

## 2013 - JCR Evaluation Form

SPECIES: Elk  
 HERD: EL104 - HOBACK  
 HUNT AREAS: 86-87

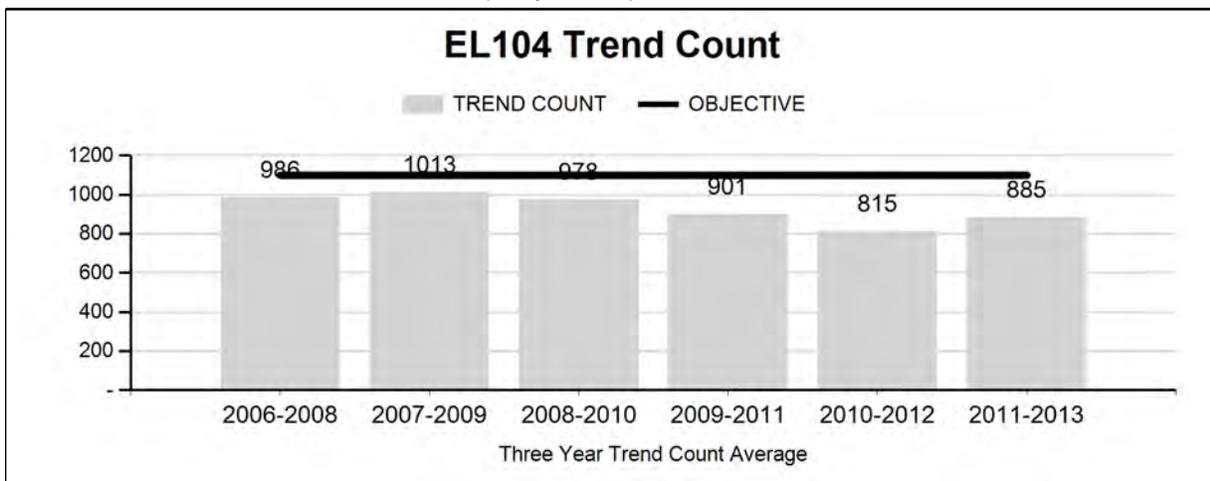
PERIOD: 6/1/2013 - 5/31/2014  
 PREPARED BY: DEAN CLAUSE

	<u>2008 - 2012 Average</u>	<u>2013</u>	<u>2014 Proposed</u>
Trend Count:	909	1,047	1,100
Harvest:	253	192	200
Hunters:	826	723	700
Hunter Success:	31%	27%	29%
Active Licenses:	835	726	700
Active License Percentage:	30%	26%	29%
Recreation Days:	5,799	5,171	5,200
Days Per Animal:	22.9	26.9	26
Males per 100 Females:	20	18	
Juveniles per 100 Females	32	38	

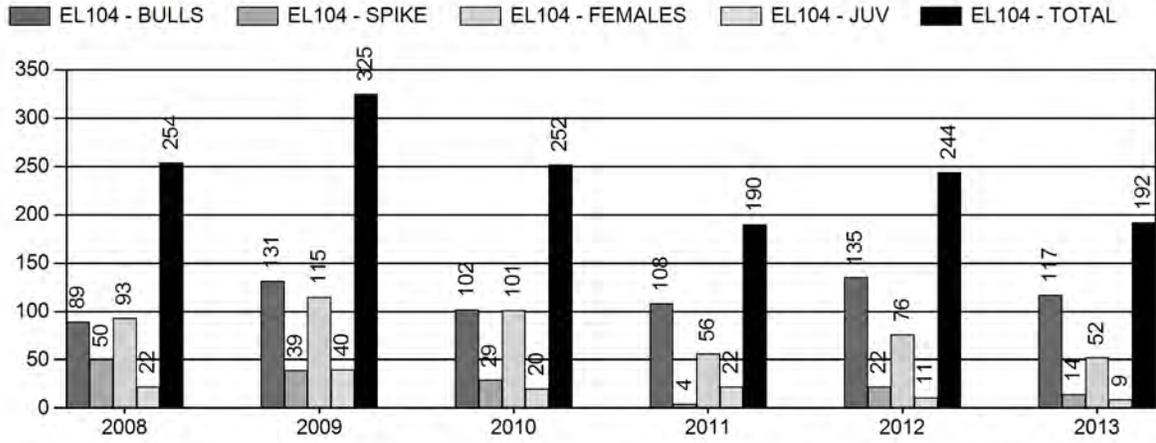
Trend Based Objective ( $\pm 20\%$ ) 1,100 (880 - 1320)  
 Management Strategy: Recreational  
 Percent population is above (+) or (-) objective: -4.8%  
 Number of years population has been + or - objective in recent trend: 0

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

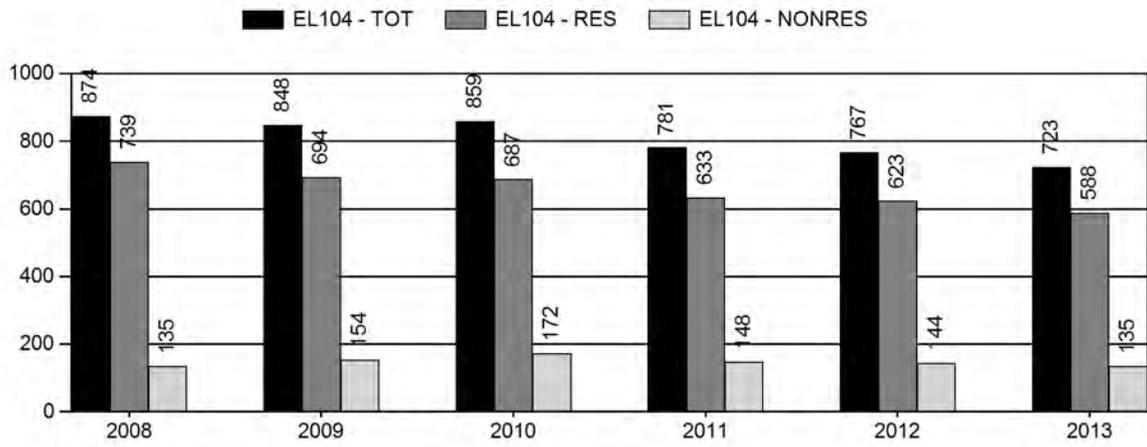
	<u>JCR Year</u>	<u>Proposed</u>
Females $\geq 1$ year old:	0%	0%
Males $\geq 1$ year old:	0%	0%
Juveniles (< 1 year old):	0%	0%



