.00
8	8.0	118.0	2.0	2.0	30.0	20.0	1.00	1.00	1.00	1.00
9	4.0	59.0	2.0	2.0	50.0	25.0	1.00	1.00	1.00	1.00
10	0.0	30.0	2.0	2.0	75.0	30.0	1.00	1.00	1.00	1.00
11	0.0	10.0	2.0	2.0	100.0	40.0	1.00	1.00	1.00	1.00
12	0.0	2.0	2.0	2.0	100.0	60.0	1.00	1.00	1.00	1.00
13	0.0	0.0	2.0	2.0	100.0	80.0	1.00	1.00	1.00	1.00
14	0.0	0.0	2.0	2.0	100.0	100.0	1.00	1.00	1.00	1.00
Sum =		8115.0	Estimated Sum =		11500	Subadults: Ages 0 to 0				

Bio-Year	Preseason MSI	MSI Function is Linear			Postseason MSI	Effort & Wound Set Used
		Harvest Subadults#	Des. Pop Size Males#	Pop Size Females#		
1984	1.00	67	742	507	1.00	1
1985	1.00	53	531	266	1.40	1
1986	1.00	43	554	337	0.80	1
1987	1.00	58	524	755	1.00	1
1988	1.00	52	554	632	1.20	1
1989	1.00	128	662	860	0.70	1
1990	1.00	62	518	485	0.80	1
1991	1.00	36	647	490	1.10	1
1992	1.00	66	817	858	1.90	1
1993	1.00	145	745	710	0.80	1
1994	1.00	23	335	164	1.30	1
1995	1.00	20	259	108	1.00	1
1996	1.00	13	260	84	1.30	1
1997	1.00	42	351	181	1.00	1
1998	1.10	5	367	162	0.80	1
1999	1.00	23	339	214	0.80	1
2000	1.15	27	369	165	1.00	1
2001	1.03	65	317	282	0.90	1
2002	1.08	26	408	222	1.00	1
2003	1.07	22	429	303	1.20	1
2004	0.92	10	434	83	1.10	1
2005	1.01	21	387	62	1.20	1
2006	1.24	19	400	109	1.20	1
2007	1.10	30	390	230	1.10	1
2008	1.10	50	400	250	1.10	1
Set 1	Wounding Loss	10.0%	10.0%	10.0%	Yearling Male	10.0%
Set 2	Wounding Loss	10.0%	10.0%	10.0%	Yearling Male	10.0%

Bio- Year	Young/100 Fems Age 1 - 1	Young/100 Fems Age 2 - 14	Young/100 Fems Disabled	Sex Ratio: 50 : 50
1985	0.0	180.0	0.0	
1986	0.0	180.0	0.0	
1987	0.0	180.0	0.0	
1988	0.0	180.0	0.0	
1989	0.0	180.0	0.0	
1990	0.0	180.0	0.0	
1991	0.0	180.0	0.0	
1992	0.0	180.0	0.0	
1993	0.0	180.0	0.0	
1994	0.0	180.0	0.0	
1995	0.0	180.0	0.0	
1996	0.0	180.0	0.0	
1997	0.0	180.0	0.0	
1998	0.0	180.0	0.0	
1999	0.0	180.0	0.0	
2000	0.0	180.0	0.0	
2001	0.0	180.0	0.0	
2002	0.0	180.0	0.0	
2003	0.0	180.0	0.0	
2004	0.0	180.0	0.0	
2005	0.0	180.0	0.0	
2006	0.0	180.0	0.0	
2007	0.0	180.0	0.0	
2008	0.0	180.0	0.0	
2009	0.0	180.0	0.0	

Table 1. Population Size During Bio-Year for A411_2007.GN1 04/02/2007 02:41 pm

Bio-Year	Start	Pre-Season	Post Season	End	%Growth
2003	11500	8397	7568	6015	8.3
2004	12459	9220	8640	6723	6.9
2005	13316	9656	9139	7072	7.0
2006	14254	9374	8793	6967	0.3
2007	14300	9891	9176	7245	0.3
2008	14338	10055	9285	7374	1.3

