

2011 - JCR Evaluation Form

SPECIES: Elk

PERIOD: 6/1/2011 - 5/31/2012

HERD: EL531 - IRON MOUNTAIN

HUNT AREAS: 5-6

PREPARED BY: LEE KNOX

	2006 - 2010 Average	2011	2012 Proposed
Population:	0	N/A	N/A
Harvest:	425	761	750
Hunters:	745	1,237	1,400
Hunter Success:	57%	62%	54 %
Active Licenses:	778	1,264	1,450
Active License Percent:	55%	60%	52 %
Recreation Days:	5,001	6,497	6,000
Days Per Animal:	11.8	8.5	8
Males per 100 Females	19	15	
Juveniles per 100 Females	45	62	

Population Objective:	1,800
Management Strategy:	Recreational
Percent population is above (+) or below (-) objective:	N/A%
Number of years population has been + or - objective in recent trend:	11
Model Date:	2/22/2012

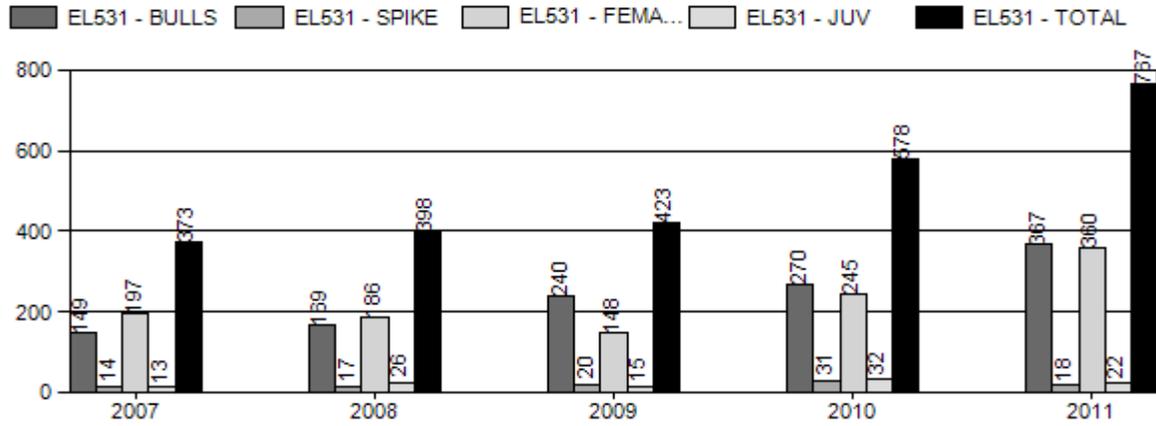
Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	<u>JCR Year</u>	<u>Proposed</u>
Females ≥ 1 year old:	0%	0%
Males ≥ 1 year old:	0%	0%
Juveniles (< 1 year old):	0%	0%
Total:	0%	0%
Proposed change in post-season population:	0%	0%

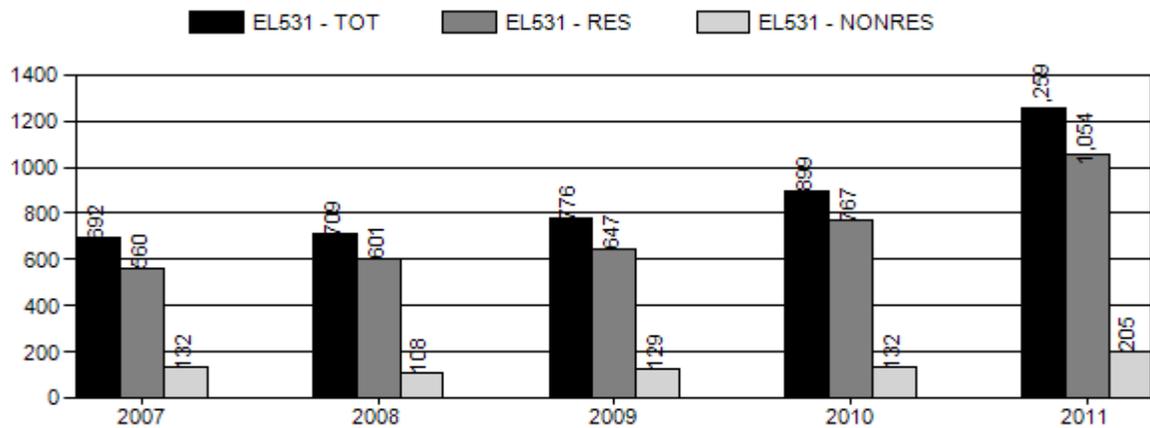
Population Size - Postseason



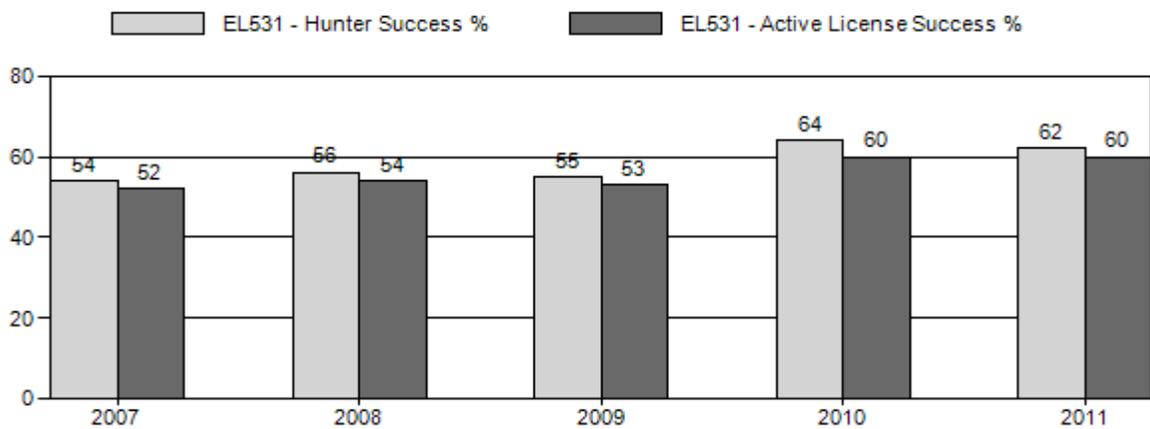
Harvest



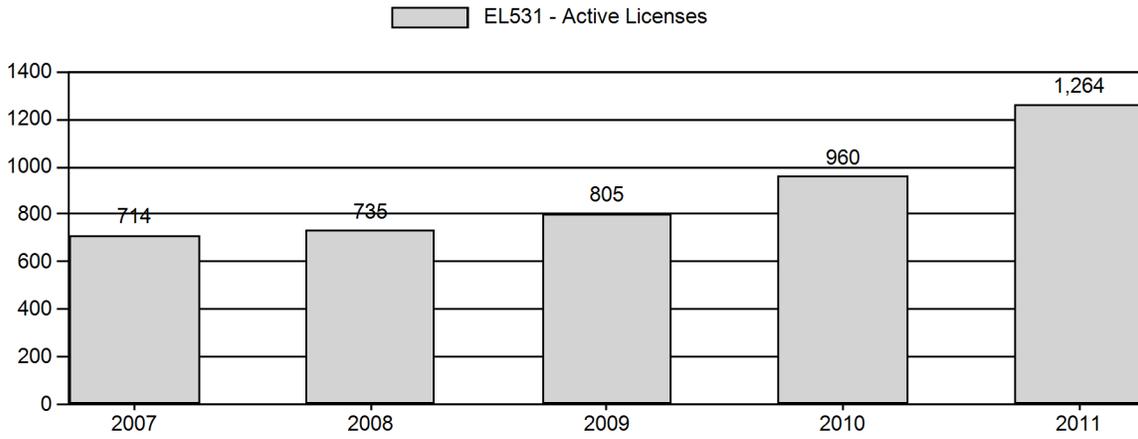
Number of Hunters



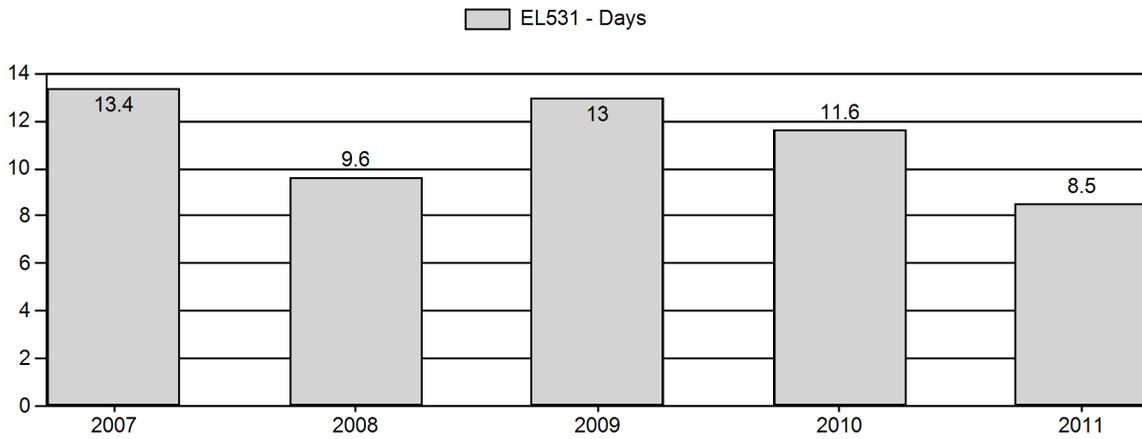
Harvest Success



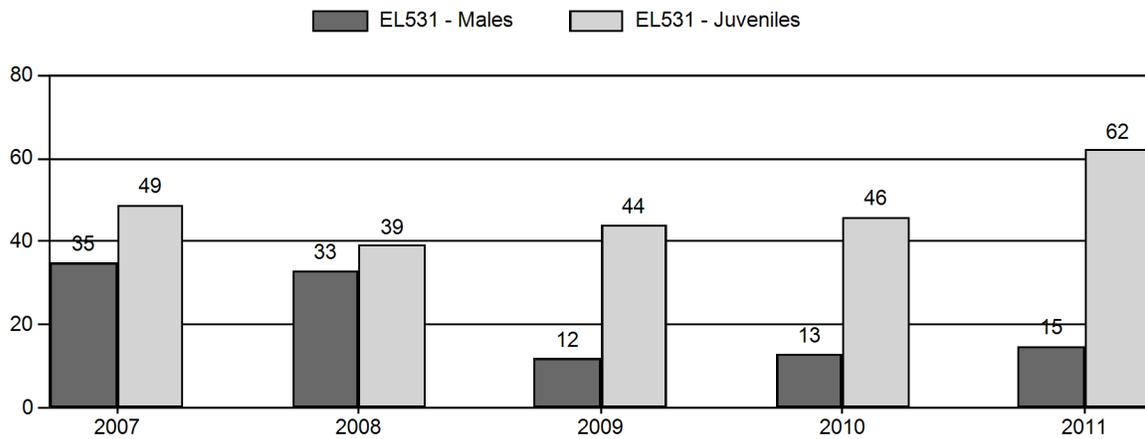
Active Licenses



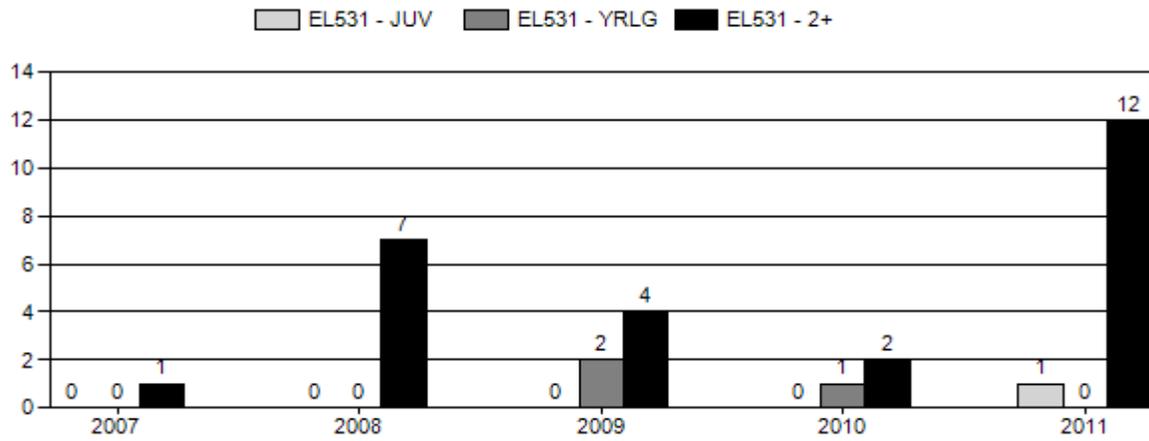
Days per Animal Harvested



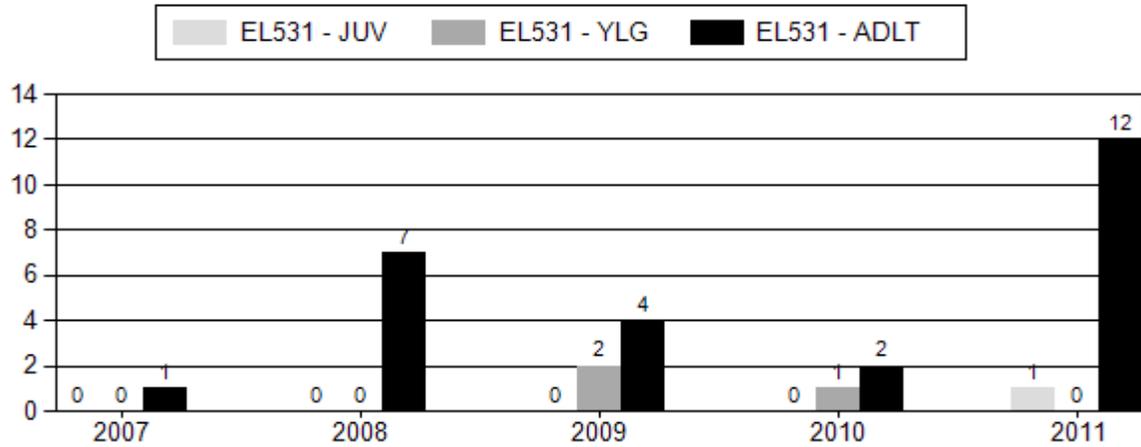
Postseason Animals per 100 Females



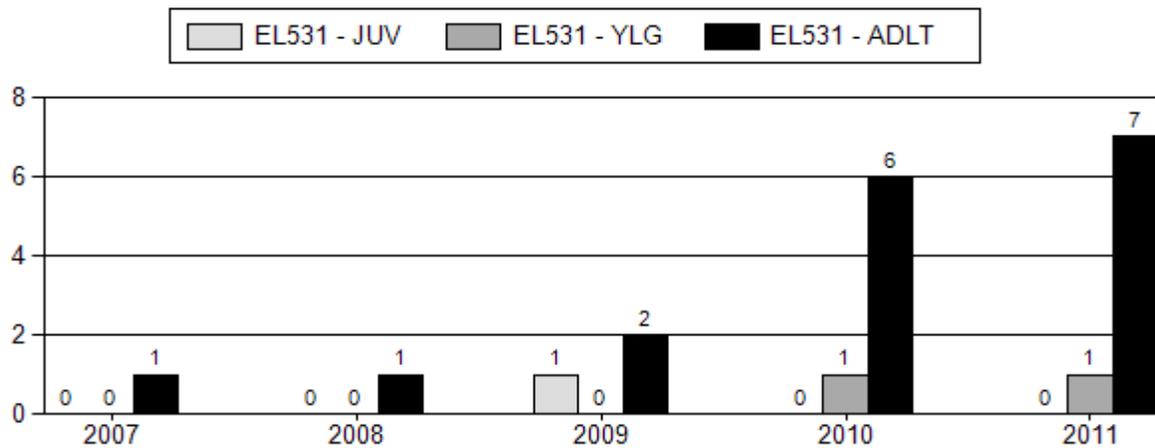
Age Structure of Field Checked Males



Age Structure Data (Field and Laboratory) - Male



Age Structure Data (Field and Laboratory) - Female



2007 - 2011 Postseason Classification Summary

for Elk Herd EL531 - IRON MOUNTAIN

Year	Post Pop	MALES				FEMALES		JUVENILES		Tot CIs	CIs Obj	Males to 100 Females				Young to		
		Ylg	Adult	Total	%	Total	%	Total	%			YIng	Adult	Total	Conf Int	100 Fem	Conf Int	100 Adult
2007	0	27	68	95	19%	272	55%	132	26%	499	606	10	25	35	± 5	49	± 6	36
2008	0	36	19	55	19%	168	58%	66	23%	289	469	21	11	33	± 0	39	± 0	30
2009	0	70	21	91	8%	741	64%	325	28%	1,157	533	9	3	12	± 0	44	± 0	39
2010	0	53	26	79	8%	604	63%	278	29%	961	617	9	4	13	± 0	46	± 0	41
2011	0	20	16	36	9%	235	56%	145	35%	416	0	9	7	15	± 0	62	± 0	54

EL531 - IRON MOUNTAIN

<u>Hunt Area</u>	<u>Add'l Hunt Areas</u>	<u>Type</u>	<u>Quota</u>	<u>Season Dates</u>	<u>Limitations</u>
5	6	ARCH		09/01 - 09/30	Refer to Section 3 of this Chapter
5		Type 1	400	10/01 - 11/20	Any
5		Type 1	400	11/21 - 01/31	unused area 5 type 1 licenses vaild for antlerless elk
5		Type 6	400	08/15 - 01/31	Reduced Price cow/calf
6		Type 1	200	10/01 - 10/19	any elk off national forest
6		Type 1	200	10/20 - 11/15	unused area 6 type 1 licenses vaild for any elk in entire area
6		Type 1	200	11/16 - 01/31	unused area 6 type 1 licenses vaild for antlerless elk off national forest
6		Type 4	100	08/15 - 01/31	antlerless elk off national forest
6		Type 6	500	10/01 - 01/31	cow or calf off national forest

Area	Type	Active Lic/Htrs	Bull	Spike	Cow	Calf	Total	Success		Days/Harvest	Days	Licenses Sold
2011												
5 IRON MOUNTAIN												
	Type 1	399	251	13	45	5	314	78.70%		7.9	2470	399
	Type 6	319	0	0	173	8	181	56.70%		4.8	865	366
Pooled Total		713 (718)*	251	13	218	13	495	69.40% (68.9%)*		6.7	3335	
Pooled Resident		575	196	13	192	0	401	69.70%		6.7	2690	
Pooled Nonresident		138	55	0	26	13	94	68.10%		6.9	645	
6 POLE MOUNTAIN												
	Type 1	191	116	5	5	0	126	66.00%		10.1	1268	205
	Type 4	62	0	0	29	0	29	46.80%		16.1	466	100
	Type 6	316	0	0	108	9	117	37.00%		16.6	1940	393
Pooled Total		535 (569)*	116	5	142	9	272	50.80% (47.8%)*		13.5	3674	
Pooled Resident		469	80	5	135	0	220	46.90%		15.2	3354	
Pooled Nonresident		66	36	0	7	9	52	78.80%		6.2	320	
2011 Hunt Area Total		1248 (1287)*	367	18	360	22	767	61.50% (59.6%)*		9.1	7009	1463
2011 Herd Total		1259 (1287)*	367	18	360	22	767	60.90% (59.6%)*		9.1	7009	1463
*Active Licenses												

2007 - 2011 Harvest Age Structure

for Elk Herd EL531 - IRON MOUNTAIN

Year	Males									Females									Herd Tot
	Juv	1	%*	2 ^	%**	Tot Aged ++	Not Aged +++	Unk	Tot Chkd	Juv	1	%*	2 ^	%**	Tot Aged ++	Not Aged +++	Unk	Tot Chkd	
2007	0	0	0%	1	100%	1	0	0	1	0	0	0%	0	0%	0	1	0	1	2
2008	0	0	0%	7	100%	7	0	0	7	0	0	0%	1	100%	1	0	2	3	10
2009	0	2	33%	0	0%	2	4	1	7	1	0	0%	0	0%	1	2	2	5	12
2010	0	1	33%	1	50%	2	1	0	3	0	1	14%	3	75%	4	3	1	8	11
2011	1	0	0%	11	100%	12	1	0	13	0	1	12%	5	83%	6	2	2	10	23

* Percent of aged animals (including unaged adults but excluding juveniles) 1 1/2 years old

^ Number of animals two years old and older. Animals aged older than two (excluding unaged adults) are lumped into this two plus category

** Percent of aged animals (not including juveniles or unaged adults) two years old or older

++ includes juveniles

+++ Unaged adults - unaged animals older than yearlings

IRON MOUNTAIN ELK (EL531)
Hunt Areas 5 and 6
2012 HUNTING SEASONS

HUNT AREA	TYPE	OPENS	CLOSES	LIMITATIONS
*5	Gen	Oct.1	Nov. 20	General license; any elk
*CWD Area		Nov. 21	Jan. 31	General license; antlerless elk
	6	Aug. 15	Jan. 31	Limited Quota; 750 licenses cow or calf
*6	Gen	Oct. 1	Oct. 31	General license; any elk off national forest
*CWD Area		Nov. 1	Jan. 31	General license; antlerless elk off national forest
				Limited quota; 100 licenses any elk
	1	Oct. 20	Nov. 15	
		Nov. 16	Jan. 31	Unused Area 6 Type 1 license; antlerless elk
	4	Aug. 15	Jan. 31	Limited Quota; 100 licenses antlerless elk off national forest
	6	Oct. 1	Jan. 31	Limited Quota.; 750 licenses cow or calf off national forest
5, 6 ARCHERY		Sept. 1	Sept. 30	Refer to Section 3 of this Chapter

SUMMARY OF CHANGES BY LICENSE NUMBER

Area	Type	Change from 2010
5	General 6	unlimited +350
6	General 1 4 6	unlimited 0 0 +150
Herd Totals	General 1 4 6	unlimited 0 0 +500

Changes for 2012 include:

- General licenses in Area 5 and 6
- Eliminate Area 5 type 1 licenses
- Increase Area 5 Type 6 quota by 350
- Increased the Area 6 Type 6 quota by 150.
- Area 6 type 1 quota by 100.
- Move opening date of Area 6 type 1 to Oct. 20th to address forest grazing leasee concerns and extend the closing date to Nov. 15th.
- Area 6 type 1 valid for antlerless elk from Nov. 21 to Jan. 31

MANAGEMENT EVALUATION

The Iron Mountain Elk Herd is managed under recreational guidelines with a season structured to reduce the population. Harvest management in the Iron Mountain Elk Herd has many challenges due to limited access, clumped elk distributions, interstate and other seasonal movements, lower priority for data collection efforts, varying tolerances for elk among landowners, differing goals for the elk herd among landowners, and different tolerances for who they will allow to hunt and when they will grant access. In 2011, the issue came to a head as winter conditions combined with large ranches that provide refuges from hunting prompted some landowners to complain to the Commission about the number of elk they have to tolerate, especially when licenses and/or season lengths did not allow harvest to address these problems. In recent years, we have made changes to try to increase opportunities for hunters to harvest elk. Harvest increased from 373 elk in 2007 to 761 in 2011. For 2012, there will be a General season

in both hunt Area 5 and 6 that will run from October 1st to January 31st. Type 6 licenses will be significantly increased in both hunt areas and will run to January 31st. Landowner access and tolerance of hunters is the key to addressing the herd's growth and currently landowners are highly polarized among themselves with regard to desired elk numbers.

Population: There is no population model for this herd because of poor to no classification data for most years because this herd receives lower management emphasis due to lack of access to harvest the population at desired rates. Interstate movements of elk between Wyoming and Colorado also confound our efforts to manage this herd. However, past efforts to try to simulate this herd's dynamics; cementum annuli data from 2000, 2001, and 2003; and harvest statistics support observations by field personnel, landowners and hunters that the herd is continuing to increase in number and expand in distribution. A Spreadsheet model simulation based upon only seven years of data suggests that the population is between 2,500 and 4,000 elk. We do not have a reliable way to monitor the herd's status relative to its postseason objective and have limited ability to manage the herd by harvest due to access constraints. The herd has expanded east of Interstate Highway 25 so we have adjusted unit boundaries accordingly. The proposed 2012 season and introduction of the Hunter Management and Access Program will hopefully reduce the elk herd and allow landowners wanting to harvest or redistribute elk ample opportunity to do so.