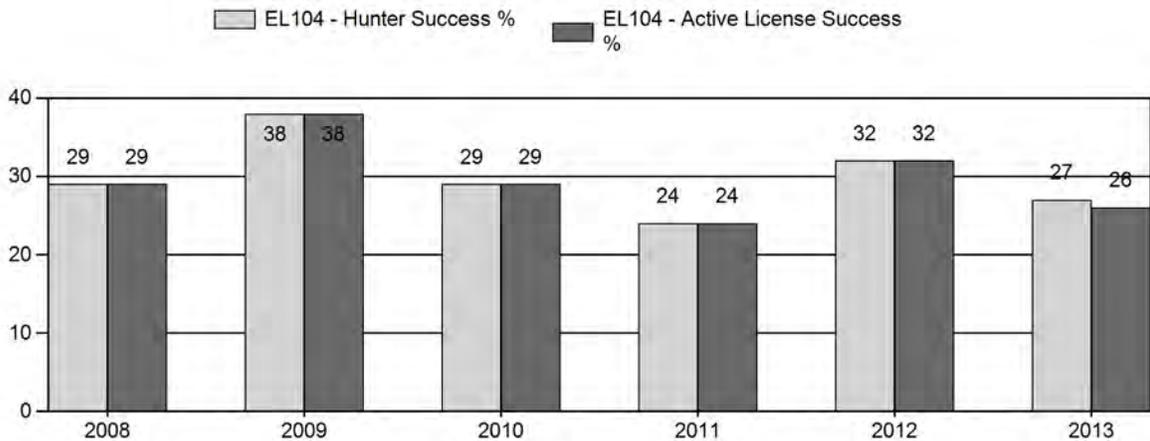
# Harvest



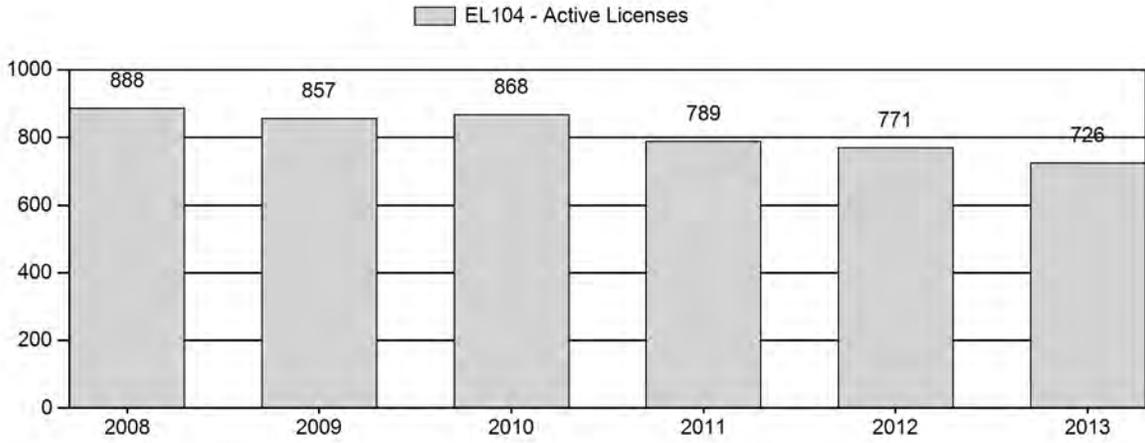
# Number of Hunters



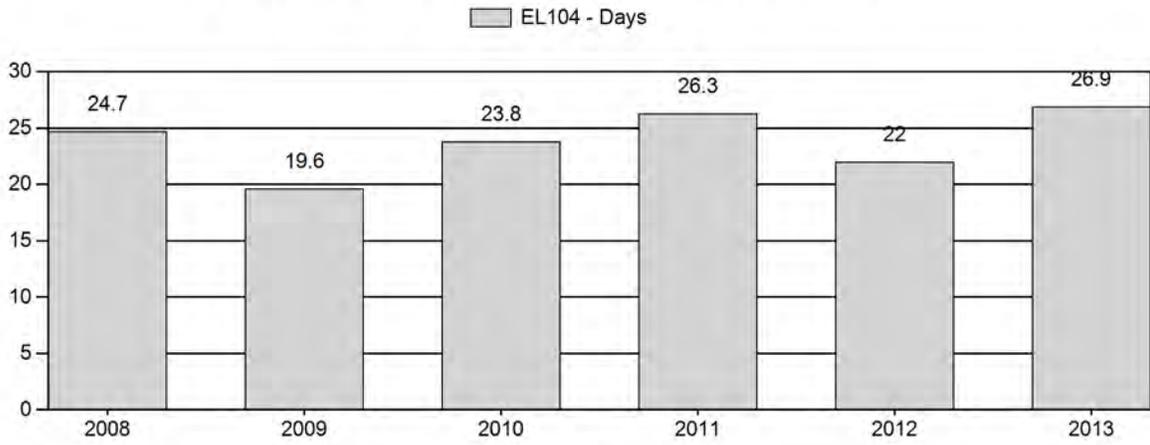
# Harvest Success



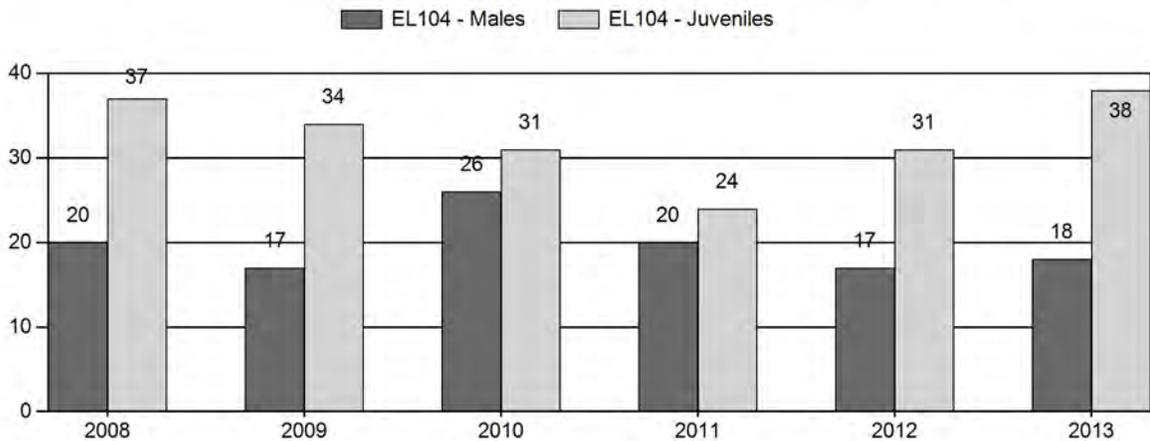
# Active Licenses



# Days per Animal Harvested



# Postseason Animals per 100 Females



**2008 - 2013 Postseason Classification Summary**

for Elk Herd EL104 - HOBACK

Year	Post Pop	MALES				FEMALES		JUVENILES		Tot CIs	Cls Obj	Males to 100 Females			Young to			
		Ylg	Adult	Total	%	Total	%	Total	%			Yng	Adult	Total	Conf Int	100 Fem	Conf Int	100 Adult
2008	1,064	66	68	134	13%	655	63%	243	24%	1,032	353	10	10	20	± 0	37	± 0	31
2009	1,076	59	55	114	11%	670	66%	229	23%	1,013	319	9	8	17	± 0	34	± 0	29
2010	850	60	80	140	17%	533	64%	164	20%	837	281	11	15	26	± 0	31	± 0	24
2011	823	45	69	114	14%	573	70%	135	16%	822	204	8	12	20	± 0	24	± 0	20
2012	0	20	70	90	11%	533	68%	164	21%	787	264	4	13	17	± 0	31	± 0	26
2013	0	55	54	109	11%	617	64%	235	24%	961	349	9	9	18	± 0	38	± 0	32

**2014 Seasons – Hoback Elk Herd Unit (EL104)**

Hunt Area	Type	Opens	Closes	Quota	License	Limitations
86		Sept. 26	Oct. 31		General	Any elk
87		Oct. 15	Oct. 31		General	Any elk valid in that portion of Area 87 south of U.S Hwy 191.
		Oct. 15	Oct. 31		General	Antlered elk valid in that portion of Area 87 north of U.S Hwy 191.
	6	Dec. 1	Jan. 31	25	Limited quota	Cow or calf valid south and east of Dell Creek, north and east of U.S. Highway 191, and west of the North Fork of Fisherman Creek.
<b>Archery Seasons</b>						
<b>86</b>		Sept. 1	Sept. 25			Refer to Section 3
<b>87</b>		Sept. 1	Sept. 30			Refer to Section 3

**Summary of Proposed Changes in License Numbers**

Area	Type	Changes from 2013
<b>EL104 Totals</b>		<b>No Changes</b>

**Management Evaluation**

**Current Mid-Winter Trend Count Management Objective:** 1,100

**Management Strategy:** Recreational

**2013 Trend Count:** 1047

**Most Recent 3-year Running Average Trend Count:** 885

The Hoback Herd Unit encompasses approximately 341 square miles of occupied elk habitat almost entirely within Sublette County. Hunt Areas 86 (Monument Ridge) and 87 (Raspberry Ridge) make up the Hoback Herd Unit. This herd unit is managed under a mid-winter trend objective of 1,100 (± 20%) with a herd estimate derived from a 3-year trend count average on

feedgrounds and native range combined. This herd is managed under “recreational” management, with a management objective for bull: 100 cow ratio of 15 to 29.

### Herd Unit Issues

Managers believe a very high proportion (>90%) of elk are typically counted in this herd unit and are located on feedgrounds during the winter. This is an extremely “leaky” herd unit and as a result, a population model has not been successfully developed. Elk are annually documented moving into and out of this Hoback herd unit resulting in annual winter trend counts that can vary from year to year. In addition, the Dell Creek feedground has struggled to maintain elk numbers near the winter objective of 400 elk. Low elk numbers at Dell Creek feedground can partially be attributed to the close proximity of this feedground to the Fall Creek herd unit and summer/fall use in that adjacent herd unit where more liberal elk harvest strategies occur.

### Weather

Elk in this herd unit experience the coldest winter temperatures compared to all others herd units in western Wyoming, which may result in higher feedground dependence, even on low snow years. Heavy snow loads typically make most native forage unavailable on most winters. Snow conditions were below normal this past winter (2013-14) until February when heavy snow accumulations occurred. Deep snow persisted well into late April.

### Habitat

Diverse habitats from low elevation willow bottoms and sagebrush/grass, to aspen and mixed conifer, to high elevation tall forb, white-bark pine, and alpine make this herd unit rich for a wide array of wildlife. Due to the heavy snow accumulations and cold temperatures during winter, over 90% of the elk rely on supplemental feeding (feedgrounds) within this herd unit. Therefore winter and other seasonal habitats are not considered to be limiting herd dynamics in this herd unit.

### Field Data

The 2013 postseason trend count of 1,047 elk observed on Department-operated elk feedgrounds and native winter ranges, showed an increase compared to a continuing declining trend since 2008 (Table 1). Very few elk (n=99) were counted away from established feedgrounds in Areas 86 and 87, which is typical for this herd unit due to climatic conditions. Over 90% of the documented elk numbers were from feedground locations.

**Table 1. Herd trend counts in the Hoback Herd Unit, 2004-2013.**

Location	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Dell Creek F.G.	298	258	297	311	345	298	228	205	171	242
McNeel F.G.	560	716	598	591	687	701	596	613	544	706
N.W.R.	83	70	67	38	23	44	13	4	72	99
<b>HU Total</b>	<b>941</b>	<b>1044</b>	<b>962</b>	<b>940</b>	<b>1055</b>	<b>1043</b>	<b>837</b>	<b>822</b>	<b>787</b>	<b>1047</b>

The 2013 postseason ratios of 18 bulls:100 cows:38 calves, shows a decrease in the bull ratio and an increase in the calf ratio compared to the 5-year average bull:cow:calf ratios of 20:100:32. The 2013 bull ratio is adequate and within management goals for this herd unit.

## **Harvest Data**

Additional antlerless harvest opportunities were made available starting in 2008 continuing through 2011 in Area 86 and the southern portions of Area 8. Liberal seasons were designed to help reduce elk numbers from surrounding herd units, as many of these animals move into the Hoback during the spring/summer/fall period. The 2013 harvest survey indicated a total harvest of approximately 200 (140 bulls and 60 cows/calves) which decreased from the 2012 harvest. Hunter success was 26% and days/harvest was 27, compared to the 5-year average of 30% success and 23 days/harvest. The lower success and increased hunter effort in 2013 can be attributed to conservative antlerless elk seasons (primarily the north portion of Area 87) and lower elk numbers.

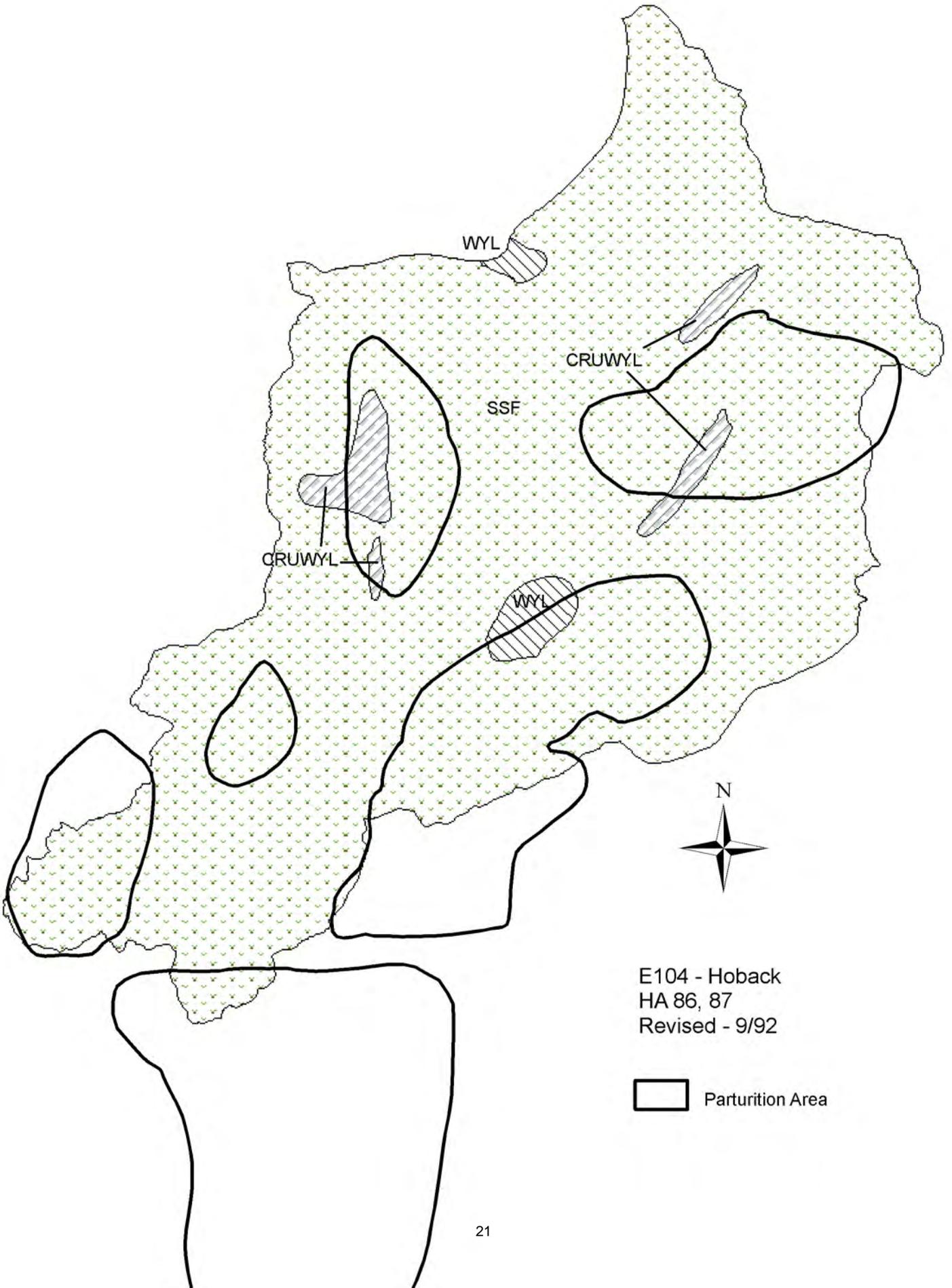
## **Population**

Starting in 2012, a mid-winter trend count was used to manage this herd unit instead of hand-derived population model estimates. This is an extremely “leaky” herd unit and as a result, a functional computer simulation model has never been developed. The post hunt population trend objective for this herd is 1,100 elk ( $\pm 20\%$ ). The 2011-2013 mid-winter 3-year trend count average is 885 elk, which is at the low end of the range for this herd objective.