Table 3. Harvest Mortality for A411_2007.GN1 04/02/2007 02:41 pm

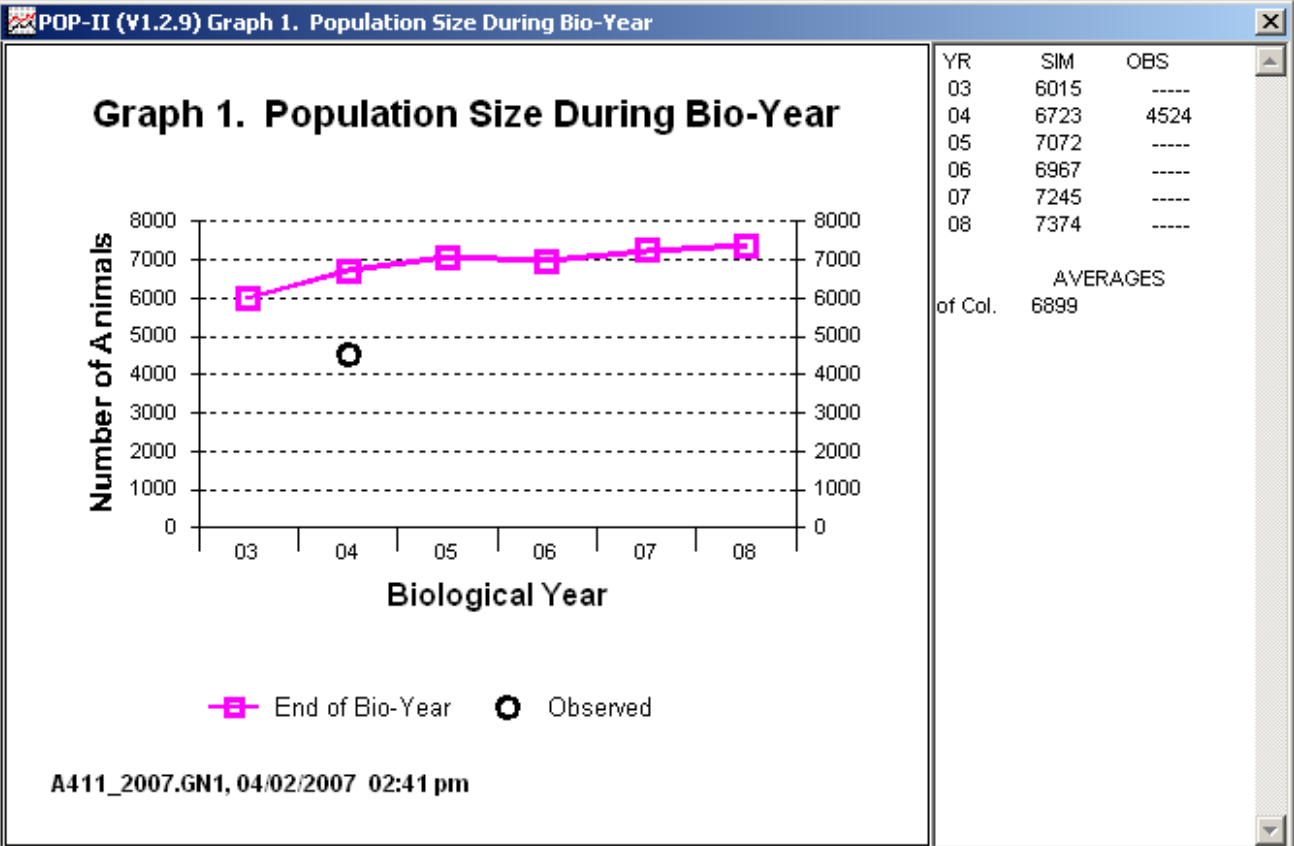
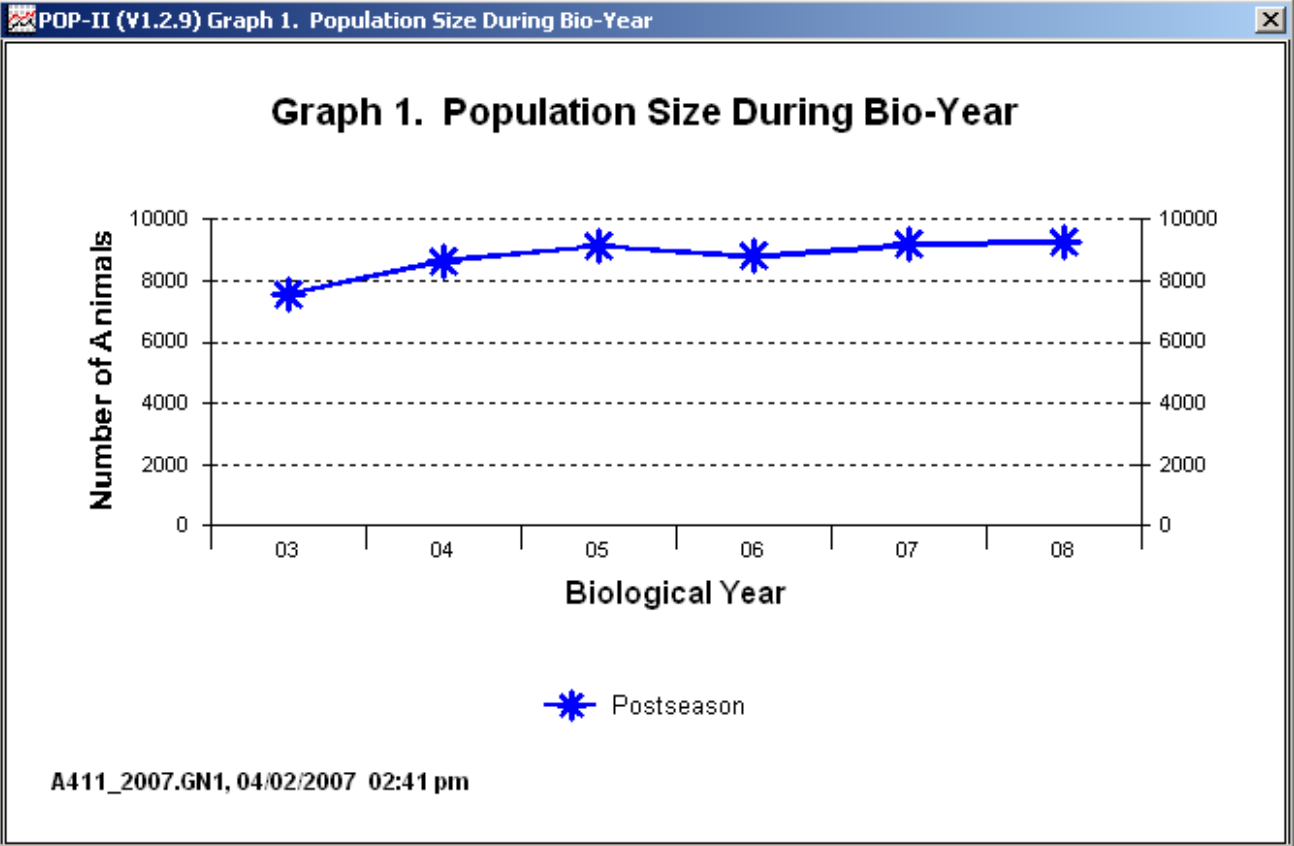
Bio-Year	Sub-Adults	Adult Males	Adult Females	Total	% of Pop
2003	22	429	303	754	9.0
2004	10	434	83	527	5.7
2005	21	387	62	470	4.9
2006	19	400	109	528	5.6
2007	30	390	230	650	6.6
2008	50	400	250	700	7.0