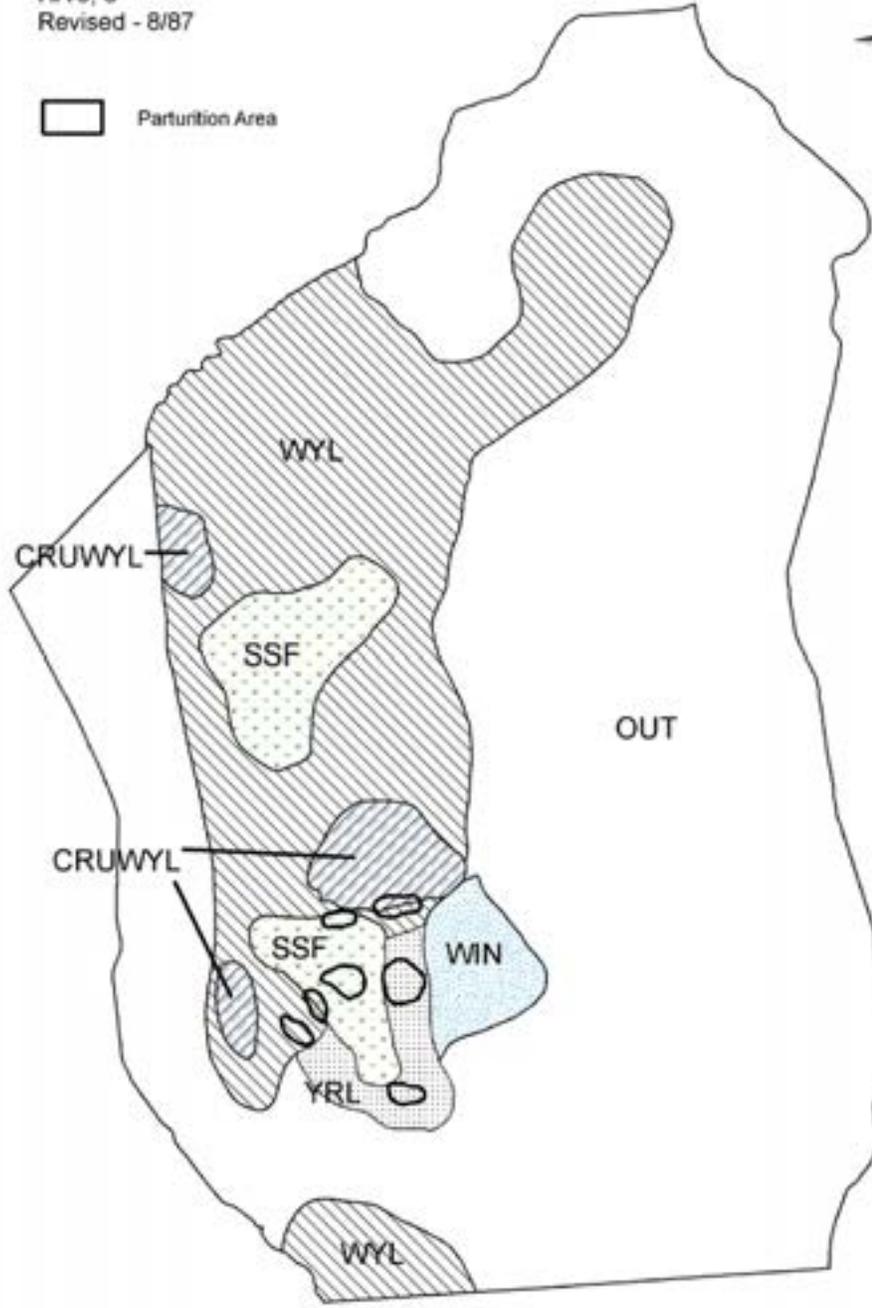
We classified 416 elk during our 2011 postseason deer surveys which is significantly less than years past. The observed calf:cow ratio of 62:100 is higher than what we observed in the last 5 years and could be due to the low sample size. Our observed bull:cow ratio of 15:100 is undoubtedly low given the number of bulls harvested in this population.

Harvest: The 2011 harvest of 761 elk is 32% higher than in 2010 and 79% higher than the 5 year average. Success rates for Type 6 licenses in both hunt areas did not increase however harvest increased by 48% in Area 5 and 178% in Area 6. We hope to continue to increase harvest with the proposed 2012 season while at the same time addressing landowner concerns.

E531 - Iron Mtn.
HA 5, 6
Revised - 8/87



 Parturition Area



2011 - JCR Evaluation Form

SPECIES: Elk

PERIOD: 6/1/2011 - 5/31/2012

HERD: EL533 - SNOWY RANGE

HUNT AREAS: 8-12, 110, 114, 125

PREPARED BY: WILL SCHULTZ

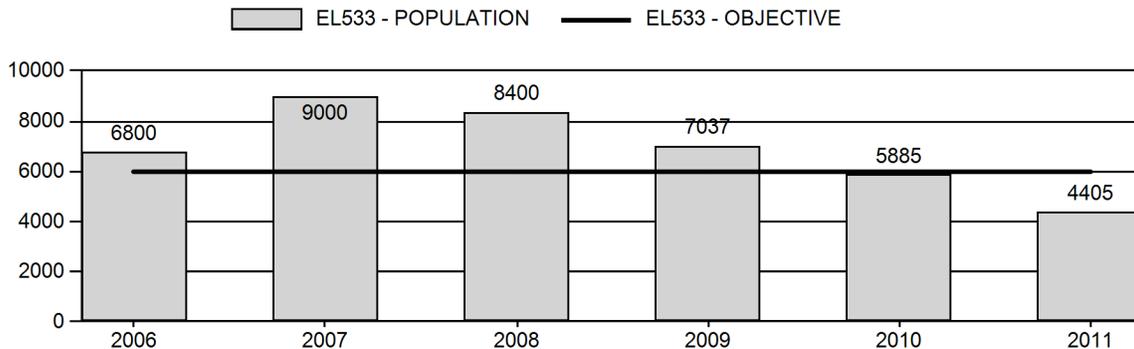
	2006 - 2010 Average	2011	2012 Proposed
Population:	7,424	4,405	3,277
Harvest:	1,575	1,786	1,420
Hunters:	5,218	5,721	5,500
Hunter Success:	30%	31%	26%
Active Licenses:	5,336	5,890	5,500
Active License Percent:	30%	30%	26%
Recreation Days:	36,483	42,110	32,000
Days Per Animal:	23.2	23.6	22.5
Males per 100 Females	24	19	
Juveniles per 100 Females	46	44	

Population Objective:	6,000
Management Strategy:	Recreational
Percent population is above (+) or below (-) objective:	-26.6%
Number of years population has been + or - objective in recent trend:	2
Model Date:	03/02/2012

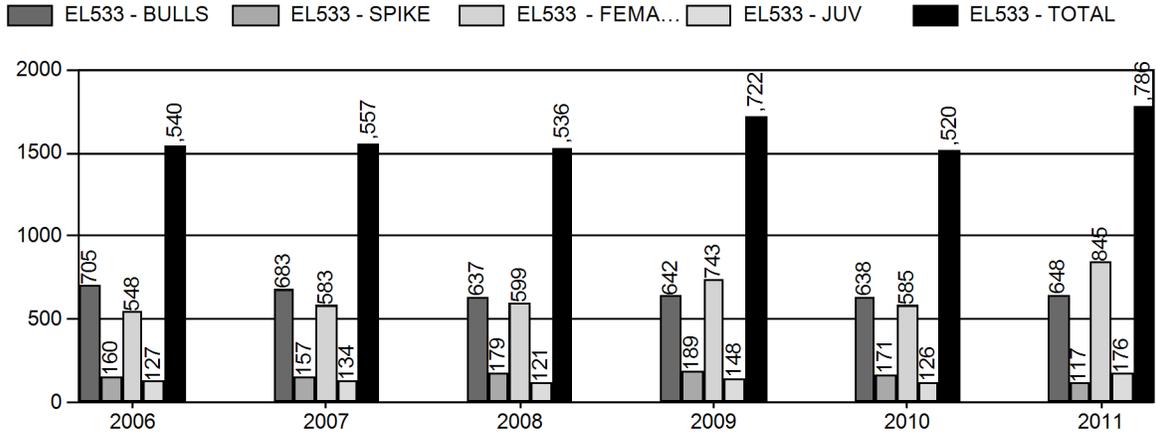
Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	<u>JCR Year</u>	<u>Proposed</u>
Females ≥ 1 year old:	124.5%	28.0%
Males ≥ 1 year old:	56.4%	51.5%
Juveniles (< 1 year old):	13.5%	11.8%
Total:	29.1%	29.4%
Proposed change in post-season population:	-32.0%	-32.3%

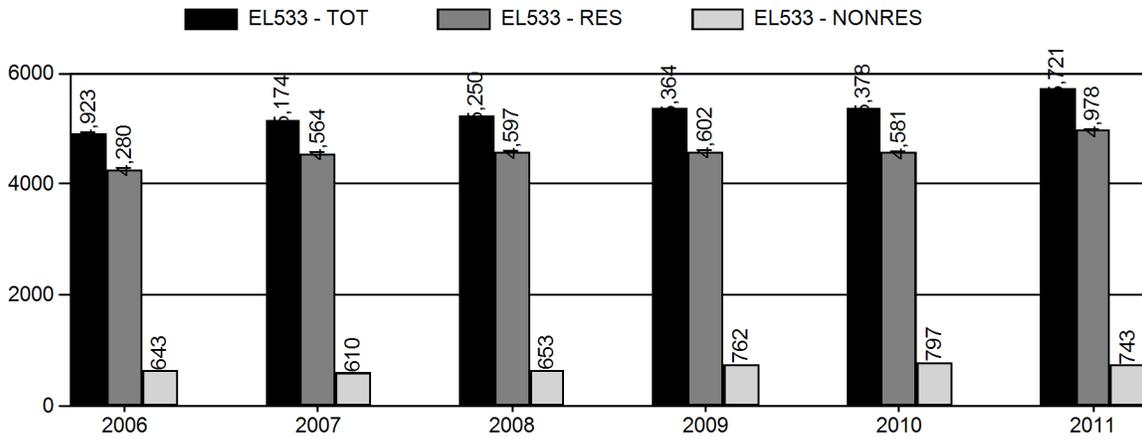
Population Size - Postseason



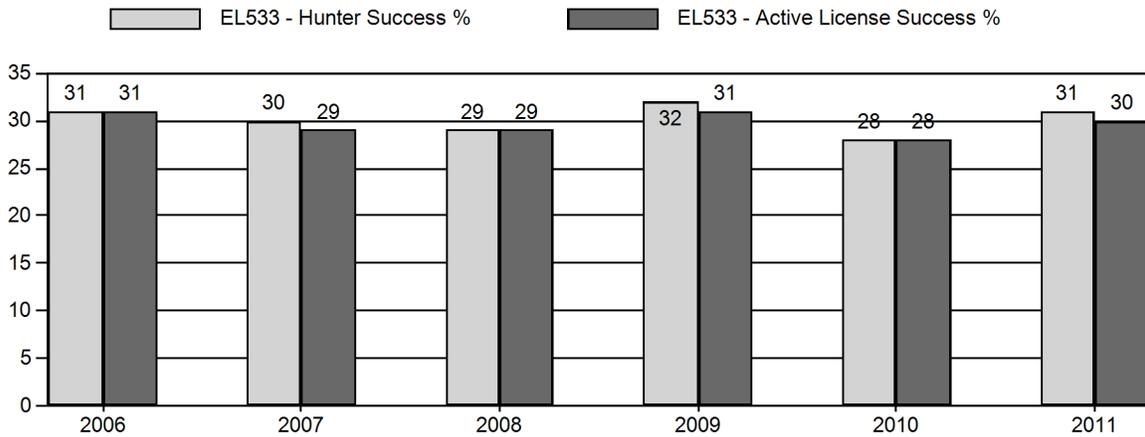
Harvest



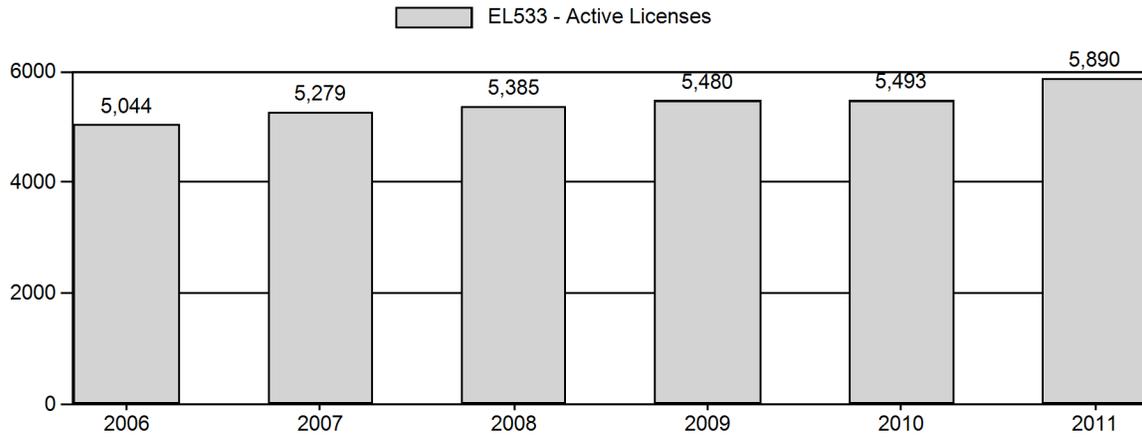
Number of Hunters



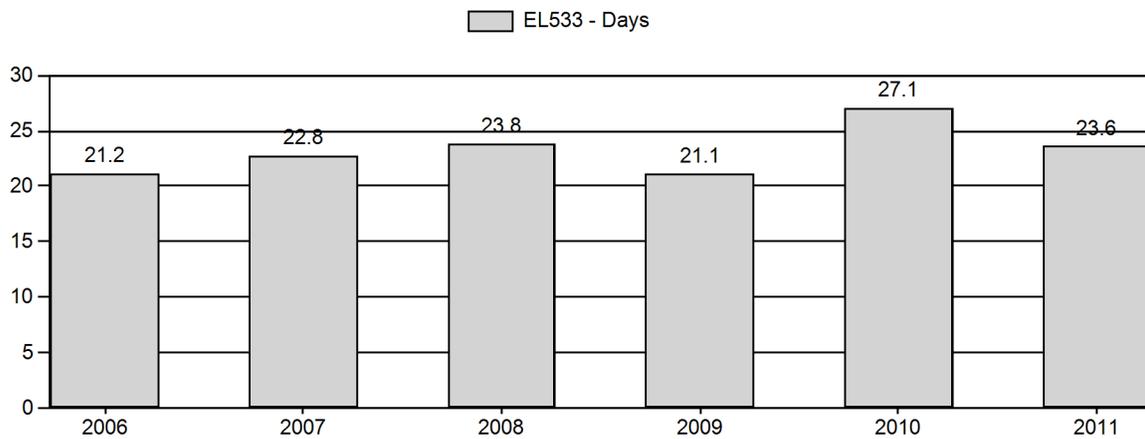
Harvest Success



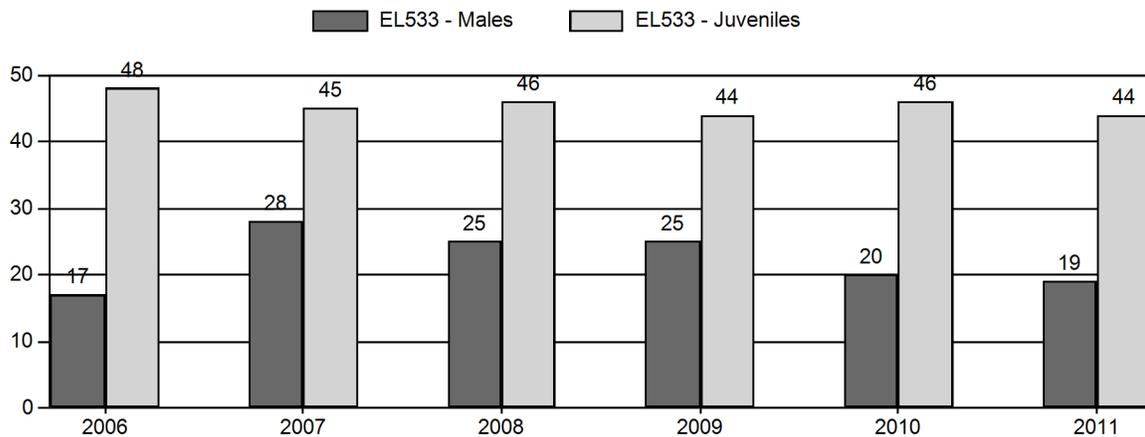
Active Licenses



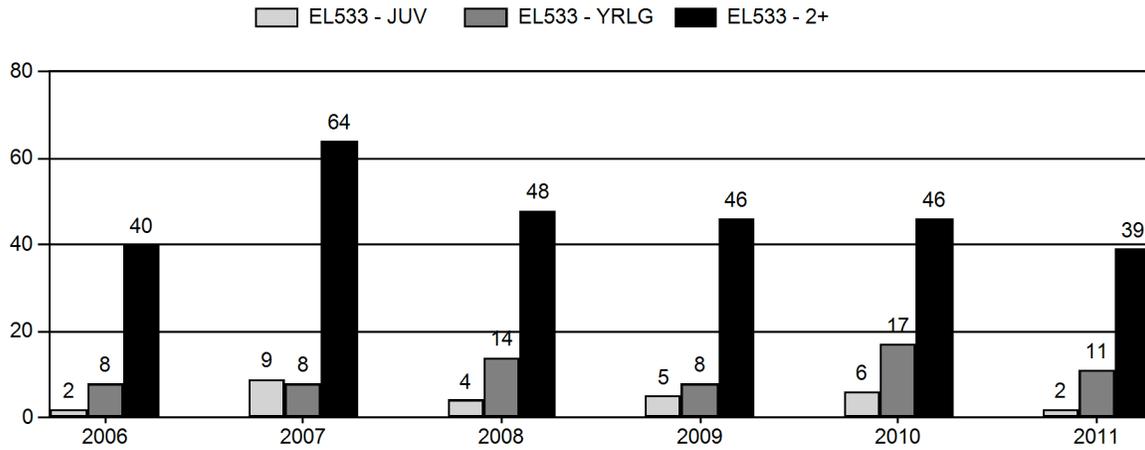
Days per Animal Harvested



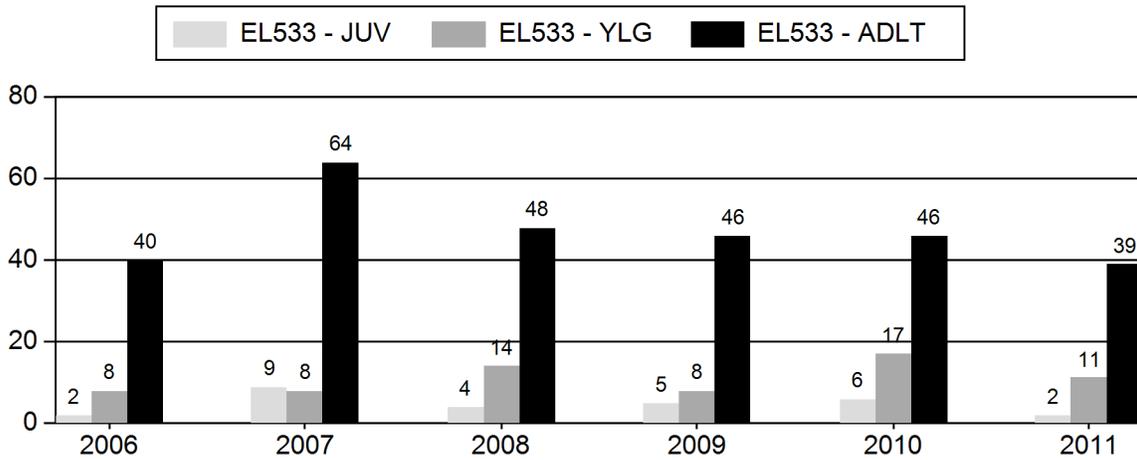
Postseason Animals per 100 Females



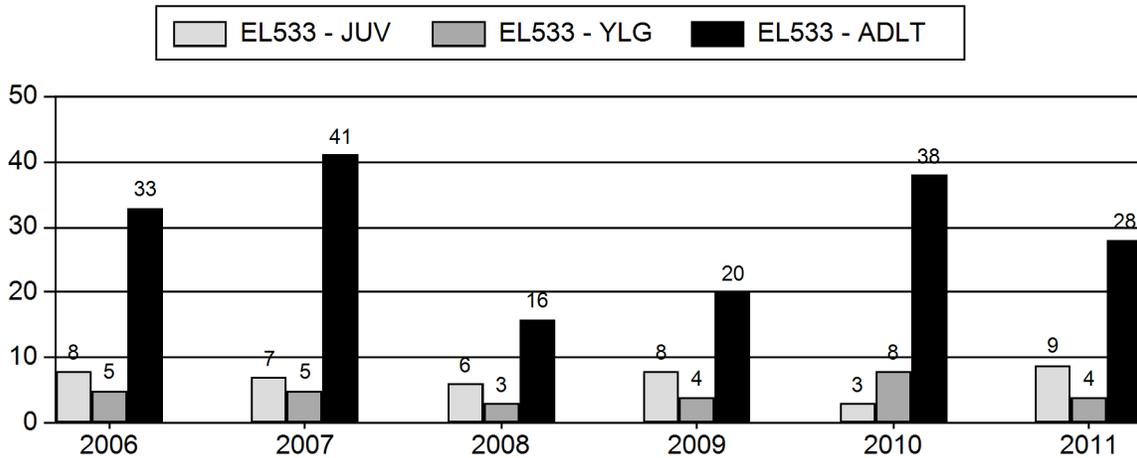
Age Structure of Field Checked Males



Age Structure Data (Field and Laboratory) - Male



Age Structure Data (Field and Laboratory) - Female



2006 - 2011 Postseason Classification Summary

for Elk Herd EL533 - SNOWY RANGE

Year	Post Pop	MALES				FEMALES		JUVENILES		Tot Cls	Cls Obj	Males to 100 Females				Young to		
		Ylg	Adult	Total	%	Total	%	Total	%			YIng	Adult	Total	Int	100 Fem	Conf Int	100 Adult
2006	6,600	136	55	191	10%	1,115	61%	530	29%	1,836	656	12	5	17	± 1	48	± 3	41
2007	9,000	482	399	881	16%	3,102	58%	1,394	26%	5,377	683	16	13	28	± 1	45	± 1	35
2008	8,400	215	271	486	14%	1,980	59%	909	27%	3,375	690	11	14	25	± 1	46	± 2	37
2009	7,037	279	179	458	15%	1,816	59%	802	26%	3,076	679	15	10	25	± 1	44	± 2	35
2010	5,885	318	200	518	12%	2,633	60%	1,211	28%	4,362	650	12	8	20	± 1	46	± 1	38
2011	4,405	145	109	254	12%	1,308	61%	576	27%	2,138	639	11	8	19	± 1	44	± 2	37

2011 HUNTING SEASONS

EL533 - SNOWY RANGE

<u>Hunt Area</u>	<u>Add'l Hunt Areas</u>	<u>Type</u>	<u>Quota</u>	<u>Season Dates</u>	<u>Limitations</u>
8		Type 1	150	10/01 - 10/31	Any
8		Type 1	150	11/01 - 12/31	Unused Area 8 Type 1 licenses valid for any elk west of Sand Creek Road (Albany County Road 34) and antlerless elk east of Sand Creek Road (Albany County Road 34)
9		GEN		10/15 - 10/19	any elk
9		GEN		10/20 - 11/30	antlered elk
9		Type 6	50	08/15 - 01/31	valid on private land
10		GEN		10/01 - 10/31	any elk
10		Type 4	250	08/15 - 09/30	valid on private land
10		Type 4	250	10/01 - 01/31	Full Priced Antlerless
10		Type 6	500	08/15 - 09/30	valid on private land
10		Type 6	500	10/01 - 01/31	Reduced Price cow/calf
11		Type 1	150	10/01 - 10/31	Any
11		Type 4	300	10/01 - 10/31	Full Priced Antlerless
11		Type 6	25	08/15 - 01/31	valid on private land
12		GEN		10/15 - 10/31	any elk
12		Type 4	100	10/08 - 11/30	Full Priced Antlerless
12	13, 15, 110	Type 6	125	08/15 - 01/31	valid on private land
12	130	Type 7	100	12/01 - 01/31	valid on Savage Meadows HMA (HMA permission slip required)
110		GEN		10/15 - 10/31	any elk
110		Type 4	75	10/08 - 11/30	Full Priced Antlerless
114		Type 1	150	10/01 - 01/31	Any
114	125	Type 4	75	10/01 - 01/31	also valid Area 125 north of I-80
114		Type 6	150	08/15 - 09/30	valid on private land
114	125	Type 6	150	10/01 - 10/31	also valid in Area 125 north of I-80
114		Type 6	150	11/01 - 01/31	valid entire Area 114
125		Type 1	125	10/01 - 11/14	Any
125		Type 1	125	11/14 - 01/31	valid antlerless elk
125		Type 6	200	10/01 - 01/31	Reduced Price cow/calf