## **Management Summary**

The Hoback Herd Unit is extremely “leaky” in regards to elk moving in and out of the herd on a seasonal basis. Fluctuations of up to 260 animals between annual winter counts are common without any rational explanation for the changes. Radio collared (GPS) elk and harvest data from elk ear tagged at Franz (located in the Piney herd unit), McNeel, and Dell Creek feedgrounds have documented movement among herd units quite well. Ear tag data has documented 29% to 43% harvest outside the herd unit where those elk were tagged. Radio collared elk have also documented movements outside the herd units from where they were collared as follows; McNeel at 0%, Dell Creek at 63%, and Franz at 89%. Since 2008, hunting seasons were designed to increase harvest on antlerless within the Hoback herd unit as well as surrounding herd units, which can be attributed to low elk numbers during 2010-2012. In 2012 seasons were changed to reduce female harvest in response to low elk numbers during the winter of 2011-2012. Currently, adequate bull:cow:calf ratios are being maintained. The recent mid-winter 3-year trend average was 885 elk, 20% below the objective of 1,100, although the 2013 winter trend increased to 1,047. Herd management for 2014 will be similar to 2013, to reduce antlerless harvest in parts of this herd, primarily targeted in the northern portion of Area 87 to increase the postseason (winter) population.

The 2014 hunting seasons for this herd unit will be essentially the same as in 2013. In Area 87, the general license season is “any” elk hunting the entire season (Oct. 15 – Oct. 31) south of U.S. Hwy 191, but will be limited to “antlered” elk north of U.S. Hwy 191. A total of 25 limited quota Type 6 (cow/calf) licenses are available in a portion of Area 87, valid from Dec. 1 (change from Nov. 19) through January 31, in an effort to reduce damage to privately stored hay crops. The 2014 season in Area 86 offers a general license, “any” elk hunting from September 26 through October 31, same as in past years. The 2013 hunting seasons are projected to harvest approximately 200 elk (140 bulls, 60 cows/calves).



E104 - Hoback  
HA 86, 87  
Revised - 9/92

 Parturition Area



## 2013 - JCR Evaluation Form

SPECIES: Elk  
 HERD: EL106 - PINEY  
 HUNT AREAS: 92, 94

PERIOD: 6/1/2013 - 5/31/2014

PREPARED BY: GARY FRALICK

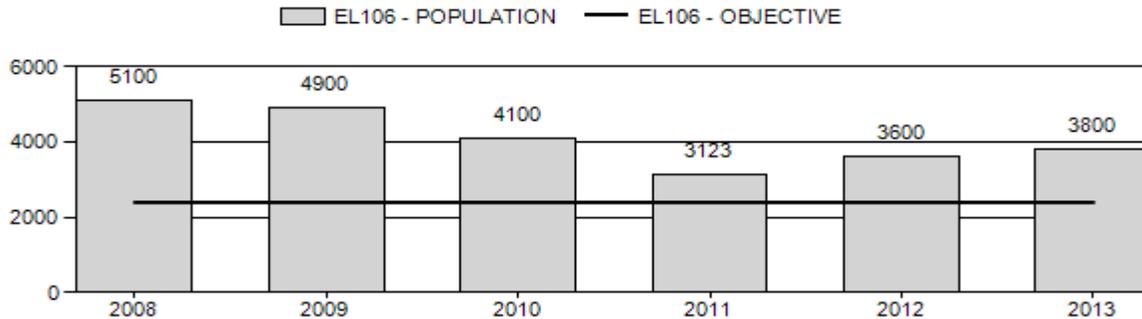
	<u>2008 - 2012 Average</u>	<u>2013</u>	<u>2014 Proposed</u>
Population:	4,165	3,800	2,800
Harvest:	954	1,123	1,147
Hunters:	3,065	3,312	3,400
Hunter Success:	31%	34%	34%
Active Licenses:	3,212	3,471	3,400
Active License Percent:	30%	32%	34%
Recreation Days:	25,336	29,585	31,201
Days Per Animal:	26.6	26.3	27.2
Males per 100 Females	30	46	
Juveniles per 100 Females	33	33	

Population Objective: 2,400  
 Management Strategy: Recreational  
 Percent population is above (+) or below (-) objective: 58%  
 Number of years population has been + or - objective in recent trend: 10  
 Model Date: 02/23/2014

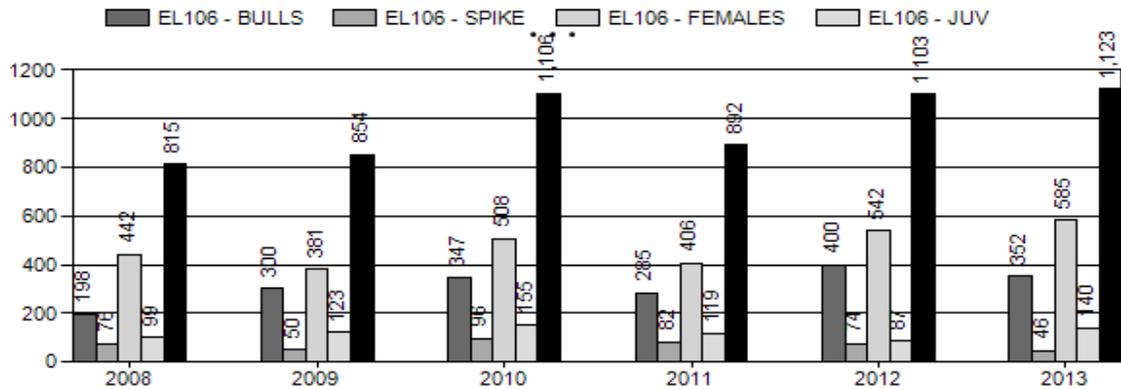
**Proposed harvest rates (percent of pre-season estimate for each sex/age group):**

	<u>JCR Year</u>	<u>Proposed</u>
Females ≥ 1 year old:	26%	31%
Males ≥ 1 year old:	30%	34%
Juveniles (< 1 year old):	17%	18%
Total:	21%	30%
Proposed change in post-season population:	-16%	-24%