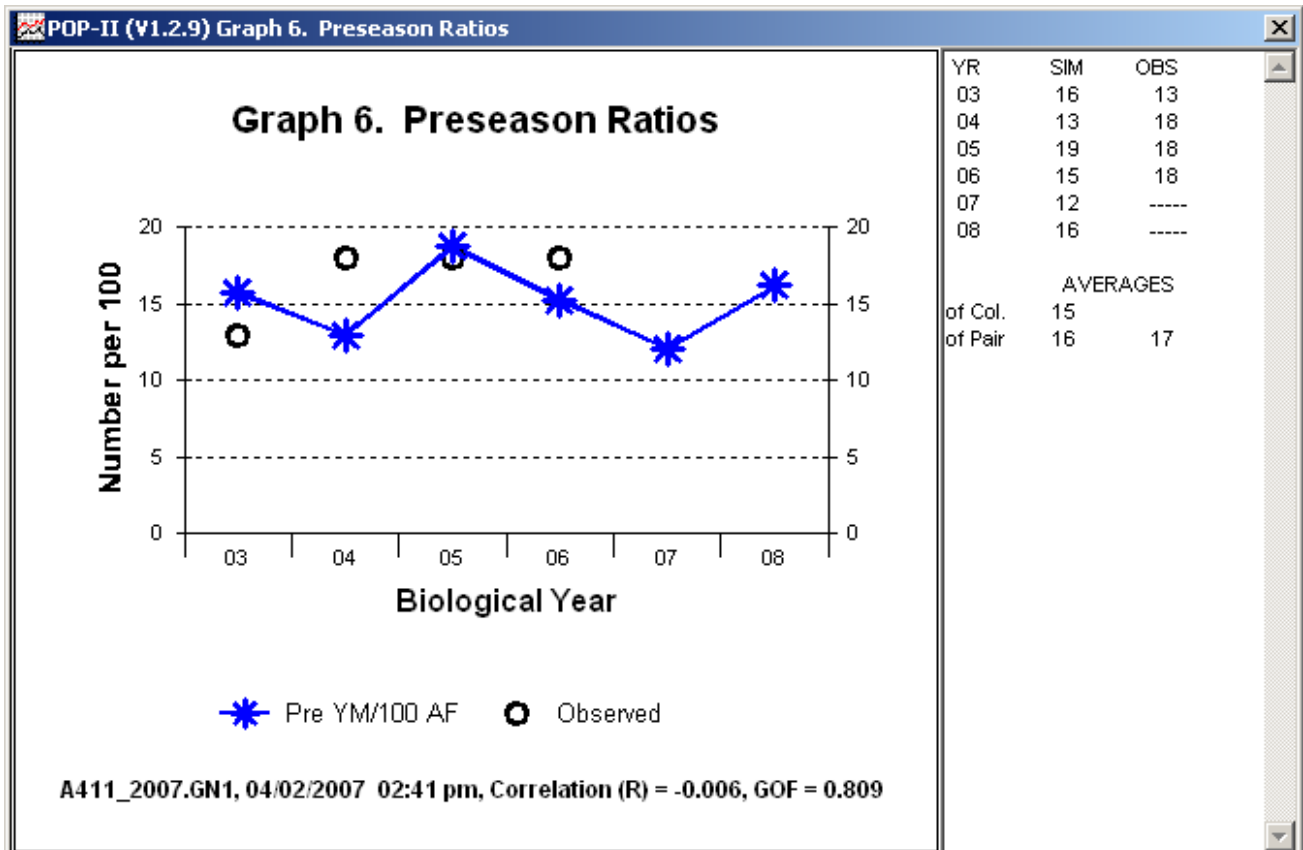
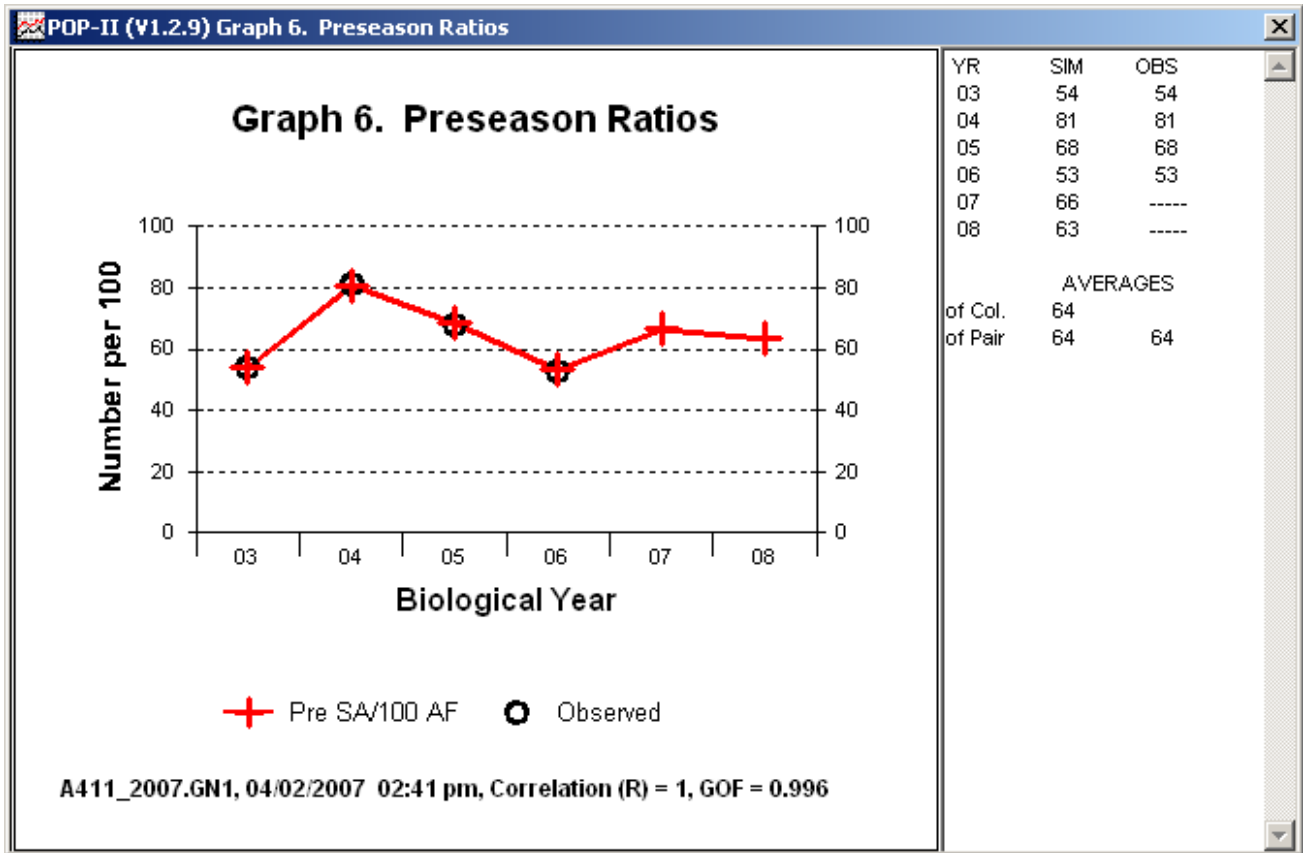
Table 4. Harvest Percentages for A411_2007.GN1 04/02/2007 02:41 pm