Area	Type	Active Lic/Htrs	Bull	Cow	Calf	Total	Success	Days/Harvest	Days	Licenses Sold
2011										
8 BOULDER RIDGE										
	Type 1	142	39	46	0	85	59.90%	15.6	1323	148
	Pooled Total	142 (142)*	39	46	0	85	59.90% (59.9%)*	15.6	1323	
	Pooled Resident	126	30	42	0	72	57.10%	17.3	1248	
	Pooled Nonresiden	16	9	4	0	13	81.20%	5.8	75	
9 SOUTH SNOWY RANGE										
	General	774	81	43	7	131	16.90%	30.7	4026	
	Type 6	46	0	39	0	39	84.80%	3.9	151	50
	Pooled Total	813 (820)*	81	82	7	170	20.90% (20.7%)*	24.6	4177	
	Pooled Resident	736	69	68	7	144	19.60%	26.1	3761	
	Pooled Nonresiden	77	12	14	0	26	33.80%	16	416	
10 ROCK CREEK										
	General	1179	183	66	18	267	22.60%	27.6	7356	
	Type 4	73	0	29	4	33	45.20%	12.6	415	88
	Type 6	425	0	117	75	192	45.20%	21.8	4180	500
	Pooled Total	1596 (1677)*	183	212	97	492	30.80% (29.3%)*	24.3	11951	
	Pooled Resident	1405	159	186	73	418	29.80%	25.9	10826	
	Pooled Nonresiden	191	24	26	24	74	38.70%	15.2	1125	
11 MEDICINE BOW RIVER										
	Type 1	144	37	15	0	52	36.10%	25.9	1348	149
	Type 4	250	0	74	10	84	33.60%	18.7	1568	260
	Type 6	19	0	12	0	12	63.20%	6.8	81	25
	Pooled Total	405 (413)*	37	101	10	148	36.50% (35.8%)*	20.2	2997	
	Pooled Resident	342	27	76	10	113	33.00%	22.8	2578	
	Pooled Nonresiden	63	10	25	0	35	55.60%	12	419	
12 KENNADAY PEAK										
	General	997	96	66	15	177	17.80%	35.5	6288	
	Type 4	72	0	25	7	32	44.40%	15.9	508	89
	Type 6	49	0	25	2	27	55.10%	8.5	230	126
	Type 7	44	0	0	0	0	0%	0	149	67
	Pooled Total	1151 (1162)*	96	116	24	236	20.50% (20.3%)*	30.4	7175	
	Pooled Resident	1007	72	82	22	176	17.50%	36.1	6346	
	Pooled Nonresiden	144	24	34	2	60	41.70%	13.8	829	
110 UPPER PLATTE RIVER										
	General	1717	190	129	21	340	19.80%	29.4	10004	
	Type 4	68	0	16	3	19	27.90%	28.2	536	75
	Type 6	20	0	9	0	9	45%	13.4	121	0
	Pooled Total	1801 (1805)*	190	154	24	368	20.40% (20.4%)*	29	10661	
	Pooled Resident	1629	170	147	20	337	20.70%	27.7	9319	
	Pooled Nonresiden	172	20	7	4	31	18.00%	43.3	1342	
114 KYLE										
	Type 1	143	79	0	0	79	55.20%	16.7	1323	152
	Type 4	18	0	7	0	7	38.90%	14.1	99	24
	Type 6	136	0	31	12	43	31.60%	16.6	712	150
	Pooled Total	277 (297)*	79	38	12	129	46.60% (43.4%)*	16.5	2134	
	Pooled Resident	232	64	19	12	95	40.90%	20.4	1936	
	Pooled Nonresiden	45	15	19	0	34	75.60%	5.8	198	

Area	Type	Active Lic/Htrs	Bull	Cow	Calf	Total	Success	Days/Harvest	Days	Licenses Sold
2011										
125 ELK MOUNTAIN										
	Type 1	111	60	17	2	79	71.20%	6.6	522	127
	Type 4	2	0	0	0	0	0%	0	32	0
	Type 6	141	0	79	0	79	56.00%	14.4	1138	168
	Pooled Total	254 (254)*	60	96	2	158	62.20% (62.2%)*	10.7	1692	
	Pooled Resident	164	25	60	0	85	51.80%	15.5	1321	
	Pooled Nonresiden	90	35	36	2	73	81.10%	5.1	371	
	2011 Hunt Area To	6439 (6570)*	765	845	176	1786	27.70% (27.2%)*	23.6	42110	2198
	2011 Herd Total	5721 (5890)*	765	845	176	1786	31.20% (30.3%)*	23.6	42110	2198
	*Active Licenses									

2006 - 2011 Harvest Age Structure

for Elk Herd EL533 - SNOWY RANGE

Year	Males									Females									Herd Tot
	Juv	1	% *	2 ^	% **	Tot Aged ++	Not Aged +++	Unk	Tot Chkd	Juv	1	% *	2 ^	% **	Tot Aged ++	Not Aged +++	Unk	Tot Chkd	
2006	2	8	17%	40	83%	50	0	0	50	8	5	13%	33	87%	46	0	0	46	96
2007	9	8	11%	0	0%	17	64	0	81	7	5	11%	0	0%	12	41	0	53	134
2008	4	14	23%	47	77%	65	1	5	71	6	3	16%	16	84%	25	0	14	39	110
2009	5	8	15%	28	78%	41	18	16	75	8	4	17%	13	76%	25	7	39	71	146
2010	6	17	27%	19	53%	42	27	2	71	3	8	17%	1	11%	12	37	4	53	124
2011	2	11	22%	27	71%	40	12	4	56	9	4	12%	21	84%	34	7	11	52	108

* Percent of aged animals (including unaged adults but excluding juveniles) 1 1/2 years old

^ Number of animals two years old and older. Animals aged older than two (excluding unaged adults) are lumped into this two plus category

** Percent of aged animals (not including juveniles or unaged adults) two years old or older

++ includes juveniles

+++ Unaged adults - unaged animals older than yearlings

Snowy Range Elk (EL533)
Hunt Areas 8, 9, 10, 11, 12, 110, 114 and 125
2012 Season Recommendations

Hunt Area	Type	Dates of Seasons		Limitations
		Opens	Closes	
*8	1	Oct. 1	Oct. 31	Limited quota; 150 licenses any elk
		Nov. 1	Dec. 31 <u>Jan. 31</u>	Unused Area 8 Type 1 licenses valid for any elk west of Sand Creek Road (Albany County Road 34) and antlerless elk east of Sand Creek Road (Albany County Road 34)
	<u>6</u>	<u>Aug. 15</u>	<u>Jan. 31</u>	<u>Limited quota; 100 licenses cow or calf</u>
9		Oct. 15 <u>1</u>	Oct. 19 <u>7</u>	General license; any elk
		Oct. 20 <u>8</u>	Oct. 31	General license; antlered <u>antlerless</u> elk
	6	Aug. 15	Jan. 31 <u>Sept. 30</u>	Limited quota; 50 <u>100</u> licenses cow or calf valid on private land
		<u>Oct. 1</u>	<u>Jan. 31</u>	<u>Unused Area 9 Type 6 licenses valid in the entire area</u>
10		Oct. 1	Oct. 31	General license; any elk
	<u>4</u>	<u>Aug. 15</u>	<u>Sep. 30</u>	<u>Limited quota; 250 licenses antlerless elk valid on private land</u>
	6	Aug. 15	Sep. 30	Limited quota; 500 <u>800</u> licenses cow or calf valid on private land
		Oct 1	Jan. 31	Unused Area 10 Type 4 and Type 6 licenses valid for <u>antlerless elk in the entire Area</u>
11	1	Oct. 1	Oct. 31	Limited quota; 150 licenses any elk
	4	Oct. 1	Oct. 31	Limited quota; 300 licenses antlerless elk
	6	Aug. 15	Jan. 31	Limited quota; 25 licenses cow or calf valid on private land
12		Oct. 15	Oct. 31	General license; any elk
	<u>4</u>	<u>Oct. 8</u>	<u>Nov. 30</u>	<u>Limited quota; 100 licenses antlerless elk</u>
12, *13, 15, *110	6	Aug. 15	Jan. 31	Limited quota; 125 <u>75</u> licenses cow or calf valid on private land
12, 130	7	<u>Oct. 1</u>	<u>Nov. 14</u>	<u>Limited quota; 200 licenses cow or calf valid in Area 12</u>
		Dec. 1	Jan. 31	Limited quota; 100 licenses cow or calf <u>Unused Area 12, 130 Type 7 licenses</u> valid on the Savage Meadows Hunter Management Area (HMA permission slip required)
*110		Oct. 15	Oct. 31	General license; any elk
		<u>Oct. 22</u>	<u>Oct. 31</u>	<u>General license; antlerless elk</u>
	<u>4</u>	<u>Oct. 8</u>	<u>Nov. 30</u>	<u>Limited quota; 75 licenses antlerless elk</u>
114	1	Oct. 1	Jan. 31	Limited quota; 150 <u>100</u> licenses any elk
		<u>Oct. 1</u>	<u>Oct. 31</u>	<u>Limited quota; 75 licenses antlerless elk; also valid in Area 125 north of Interstate Highway 80</u>
	6	Aug. 15	Sep. 30 <u>Jan. 31</u>	Limited quota; 150 licenses cow or calf
		<u>Oct. 1</u>	<u>Oct. 31</u>	<u>Unused Area 114 Type 6 licenses cow or calf; also valid in Area 125 north of Interstate Highway 80</u>
		<u>Nov. 1</u>	<u>Jan. 31</u>	<u>Unused Area 114 Type 4 and Type 6 licenses valid for antlerless elk in all of Area 114</u>
*125	1	Oct. 1	Nov. 14 <u>Dec. 31</u>	Limited quota; 125 <u>150</u> licenses any elk
		Nov. 15 <u>Jan. 1</u>	Jan. 31	Unused Area 125 Type 1 licenses valid for antlerless elk
	6	Oct. 1	Jan. 31	Limited quota; 200 licenses cow or calf

Summary of Proposed Changes in License Numbers

Hunt Area	Type	Change From 2011
8	6	+100
9	6	+50
10	4	-250
10	6	+300
12	6	-50
12	4	-100
12, 130	7	+100
110	4	-75
110	7	+100
114	1	-50
114	4	-75
125	1	+25
Herd Unit Total	1	-25
Herd Unit Total	4	-500
Herd Unit Total	6	+400
Herd Unit Total	7	+200

Management Evaluation

A postseason classification sample of 2,138 elk produced ratios of 19 bulls and 44 calves /100 cows in this herd unit (Figure 1). The classification survey was conducted from a helicopter in conjunction with local mule deer classifications. A comparison of the trend in bull ratios between General season Hunt Areas and Limited Quota Hunt Areas in the Snowy Range Herd Unit demonstrates the difference in ratios between these two season strategies (Figure 2). It would appear the Limited Quota Hunt Area's ratio "carries" the bull ratio at the entire herd unit level.

The 2010 postseason population estimate for the Snowy Range herd unit was 4,405 elk. We consider the POP-II population model for this herd unit to be low quality. Annual postseason classification data collected from the ground in Hunt Areas 8 and 9 is known to contain an unknown proportion elk which have migrated into Wyoming from Colorado. Classification data from other Hunt Areas is typically collected in late fall, in conjunction with mule deer surveys, and may not provide adequate representation for this segment of the elk herd's composition, due to unknown elk which may be located at higher elevations on national forest. The applicability of current elk model parameters, to the Snowy Range Herd Unit, has not been validated either.

Figure 1. 2000-2011 Bull and calf ratios from the Snowy Range Elk Herd Unit, Wyoming.

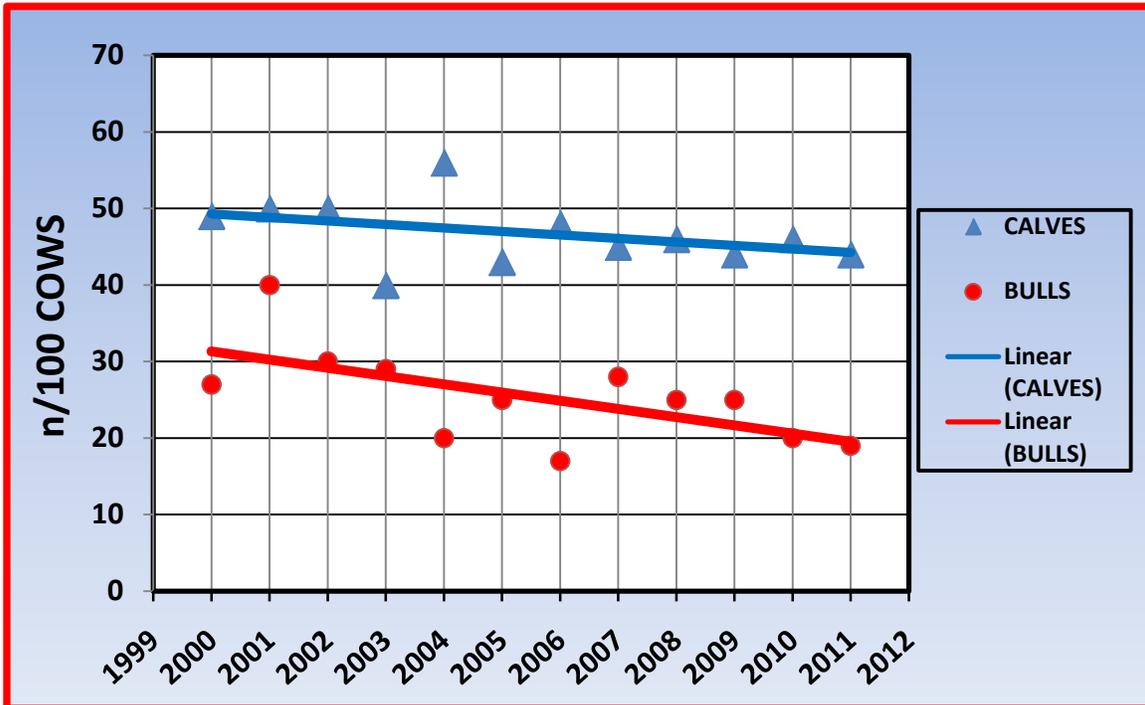
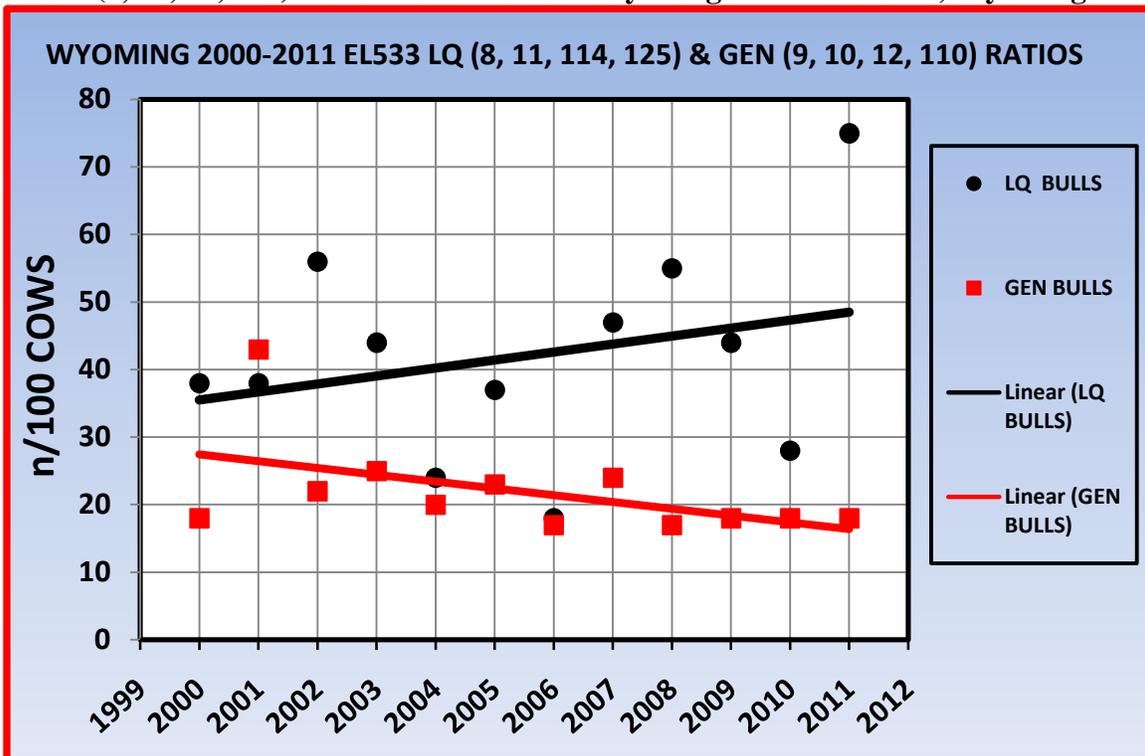


Figure 2. 2000-2011 Bull ratios from limited quota (8, 11, 114, 125) and general season (9, 10, 12, 110) Hunt Areas in the Snowy Range Elk Herd Unit, Wyoming.



Harvest

The 2011 preliminary harvest survey data indicated 5,857 (6% increase from 2010) active licensed hunters harvested 1,883 (19% increase from 2010), with a total harvest success

rate of 32% (4% increase from 2010). Branch antlered bulls accounted for 84% of the male harvest in 2011, and this was 5% more than the 2010 branch antlered bull harvest. Antlerless elk accounted for 58% of the total 2011 elk harvest in the Snowy Range Herd Unit.

2012 Season Proposal

The proposed seasons in the Snowy Range Herd Unit should continue to reduce the overall elk population. Opening limited quota antlerless seasons on private land in mid-August and increasing the length of these seasons should provide landowners and managers with an opportunity to address late summer and late winter damage issues. Offering additional Type 1 licenses and season days in Areas 8, 114 and 125 should assist in reducing the bull ratio towards the desired recreational management strategy ratio maximum. Future harvest opportunity for antlered elk may need to be further reduced to insure ratios do not reach the threshold for the recreational management strategy.

EL533_2012_SEASON

Data from 1987 to 2013

Simulation from 2005 to 2013

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	31.0	31.0	40.0	40.0	10.0	10.0	1.00	1.00	1.00	1.00
1	17.0	20.2	1.0	1.0	6.5	6.0	0.55	1.00	0.30	1.00
2	10.2	16.2	1.0	1.0	6.5	6.0	1.00	1.00	1.00	1.00
3	6.1	12.9	1.0	1.0	6.5	6.0	1.00	1.00	1.00	1.00
4	3.7	10.4	1.0	1.0	6.5	6.0	1.00	1.00	1.00	1.00
5	2.2	8.3	1.0	1.0	6.5	6.0	1.00	1.00	1.00	1.00
6	1.3	6.6	1.0	1.0	6.5	6.0	1.00	1.00	1.00	1.00
7	0.8	5.3	1.0	1.0	25.0	10.0	1.00	1.00	1.00	1.00
8	0.5	4.2	1.0	1.0	50.0	10.0	1.00	1.00	1.00	1.00
9	0.3	3.4	1.0	1.0	75.0	10.0	1.00	1.00	1.00	1.00
10	0.2	2.7	1.0	1.0	80.0	10.0	1.00	1.00	1.00	1.00
11	0.1	2.2	1.0	1.0	100.0	10.0	1.00	1.00	1.00	1.00
12	0.1	1.7	1.0	1.0	100.0	20.0	1.00	1.00	1.00	1.00
13	0.0	1.4	1.0	1.0	100.0	30.0	1.00	1.00	1.00	1.00
14	0.0	1.1	1.0	1.0	100.0	40.0	1.00	1.00	1.00	1.00
15	0.0	0.9	1.0	1.0	100.0	50.0	1.00	1.00	1.00	1.00
16	0.0	0.7	1.0	1.0	100.0	60.0	1.00	1.00	1.00	1.00
17	0.0	0.6	1.0	1.0	100.0	70.0	1.00	1.00	1.00	1.00
18	0.0	0.5	1.0	1.0	100.0	80.0	1.00	1.00	1.00	1.00
19	0.0	0.4	1.0	1.0	100.0	90.0	1.00	1.00	1.00	1.00
20	0.0	0.3	1.0	1.0	100.0	100.0	1.00	1.00	1.00	1.00

Sum = 204.5 Estimated Sum = 10912 Subadults: Ages 0 to 0

Bio-Year	MSI Function is Linear					Postseason MSI	Effort & Wound Set Used
	Preseason MSI	Harvest Subadults#	Des. Males#	Pop Size Females#	in NA		
2005	0.88	110	796	520		0.23	1
2006	0.73	127	865	548		0.73	1
2007	0.85	134	840	583		1.53	1
2008	0.83	121	816	599		1.63	1
2009	0.97	148	831	743		1.85	1
2010	0.89	126	781	593		1.70	1
2011	1.07	187	793	903		1.50	1
2012	1.15	120	500	800		1.50	1
2013	1.28	120	500	800		1.50	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 - 2	Young/100 Fems Age 3 - 20	Sex Ratio: 50 : 50
2005	0.0	30.0	90.0	
2006	0.0	30.0	90.0	
2007	0.0	30.0	90.0	
2008	0.0	30.0	90.0	
2009	0.0	30.0	90.0	
2010	0.0	30.0	90.0	
2011	0.0	30.0	90.0	
2012	0.0	30.0	90.0	
2013	0.0	30.0	90.0	
2014	0.0	30.0	90.0	

POP-II (V1.2.9) Simulation Output Tables for E533_2012_SEASON.GN1, 03/02/2012 02:09 pm

Table 1. Population Size During Bio-Year for E533_2012_SEASON.GN1 03/02/2012 02:09 pm

Bio- Year	Start	Pre- Season	Post Season	End	%Growth
2005	10912	9681	8112	7922	5.4
2006	11498	10396	8702	8099	2.0
2007	11732	10428	8715	7548	-6.8
2008	10931	9745	8056	6977	-7.2
2009	10143	8847	6952	5912	-14.8
2010	8643	7618	5968	5146	-12.4
2011	7568	6476	4405	3868	-24.0
2012	5748	4839	3277	2875	-25.9
2013	4259	3514	1952	1710	-40.0

Table 2. Preseason Natural Mortality for E533_2012_SEASON.GN1 03/02/2012 02:09 pm

Bio- Year	Sub- Adults	Adult Males	Adult Females	Total	% of Pop
2005	1165	20	47	1231	11.3
2006	1044	17	41	1102	9.6
2007	1235	20	48	1304	11.1
2008	1123	19	44	1186	10.8
2009	1228	20	48	1296	12.8
2010	972	15	37	1025	11.9
2011	1036	15	40	1091	14.4
2012	865	11	33	909	15.8
2013	708	10	27	745	17.5

Table 3. Harvest Mortality for E533_2012_SEASON.GN1 03/02/2012 02:09 pm

Bio- Year	Sub- Adults	Adult Males	Adult Females	Total	% of Pop
2005	110	796	520	1426	14.7
2006	127	865	548	1540	14.8
2007	134	840	583	1557	14.9
2008	121	816	599	1536	15.8
2009	148	831	743	1722	19.5
2010	126	781	593	1500	19.7
2011	187	793	903	1883	29.1
2012	120	500	800	1420	29.3
2013	120	500	800	1420	40.4

Table 4. Harvest Percentages for E533_2012_SEASON.GN1 03/02/2012 02:09 pm

Bio-Year	Sub-Adults	Adult Males	Adult Females	Total	Yearling Males
2005	5.1	35.4	9.8	14.73	26.8
2006	5.0	37.3	9.9	14.81	28.8
2007	5.6	35.4	10.3	14.93	32.1
2008	5.4	36.6	11.4	15.76	28.8
2009	7.6	40.5	15.3	19.46	29.3
2010	7.2	45.8	14.3	19.69	28.5
2011	13.5	56.4	24.5	29.07	33.1
2012	11.8	51.5	28.0	29.35	36.4
2013	17.8	67.1	38.2	40.41	35.2

Table 5. Postseason Natural Mortality for E533_2012_SEASON.GN1 03/02/2012 02:09 pm

Bio-Year	Sub-Adults	Adult Males	Adult Females	Total	% of Pop
2005	47	26	117	190	2.3
2006	175	78	350	603	6.9
2007	344	159	664	1167	13.4
2008	347	148	584	1079	13.4
2009	328	142	571	1041	15.0
2010	275	96	451	822	13.8
2011	177	53	307	537	12.2
2012	133	42	227	401	12.2
2013	81	19	141	242	12.4

Table 6. Preseason Ratios for E533_2012_SEASON.GN1 03/02/2012 02:09 pm

Bio-Year	Subadults /100 1+F	2+ Males /100 1+F	Yr. Males /100 1+F	Ad Males /100 1+F
2005	40.5	25.5	17.0	42.5
2006	45.6	24.1	17.7	41.8
2007	42.4	22.6	19.4	42.0
2008	43.0	24.4	18.0	42.4
2009	39.9	24.1	18.1	42.2
2010	42.3	23.8	17.2	41.0
2011	37.6	20.1	18.1	38.2
2012	35.6	16.7	17.4	34.1
2013	32.3	17.9	17.7	35.6

Table 7. Postseason Ratios for E533_2012_SEASON.GN1 03/02/2012 02:09 pm

Bio-Year	Subadults /100 1+F	2+ Males /100 1+F	Yr. Males /100 1+F	Ad Males /100 1+F
2005	42.9	15.0	14.1	29.1
2006	48.4	13.3	14.3	27.6
2007	44.9	13.0	16.0	29.0
2008	46.2	14.0	14.9	28.9
2009	43.9	13.0	15.2	28.2
2010	46.3	10.7	13.5	24.1
2011	43.8	5.8	14.0	19.8
2012	44.8	6.4	15.0	21.4
2013	44.8	1.5	14.6	16.1