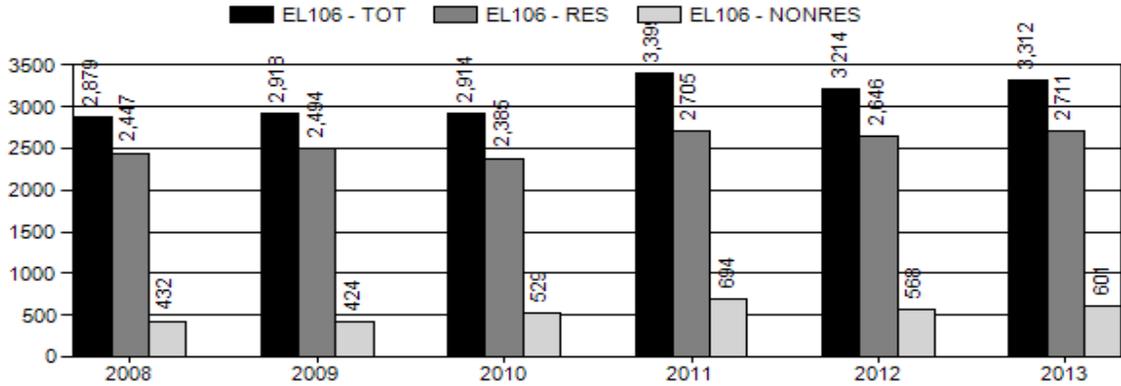
## Population Size - Postseason



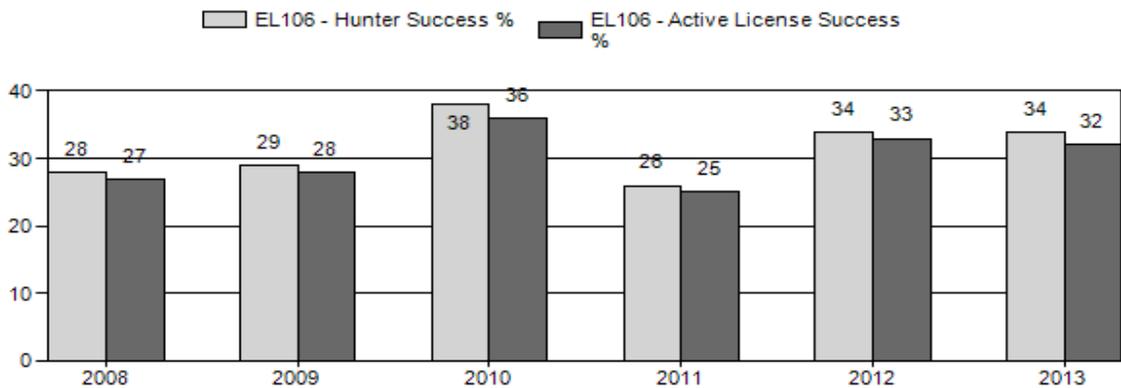
## Harvest



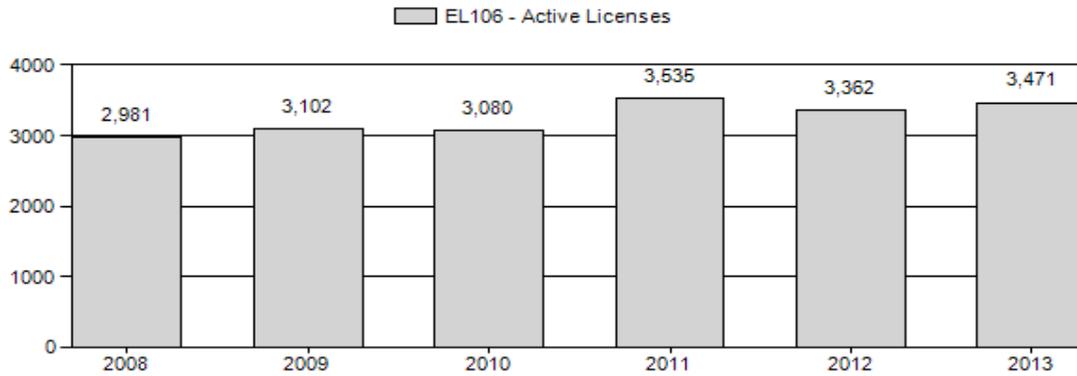
## Number of Hunters



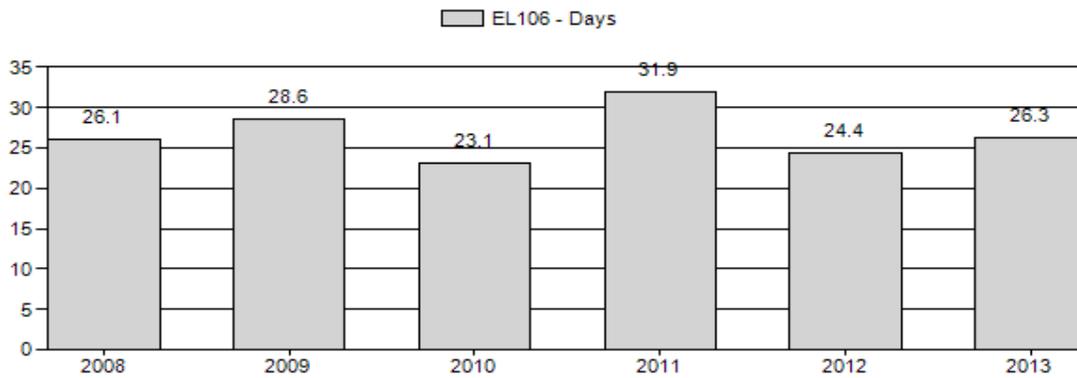
## Harvest Success



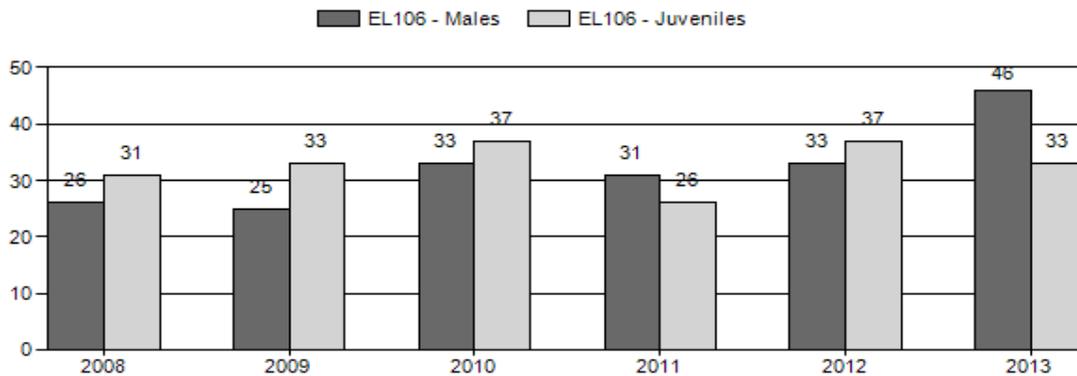
## Active Licenses



## Days per Animal Harvested



## Postseason Animals per 100 Females



**2008 - 2013 Postseason Classification Summary**

for Elk Herd EL106 - PINEY

Year	Post Pop	MALES				FEMALES		JUVENILES		Tot CIs	Cls Obj	Males to 100 Females			Young to			
		Ylg	Adult	Total	%	Total	%	Total	%			Yng	Adult	Total	Conf Int	100 Fem	Conf Int	100 Adult
2008	5,100	255	243	498	17%	1,887	64%	585	20%	2,970	383	14	13	26	± 1	31	± 1	25
2009	4,900	190	216	406	16%	1,618	63%	539	21%	2,563	403	12	13	25	± 1	33	± 1	27
2010	4,100	199	357	556	19%	1,683	59%	621	22%	2,860	0	12	21	33	± 1	37	± 1	28
2011	3,123	217	302	519	20%	1,660	64%	425	16%	2,604	369	13	18	31	± 1	26	± 1	20
2012	3,600	261	306	567	19%	1,705	59%	639	22%	2,911	0	15	18	33	± 1	37	± 1	28
2013	3,800	240	380	620	26%	1,337	56%	443	18%	2,400	0	18	28	46	± 2	33	± 1	23

**2014 HUNTING SEASON**

**SPECIES: ELK  
(EL106)**

**HERD UNIT: PINEY**

<u>HUNT AREA</u>	<u>TYPE</u>	<u>OPENS</u>	<u>CLOSES</u>	<u>QUOTA</u>	<u>LIMITATIONS</u>
92		Oct. 15	Oct. 31		General license; Any elk – SEE SECTION 6.
		Nov. 1	Nov. 23		General license; Antlerless elk – SEE SECTION 6.
	6	Oct. 1	Nov. 23	500	Limited quota; Cow or calf – SEE SECTION 6.
	6	Nov. 24	Jan. 31		Unused Area 92 Type 6 licenses valid off national forest east of Sublette County Roads 115, 116 and 117 and south of the North Beaver Road – SEE SECTION 6.
94		Oct. 15	Oct. 31		General license; Any elk – SEE SECTION 6.
		Nov. 1	Nov. 23		General license; Antlerless elk – SEE SECTION 6.
	6	Oct. 1	Nov. 23	450	Limited quota; Cow or calf – SEE SECTION 6.

	Dec. 1	Jan. 31		Unused Area 94 Type 6 and Type 7 licenses valid on the Big Piney Hunter Management Area (HMA permission slip required) – SEE SECTION 6.	
	7	Nov. 1	Nov. 31	100	Limited Quota; Cow or calf valid north of Middle Piney Creek – SEE SECTION 6.
92, 94	Sep. 1	Sep. 30			General license; Archery only – SEE SECTION 3.

SUMMARY OF CHANGES BY LICENSE NUMBER

Area	Type	Change from 2013
92	Gen.Antlerless	Eliminates Oct.1 – Oct. 14 hunt
92	Gen.Antlerless	Change closing dates from Nov. 24 to Nov. 23
92	Limited Type 6	Changes closing dates from Nov. 24 to Nov. 23
94	Gen. Antlerless	Eliminates Oct. 1 – Oct. 14 hunt
94	Gen. Antlerless	Changes closing date from Nov. 24 to Nov. 23; eliminates area that portion of the area north of Middle Piney Creek, Nov. 1-24
94	Limited Type 6	Eliminates Nov. Unused LQ Type 6 licenses valid only in area north of Middle Piney Creek; reduces Type 6 licenses from 550 to 450 licenses
94	Limited Type 7	Adds 100 Limited Quota Type 7 cow/calf only hunt valid in a portion of the area during November
Herd Unit Total	Limited quota licenses	No Net Change

## **Management Evaluation**

**Current Postseason Population Management Objective: 2,400**

**Management Strategy: Recreational**

**2013 Postseason Population Estimate: ~3,800**

**2014 Proposed Postseason Population Estimate: ~2,800**

The population objective for Piney elk herd is 2400 elk. The management strategy is recreational management. The objective and management strategy were last revised in 2011. The current population estimate is 3800 elk.

## **Herd Unit Issues**

Since 2005 sustained population reduction has been difficult to achieve. Hunting opportunities are some of the most liberal in western Wyoming. Management strategies have emphasized hunter opportunity by promoting antlerless elk harvest with November hunting seasons and issuance of limited quota cow/calf only licenses. While both hunt areas continue to support winter elk numbers at or above Commission-established feedground quotas, Area 94, and specifically the Bench Corral feedground that has supported the highest increase in elk.

## **Weather**

Weather conditions during the 2013 were extremely dry during the early portion of the summer. By late summer the moisture regime had changed frequent precipitation scenario that persisted into the fall hunting season. Drought conditions in the early portion of the summer abated by late fall as persistent snow storms began to deposit snowpack in the Wyoming and Salt Mountain Ranges. By late winter 2014 snowpack in western Wyoming watersheds were estimated to be well-above normal. Please refer to the following web sites for specific weather station data: <http://www.ncdc.noaa.gov/temp-and-precip/time-series> and <http://www.ncdc.noaa.gov/oa/climate/research/prelim/drought/pdiimage.html>.

## **Habitat**

Winter range browse plants have been measured each spring and fall to assess production and utilization since the late 1990s. Growing conditions improved in 2013 in spite of below average snowpack during the 2012-13 winter. Improved growing conditions were due to spring and summer rains which have a different effect on shrubs than winter snowpack due to rates of infiltration. Leader production on Wyoming big sagebrush and black sagebrush were the species most notably improved compared to the 2012 leader growth. However, average leader growth was still less than a half inch for Wyoming big sagebrush sites and less than two inches for mountain shrubs.

For additional site specific information, please refer to the 2012 Annual Report Strategic Habitat Plan Accomplishments, pages 104-123 for Pinedale Region habitat improvement project summaries ( <http://wgfd.wyo.gov/web2011/wildlife-1000708.aspx>).

## **Field Data**

Since 2005, sustained and significant population reduction has been difficult to achieve. Management strategies have emphasized the harvest of antlerless elk with November hunting seasons and issuance of limited quota cow/calf licenses. While both hunt areas continue to support winter elk numbers at or above Commission-established feedground quotas, Area 94, and specifically the Bench Corral feedground, has supported the highest increase in elk. Consequently, hunting opportunities, especially for antlerless elk in Area 94 where trend counts continue to remain high, will continue to be liberal in order to affect the desired population reduction. Limited quota Type 6 cow/calf licenses will focus on the antlerless segment of the population since these license holders typically account for at least 50% of the antlerless harvest in the herd unit.

## **Harvest Data**

Hunter success was estimated at 34% in 2013 with a total harvest over 1100 elk. General license hunters accounted for 69% of the total elk harvest, and 52% of the total antlerless harvest. Limited quota Type 6 license holders accounted for 48% of the total antlerless elk harvest. The relatively high number of additional cow/calf only licenses issued resulted in a substantial harvest of antlerless elk. The majority of this harvest likely occurred in November, and affirms the management strategy to promote antlerless harvest when elk are more likely to be present at lower elevation and accessible to hunters. The added dimension of harvesting antlerless elk with Type 6 licenses other than general hunting opportunity will assist in reducing this population. Antlerless hunting is an essential component of the elk management strategy; managing the reproductive segment of the population will continue to emphasize cow harvest with limited quota licenses holders during the months of October and November. The management goal of maintaining the postseason bull: cow ratios of at least 20 bulls:100 cows have been achieved.

## **Population**

The population trend is decreasing, but only slightly. The “Constant Juvenile and Adult Survival – CJ,CA Model” spreadsheet model was chosen for the post season population estimate. This model provides the best model alignment with low AICc value of 365 and fit of 356. This model also tracks reasonably with observed bull:cow ratios, bull harvest percentages, and annual population dynamics.

## **Management Summary**

The 2014 hunting seasons are designed to reduce the Piney elk toward the objective of 2400 elk. The emphasis to harvest adult female elk in both hunt areas will continue for the 7<sup>th</sup> consecutive year by opening the limited quota antlerless elk hunting on October 1. In addition, the number of

days for the November portion of the antlerless elk hunting season will extend to November 23 for general license hunters and limited quota Type 6 hunters. The number of limited quota Type 6 licenses available in 2014 will remain at 950 additional cow/calf licenses. A total of 500 and 550 Type 6 licenses will be available in Areas 92 and 94, respectively.

A substantial change in the 2014 hunt in Area 94 will be an effort to shift the hunting pressure north of Middle Piney Creek with a newly implemented limited quota Type 7 cow/calf license which will be valid during November 1 – 30. This hunt is designed to focus harvest on that segment of the population that spends the winter on the Bench Corral feedground. For the 3<sup>rd</sup> consecutive year, hunters will be permitted to harvest up to three elk in this herd.

The 2014 hunting seasons are projected to harvest 1100 elk. The 2014 posthunt population estimate should be approximately 2800 elk.