Bio-Year	Sub-Adults	Adult Males	Adult Females	Total	Yearling Males
2003	1.0	23.5	7.1	8.98	7.7
2004	0.3	24.6	2.0	5.72	6.0
2005	0.7	19.1	1.4	4.87	9.3
2006	0.8	18.5	2.3	5.63	6.8
2007	1.0	18.3	4.9	6.57	4.9
2008	1.7	17.2	5.3	6.96	6.2

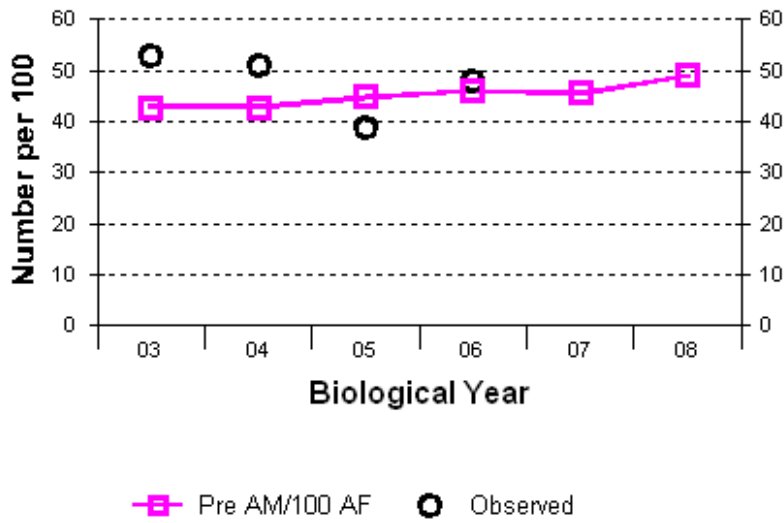
Table 6. Preseason Ratios for A411_2007.GN1 04/02/2007 02:41 pm

Bio-Year	Subadults /100 1+F	2+ Males /100 1+F	Yr. Males /100 1+F	Ad Males /100 1+F
2003	53.8	27.0	15.7	42.8
2004	80.8	29.8	13.0	42.8
2005	68.4	26.0	18.8	44.8
2006	53.3	30.8	15.3	46.0
2007	66.4	33.6	12.1	45.6
2008	63.3	32.8	16.2	49.0





Graph 6. Preseason Ratios



YR	SIM	OBS
03	43	53
04	43	51
05	45	39
06	46	48
07	46	----
08	49	----
AVERAGES		
of Col.	45	
of Pair	44	48

A411_2007.GN1, 04/02/2007 02:41 pm, Correlation (R) = -0.562, GOF = 0.848

Pronghorn - Uinta-Cedar Mountain
Herd Unit - 411
Hunt Areas 95, 99
Revised 6/94