Table 8. End of Year Ratios for E533_2012_SEASON.GN1 03/02/2012 02:09 pm

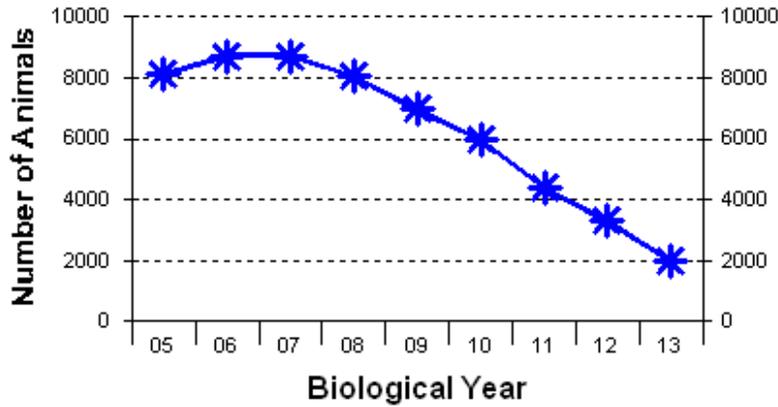
Bio-Year	Subadults /100 Adlts	Subadults /100 1+F	Yr. Males /100 1+F	Ad Males /100 1+F
2005	33.2	43.0	14.2	29.3
2006	37.7	48.3	14.7	28.0
2007	33.8	43.8	16.6	29.7
2008	34.3	44.3	15.3	29.4
2009	32.4	41.7	15.6	28.7
2010	35.4	44.1	13.7	24.5
2011	35.0	42.0	14.3	20.2
2012	35.3	43.0	15.3	21.8
2013	37.0	43.1	14.9	16.5

Table 9. Reproduction at Start of Bio-Year for E533_2012_SEASON.GN1 03/02/2012 02:09 pm

Bio-Year	Young / 100 AF 1 +	Sub-Ad. / 100 AF 1 +	Total Young	Total Sub-Adult	Total Females 1 +
2005	62	62	3308	3308	5336
2006	64	64	3576	3576	5588
2007	64	64	3633	3633	5703
2008	64	64	3383	3383	5302
2009	65	65	3166	3166	4905
2010	65	65	2731	2731	4193
2011	65	65	2421	2421	3725
2012	65	65	1880	1880	2885
2013	65	65	1383	1383	2120

POP-II (V1.2.9) Graph 1. Population Size During Bio-Year

Graph 1. Population Size During Bio-Year



* Postseason ○ Observed

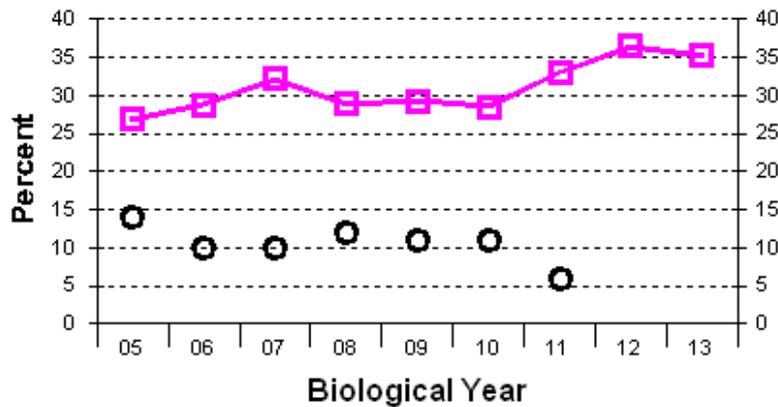
E533_2012_SEASON.GN1, 03/02/2012 02:09 pm

YR	SIM	OBS
05	8112	----
06	8702	----
07	8715	----
08	8056	----
09	6952	----
10	5968	----
11	4405	----
12	3277	----
13	1952	----

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POP-II (V1.2.9) Graph 4. Harvest Percentages

Graph 4. Harvest Percentages

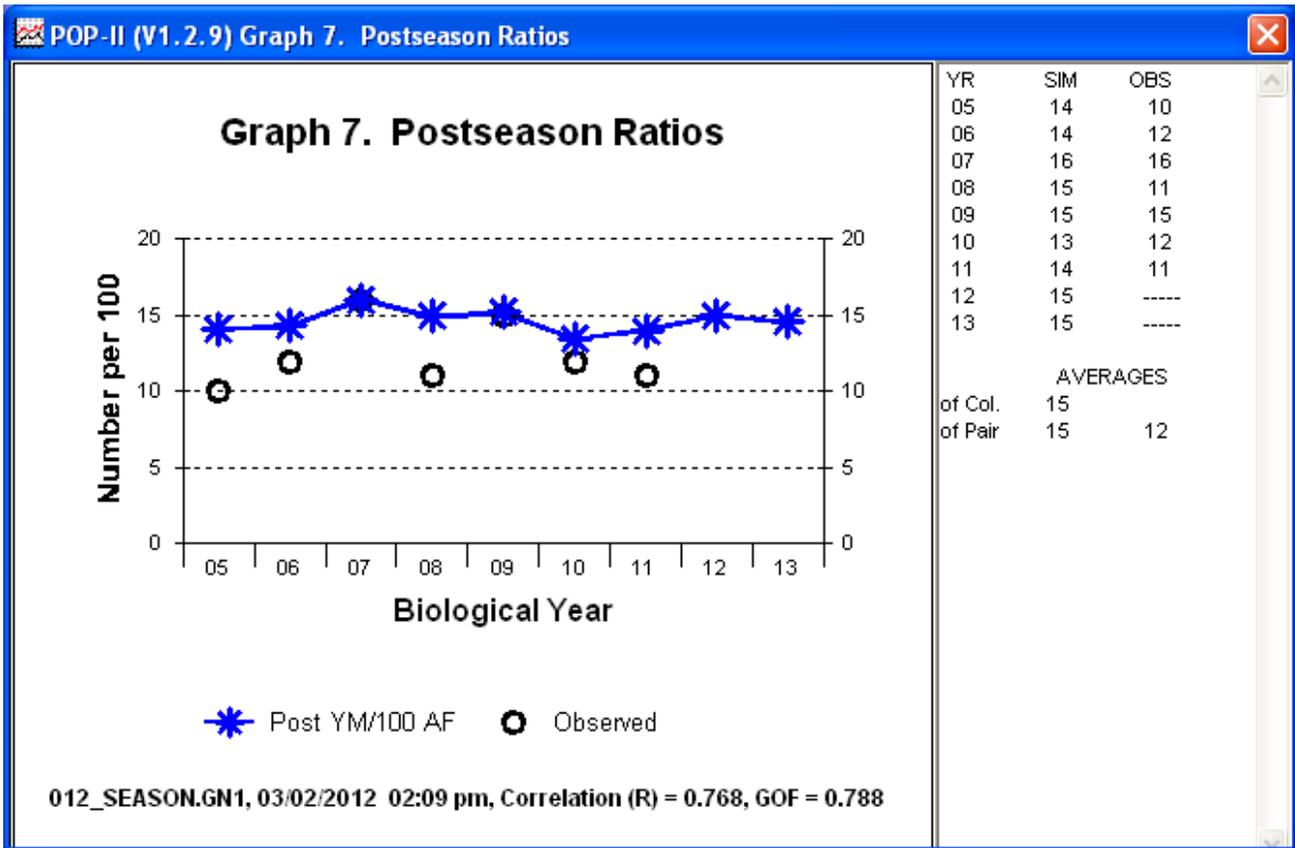
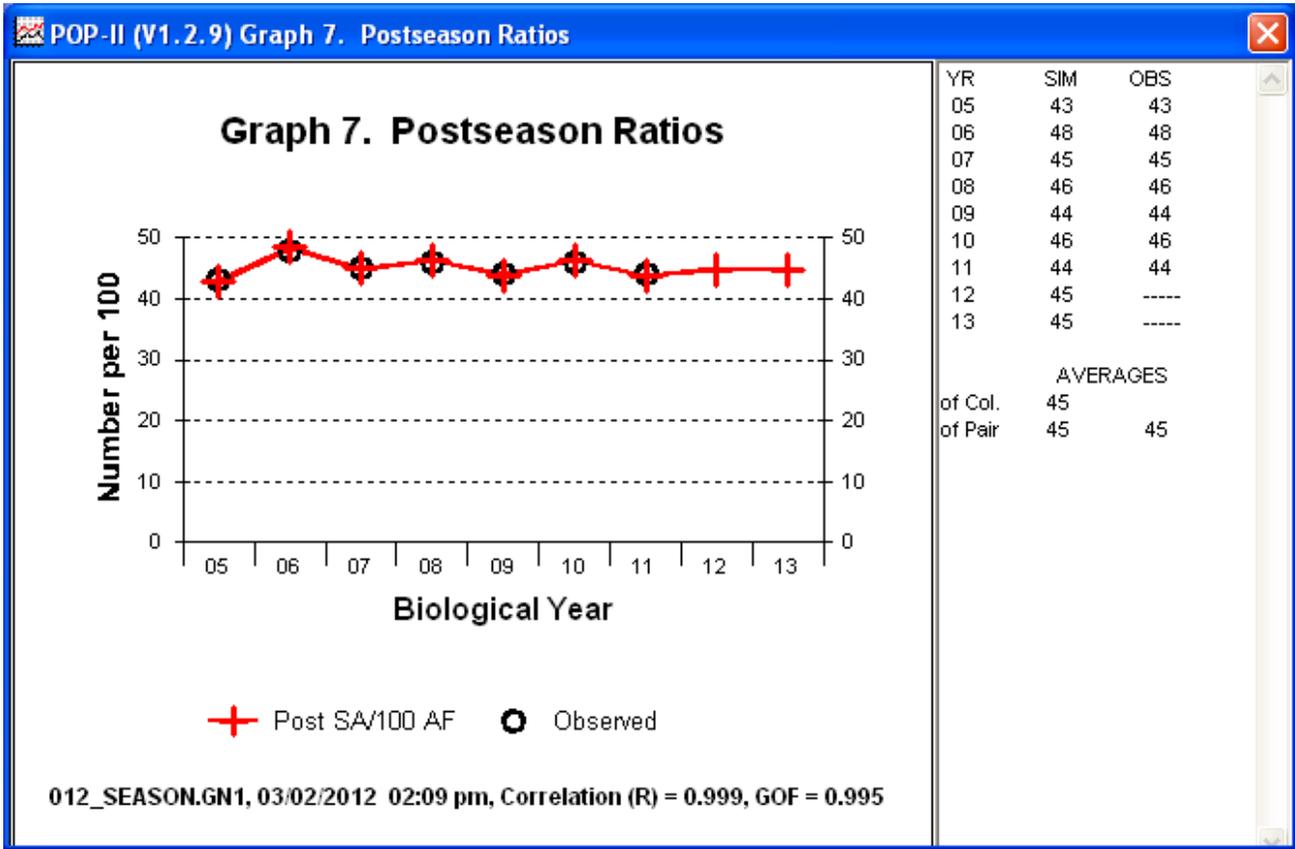


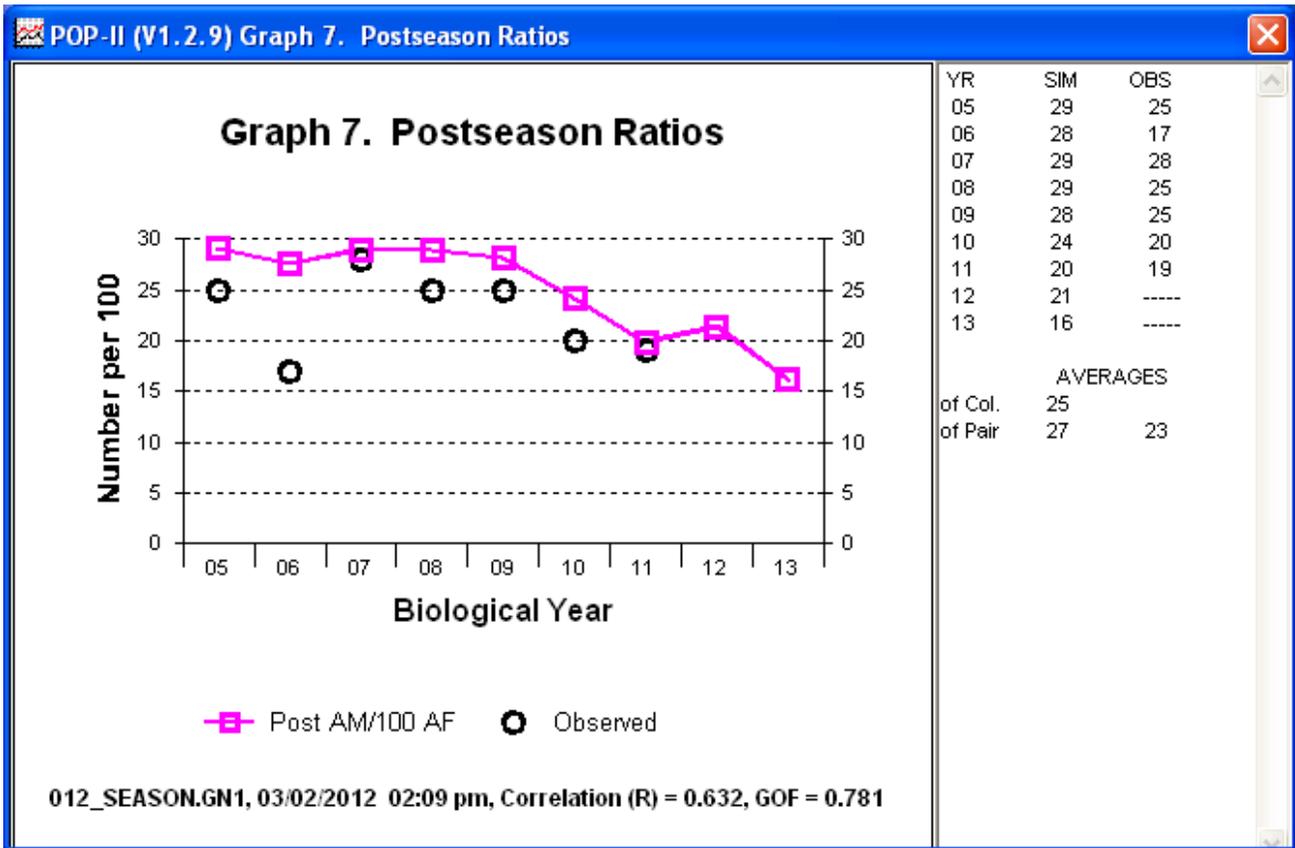
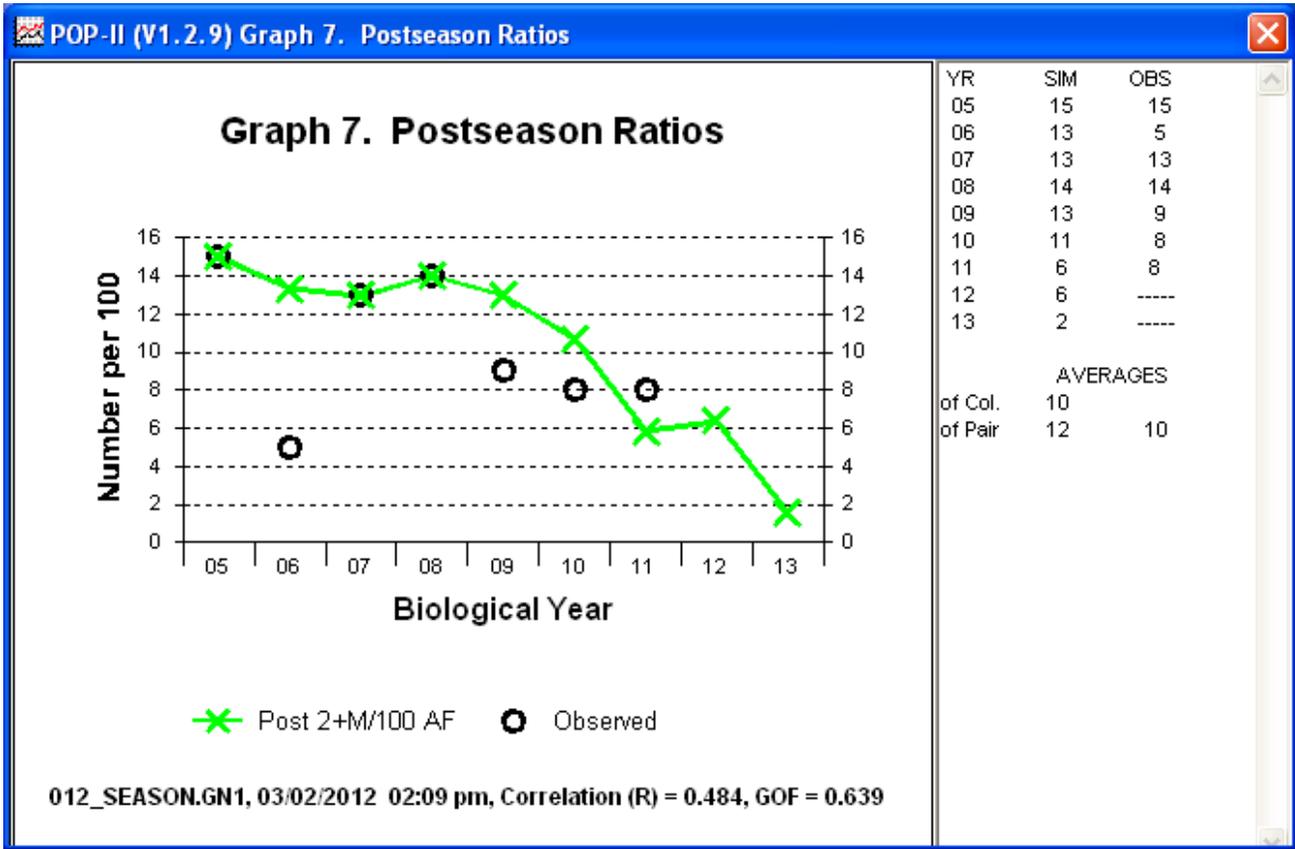
■ Yearling Males ○ Observed

12_SEASON.GN1, 03/02/2012 02:09 pm, Correlation (R) = -0.875, GOF = -0.845

YR	SIM	OBS
05	27	14
06	29	10
07	32	10
08	29	12
09	29	11
10	29	11
11	33	6
12	36	----
13	35	----

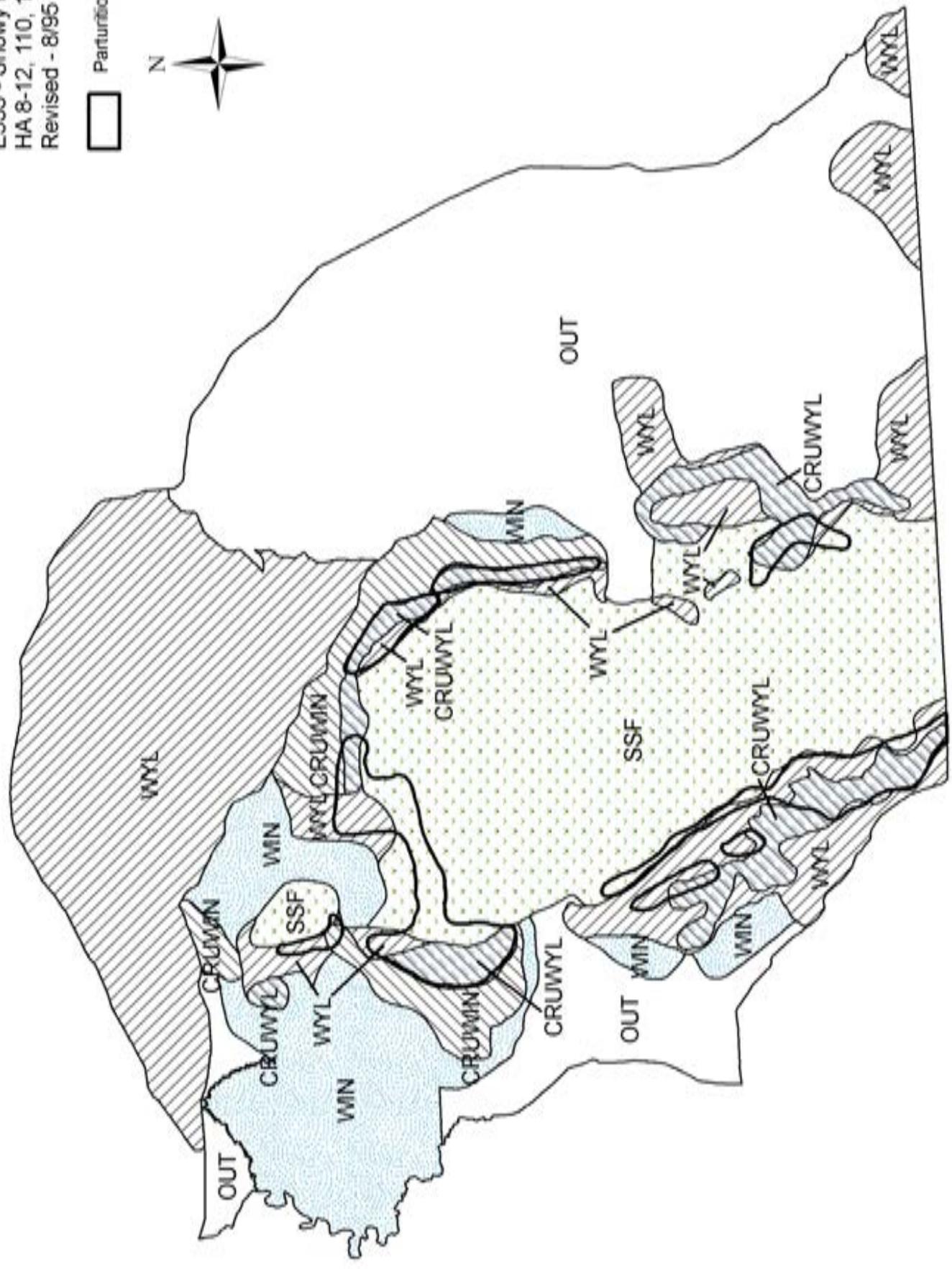
AVERAGES
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E533 - Snowy Range
HA 8-12, 110, 114, 125
Revised - 8/95

Parturition Area



2011 - JCR Evaluation Form

SPECIES: Elk

PERIOD: 6/1/2011 - 5/31/2012

HERD: EL534 - SHIRLEY MOUNTAIN

HUNT AREAS: 16

PREPARED BY: WILL SCHULTZ

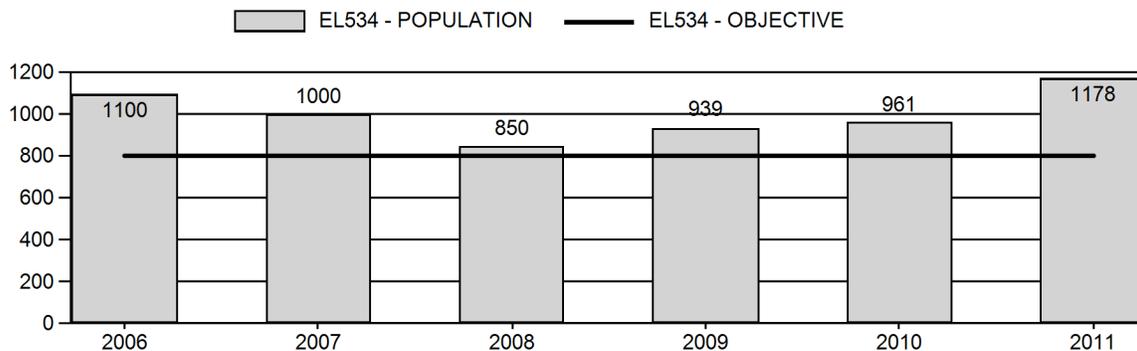
	2006 - 2010 Average	2011	2012 Proposed
Population:	970	1,178	1,034
Harvest:	270	364	308
Hunters:	543	576	600
Hunter Success:	50%	63%	51%
Active Licenses:	561	607	600
Active License Percent:	48%	60%	51%
Recreation Days:	3,572	4,670	4,600
Days Per Animal:	13.2	12.8	14.9
Males per 100 Females	33	0	
Juveniles per 100 Females	43	0	

Population Objective:	800
Management Strategy:	Recreational
Percent population is above (+) or below (-) objective:	47%
Number of years population has been + or - objective in recent trend:	10
Model Date:	03/02/2012

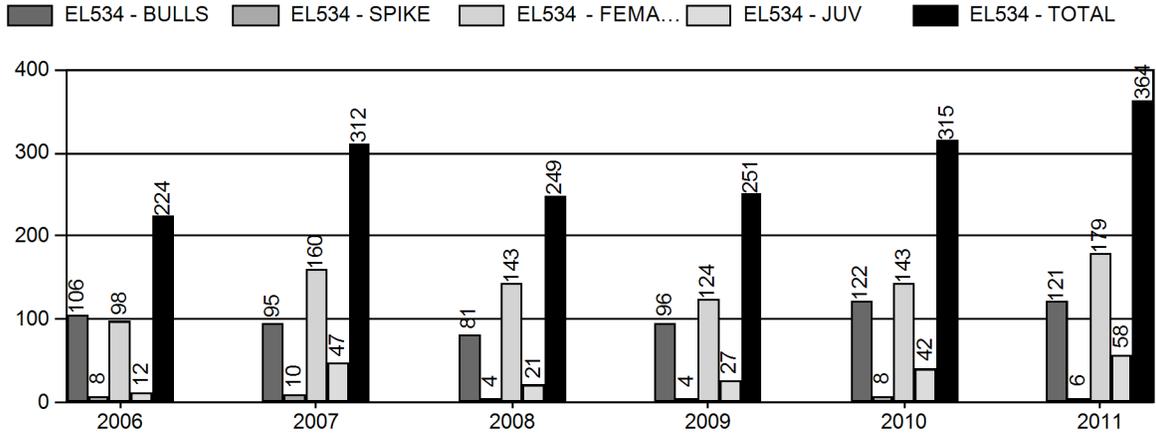
Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	<u>JCR Year</u>	<u>Proposed</u>
Females ≥ 1 year old:	22.9%	21.4%
Males ≥ 1 year old:	30.9%	32.9%
Juveniles (< 1 year old):	16.3%	12.3%
Total:	23.4%	22.4%
Proposed change in post-season population:	-25.8%	-24.7%