<b>INPUT</b>	
Species:	Elk
Biologist:	Gary Fralick
Herd Unit & No.:	Piney Elk
Model date:	02/23/14

<b>MODELS SUMMARY</b>		Relative AICc	Fit	Notes
CJ,CA	Constant Juvenile & Adult Survival	365	356	
SC,J,SCA	Semi-Constant Juvenile & Semi-Constant Adult Survival	43576	43567	
TS,J,CA	Time-Specific Juvenile & Constant Adult Survival	378	263	
TS,J,CA,MSC	Time-Specific Juv, Constant Adult Survival, Male survival coefficient	299854	299843	

Year	Posthunt Population Est.		Trend Count	Predicted Prehunt Population		Predicted Posthunt Population		Total	Objective	
	Field Est	Field SE		Juveniles	Total Males	Females	Total Males			Females
1993				1204	1335	3106	1160	955	2878	4993
1994				1603	1430	3282	1494	736	2833	5063
1995				1350	1366	3386	1279	1024	3181	5483
1996				1422	1548	3626	1353	1203	3213	5770
1997				1059	1754	3690	937	1267	3151	5354
1998				1245	1632	3446	1159	1151	2960	5271
1999				1417	1619	3360	1299	1002	2953	5254
2000				1201	1536	3416	1044	985	2747	4776
2001				1079	1408	3105	1006	944	2792	4741
2002				1060	1351	3131	979	1021	2910	4911
2003				1063	1414	3233	985	1026	2985	4995
2004				1295	1421	3307	1183	945	2911	5039
2005				1369	1430	3324	1335	1081	3144	5560
2006				1475	1628	3615	1162	1162	3257	5783
2007				1378	1719	3737	1244	1235	3317	5796
2008				1118	1737	3741	1009	1435	3255	5700
2009				1188	1826	3579	1053	1441	3160	5654
2010				1258	1851	3506	1087	1364	2947	5398
2011				852	1792	3316	734	1389	2865	4988
2012				1029	1660	3082	932	1130	2488	4551
2013				870	1499	2806	687	1054	2075	3816
2014				536	1318	2300	437	870	1585	2892
2015				509	1030	1719	443	599	1301	2343
2016										
2017										
2018										
2019										
2020										
2021										
2022										
2023										
2024										
2025										

Survival and Initial Population Estimates

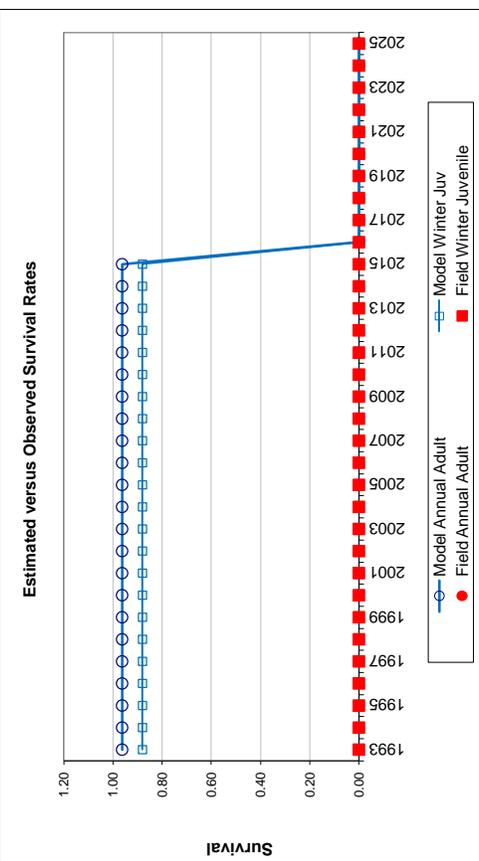
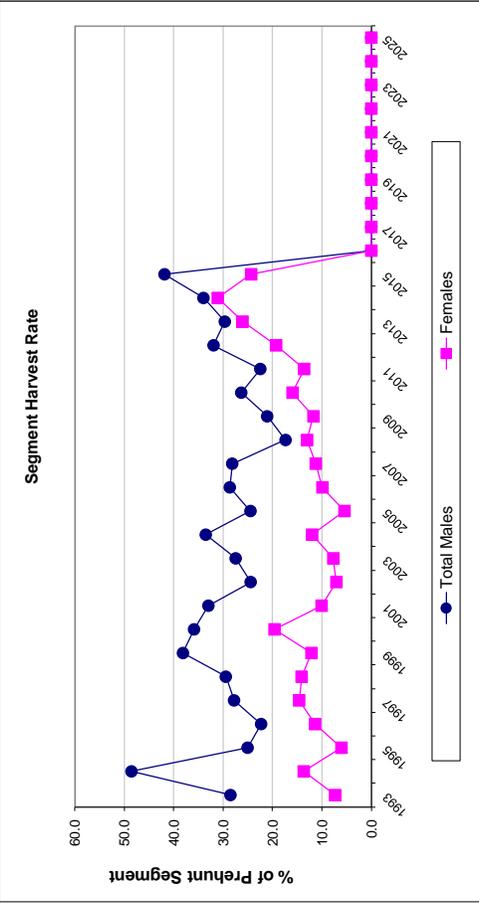
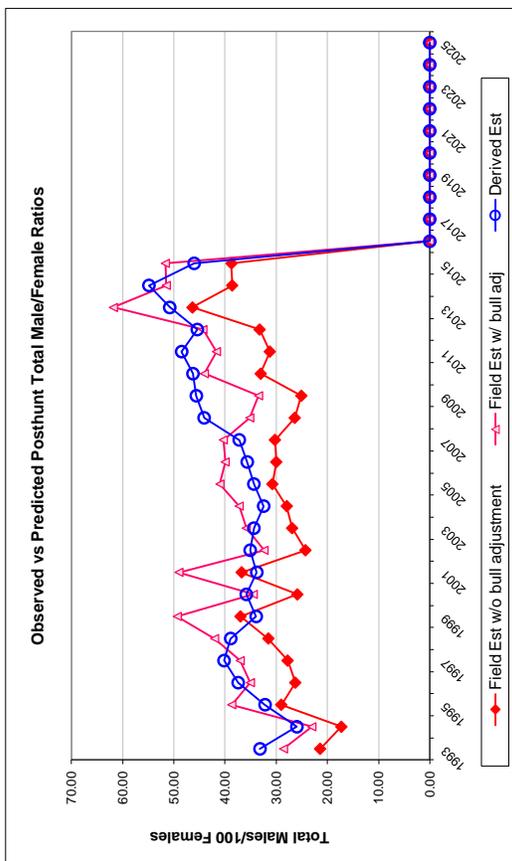
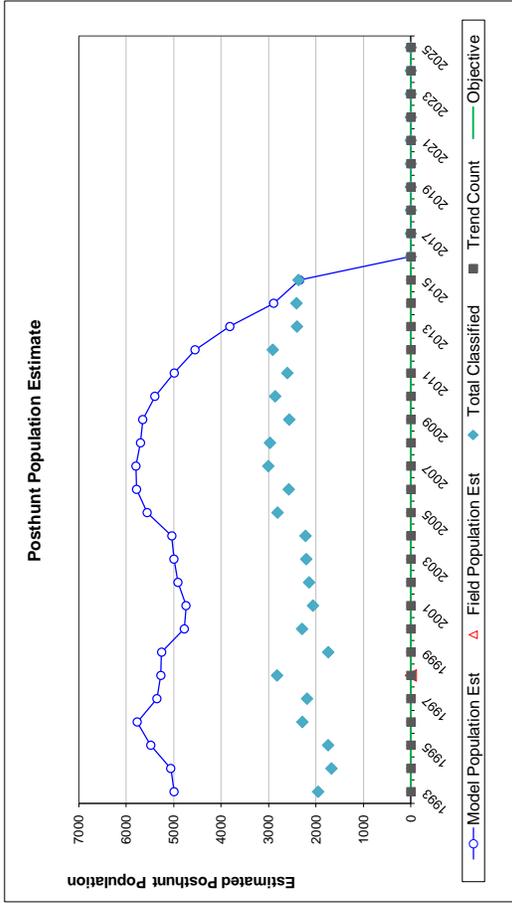
Year	Annual Juvenile Survival Rates		Annual Adult Survival Rates	
	Model Est	Field Est	Model Est	Field Est
1993	0.88		0.96	
1994	0.88		0.96	
1995	0.88		0.96	
1996	0.88		0.96	
1997	0.88		0.96	
1998	0.88		0.96	
1999	0.88		0.96	
2000	0.88		0.96	
2001	0.88		0.96	
2002	0.88		0.96	
2003	0.88		0.96	
2004	0.88		0.96	
2005	0.88		0.96	
2006	0.88		0.96	
2007	0.88		0.96	
2008	0.88		0.96	
2009	0.88		0.96	
2010	0.88		0.96	
2011	0.88		0.96	
2012	0.88		0.96	
2013	0.88		0.96	
2014	0.88		0.96	
2015	0.88		0.96	
2016	0.88		0.96	
2017				
2018				
2019				
2020				
2021				
2022				
2023				
2024				
2025				

Parameters:		Optim cells
Juvenile Survival =		0.880
Adult Survival =		0.963
Initial Total Male Pop/10,000 =		0.095
Initial Female Pop/10,000 =		0.288

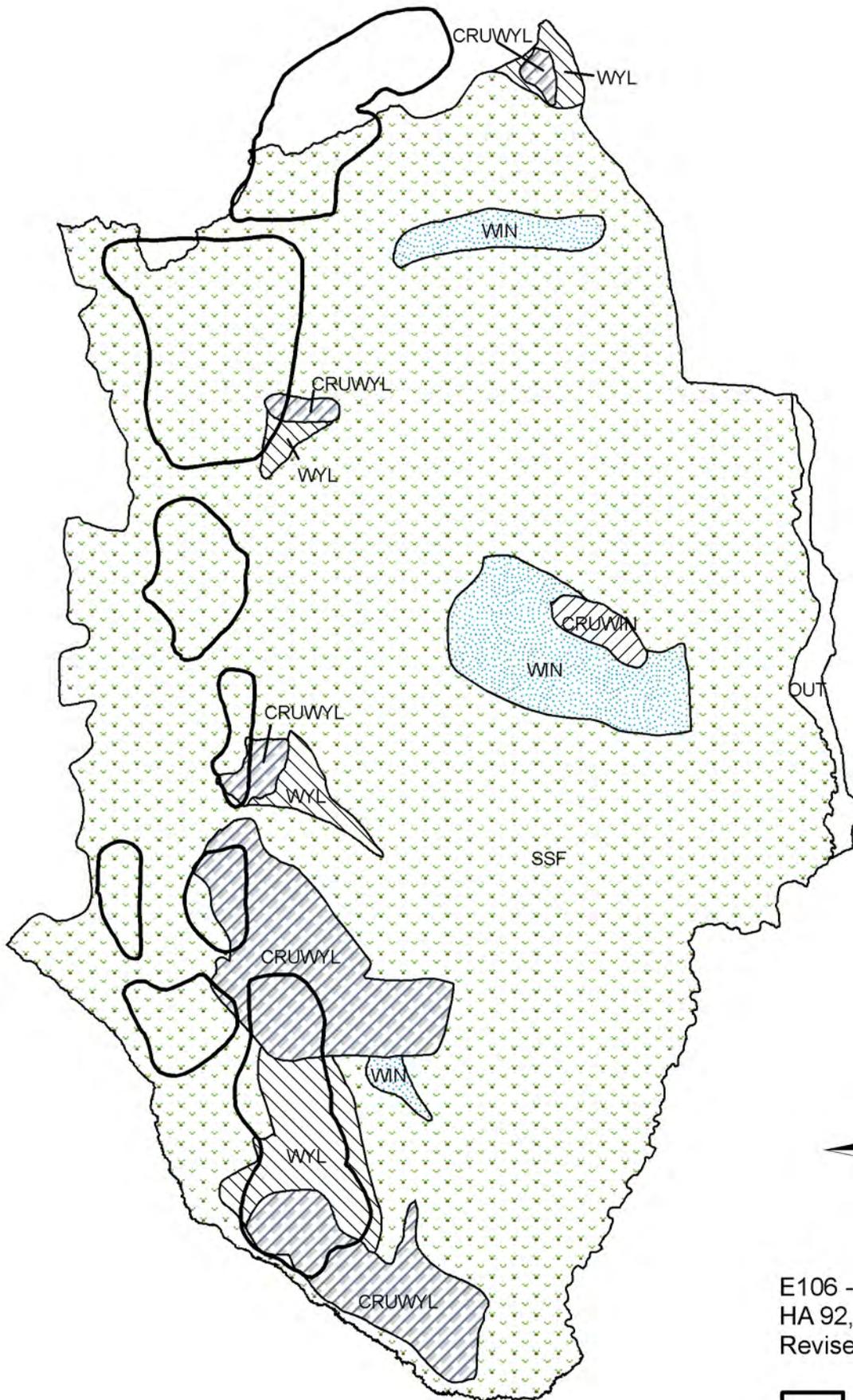
MODEL ASSUMPTIONS	
Sex Ratio (% Males) =	50%
Wounding Loss (total males) =	10%
Wounding Loss (females) =	10%
Wounding Loss (juveniles) =	10%
<b>Total Bulls Adjustment Factor</b>	<b>75%</b>