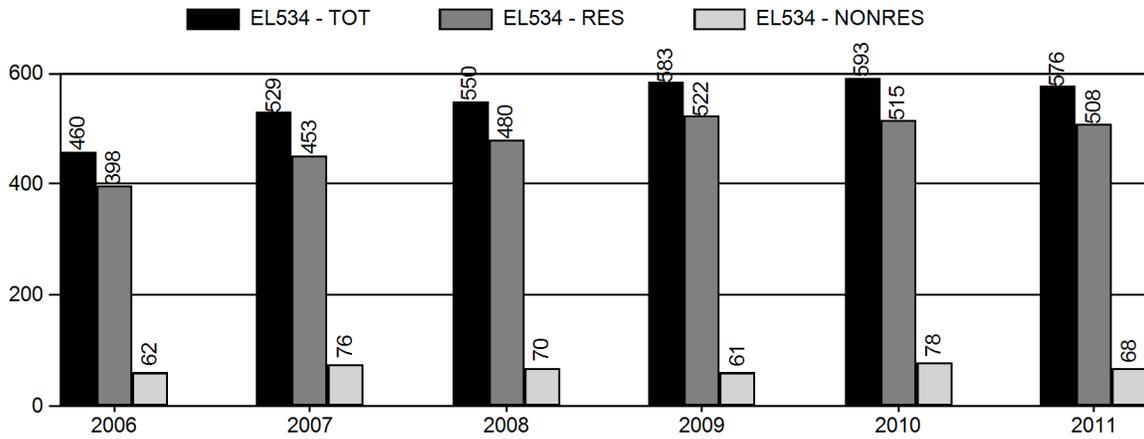
Population Size - Postseason



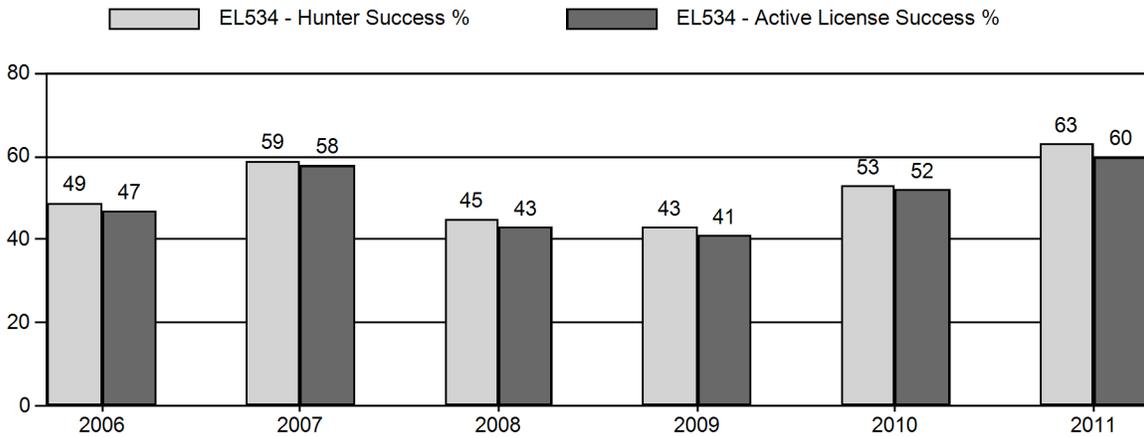
Harvest



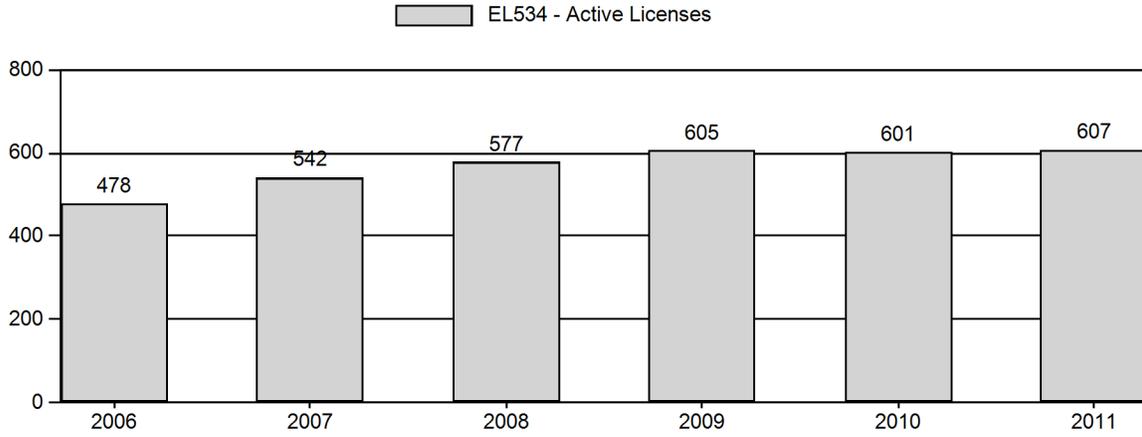
Number of Hunters



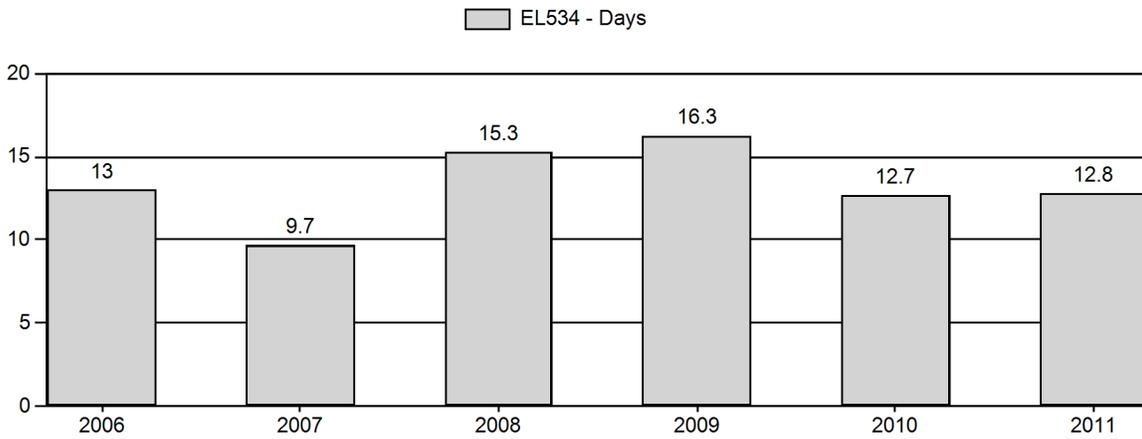
Harvest Success



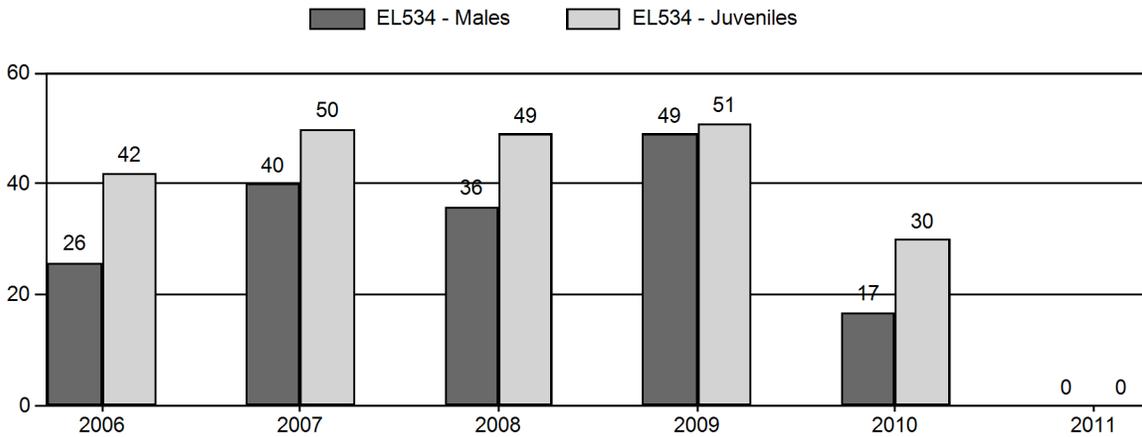
Active Licenses



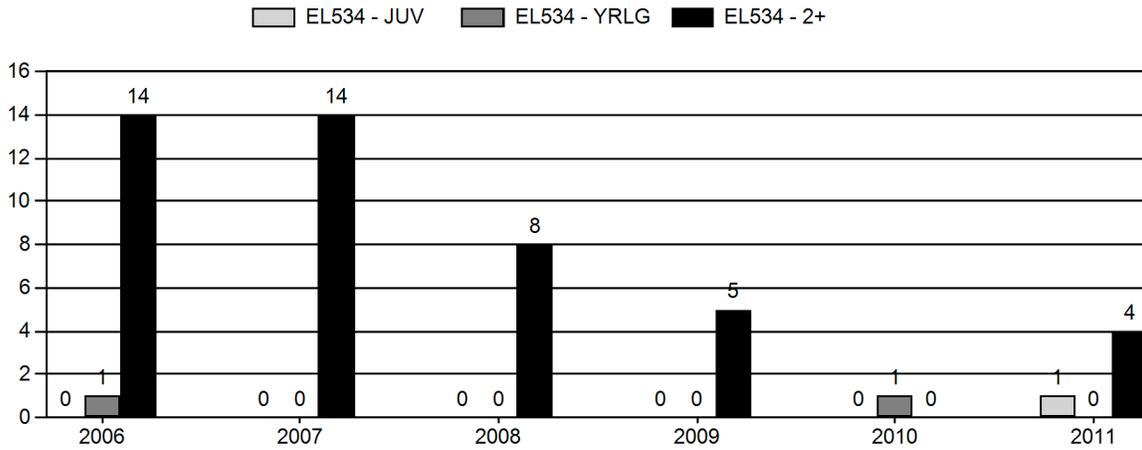
Days per Animal Harvested



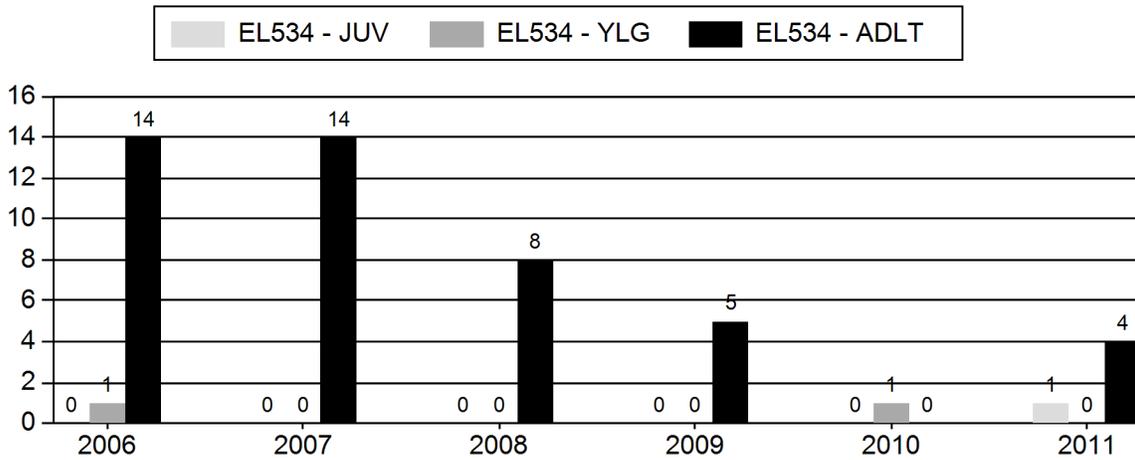
Postseason Animals per 100 Females



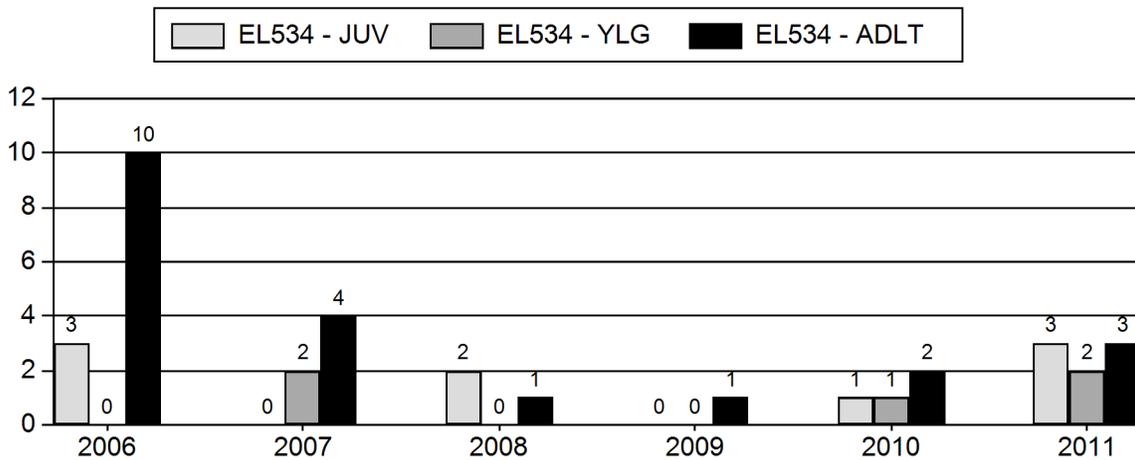
Age Structure of Field Checked Males



Age Structure Data (Field and Laboratory) - Male



Age Structure Data (Field and Laboratory) - Female



2006 - 2011 Postseason Classification Summary

for Elk Herd EL534 - SHIRLEY MOUNTAIN

Year	Post Pop	MALES				FEMALES		JUVENILES		Tot Cls	Cls Obj	Males to 100 Females				Young to		
		Ylg	Adult	Total	%	Total	%	Total	%			YIng	Adult	Total	Int	100 Fem	Conf Int	100 Adult
2006	1,100	40	28	68	16%	200	60%	108	25%	436	408	15	11	26	± 4	42	± 5	33
2007	1,000	30	42	72	21%	179	53%	89	26%	340	387	17	23	40	± 0	50	± 0	35
2008	850	71	91	162	20%	444	54%	216	26%	822	440	16	20	36	± 11	49	± 12	36
2009	939	37	108	145	25%	295	50%	151	26%	591	463	13	37	49	± 0	51	± 0	34
2010	961	39	27	66	11%	397	68%	121	21%	584	469	10	7	17	± 2	30	± 3	26
2011	1,178	0	0	0	0%	0	0%	0	0%	0	500	0	0	0	± 0	0	± 0	0

2011 HUNTING SEASONS

EL534 - SHIRLEY MOUNTAIN

<u>Hunt Area</u>	<u>Add'l Hunt Areas</u>	<u>Type</u>	<u>Quota</u>	<u>Season Dates</u>	<u>Limitations</u>
16		Type 1	200	10/01 - 10/31	Any
16		Type 1	25	11/01 - 11/15	Beer Mug HMA
16		Type 4	200	01/01 - 01/31	Full Priced Antlerless
16		Type 4	300	10/01 - 11/30	Full Priced Antlerless
16		Type 6	100	01/01 - 01/31	Reduced Price cow/calf
16		Type 6	100	10/01 - 11/30	Reduced Price cow/calf
16		Type 7	50	01/01 - 01/31	Reduced Price cow/calf
16		Type 7	50	08/15 - 09/30	Valid on private land
16		Type 7	50	10/01 - 11/30	Reduced Price cow/calf

Area	Type	Active Lic/Htrs	Bull	Cow	Calf	Total	Success	Days/Harvest	Days	Licenses Sold
2011										
16 SHIRLEY MOUNTAIN										
	Type 1	195	127	12	0	139	71.3%	9.6	1333	200
	Type 4	270	0	111	47	158	58.5%	14.2	2237	301
	Type 6	89	0	34	11	45	50.6%	16.7	752	100
	Type 7	53	0	22	0	22	41.5%	15.8	348	54
	Pooled Total	572 (607)*	127	179	58	364	63.6% (60.0%)*	12.8	4670	
	Pooled Resident	504	106	165	56	327	64.9%	12.7	4165	
	Pooled Nonresident	68	21	14	2	37	54.4%	13.6	505	
	2011 Hunt Area Tot	572 (607)*	127	179	58	364	63.6% (60.0%)*	12.8	4670	655
	2011 Herd Total	576 (607)*	127	179	58	364	63.2% (60.0%)*	12.8	4670	655
	*Active Licenses									

2006 - 2011 Harvest Age Structure

for Elk Herd EL534 - SHIRLEY MOUNTAIN

Year	Males									Females									Herd Tot
	Juv	1	% *	2 ^	% **	Tot Aged ++	Not Aged +++	Unk	Tot Chkd	Juv	1	% *	2 ^	% **	Tot Aged ++	Not Aged +++	Unk	Tot Chkd	
2006	0	1	7%	14	93%	15	0	0	15	3	0	0%	10	100%	13	0	0	13	28
2007	0	0	0%	0	0%	0	14	0	14	0	2	33%	0	0%	2	4	0	6	20
2008	0	0	0%	7	100%	7	1	0	8	2	0	0%	1	100%	3	0	0	3	11
2009	0	0	0%	0	0%	0	5	0	5	0	0	0%	1	100%	1	0	0	1	6
2010	0	1	100%	0	0%	1	0	4	5	1	1	33%	2	67%	4	0	2	6	11
2011	1	0	0%	4	100%	5	0	6	11	3	2	40%	2	50%	7	1	1	9	20

* Percent of aged animals (including unaged adults but excluding juveniles) 1 1/2 years old

^ Number of animals two years old and older. Animals aged older than two (excluding unaged adults) are lumped into this two plus category

** Percent of aged animals (not including juveniles or unaged adults) two years old or older

++ includes juveniles

+++ Unaged adults - unaged animals older than yearlings

**Shirley Mountain Elk (EL534)
Hunt Areas 16
2012 Season Recommendations**

Hunt Area	Type	Dates of Seasons		Limitations
		Opens	Closes	
*16	1	Oct. 1	Oct. 31	Limited quota; 200 licenses any elk
		Nov. 1	Nov. 15	Unused Area 16 Type 1 licenses valid on the Beer Mug Mountain Hunter Management Area (HMA permission slip required)
	2	Nov. 1	Nov. 30	Limited quota; 50 licenses any elk
		Dec. 1	Dec. 15	Unused Area 16 Type 1 and Type 2 licenses valid on the Beer Mug Hunter Management Area (HMA permission slip required)
		Jan. 1	Jan. 15 31	Unused Area 16 Type 1 <u>and Type 2</u> licenses valid on the Beer Mug Hunter Management Area (HMA permission slip required)
	4	Oct. 1	Nov. 30 Jan. 31	Limited quota; 300 licenses antlerless elk
	6	Aug. 15	Sep. 30	Limited quota; 150 licenses cow or calf valid on private land
		Oct. 1	Nov. 30 Jan. 31	Unused Area 16 Type 6 licenses cow or calf valid in the entire area
	7	Aug. 15	Sep. 30	Limited quota; 50 licenses cow or calf valid on private land
		Oct. 1	Nov. 30	Unused Area 16 Type 7 licenses cow or calf valid in the entire area
		Dec. 1	Dec. 15	Unused Area 16 Type 1, Type 4, and Type 6 and Type 7 licenses valid on the Beer Mug Hunter Management Area (HMA permission slip required)
		Jan. 1	Jan. 31	Unused Area 16 Type 4, Type 6 and Type 7 licenses valid for antlerless elk

Summary of Proposed Changes in License Numbers

Hunt Area	Type	Change From 2011
16	2	+50 (new)
16	6	+50
16	7	-50

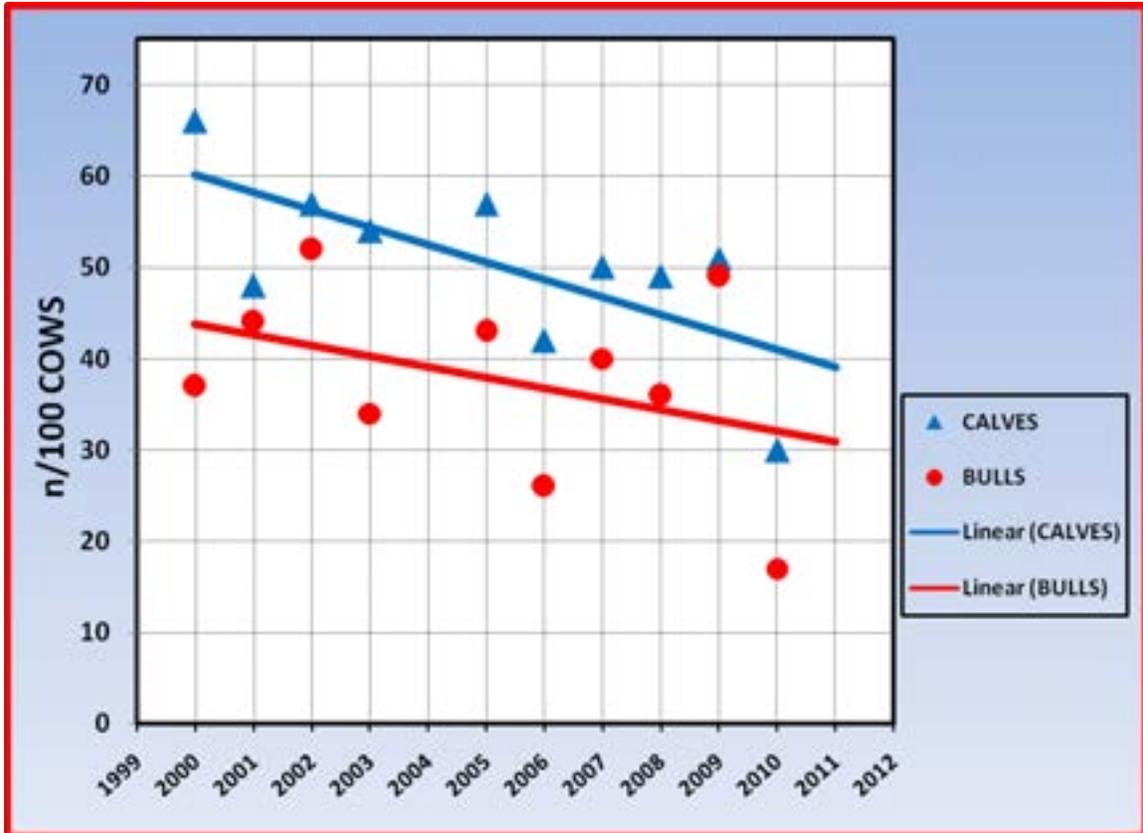
Management Evaluation

A 2011 postseason classification sample was not obtained for this herd unit. Trend from past classifications infer this herd unit was still above the recreational management strategy maximum for bull ratios (Figure 1). The 2010 ratios were well below the trend of ratios observed during the past 10 years, and likely contained observation and sampling bias. Habitat conditions continued to be good during 2011 with above normal

precipitation in the herd unit. Impacts to elk from the development of the Dunlap Wind Farm on the east side of this herd unit continued to be monitored through a University of Wyoming research.

The 2011 POP-II population model was revised for this herd unit to better align simulations with the observed values. This revision resulted in an increase in the 2011 postseason population estimate. The 2011 postseason population estimate was 1,178 elk. We consider the POP-II population model to be one of low quality. Classification data, a major variable in the model, has been inconsistent for this herd unit. The integrity of the herd unit boundaries for this herd unit, as well as for adjacent herd units, is suspect. However, the data collected from the Dunlap Wind Farm research may provide insight into the ranges of elk in this herd unit.

Figure 1. Wyoming 2000-2011 Shirley Mountain Elk Herd Unit bull and calf ratio trend.



Harvest

Preliminary harvest survey data indicated 605 active license hunters harvested 372 elk in 2011, with an overall success rate of 65%. The 2011 harvest increased 15% from the 2010 harvest. The 2011 bull harvest (n=127) was similar to the 2010 bull harvest. This continued rate of bull harvest success was attributed to the restored access to private

lands on the Beer Mug Mountain HMA. Antlerless harvest increased 22% in 2011, with no additional allocation of licenses but rather an increase in season lengths.

2012 Season Proposal

There are several changes proposed to the license quotas for the Shirley Mountain elk herd unit. A Type 2 license valid in November only is proposed, to increase hunting opportunity for any elk while not adding to hunter crowding in October. The Type 4 and 6 license season length has been increased. The Type 7 license had become redundant and was removed to simplify regulations. The continued operation of the Beer Mug Mountain Hunter Management Area should provide an additional opportunity for a limited number of elk hunters in this herd unit.