Year	Classification Counts										Harvest				
	Juvenile/Female Ratio					Total Male/Female Ratio					Segment Harvest Rate (% of Prehunt Segment)				
	Derived Est	Field Est	Field SE	Derived Est	Field Est w/ bull adj	Field Est w/o bull adj	Juv	Yrl males	2+ Males	Females	Total Harvest	Total Males	Females		
1993		40.31	2.16	33.17	28.59	21.44	1.47	40	116	230	207	593	28.5	7.3	
1994		52.74	2.86	25.97	23.04	17.28	1.43	99	144	487	408	1138	48.5	13.7	
1995		40.19	2.34	32.18	38.71	29.03	1.91	65	120	191	186	562	25.0	6.0	
1996		42.12	2.10	37.44	35.05	26.29	1.56	62	74	240	375	751	22.3	11.4	
1997		29.73	1.67	40.20	37.05	27.79	1.60	111	156	287	490	1044	27.8	14.6	
1998		39.16	1.82	38.89	42.05	31.54	1.58	78	109	328	442	957	29.5	14.1	
1999		43.97	2.57	33.91	49.34	37.01	2.30	108	138	423	370	1039	38.1	12.1	
2000		38.03	1.94	35.85	34.50	25.88	1.53	142	106	395	608	1251	35.9	19.6	
2001		36.01	2.03	33.80	49.02	36.77	2.05	67	117	305	284	773	33.0	10.1	
2002		33.65	1.82	35.09	32.40	24.30	1.49	73	53	247	201	574	24.4	7.1	
2003		32.99	1.78	34.38	35.87	26.90	1.57	71	84	269	226	650	27.5	7.7	
2004		40.62	2.08	32.46	37.26	27.94	1.65	102	77	356	360	895	33.5	12.0	
2005		42.48	1.93	34.37	41.02	30.76	1.57	31	76	242	164	513	24.5	5.4	
2006		41.88	1.99	35.67	39.99	29.99	1.61	101	91	333	325	850	28.6	9.9	
2007		37.52	1.70	37.24	40.35	30.26	1.48	121	111	329	382	943	28.2	11.2	
2008		31.00	1.47	44.10	35.19	26.39	1.33	99	76	198	442	815	17.4	13.0	
2009		33.31	1.66	45.62	33.46	25.09	1.39	123	50	300	381	854	21.1	11.7	
2010		36.90	1.73	46.28	44.05	33.04	1.62	155	96	347	508	1106	26.3	15.9	
2011		25.60	1.39	48.48	41.69	31.27	1.57	108	84	282	410	884	22.5	13.6	
2012		37.48	1.74	45.43	44.34	33.26	1.61	88	75	407	540	1110	31.9	19.3	
2013		33.13	1.82	50.82	61.83	46.37	2.25	166	48	356	665	1235	29.7	26.1	
2014		27.59	1.56	54.88	51.49	38.62	1.92	90	77	330	650	1147	34.0	31.1	
2015		34.09	1.83	46.04	51.68	38.76	1.98	60	67	325	380	832	41.9	24.3	
2016															
2017															
2018															
2019															
2020															
2021															
2022															
2023															
2024															
2025															

FIGURES



Comments:



E106 - Piney  
 HA 92, 94  
 Revised - 12/88

 Parturition Area



## 2013 - JCR Evaluation Form

SPECIES: Elk

PERIOD: 6/1/2013 - 5/31/2014

HERD: EL107 - UPPER GREEN RIVER

HUNT AREAS: 93, 95-96

PREPARED BY: DEAN CLAUSE

	<u>2008 - 2012 Average</u>	<u>2013</u>	<u>2014 Proposed</u>
Trend Count:	2,534	2,787	2,600
Harvest:	411	453	500
Hunters:	1,151	1,223	1,250
Hunter Success:	36%	37%	40%
Active Licenses:	1,206	1,310	1,350
Active License Percentage:	34%	35%	37%
Recreation Days:	9,070	11,064	10,500
Days Per Animal:	22.1	24.4	21
Males per 100 Females:	28	26	
Juveniles per 100 Females	30	31	

Trend Based Objective (± 20%) 2,500 (2000 - 3000)

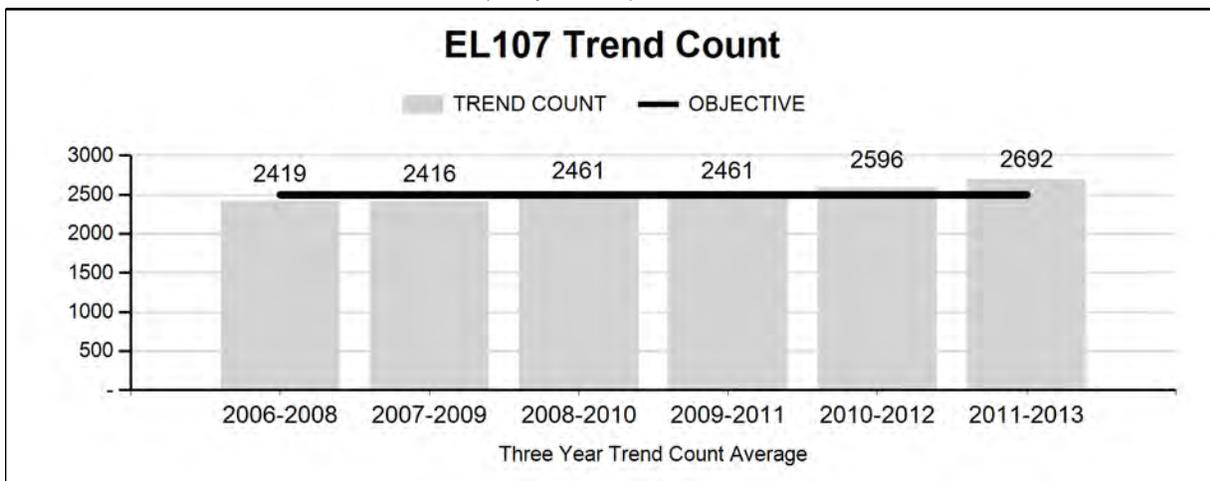
Management Strategy: Recreational

Percent population is above (+) or (-) objective: 11%

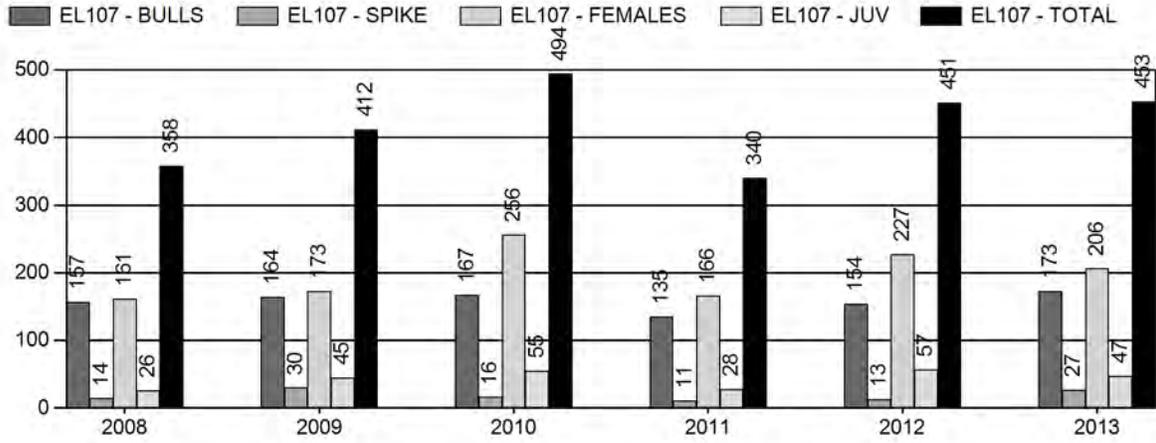
Number of years population has been + or - objective in recent trend: 0

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

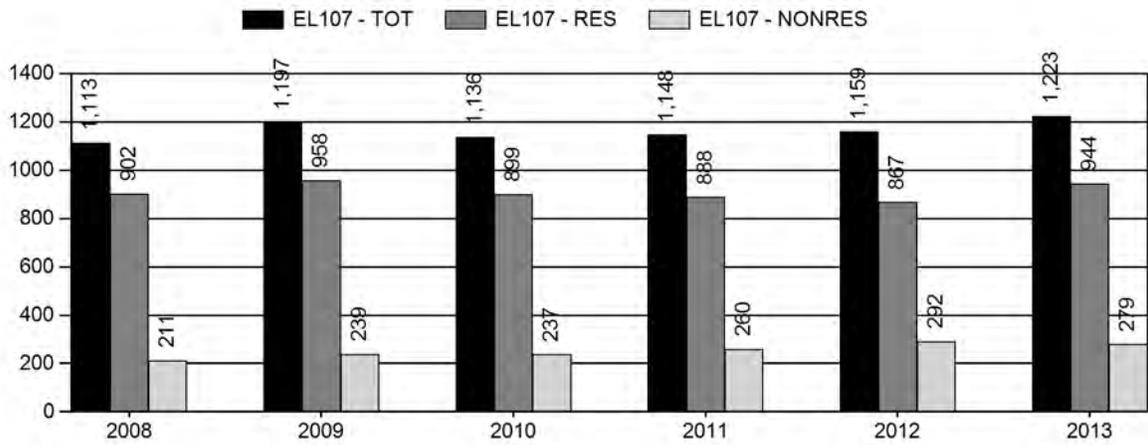
	<u>JCR Year</u>	<u>Proposed</u>
Females ≥ 1 year old:	0%	0%
Males ≥ 1 year old:	0%	0%
Juveniles (< 1 year old):	0%	0%