EL534_2012_SEASON

Data from 2005 to 2013

Simulation from 2005 to 2013

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	40.0	40.0	40.0	40.0	20.0	10.0	1.00	1.00	1.00	1.00
1	14.3	20.2	1.0	1.0	10.0	5.0	0.98	1.00	0.60	1.00
2	10.3	16.2	1.0	1.0	10.0	5.0	1.00	1.00	1.00	1.00
3	7.4	12.9	1.0	1.0	10.0	5.0	1.00	1.00	1.00	1.00
4	5.3	10.4	1.0	1.0	10.0	5.0	1.00	1.00	1.00	1.00
5	3.8	8.3	1.0	1.0	10.0	5.0	1.00	1.00	1.00	1.00
6	2.8	6.6	1.0	1.0	10.0	5.0	1.00	1.00	1.00	1.00
7	2.0	5.3	1.0	1.0	25.0	10.0	1.00	1.00	1.00	1.00
8	1.4	4.2	1.0	1.0	50.0	10.0	1.00	1.00	1.00	1.00
9	1.0	3.4	1.0	1.0	75.0	10.0	1.00	1.00	1.00	1.00
10	0.7	2.7	1.0	1.0	80.0	10.0	1.00	1.00	1.00	1.00
11	0.5	2.2	1.0	1.0	100.0	10.0	1.00	1.00	1.00	1.00
12	0.4	1.7	1.0	1.0	100.0	20.0	1.00	1.00	1.00	1.00
13	0.3	1.4	1.0	1.0	100.0	30.0	1.00	1.00	1.00	1.00
14	0.2	1.1	1.0	1.0	100.0	40.0	1.00	1.00	1.00	1.00
15	0.1	0.9	1.0	1.0	100.0	50.0	1.00	1.00	1.00	1.00
16	0.1	0.7	1.0	1.0	100.0	60.0	1.00	1.00	1.00	1.00
17	0.1	0.6	1.0	1.0	100.0	70.0	1.00	1.00	1.00	1.00
18	0.1	0.5	1.0	1.0	100.0	80.0	1.00	1.00	1.00	1.00
19	0.0	0.4	1.0	1.0	100.0	90.0	1.00	1.00	1.00	1.00
20	0.0	0.3	1.0	1.0	100.0	100.0	1.00	1.00	1.00	1.00
Sum =		230.8	Estimated Sum =		2412.875		Subadults: Ages 0 to 0			

Bio-Year	Preseason MSI	MSI Function is Linear			Postseason MSI	Effort & Wound Set Used
		Harvest Subadults#	Des. Pop Males#	Size in NA Females#		
2005	0.88	19	126	113	1.36	1
2006	0.91	12	114	98	0.34	1
2007	0.68	47	105	163	1.36	1
2008	0.81	21	85	143	1.76	1
2009	0.67	27	100	124	0.96	1
2010	0.75	27	129	144	1.03	1
2011	0.70	60	127	185	0.89	1
2012	0.76	38	120	150	0.70	1
2013	0.78	38	120	150	0.70	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 - 2	Young/100 Fems Age 3 - 20	Sex Ratio: 50 : 50
2006	0.0	30.0	90.0	
2007	0.0	30.0	90.0	
2008	0.0	30.0	90.0	
2009	0.0	30.0	90.0	
2010	0.0	30.0	90.0	
2011	0.0	30.0	90.0	
2012	0.0	30.0	90.0	
2013	0.0	30.0	90.0	
2014	0.0	30.0	90.0	

POP-II (V1.2.9) Simulation Output Tables for EL534_2012_SEASON.GN1, 03/02/2012 06:26 pm

Table 1. Population Size During Bio-Year for EL534_2012_SEASON.GN1 03/02/2012 06:26 pm

Bio- Year	Start	Pre- Season	Post Season	End	%Growth
2005	2413	2105	1821	1520	-11.4
2006	2138	1899	1653	1597	6.6
2007	2278	2082	1736	1487	-7.0
2008	2119	1902	1628	1340	-10.3
2009	1902	1742	1466	1326	-1.4
2010	1875	1700	1370	1228	-7.2
2011	1739	1587	1178	1072	-12.8
2012	1515	1373	1034	960	-10.5
2013	1357	1226	887	823	-14.1

Table 2. Preseason Natural Mortality for EL534_2012_SEASON.GN1 03/02/2012 06:26 pm

Bio- Year	Sub- Adults	Adult Males	Adult Females	Total	% of Pop
2005	294	5	9	308	12.8
2006	225	4	9	239	11.2
2007	185	4	7	196	8.6
2008	205	4	8	217	10.2
2009	151	3	6	160	8.4
2010	164	3	7	174	9.3
2011	143	3	6	152	8.7
2012	135	3	5	143	9.4
2013	124	3	5	131	9.7

Table 3. Harvest Mortality for EL534_2012_SEASON.GN1 03/02/2012 06:26 pm

Bio- Year	Sub- Adults	Adult Males	Adult Females	Total	% of Pop
2005	19	126	113	258	12.3
2006	12	114	98	224	11.8
2007	47	105	163	315	15.1
2008	21	85	143	249	13.1
2009	27	100	124	251	14.4
2010	27	129	144	300	17.6
2011	60	127	185	372	23.4
2012	38	120	150	308	22.4
2013	38	120	150	308	25.1

Table 4. Harvest Percentages for EL534_2012_SEASON.GN1 03/02/2012 06:26 pm

Bio-Year	Sub-Adults	Adult Males	Adult Females	Total	Yearling Males
2005	3.5	23.9	10.9	12.26	27.7
2006	3.1	23.3	9.6	11.79	38.0
2007	9.5	20.1	15.3	15.13	33.2
2008	4.9	17.2	14.6	13.09	31.9
2009	6.6	22.3	14.1	14.41	28.5
2010	7.0	28.5	16.7	17.65	33.3
2011	16.3	30.9	22.9	23.44	33.5
2012	12.3	32.9	21.4	22.44	33.3
2013	13.9	36.9	23.9	25.13	34.5

Table 5. Postseason Natural Mortality for EL534_2012_SEASON.GN1 03/02/2012 06:26 pm

Bio-Year	Sub-Adults	Adult Males	Adult Females	Total	% of Pop
2005	106	85	110	301	16.5
2006	19	15	22	56	3.4
2007	91	69	89	248	14.3
2008	107	81	101	289	17.7
2009	55	37	48	140	9.5
2010	55	37	50	142	10.4
2011	40	28	37	106	9.0
2012	28	19	27	74	7.1
2013	24	16	23	64	7.2

Table 6. Preseason Ratios for EL534_2012_SEASON.GN1 03/02/2012 06:26 pm

Bio-Year	Subadults /100 1+F	2+ Males /100 1+F	Yr. Males /100 1+F	Ad Males /100 1+F
2005	52.3	36.5	14.3	50.8
2006	38.7	29.5	18.5	48.0
2007	46.6	32.5	16.5	49.0
2008	43.6	34.2	16.4	50.6
2009	46.6	36.1	14.7	50.8
2010	44.4	34.7	17.7	52.4
2011	45.4	33.6	17.3	50.8
2012	44.1	34.5	17.6	52.1
2013	43.5	33.7	18.1	51.8

Table 7. Postseason Ratios for EL534_2012_SEASON.GN1 03/02/2012 06:26 pm

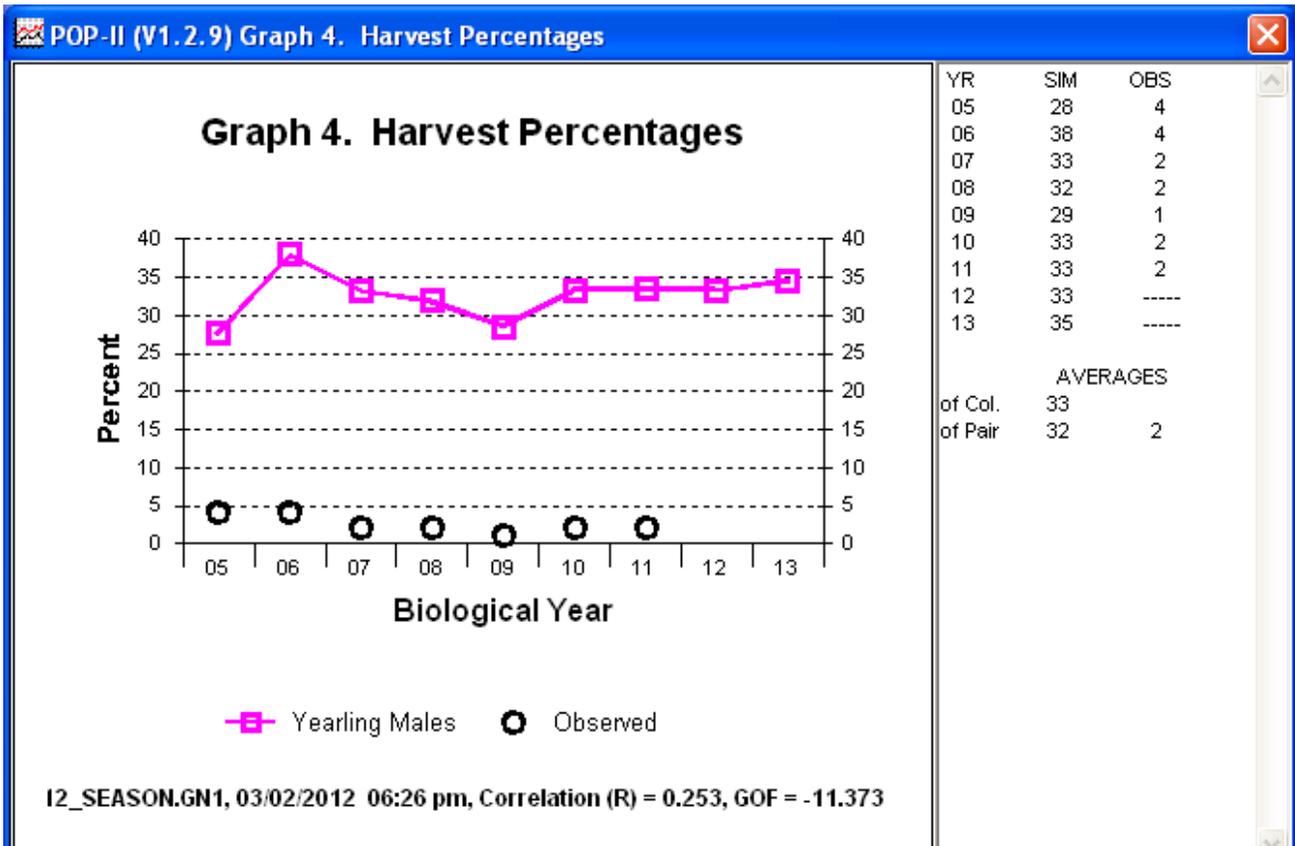
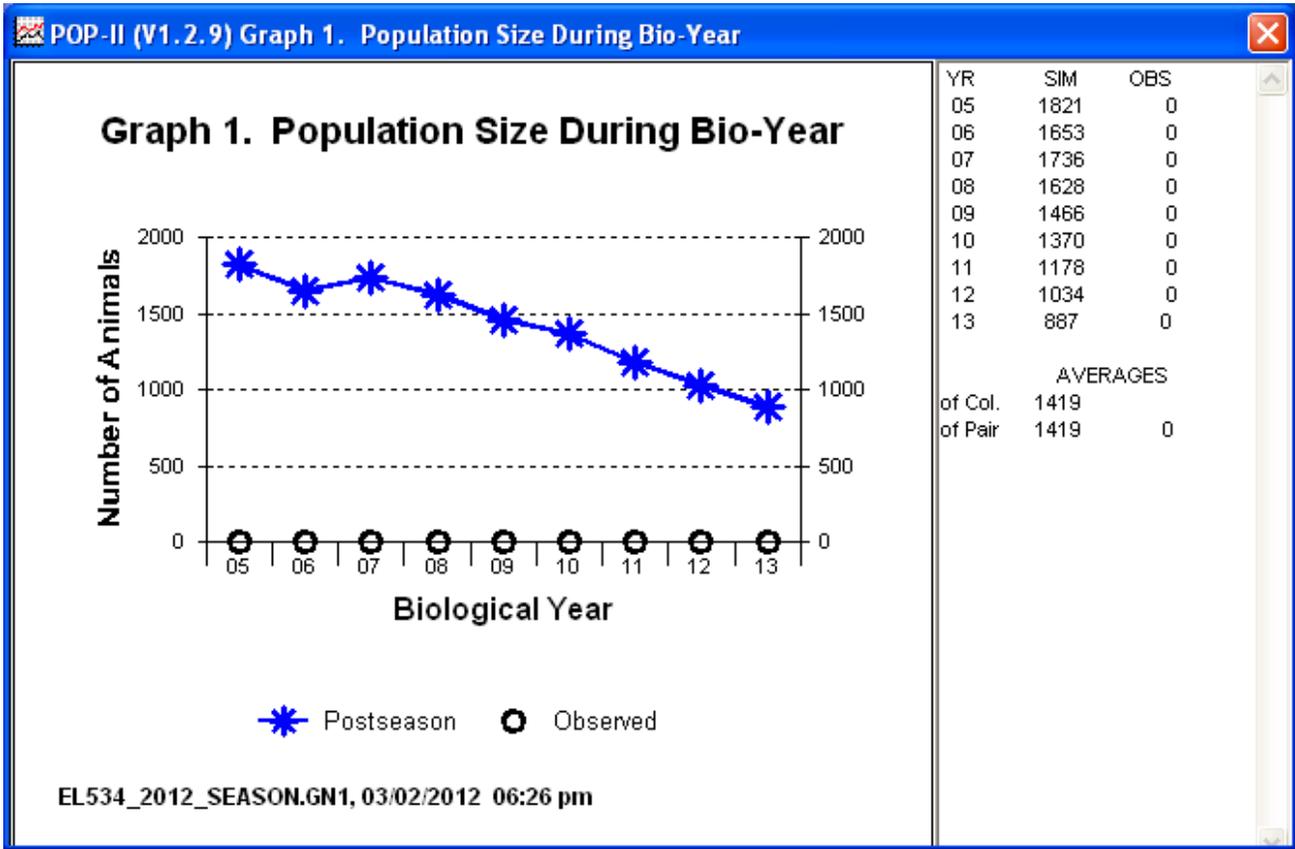
Bio-Year	Subadults /100 1+F	2+ Males /100 1+F	Yr. Males /100 1+F	Ad Males /100 1+F
2005	57.1	30.5	12.0	42.5
2006	41.8	24.5	15.4	39.9
2007	50.2	30.4	15.5	45.9
2008	49.1	33.0	15.9	48.9
2009	51.2	32.2	13.2	45.4
2010	50.2	29.0	15.0	44.0
2011	49.8	29.5	15.3	44.8
2012	49.9	28.7	14.8	43.4
2013	50.0	27.0	14.8	41.8

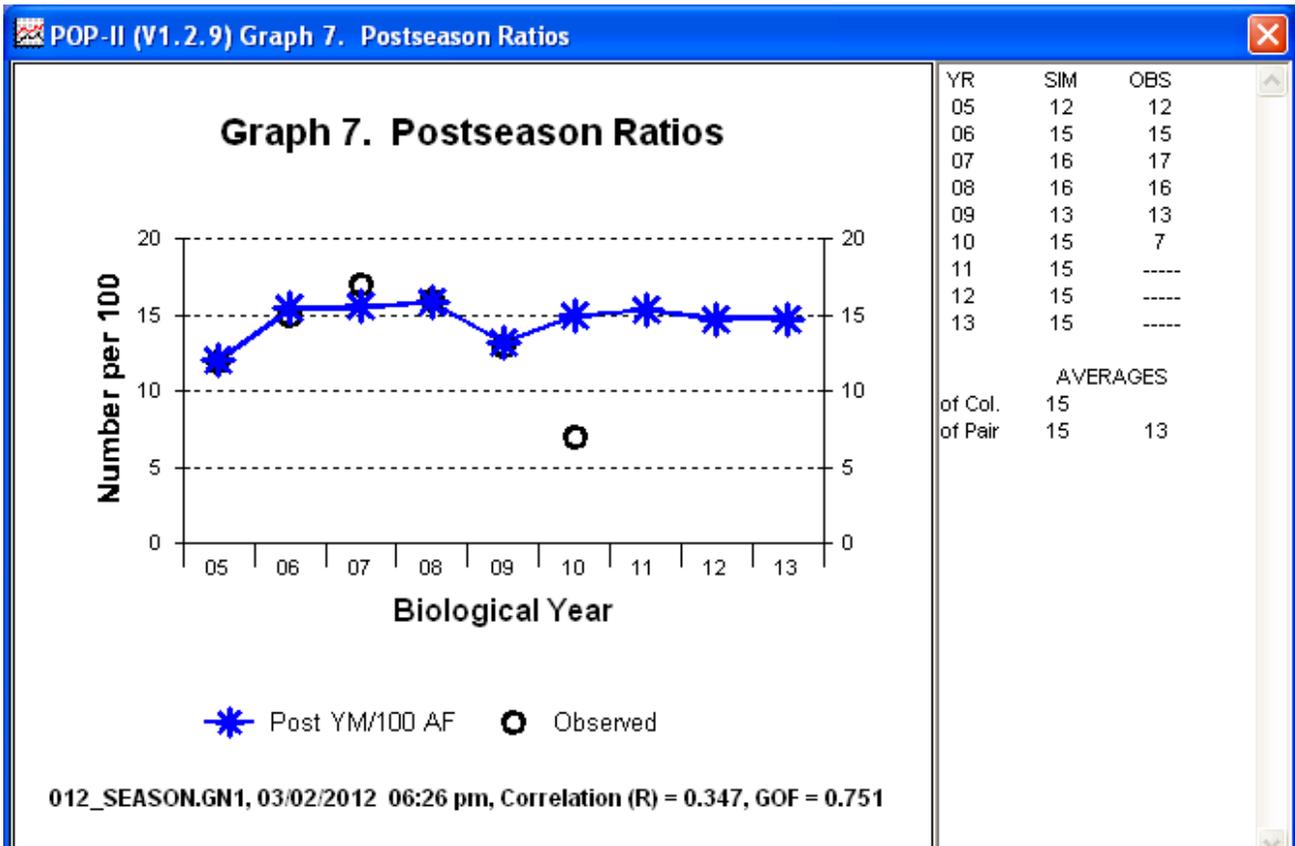
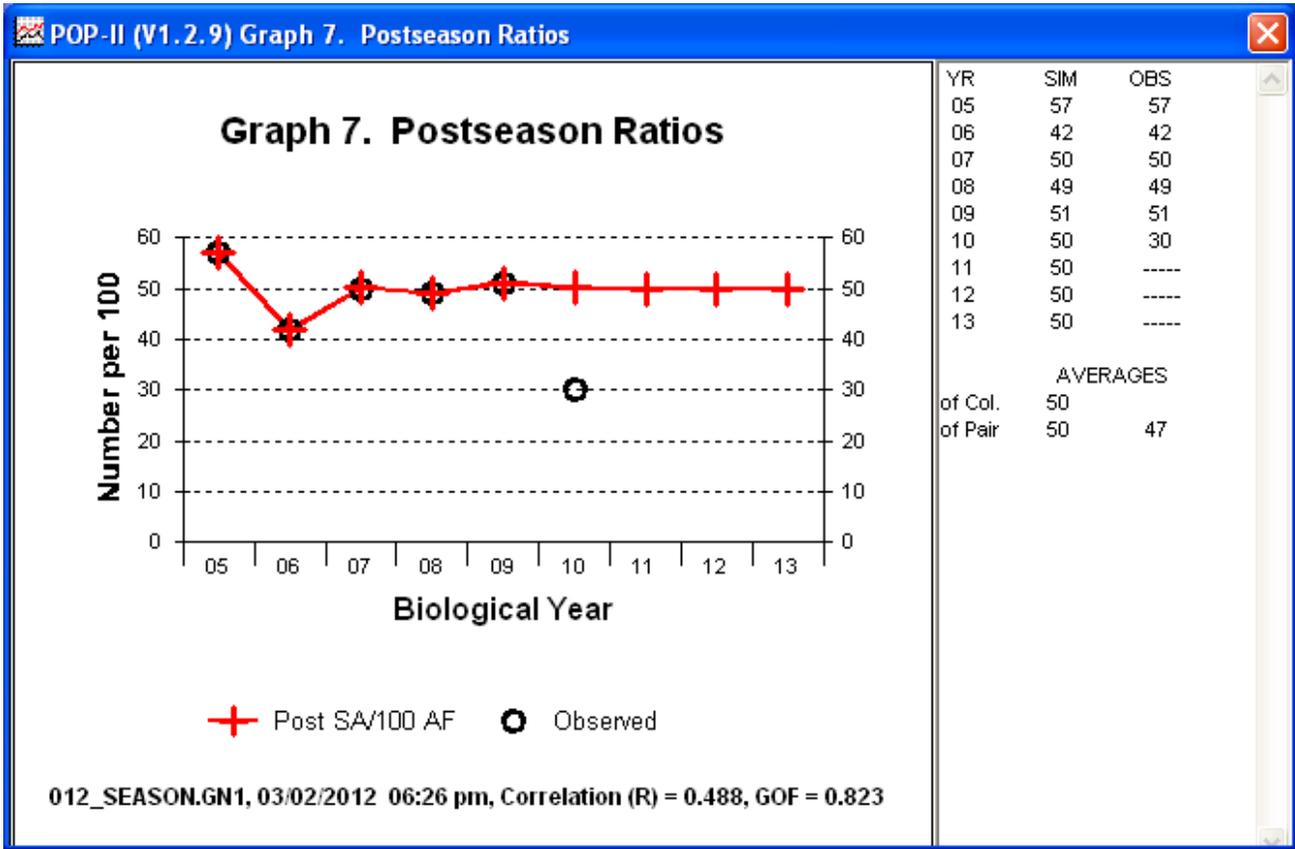
Table 8. End of Year Ratios for EL534_2012_SEASON.GN1 03/02/2012 06:26 pm

Bio-Year	Subadults /100 Adlts	Subadults /100 1+F	Yr. Males /100 1+F	Ad Males /100 1+F
2005	37.5	51.7	11.8	37.8
2006	29.2	40.6	15.3	39.2
2007	31.2	44.4	14.9	42.4
2008	28.5	41.2	14.9	44.4
2009	32.7	46.8	12.8	43.2
2010	32.2	45.7	14.5	41.7
2011	32.2	46.0	14.9	42.8
2012	33.1	47.0	14.5	41.9
2013	33.6	47.2	14.5	40.2

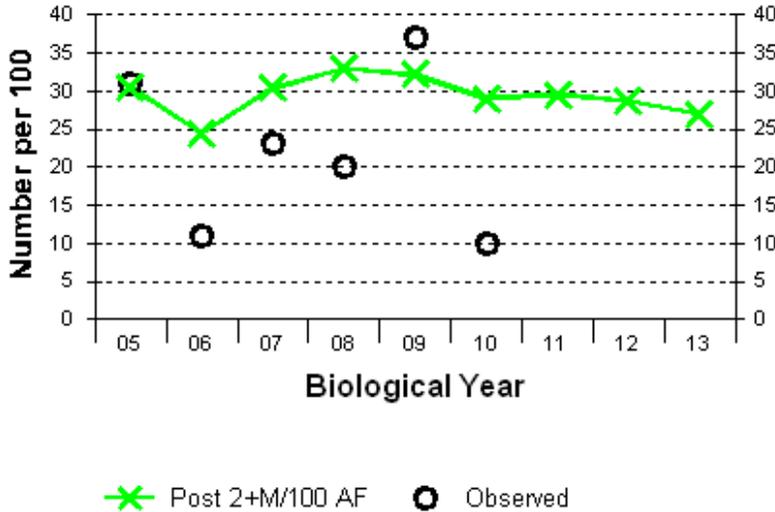
Table 9. Reproduction at Start of Bio-Year for EL534_2012_SEASON.GN1 03/02/2012 06:26 pm

Bio-Year	Young / 100 AF 1 +	Sub-Ad. / 100 AF 1 +	Total Young	Total Sub-Adult	Total Females 1 +
2005	80	80	836	836	1045
2006	60	60	619	619	1027
2007	64	64	681	681	1071
2008	64	64	632	632	988
2009	63	63	562	562	888
2010	63	63	548	548	870
2011	63	63	510	510	814
2012	63	63	443	443	705
2013	63	63	397	397	632





Graph 7. Postseason Ratios

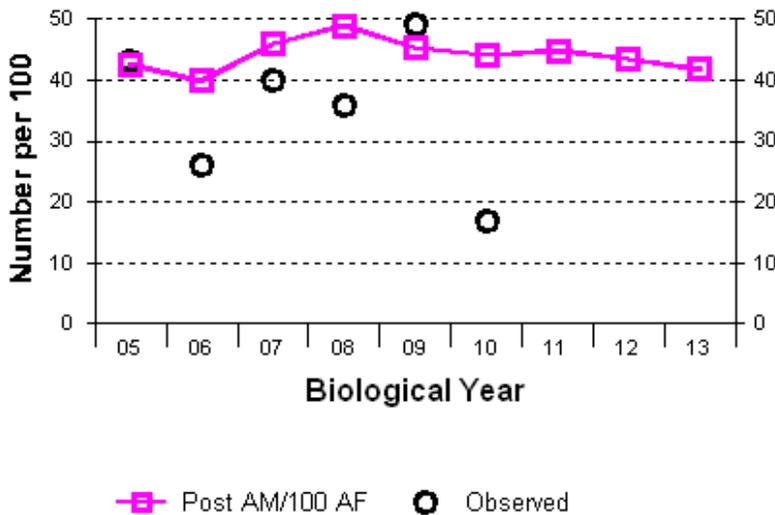


YR	SIM	OBS
05	30	31
06	24	11
07	30	23
08	33	20
09	32	37
10	29	10
11	29	---
12	29	---
13	27	---

AVERAGES		
of Col.	29	
of Pair	30	22

012_SEASON.GN1, 03/02/2012 06:26 pm, Correlation (R) = 0.639, GOF = 0.478

Graph 7. Postseason Ratios

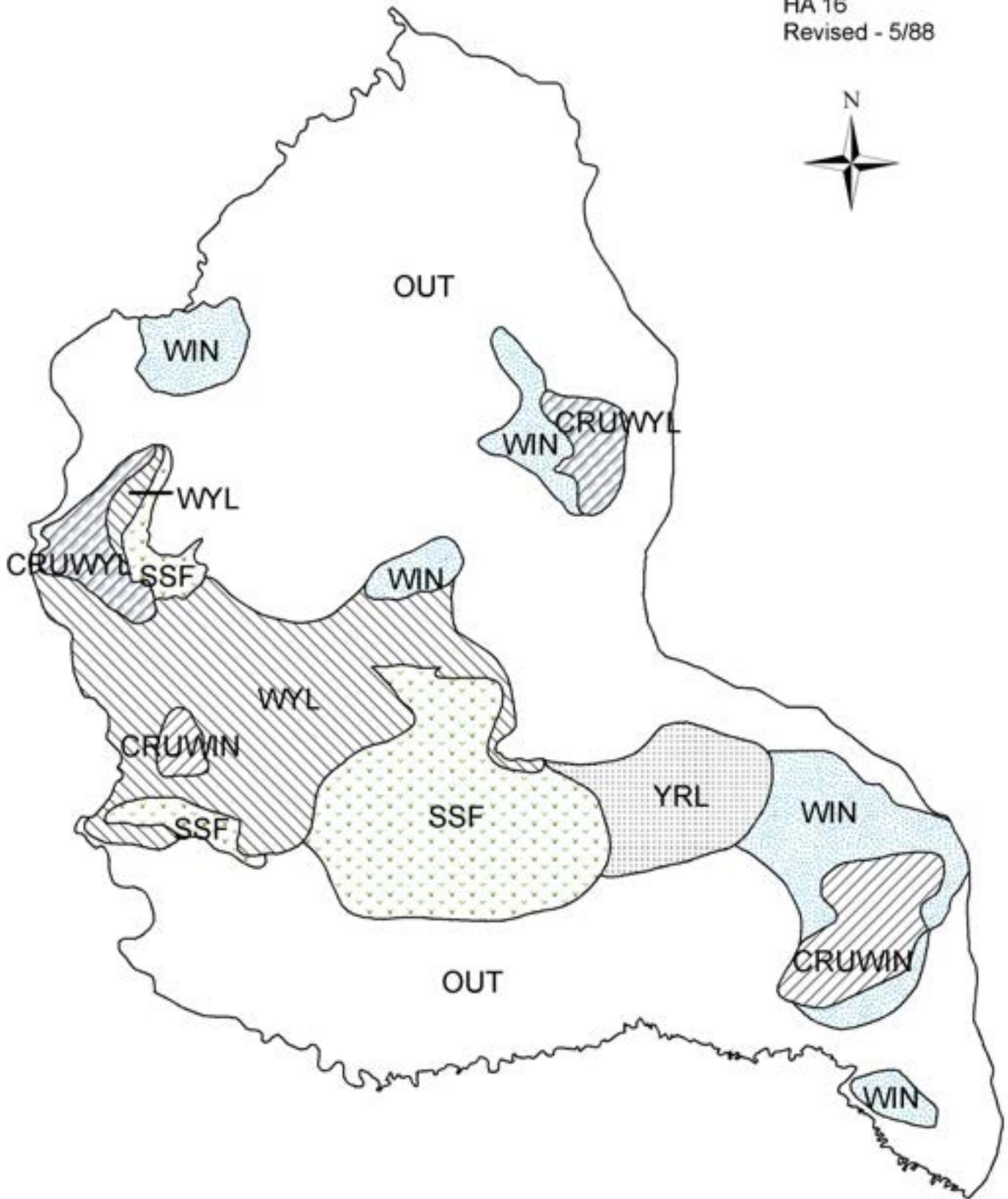


YR	SIM	OBS
05	43	43
06	40	26
07	46	40
08	49	36
09	45	49
10	44	17
11	45	---
12	43	---
13	42	---

AVERAGES		
of Col.	44	
of Pair	44	35

2012_SEASON.GN1, 03/02/2012 06:26 pm, Correlation (R) = 0.32, GOF = 0.608

E534 - Shirley Mtn.
HA 16
Revised - 5/88



2011 - JCR Evaluation Form

SPECIES: Elk
 HERD: EL730 - RAWHIDE
 HUNT AREAS: 3

PERIOD: 6/1/2011 - 5/31/2012
 PREPARED BY: MARTIN HICKS

	2006 - 2010 Average	2011	2012 Proposed
Population:	0	N/A	N/A
Harvest:	62	103	105
Hunters:	124	296	300
Hunter Success:	50%	35%	35 %
Active Licenses:	133	318	325
Active License Percent:	47%	32%	32 %
Recreation Days:	1,252	2,487	2,500
Days Per Animal:	20.2	24.1	23.8
Males per 100 Females	30	52	
Juveniles per 100 Females	46	61	

Population Objective: 40
 Management Strategy: Recreational
 Percent population is above (+) or below (-) objective: N/A%
 Number of years population has been + or - objective in recent trend: 0
 Model Date: None

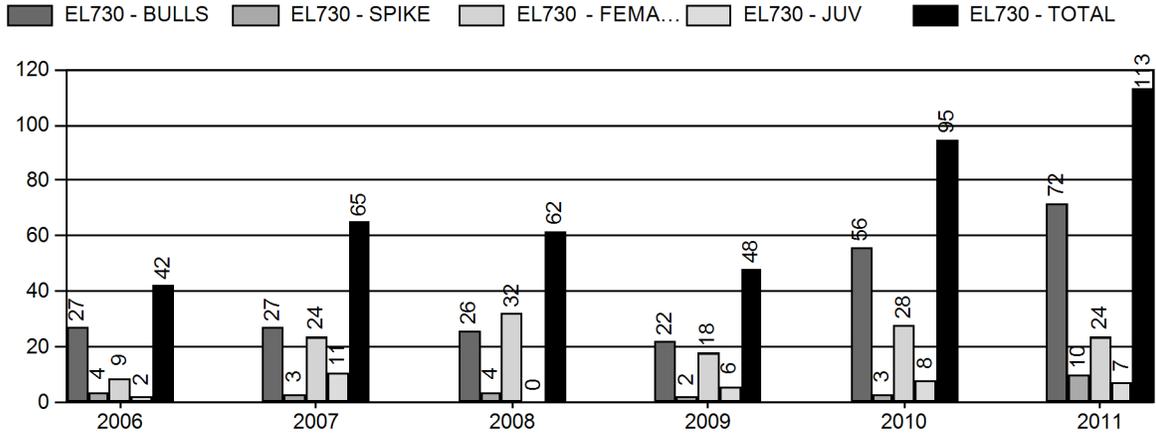
Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	<u>JCR Year</u>	<u>Proposed</u>
Females ≥ 1 year old:	NA%	NA%
Males ≥ 1 year old:	NA%	NA%
Juveniles (< 1 year old):	NA%	NA%
Total:	NA%	NA%
Proposed change in post-season population:	NA%	NA%

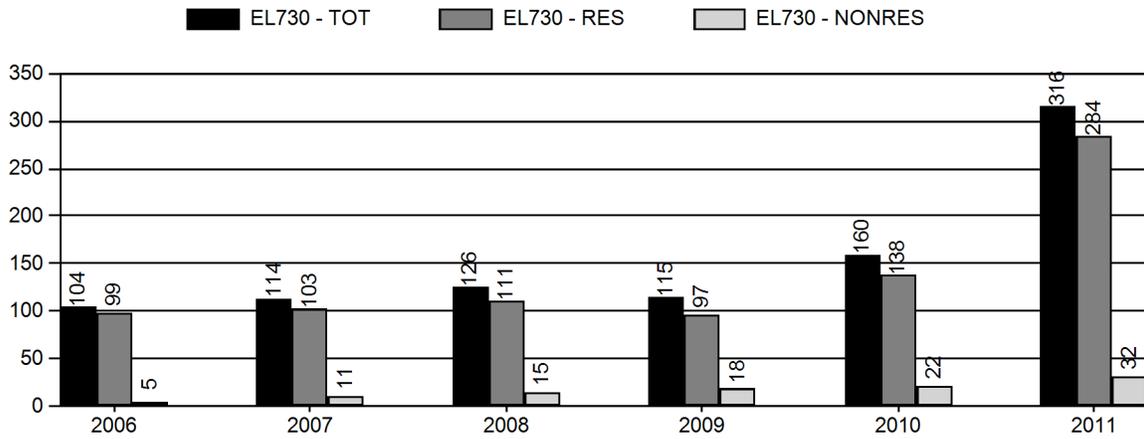
Population Size - Postseason



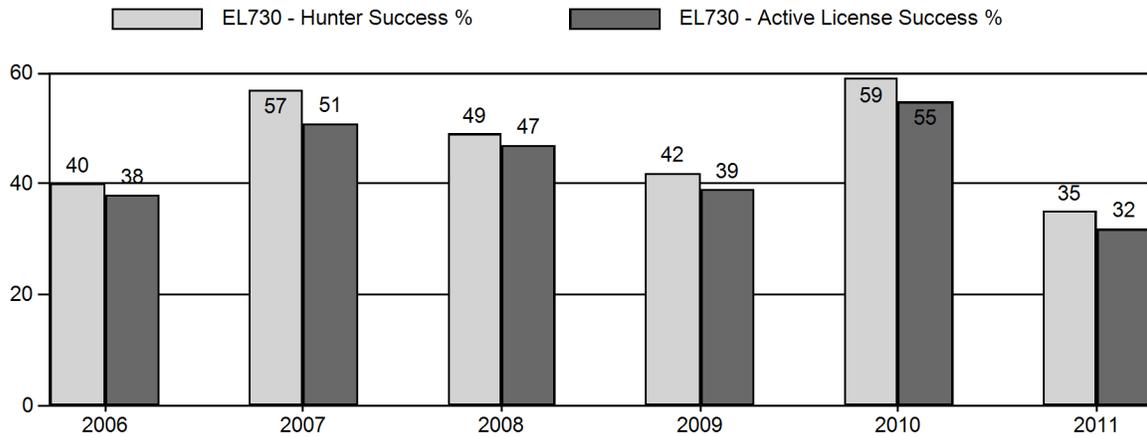
Harvest



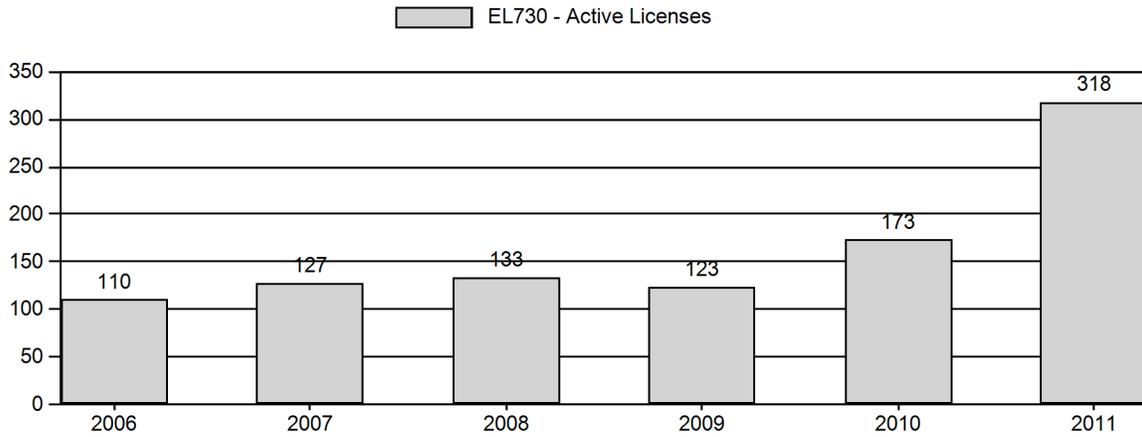
Number of Hunters



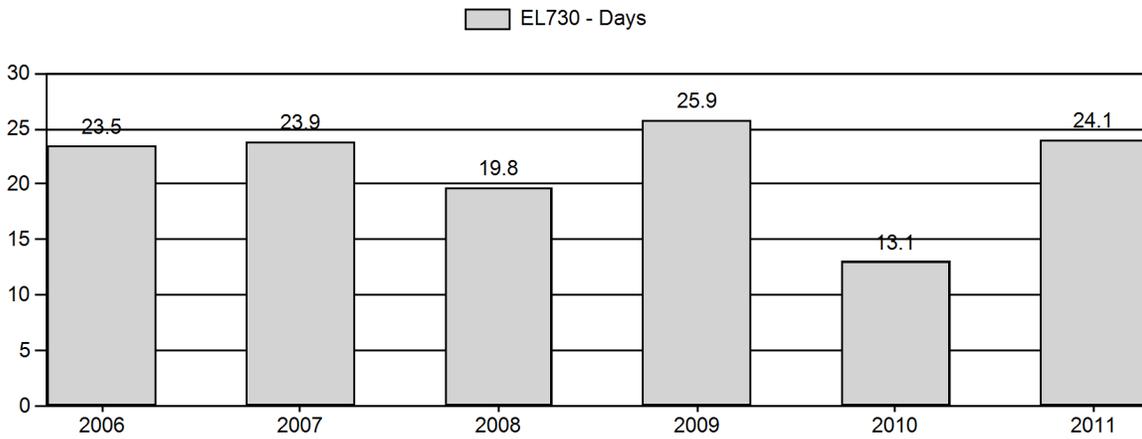
Harvest Success



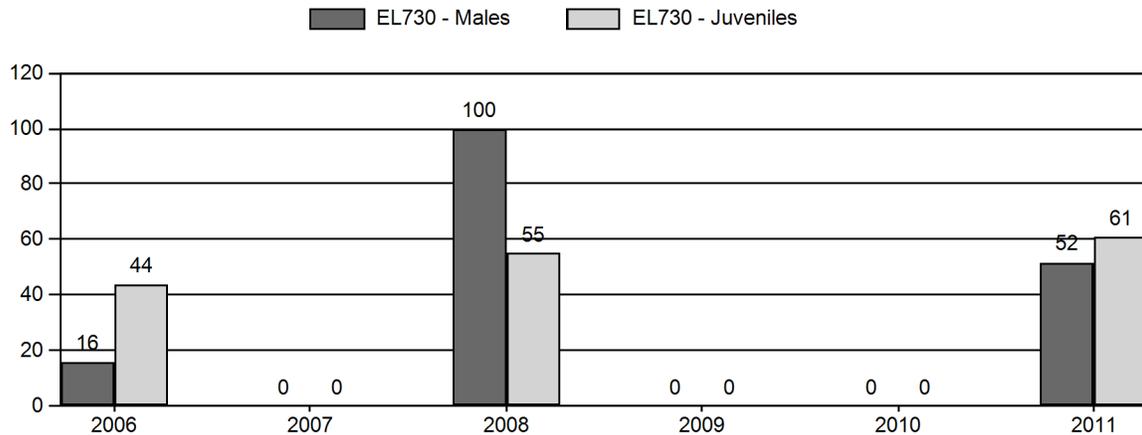
Active Licenses



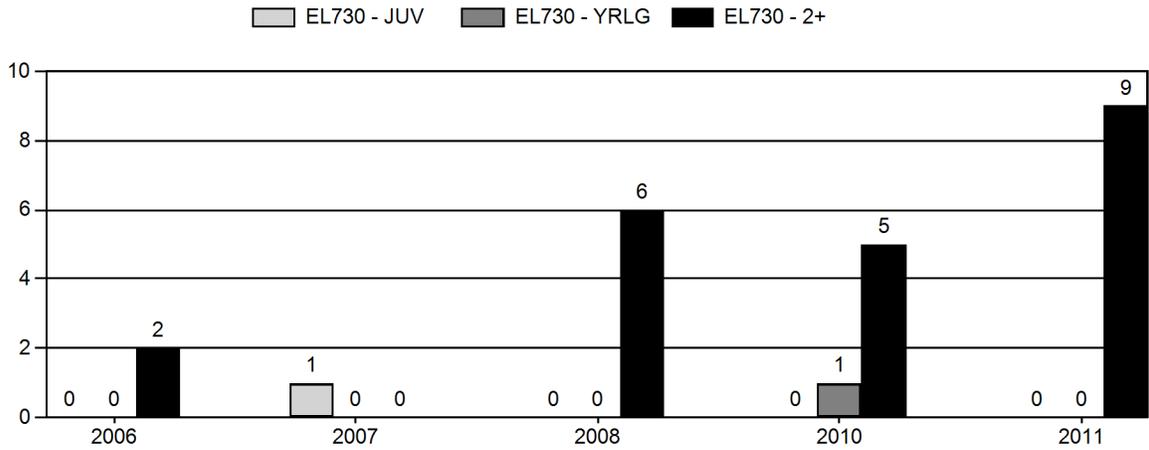
Days per Animal Harvested



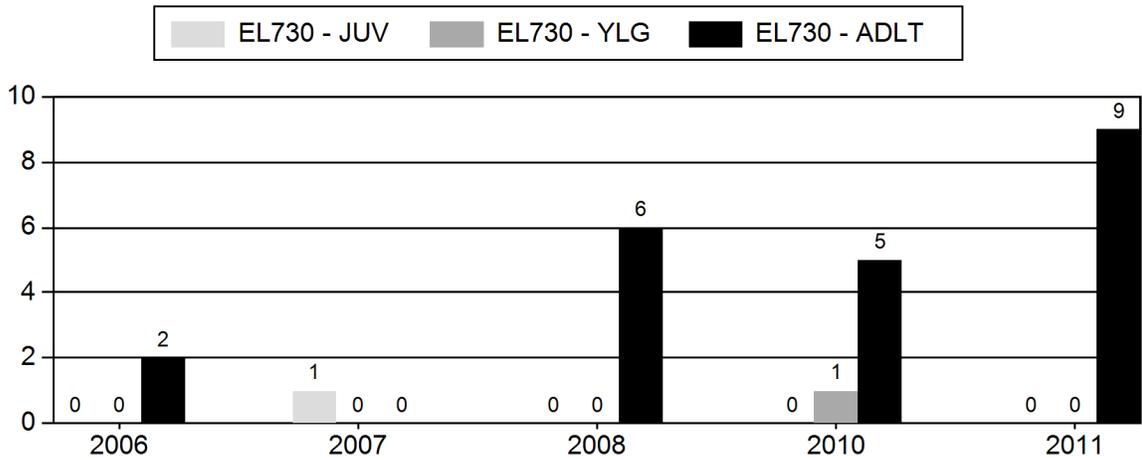
Postseason Animals per 100 Females



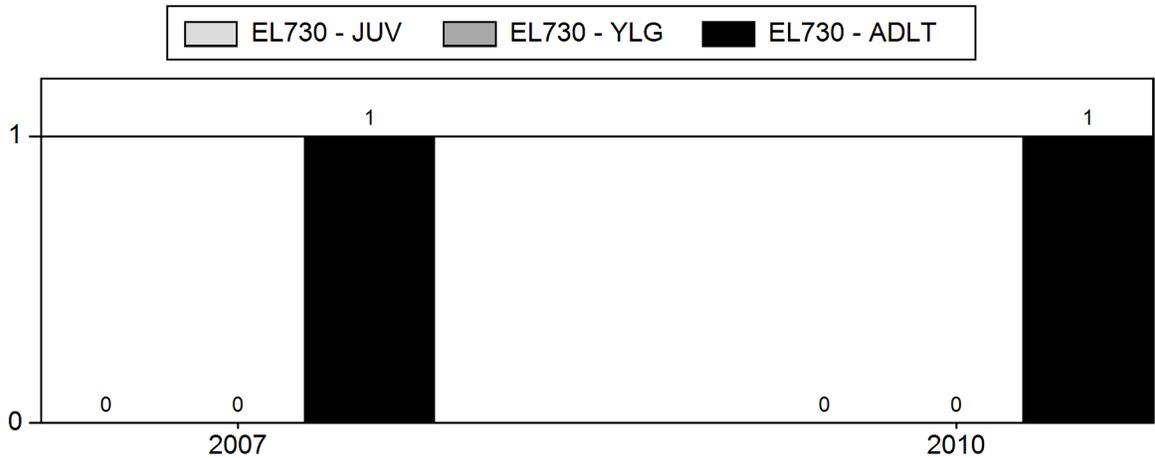
Age Structure of Field Checked Males



Age Structure Data (Field and Laboratory) - Male



Age Structure Data (Field and Laboratory) - Female



2006 - 2011 Postseason Classification Summary

for Elk Herd EL730 - RAWHIDE

Year	Post Pop	MALES				FEMALES		JUVENILES		Tot Cls	Cls Obj	Males to 100 Females				Young to		
		Ylg	Adult	Total	%	Total	%	Total	%			Ylng	Adult	Total	Conf Int	100 Fem	Conf Int	100 Adult
2006	0	11	6	17	10%	105	62%	46	27%	168	0	10	6	16	± 0	44	± 0	38
2007	0	0	0	0	0%	0	0%	0	0%	0	0	0	0	0	± 0	0	± 0	0
2008	0	5	15	20	39%	20	39%	11	22%	51	0	25	75	100	± 0	55	± 0	28
2009	0	0	0	0	0%	0	0%	0	0%	0	0	0	0	0	± 0	0	± 0	0
2010	0	0	0	0	0%	0	0%	0	0%	0	0	0	0	0	± 0	0	± 0	0
2011	0	3	14	17	24%	33	47%	20	29%	70	0	9	42	52	± 0	61	± 0	40

2011 HUNTING SEASONS

EL730 - RAWHIDE

<u>Hunt Area</u>	<u>Add'l Hunt Areas</u>	<u>Type</u>	<u>Quota</u>	<u>Season Dates</u>	<u>Limitations</u>
3		ARCH		09/01 - 09/14	Refer to Section 3 of this Chapter
3		GEN		09/15 - 01/31	any elk valid in that portion of Area 3 south of U.S. Highway 26.
3		Type 1	75	09/15 - 10/14	Any
3		Type 4	50	09/15 - 10/14	Full Priced Antlerless
3		Type 6	75	09/15 - 10/14	Reduced Price cow/calf
3		Type 6	200	11/01 - 12/31	Unused Area 3 Type 1, Type 4, Type 6 licenses valid for antlerless elk

Table 1. E730 Harvest Data, 2011.

Area	Type	Active Lic/†	Bull	Spike	Cow	Calf	Total	Success	Days/Harv	€ Licenses Sold
2011										
3 RAWHIDE										
	General	153	37	8	12	0	57	37.30%	15.6	
	Type 1	71	35	2	2	0	39	54.90%	13.8	77
	Type 4	50	0	0	7	4	11	22%	40.7	50
	Type 6	63	0	0	3	3	6	9.50%	134	75
	Pooled Total	315	72	10	24	7	113	35.90%	23.7	
	Pooled Resident	283	62	10	24	7	103	36.40%	24.4	
	Pooled Nonresident	32	10	0	0	0	10	31.20%	16.5	
	2011 Hunt Area Total	315	72	10	24	7	113	35.90%	23.7	202
	2011 Herd Total	316	72	10	24	7	113	35.80%	23.7	202
	*Active Licenses									

2006 - 2011 Harvest Age Structure

for Elk Herd EL730 - RAWHIDE

Year	Males									Females									Herd
	Juv	1	% *	2 ^	% **	Tot Aged ++	Not Aged +++	Unk	Tot Chkd	Juv	1	% *	2 ^	% **	Tot Aged ++	Not Aged +++	Unk	Tot Chkd	Tot
2006	0	0	0%	2	100%	2	0	0	2	0	0	0%	0	0%	0	0	0	0	2
2007	1	0	0%	0	0%	1	0	0	1	0	0	0%	1	100%	1	0	0	1	2
2008	0	0	0%	6	100%	6	0	0	6	0	0	0%	0	0%	0	0	0	0	6
2010	0	1	17%	5	83%	6	0	0	6	0	0	0%	1	100%	1	0	0	1	7
2011	0	0	0%	9	100%	9	0	0	9	0	0	0%	0	0%	0	0	0	0	9

* Percent of aged animals (including unaged adults but excluding juveniles) 1 1/2 years old

^ Number of animals two years old and older. Animals aged older than two (excluding unaged adults) are lumped into this two plus category

** Percent of aged animals (not including juveniles or unaged adults) two years old or older

++ includes juveniles

+++ Unaged adults - unaged animals older than yearlings

RAWHIDE ELK(E730)
Hunt Area 3
2012 PROPOSED HUNTING SEASONS

HUNT AREA	TYPE	OPENS	CLOSES	LIMITATIONS
3	GEN	SEPT. 15	JAN. 31	Any elk valid in that portion of Area 3 south of U.S. Highway 26.
	1	SEPT. 15	OCT. 14	L.Q.; 75 licenses any elk
	4	SEPT. 15	OCT. 14	L.Q.; 50 licenses antlerless elk
	6	SEPT. 15	OCT. 14	L.Q. 75 licenses cow or calf
		NOV. 1	DEC. 31	Unused Area 3 Type 1, Type 4, and Type 6 licenses valid for antlerless elk
	ARCHERY			
3		SEPT. 1	SEPT. 14	Refer to Section 3 of this Chapter

2012 PROPOSED CHANGES

Change the Hunt Area Boundary- see Attachment A

Management Evaluation

Population: There was an objective review for the 2011 biological year. Currently the objective is 40 elk. The high percentage of private land, rolling topography, extensive tree cover and the fact that there is no money to fly this herd make it difficult to collect population data in this DAU. Consequently there is no reliable estimate of population size. Classifications data from previous years with adequate samples sizes (2004, 2006 and 2008) indicate that the population continues to grow with average to above average calf ratios (2004- 83Juv:100 Cows, 2006- 43 Juv:100 Cows, 2008- 55Juv:100Cows).