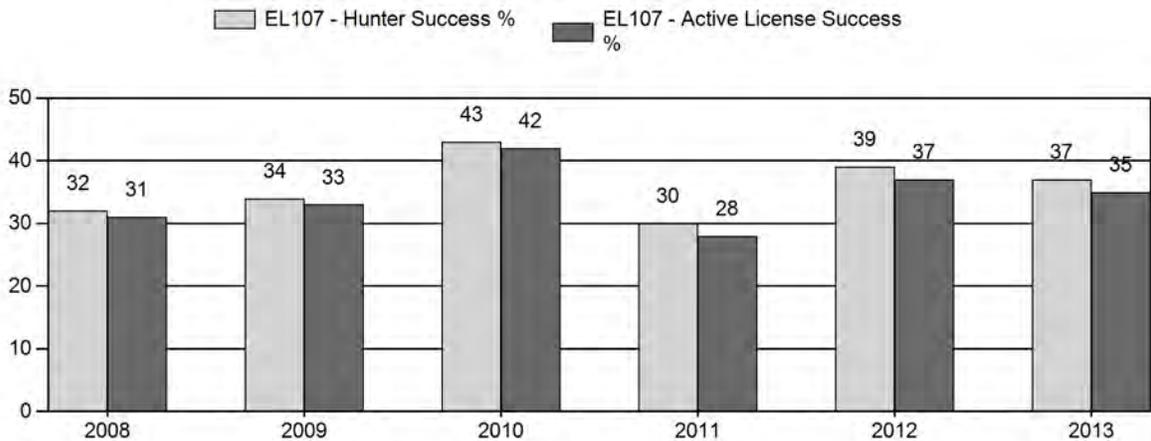
# Harvest



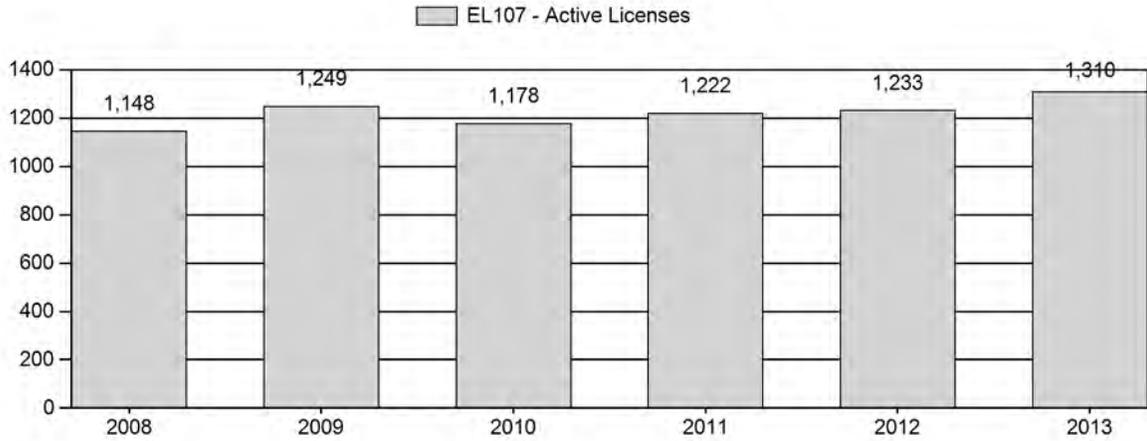
# Number of Hunters



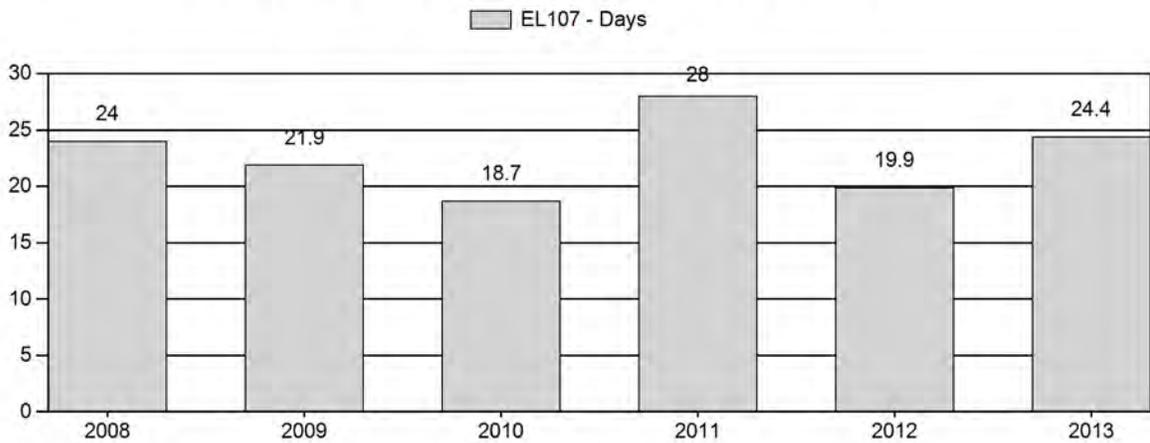
# Harvest Success



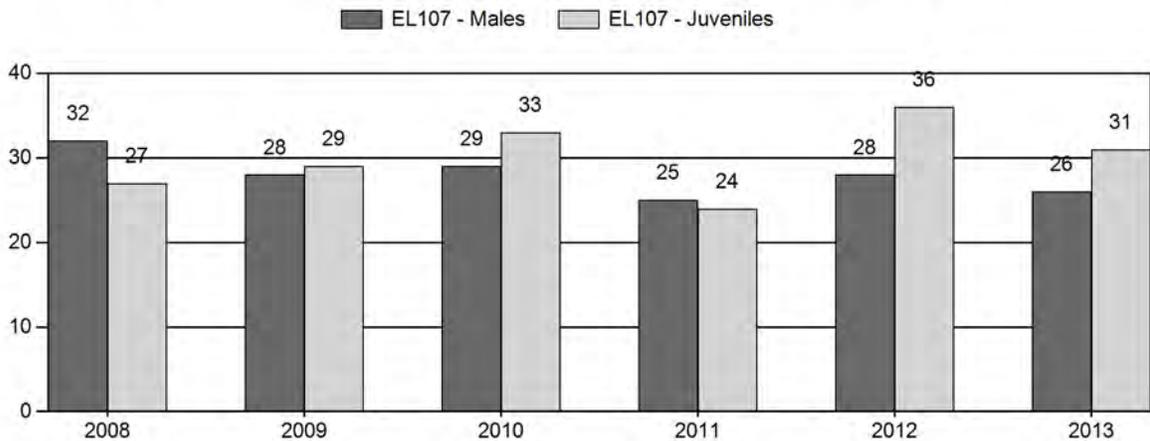
# Active Licenses



# Days per Animal Harvested



# Postseason Animals per 100 Females



**2008 - 2013 Postseason Classification Summary**

for Elk Herd EL107 - UPPER GREEN RIVER

Year	Post Pop	MALES				FEMALES		JUVENILES		Tot CIs	Cls Obj	Males to 100 Females			Young to			
		Ylg	Adult	Total	%	Total	%	Total	%			Yng	Adult	Total	Conf Int	100 Fem	Conf Int	100 Adult
2008	2,688	180	318	498	20%	1,561	63%	422	17%	2,481	380	12	20	32	± 0	27	± 0	20
2009	2,639	134	241	375	18%	1,328	64%	384	18%	2,087	337	10	18	28	± 1	29	± 1	23
2010	2,550	173	273	446	18%	1,547	62%	506	20%	2,499	393	11	18	29	± 0	33	± 0	25
2011	2,621	159	270	429	17%	1,736	67%	417	16%	2,582	274	9	16	25	± 0	24	± 0	19
2012	0	180	278	458	17%	1,649	61%	599	22%	2,706	441	11	17	28	± 0	36	± 0	28
2013	0	208	254	462	17%	1,777	64%	548	20%	2,787	364	12	14	26	± 0	31	± 0	24

**2014 Proposed Seasons – Upper Green River Elk Herd Unit (E107)**

Hunt Area	Type	Opens	Closes	Quota	License	Limitations
93	1	Oct. 1	Oct. 31	175	Limited quota	Any elk
		Nov. 1	Nov. 20			Unused Area 93 Type 1 licenses valid for antlerless elk
	4	Oct. 1	Nov. 20	50	Limited quota	Antlerless elk
	6	Oct. 1	Nov. 20	250	Limited quota	Cow or calf
95	1	Oct. 15	Nov. 5	200	Limited quota	Any elk
	2	Oct. 1	Nov. 5	30	Limited quota	Any elk valid within the Green River drainage upstream from the outlet of Lower Green River Lake, including that portion east and south of Mill Creek
	4	Oct. 15	Nov. 5	200	Limited quota	Antlerless elk
	5	Oct. 1	Oct. 14	25	Limited quota	Antlerless elk valid within the Green River drainage upstream from the outlet of Lower Green River Lake, including that portion east and south of Mill Creek
		Oct. 15	Nov. 5			Unused Area 95 Type 5 licenses valid in the entire area
	6	Oct. 15	Nov. 5	75	Limited quota	Cow or calf
96	1	Oct. 15	Oct. 31	200	Limited quota	Any elk
		Oct. 1	Oct. 31			Unused Area 96 Type 1 licenses valid for antlerless elk
	4	Nov. 1	Nov. 20	30	Limited quota	Any elk
		Oct. 1	Nov. 20			Unused Area 96 Type 4 licenses; valid west of the elk fence and
		Nov. 21	Dec. 31			

						south of the New Fork Lake Road
	6	Oct. 1	Nov. 20	200	Limited quota	Cow or calf
<b>Archery Seasons</b>						
93, 95, 96		Sept. 1	Sept. 30			Refer to Section 3

**Summary of Proposed Changes in License Numbers**

Area	Type	Changes from 2013
96	4	-20
<b>EL107 Totals</b>	<b>4</b>	<b>-20</b>

**Management Evaluation**

**Current Mid-Winter Trend Count Management Objective: 2,500**

**Management Strategy:** Recreational

**2013 Trend Count: 2,787**

**Most Recent 3-year Running Average Trend Count: 2,692**

The Green River Herd Unit encompasses approximately 837 square miles of occupied elk habitat, almost entirely within Sublette County. Hunt Area 93 (Waterdog Lakes), Area 95 (Green River), and Area 96 (New Fork) make up the Green River Herd Unit. This herd unit is managed under a mid-winter trend objective of 2,500 ( $\pm 20\%$ ) with a herd estimate derived from 3-year trend count average on feedgrounds and native range combined. This herd is managed under “recreational” management, with a management objective for a bull: 100 cow ratio of 15 to 29 bulls:100 cows.

**Herd Unit Issues**

Managers believe a very high proportion (>90 %) of elk are typically counted in this herd unit and are located on feedgrounds during the winter. This is an extremely “leaky” herd unit and as a result, a population model has not been successfully developed. Large carnivores (wolves and grizzly bears) have reduced hunter participation in the northern portion of this herd unit, and are likely impacting elk recruitment/survival. Lack of public access on private lands in Area 93 is limiting harvest and compromising harvest goals, primarily on the female segment of this herd.

**Weather**

Three elk feedgrounds (Green River Lakes, Black Butte, and Soda Lake) are located within this herd unit to winter animals that otherwise would not be able survive the harsh winter conditions. Heavy snow loads typically make most native forage unavailable on most winters. Snow conditions were below normal this past winter (2013-14) until February when heavy snow accumulations occurred. Deep snow and a snow water equivalent of 160 percent of normal persisted well into late April.

## Habitat

Roughly 43 square miles of native winter range have been identified, which is mainly located in the upper Green River drainage near Pinyon Ridge and Osborn Mountain that winters approximately 100-200 elk in recent years. Since over 90% of the elk rely on supplemental feeding (feedgrounds) within this herd unit, winter and other seasonal habitats is not considered to be limiting herd dynamics.

## Field Data

The 2013 elk trend count was 2,787, showing an increasing trend compared to the previous four years and the highest count in the past 10 years (Table 1). Snow conditions were below normal during the first half of the 2013-14 winter, but snow accumulations significantly increased in February, resulting in good counting conditions on feedgrounds and native winter ranges. Winter conditions, habitat conditions, wolf activity, and timing of classification surveys have resulted in fluctuating trend count data on all three feedgrounds and native winter ranges in past years (Table 1).

Table 1. Trend Count Information for the Upper Green River Elk Herd Unit, 2004-2013.