The results of the objective review can be found in Attachment B. Basically this herd will no longer be managed on a numeric basis. Instead it will be managed based on a hunter/landowner satisfaction survey as the primary objective with bull harvest statistics as the secondary objective.

2011 Season: The 2011 season was designed to reduce elk numbers south of U.S. Highway 26 with a general license any elk season running from September 15-January 31. There were 46 elk harvested on that license type, 28 more than the Type 4 and Type 6 licenses combined. This season appeared to be well received by the public and landowners.

2012 Season: The 2012 season is designed to reduce elk numbers south of U.S. Highway 26 with a general any elk licenses from September 15 to January 31. Elk continue to move south of U.S. Highway 26 so all lands east of Interstate 25 to the Wyoming/Nebraska border and north of the Wyoming/Colorado boarder to

U.S. Highway 26 and follow the North Platte River up to U.S. Highway 18/20 will be the new hunt area (Attachment A).

For the 2013 season a proposal was brought forward to incorporate that portion of Area 3 north of U.S. Highway 26 and that portion of Elk Hunt Area 7 east of Interstate Highway 25 into the general license framework and converted to Hunt Area 3. Forty mailings with an attached survey were mailed out to landowners in Hunt Area 3 that own land north of Highway 26. Landowners that own land in Hunt Area 7 east of Interstate 25 were contacted in person to gather input on including that portion into Area 3 and making it a general license season. A public meeting was then held in Lusk, WY where comments were taken and additional surveys were handed out. There were 24 surveys returned (Attachment C) with thirteen against the general season and eleven for it. As a result of the returned surveys along with public comments, it was decided not to propose a general season structure for that portion of Elk Hunt Area 3 north of U.S. Highway 26 in 2013. This is the second time this proposal was considered in the last two years, with the majority opposed to it. Unless there is compelling evidence to propose this type of season structure again it will most likely remain a limited quota season. Also, the majority of landowners that own land in Hunt Area 7 east of Interstate 25 did not support converting that portion of Hunt Area 7 into Hunt Area 3.

Elk need to be reduced in this herd unit. However, until there is more cooperation from landowners north of U.S. Highway 26 to allow access, increasing Type 1, Type 4 and Type 6 licenses is not warranted.

Attachment A
Rawhide Herd Unit Map Boundary Change
Elk Hunt Area 3

Area 3. Rawhide. Beginning at the Intersection of U.S. Highway 20 and U.S. Highway 85 in the town of Lusk; easterly along U.S. Highway 20 to the Wyoming – Nebraska state line; southerly along said state line to [the Wyoming – Colorado State line](#); [westerly along said state line to U.S. Interstate 25](#); ~~Wyoming State Highway 151;~~ ~~westerly along said highway to U.S. Highway 85~~; ~~northerly along said highway to Wyoming State Highway 313~~; ~~westerly along said highway to the town of Chugwater and Interstate Highway 25~~; northerly along said Interstate to U.S. Highway 26; easterly along said highway to the North Platte River; northerly and westerly up said river to Interstate Highway 25; northerly along said Interstate to U.S. Highway 20; easterly along said highway to the intersection of U.S. Highway 20 and U.S. Highway 85 in the town of Lusk.

June 19, 2012

ATTACHMENT B

MEMORANDUM

TO: Tom Ryder, Assistant Chief Wildlife Division

FROM: Terry Creekmore, Laramie Regional Wildlife Coordinator

COPY TO: B. Nesvik, S. Edberg, B. Lanka, R. King, M. Hicks, B. Vandeberg, C. Smith, J. Stephens, J. Sandrini, J. Binfet

SUBJECT: Rawhide Herd Unit (E730) Elk Population Objective Review Recommendation

On February 17, 2012 Laramie Regional personnel received a memo from Tom Ryder, Wildlife Division Assistant Chief, regarding alternative objectives for big game management. We were charged with the task of taking two elk herds to the public for review. The Laramie Region personnel selected the Iron Mountain Elk Herd Unit and the Rawhide Elk Herd Unit.

Personnel responsible for the management of the Rawhide Herd Unit met internally and discussed the alternatives provided to us by Wildlife Division. We felt Alternative 3: Sportsmen and Landowner Satisfaction Surveys, in conjunction with harvest statistics was the best way to manage this herd in the future.

The Rawhide Elk Herd Unit was started in 1967 when 96 elk were released in the Rawhide Butte area. The objective of 40 was set at that time, and has not changed since. Based on recent years with adequate sample sizes for post-season classifications along with WGFD personnel, landowners and sportsmen observations there are at least 400 elk in the herd unit. Elk are also moving south of the North Platte River. As a result of this movement a more liberal season was set in 2011. In 2011, that portion of Elk Hunt Area 3 South of U.S. Highway 26 was a general any elk season from September 15 through January 31, and 44% of the total harvest came from that area. We proposed to maintain this season structure for 2012 and also expand the hunt area boundary south to the Wyoming/Colorado State Line and west to Interstate Highway 25.

Realizing there are more than 40 elk in the herd unit we still do not collect reliable data to derive a post-season population estimate. In the last ten years we have only met our post-season classification sample size three times. Our inability to manage the herd due to land status (the majority is private land), budget constraints for aerial surveys and safety issues of conducting aerial surveys in the Rawhide Butte area put this herd unit at a low priority for management emphasis.

2012 Harvest

											LICENSES
AREA	TYPE	ACTIVE	HARVEST					HUNTER	DAYS/	HUNTER	SOLD
		LICS/HTRS	BULL	SPIKE	COW	CALF	TOTAL	SUCCESS	HARVEST	DAYS	(cross hunt incl.)
3 Rawhide											
	Limited 1	71	35	2	2	0	39	54.9%	13.8	540	77
	Limited 4	50	0	0	7	4	11	22.0%	40.7	448	50
	Limited 6	63	0	0	3	3	6	9.5%	134.0	804	75
	General	153	37	8	12	0	57	37.3%	15.6	888	
	Pooled Total	315	72	10	24	7	113	35.9%	23.7	2680	
	Pooled Resident	283	62	10	24	7	103	36.4%	24.4	2515	
	Pooled Nonresident	32	10	0	0	0	10	31.3%	16.5	165	

Total Harvest for the Rawhide herd has increased from a 2006-2010 average of 62 elk to 113 in 2011. This hunt area is predominantly private land and as such landowners dictate bull harvest. Consequently, the percent of branch antlered bulls in the harvest is very high (94.6% in 2011) and our ability to manipulate this ratio through harvest is extremely limited.

2012 Hunter Satisfaction

AREA	RESIDENCY	NUMBER OF HUNTERS	SATISFACTION WITH OVERALL QUALITY OF HUNT *				
			VERY SATISFIED	SATISFIED	NEUTRAL	DISSATISFIED	VERY DISSATISFIED
3. Rawhide	Nonresident	18	38.9%	38.9%	5.6%	16.7%	0.0%
	Resident	89	28.1%	28.1%	21.3%	12.4%	10.1%
	Total	107	29.9%	29.9%	18.7%	13.1%	8.4%

Overall hunter satisfaction in 2011 was 60%. Nonresident hunter satisfaction was high with 78% of hunters being either very satisfied or satisfied and only 17% of nonresident hunters were dissatisfied. In comparison, resident hunter satisfaction was somewhat lower (56 %) and resident hunter dissatisfaction was slightly higher (23%). With a harvest success rate of 55% for Type 1 licenses and a branch antlered bull harvest of 95% the hunter dissatisfaction percentages are probably driven more by access issues rather than bull quality.

Starting the spring of 2012 the department held three landowner meetings throughout the region to gather input from the landowners in elk hunt area 3. A survey was distributed as well. Meetings were held in Wheatland, Torrington and Lusk. A total of ten landowners attended the three meetings and six surveys were returned. All participants felt that there were too many elk and the majority of participants agreed with our recommendation of using Alternative 3, the landowner/sportsmen satisfaction objective. Survey responses are provided in Appendix A.

N = 6 survey responses

- 1) Do you think the post-season population objective of 40 elk is:
 - a) Too High _____
 - b) Too Low 6
 - c) About Right _____

- 2) What management tool would you like to see the Department use to manage the Rawhide Elk Herd:
 - a) A post-season population objective with a herd estimate derived or based on a population model or density trend _____
 - b) Alternative objectives (e.g. harvest statistics) 2
 - c) Alternative objectives along with secondary objectives (e.g. damage) _____
 - d) A combination of all three 2
 - e) Other 2 (1 bull quality, 1 General season?)

- 3) Do you agree with combining that portion of Elk Hunt area 7 that is east of I-25 into Hunt Area 3 for the 2013 season?
 - a) Yes 1
 - b) No 4
 - c) Unknown 1

Landowner satisfaction will be determined by an annual mail survey and hunter satisfaction will be based upon the annual hunter satisfaction survey with a target objective of 60% satisfaction for all constituents. We also intend to utilize the percentage of branch antlered bull harvest as a subobjective. However, since the current percentage of branch antlered bulls in the harvest exceeds 90% and our ability to reduce that proportion through harvest is extremely limited we propose to change the existing management strategy for this herd from recreational to special. This change will result in a subobjective of maintaining a branch antlered bull harvest of greater than 61%. Currently, all five of the elk herds in the Laramie Region are managed using a recreational strategy.

Some landowners also felt it was time to again propose a general season structure for all of Elk Hunt Area 3. There was an extensive effort put forth in 2010 recommending a general firearm season north of Highway 26. However, the majority of landowners at that time disagreed with that type of season structure. Some of those same landowners now have a different opinion. As a result, department personnel responsible for the management of Elk Area 3 hosted another landowner meeting in May of 2012 to reevaluate options for the fall of 2013. Twenty-two landowners returned written surveys with 10 respondents in favor of a general season north of Highway 26 and 12 opposed. However, the majority of the negative responses were generated by a single landowner who made copies of the survey and hand delivered them to his friends and neighbors who he knew would be opposed to a general season.

In summary, the Laramie Region will abandon the current numerical objective of 40 elk in favor of a nonnumerical population objective based upon landowner and hunter satisfaction and the percentage of branch antlered bulls in the harvest. We will also change the management strategy from recreational to special and follow trends over time to make management decisions based on constituent satisfaction and bull harvest parameters. Given the options available, we feel this is the best approach to take. However, given the nature of this herd unit, we are concerned that meeting these parameters may become difficult as we approach our goal of reducing elk numbers. In this herd unit landowner satisfaction and sportsman satisfaction may be negatively correlated and maintaining bull quality is less important than minimizing damage and reducing the population size.

TC/tc
Attachments

Rawhide Elk Herd Unit (Elk Hunt Area 3) Landowner Survey

1) Would you be in favor of that portion of Elk Hunt Area 3 north of U.S. Highway 26 going to a general license any elk season structure for the 2013 season?

- A) YES _____
B) NO _____

2) If yes, what date would you prefer the season to open on?

- A) Same, September 15 _____
B) October 1 _____
C) October 15 _____
D) Other Don't make any Difference

3) Please provide any addition comments/concerns

With most of the Land involved being
Private Let the Land Owners use there
Land as they see fit.

THANK YOU FOR YOUR PARTICIPATION!

Please mail survey to:

WGFD

Attn: Martin Hicks

827 Grange Road

Wheatland, WY 82201

Rawhide Elk Herd Unit (Elk Hunt Area 3) Landowner Survey

1) Would you be in favor of that portion of Elk Hunt Area 3 north of U.S. Highway 26 going to a general license any elk season structure for the 2013 season?

- A) YES yes
 B) NO _____

2) If yes, what date would you prefer the season to open on?

- A) Same, September 15 _____
B) October 1 _____
 C) October 15 Oct 15
D) Other Later season _____

3) Please provide any addition comments/concerns

The elk season was opened way too soon. It's
too hot for them to be down lower looking for feed.
Our season was just warmed up to Smith. Oct 15th
or later would be better.

THANK YOU FOR YOUR PARTICIPATION!

Please mail survey to:
WGFD
Attn: Martin Hicks
827 Grange Road
Wheatland, WY 82201

Rawhide Elk Herd Unit (Elk Hunt Area 3) Landowner Survey

1) Would you be in favor of that portion of Elk Hunt Area 3 north of U.S. Highway 26 going to a general license any elk season structure for the 2013 season?

- A) YES _____
B) NO _____

2) If yes, what date would you prefer the season to open on?

- A) Same, September 15 _____
B) October 1 _____
C) October 15 _____
D) Other _____

3) Please provide any addition comments/concerns

As a landowner in hunt area # 3. I would be willing to have all of hunt area # 3 general license if the Game & Fish will also change both hunt areas 113 and 123 from limited quota to general hunt areas as well.
Concluding that the following elk areas, # 3, # 113 # 123, # 126 and # 129 are all combined to create one large general license elk area that opens as follows. The season for Archer Aug 25 - OCT 14, Rifle season would open OCT 15 - December 31st.
This new general area will also include that portion of hunt area # 7 East of Interstate 25.
THANK YOU FOR YOUR PARTICIPATION!

Please mail survey to:
WGFD
Attn: Martin Hicks
827 Grange Road
Wheatland, WY 82201

David A. Stevens

Rawhide Elk Herd Unit (Elk Hunt Area 3) Landowner Survey

1) Would you be in favor of that portion of Elk Hunt Area 3 north of U.S. Highway 26 going to a general license any elk season structure for the 2013 season?

- A) YES _____
B) NO _____

Don
Fredericks

2) If yes, what date would you prefer the season to open on?

- A) Same, September 15 _____
B) October 1 _____
C) October 15 _____
D) Other _____

3) Please provide any addition comments/concerns

THE NUMBER OF ELK SEEN IN MY AREA HAS BEEN CONSIDERABLY
LESS THE PAST 2 YEARS. ALSO MOST OF MY LAND IS ALREADY
COMMITTED SO I LIKELY WON'T BE ALLOWING ANY MORE HUNTERS
ON THE LAND.

I HOPE THIS CHANGE WILL HELP ACHIEVE YOUR GOALS.

DON FREDERICK

THANK YOU FOR YOUR PARTICIPATION!

Please mail survey to:
WGFD
Attn: Martin Hicks
827 Grange Road
Wheatland, WY 82201

Rawhide Elk Herd Unit (Elk Hunt Area 3) Landowner Survey

1) Would you be in favor of that portion of Elk Hunt Area 3 north of U.S. Highway 26 going to a general license any elk season structure for the 2013 season?

- A) YES _____
B) NO _____

2) If yes, what date would you prefer the season to open on?

- A) Same, September 15 _____
B) October 1 _____
C) October 15 TO Nov. 30th
D) Other _____

3) Please provide any addition comments/concerns

IT IS TOO WARM TO HUNT SEPT 15th Then OCT 15th
The general would probably keep the numbers
down some. We're 6 1/2 mi. north of Hartville,
in the hills, and not seeing as many as we used to.
The shorter season would be appreciated.
most landowners dread the season. Too many
people knocking at the door for too long!
NO season in Sept. or Dec.

THANK YOU FOR YOUR PARTICIPATION!

Please mail survey to:

WGFD

Attn: Martin Hicks

827 Grange Road

Wheatland, WY 82201

Rawhide Elk Herd Unit (Elk Hunt Area 3) Landowner Survey

1) Would you be in favor of that portion of Elk Hunt Area 3 north of U.S. Highway 26 going to a general license any elk season structure for the 2013 season?

- A) YES _____
B) NO _____

2) If yes, what date would you prefer the season to open on?

- A) Same, September 15 to October 31
B) October 1 _____
C) October 15 _____
D) Other COW & CALF ~~SEPT 15~~ NOV 15 - Dec 15

3) Please provide any addition comments/concerns

5/21
Every landowner story is different. All have differing ideas. I have from 30-150 hd of elk every day. It is so dry that they are hitting my meadows every night. I ran them off before dark and they came back, they were on the meadow at daylight. It is mostly last years calves & about 8 bulls.

Let's try something different. I have too many and obviously my neighbors don't have enough. I can remedy that.

THANK YOU FOR YOUR PARTICIPATION!



Please mail survey to:
WGFD
Attn: Martin Hicks
827 Grange Road
Wheatland, WY 82201

Rawhide Elk Herd Unit (Elk Hunt Area 3) Landowner Survey

1) Would you be in favor of that portion of Elk Hunt Area 3 north of U.S. Highway 26 going to a general license any elk season structure for the 2013 season?

- A) YES _____
B) NO X

2) If yes, what date would you prefer the season to open on?

- A) Same, September 15 _____
B) October 1 _____
C) October 15 X
D) Other _____

3) Please provide any addition comments/concerns

From what I can see the herd of elk
we did have moved to other areas or
migrated else where changing there normal
patterns,
Therefore the population having changed,
I don't feel the area could support general
licensing,

THANK YOU FOR YOUR PARTICIPATION!

Please mail survey to:
WGFD
Attn: Martin Hicks
827 Grange Road
Wheatland, WY 82201

Rawhide Elk Herd Unit (Elk Hunt Area 3) Landowner Survey

1) Would you be in favor of that portion of Elk Hunt Area 3 north of U.S. Highway 26 going to a general license any elk season structure for the 2013 season?

- A) YES _____
B) NO _____

2) If yes, what date would you prefer the season to open on?

- A) Same, September 15 _____
B) October 1 _____
C) October 15 _____
D) Other _____

3) Please provide any addition comments/concerns

THANK YOU FOR YOUR PARTICIPATION!

Please mail survey to:
WGFD
Attn: Martin Hicks
827 Grange Road
Wheatland, WY 82201

Rawhide Elk Herd Unit (Elk Hunt Area 3) Landowner Survey

1) Would you be in favor of that portion of Elk Hunt Area 3 north of U.S. Highway 26 going to a general license any elk season structure for the 2013 season?

- A) YES _____
B) NO _____

2) If yes, what date would you prefer the season to open on?

- A) Same, September 15 _____
B) October 1 _____
C) October 15 _____
D) Other _____

3) Please provide any addition comments/concerns

Trespassing Litter Drunks

THANK YOU FOR YOUR PARTICIPATION!

Glenn Southwick

Please mail survey to:
WGFD
Attn: Martin Hicks
827 Grange Road
Wheatland, WY 82201

Rawhide Elk Herd Unit (Elk Hunt Area 3) Landowner Survey

1) Would you be in favor of that portion of Elk Hunt Area 3 north of U.S. Highway 26 going to a general license any elk season structure for the 2013 season?

- A) YES _____
 B) NO X _____

2) If yes, what date would you prefer the season to open on?

- A) Same, September 15 _____
 B) October 1 X _____
 C) October 15 _____
 D) Other _____

3) Please provide any addition comments/concerns

It would seem appropriate to maintain a healthy herd in the area north of Highway 26. The presence of this wonderful resource was a major factor my wife and I considered when purchasing our property in the Haystacks in 2008. I would also like to see the opening date pushed back to at least October 1st to allow the Rut to be unencumbered by rifle hunting and better used for archery hunting.

THANK YOU FOR YOUR PARTICIPATION!

Please mail survey to:
 WGFD
 Attn: Martin Hicks
 827 Grange Road
 Wheatland, WY 82201

Warm weather in September makes care of carcasses problematic as well

Thanks for your consideration
 John P. + Twyla M. Thalken

Rawhide Elk Herd Unit (Elk Hunt Area 3) Landowner Survey

1) Would you be in favor of that portion of Elk Hunt Area 3 north of U.S. Highway 26 going to a general license any elk season structure for the 2013 season?

- A) YES _____
B) NO X _____

2) If yes, what date would you prefer the season to open on?

- A) Same, September 15 _____
B) October 1 _____
C) October 15 _____
D) Other _____

3) Please provide any addition comments/concerns

Not in favor! Would be ok to make a general cow season but leave bull season limited quota. Would prefer to leave the whole area limited quota. It is working the way it is. If made into a gen area it would be a land owner nightmare with trespassers, and the trophy quality would go down. We have been always just building a huntable population in area 3. I think it would be a huge mistake to go to a general at this point.

P.S. If making a general season in area 3 why not a general in area 7 or state wide?
THANK YOU FOR YOUR PARTICIPATION!

Please mail survey to:
WGFD
Attn: Martin Hicks
827 Grange Road
Wheatland, WY 82201

Win Miller
331-2398

Rawhide Elk Herd Unit (Elk Hunt Area 3) Landowner Survey

1) Would you be in favor of that portion of Elk Hunt Area 3 north of U.S. Highway 26 going to a general license any elk season structure for the 2013 season?

- A) YES _____
B) NO X _____

2) If yes, what date would you prefer the season to open on?

- A) Same, September 15 _____
B) October 1 _____
C) October 15 _____
D) Other _____

3) Please provide any addition comments/concerns

Too much private land. Hunters
would find great difficulty in finding
a place to hunt.
Not that many elk in this area.

THANK YOU FOR YOUR PARTICIPATION!

Please mail survey to:
WGFD
Attn: Martin Hicks
827 Grange Road
Wheatland, WY 82201

*No Name
(Gleado)*

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General season would attract to many that are just impulse hunters, not true sportsman. The trespassing issue is of great concern. Most land owner allow a few hunters in, if you flooded them with hunters with a general area, they will shut off all hunting, don't want to deal with the flood of hunters, have seen this happen. I would accept the idea of raising the # of lic to reach the goal, but keep it limited, quota that would help keep the quality bulls we have now.

THANK YOU FOR YOUR PARTICIPATION!

Please mail survey to:
WGFD
Attn: Martin Hicks
827 Grange Road
Wheatland, WY 82201

*thanks
Butch Melikian
Hendo, Wyo*

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D) Other _____

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Changing to a general license would increase trespassing issues from road hunters. This area is predominantly private land north of the West Guard North facing area and many hunters that have permission from the military do not seem to know where there boundaries are and private land starts. If for any reason they allowed this the season should be concurrent with the present deer season so we don't have a difficult time having to deal with trespassers.

THANK YOU FOR YOUR PARTICIPATION!

Kelly O'Crane Rabin 984 Patten Court
Glendale 82213

Please mail survey to:
WGFD
Attn: Martin Hicks
827 Grange Road
Wheatland, WY 82201

Rawhide Elk Herd Unit (Elk Hunt Area 3) Landowner Survey

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C) October 15 _____
D) Other _____

3) Please provide any addition comments/concerns

I think you should leave as is, but
issue more cow tags. That is the only
way to keep the herd under control, I think
Thanks Andy Barnett

THANK YOU FOR YOUR PARTICIPATION!

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WGFD
Attn: Martin Hicks
827 Grange Road
Wheatland, WY 82201

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To keep less traffic.

THANK YOU FOR YOUR PARTICIPATION!

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WGFD
Attn: Martin Hicks
827 Grange Road
Wheatland, WY 82201

Lee Lamb
Jack Lamb
Ellen Lamb

Rawhide Elk Herd Unit (Elk Hunt Area 3) Landowner Survey

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WHERE DO YOU THINK A GENERAL
SEASON TAG PUBLIC WILL HUNT?
AREA 3 IS NEARLY ALL PRIVATE LAND!
I HAVE ALREADY HAD TRESPASSER'S TEAR
DOWN SIGN'S, CUT FENCE'S & HUNT MY
GROUND ARE YOU GOING TO PATROL IT?
LET NATURE BALANCE THE HERD
YOU DONT PAY FOR MY LAND TAKES INSURANCE ECT.
POOR DISISION! HOW ABOUT MORE LANDOWNER TAGS?
THANK YOU FOR YOUR PARTICIPATION!

Please mail survey to:
WGFD
Attn: Martin Hicks
827 Grange Road
Wheatland, WY 82201

P.S. I RECEIVED THIS MAILING AFTER
THE MEETING!

E730 - Rawhide
HA 3
Revised - 8/94