<b>Location</b>	<b><u>2004</u></b>	<b><u>2005</u></b>	<b><u>2006</u></b>	<b><u>2007</u></b>	<b><u>2008</u></b>	<b><u>2009</u></b>	<b><u>2010</u></b>	<b><u>2011</u></b>	<b><u>2012</u></b>	<b><u>2013</u></b>
Green River Lakes F.G	358	556	545	615	591	0	606	532	572	627
Black Butte F.G	723	882	616	815	1072	959	405	751	847	475
Soda Lake F.G.	313	577	856	714	650	0	1417	1144	1103	1492
N.W.R.	<u>525</u>	<u>240</u>	<u>295</u>	<u>220</u>	<u>268</u>	<u>1344</u>	<u>71</u>	<u>155</u>	<u>184</u>	<u>193</u>
<b>Herd Unit</b>	<b>1919</b>	<b>2255</b>	<b>2312</b>	<b>2364</b>	<b>2581</b>	<b>2303</b>	<b>2499</b>	<b>2582</b>	<b>2706</b>	<b>2787</b>

Composition counts during 2013 revealed a bull:cow:calf ratio of 26:100:31. The 2013 bull ratio was slightly lower and the calf ratio was similar compared to the 5-year average of 28:100:30. The 2013 bull ratio is adequate and within management goals for this herd.

## Harvest Data

The 2013 harvest report indicated total elk harvest of approximately 450 (250 cow/calves and 200 bulls), similar to the total harvest, but an increase in bull harvest and reduction in cow/calf harvest, compared to 2012. During 2013, 34% of the hunters were successful in harvesting an elk, same as the past 5-year average. Hunter effort increase in 2013 as days/harvest was 25, compared to the 5-year average of 22 days/harvest. License quotas were modified in 2013 in an effort to increase female elk harvest, although not all the available antlerless and cow/calf licenses (Type 4, 5, and 6) were sold in this herd unit.

## Population

Since 2012 a mid-winter trend count was utilized to manage this herd unit instead of hand-derived population model estimates. This is an extremely “leaky” herd unit and as a result, a functional computer simulation model has never been developed. The mid-winter trend objective for this herd is 2,500 elk ( $\pm 20\%$ ). The 2011-2013 3-year trend average is 2,692 elk, which is within this herd objective.

## **Disease**

During March and April of 2014 approximately 100 elk, primarily calves, died at or near the Soda Lake feedground due to disease and wolf predation. Investigations concluded the presence of *Fusobacterium necrophorum* from many of the carcasses, the bacterium responsible for foot rot and necrotic stomatitis in elk. Foot rot is a term used for infection of the bacteria when it enters cuts and other openings around the hooves; necrotic stomatitis is the descriptive term for infection of the same bacteria in the mouth. This infectious disease is not uncommon to feedgrounds in west central Wyoming, with occasional outbreaks documented when certain winter and spring conditions increase the prevalence of the disease. Conditions with above average snowfall and above average temperatures create wet conditions causing the bacteria to thrive resulting in infections to elk. Freeze and thaw cycles during these winter conditions cause crusted snow and jagged ice, resulting in a higher than normal abrasions and opportunities for bacterial infections. The weakened condition of elk with this disease also makes animals more susceptible to predation as several wolf documented elk mortalities were documented. The estimated calf loss account for roughly one-third of the calves counted on the Soda Lake feedground this past February.

## **Management Summary**

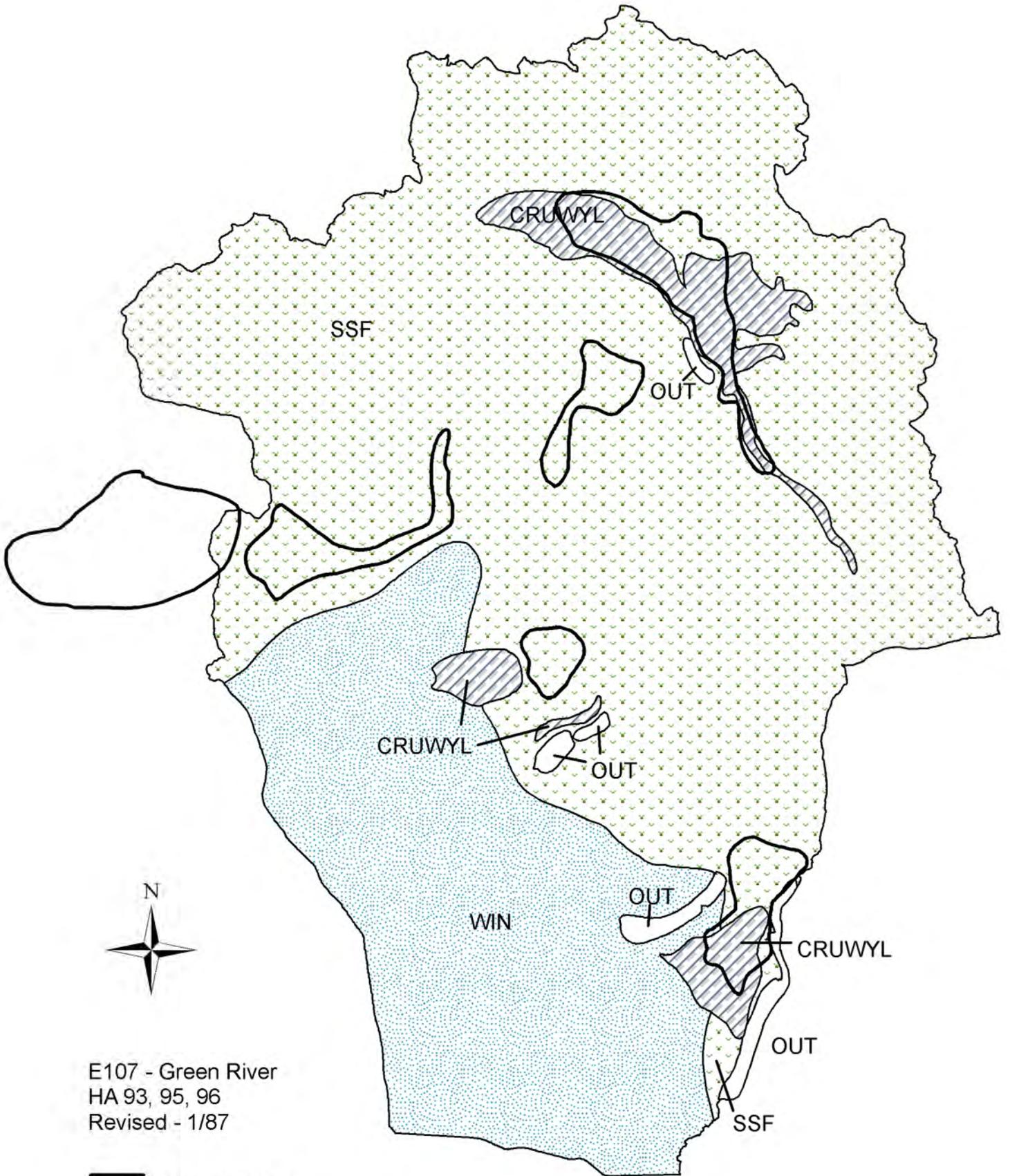
This is an extremely leaky herd unit, and as a result, a functional computer simulation model has not been developed. Overall, the data collected annually in this herd unit has indicated slow population increases since 2003 with the current population (trend count) within management objectives for this herd unit. Hunting seasons in 2004 and 2005 were designed to reduce the overall harvest in Area 96 and to allow the population to increase. The 2006 - 2008 seasons were intended to slightly increase antlerless harvest. The 2009 - 2013 seasons were designed to further increase antlerless harvest which has been somewhat successful at achieving that goal. Hunter participation has declined in portions of this herd unit, specifically the northern portions of Areas 93 and 95, but recently in Area 96 as well. This lack of hunter participation has resulted in only a portion of antlerless and cow/calf licenses being sold. It appears predation from wolves and bears may be compensating for lower hunter/harvest rates in this herd unit, as population trends have only slightly increased in recent years. Disease and wolf related elk losses estimated from the Soda Lake area this past winter and spring equated to roughly 4% of the herd unit (18% of the calves).

The 2014 seasons for the Upper Green River Herd Unit are similar to 2013, which are designed to maintain past bull harvest rates and provide liberal opportunities for female (antlerless) harvest. The same October 1 – November 20 season with no changes in limited quotas licenses (175 Type 1 and 300 Type 4 & 6) will be available in Area 93.

In Area 95, the same season length (October 15 – November 5) and limited quota licenses (200 Type 1, 30 Type 2, 200 Type 4, 25 Type 5, and 75 Type 6) will remain the same in 2014.

The 2014 General season in Area 96 will remain same as in 2013 with a October 15 – 31 “any” elk season. License quotas and season length (October 1 to November 20) will remain the same for Type 1 (n=200) and Type 6 (n=200) compared to 2013. The Type 4 (antlerless elk) quota will be reduced to 30 licenses (reduction of 20) with the same October 1 – November 20 season as other limited quota licenses for this Area. These Type 4 licenses will then be valid in that portion of Area 96 west of the elk fence and south of New Fork Lake Road from November 21 – December 31 to address damage and livestock co-mingling on private lands.

A projected harvest of 500 elk (200 bulls, 250 cows, and 50 calves) for 2014 should result in a post season trend count of approximately 2,700 elk.



E107 - Green River  
 HA 93, 95, 96  
 Revised - 1/87

 Parturition Area



## 2013 - JCR Evaluation Form

SPECIES: Elk  
 HERD: EL108 - PINEDALE  
 HUNT AREAS: 97-98

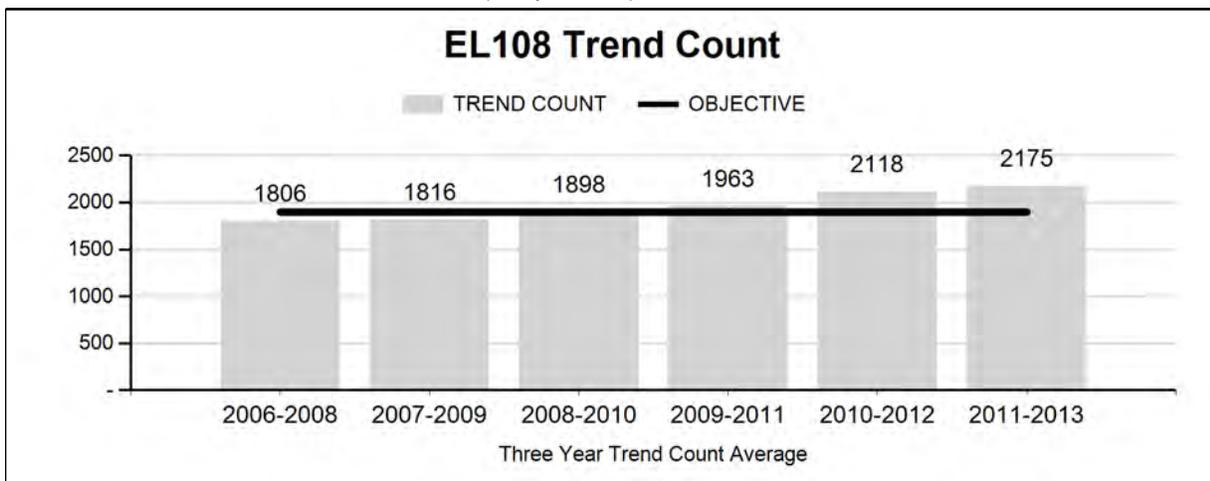
PERIOD: 6/1/2013 - 5/31/2014  
 PREPARED BY: DEAN CLAUSE

	<u>2008 - 2012 Average</u>	<u>2013</u>	<u>2014 Proposed</u>
Trend Count:	2,017	2,133	2,000
Harvest:	395	696	550
Hunters:	1,204	1,568	1,500
Hunter Success:	33%	44%	37%
Active Licenses:	1,225	1,675	1,650
Active License Percentage:	32%	42%	33%
Recreation Days:	7,325	11,290	9,000
Days Per Animal:	18.5	16.2	16.4
Males per 100 Females:	23	24	
Juveniles per 100 Females	28	30	

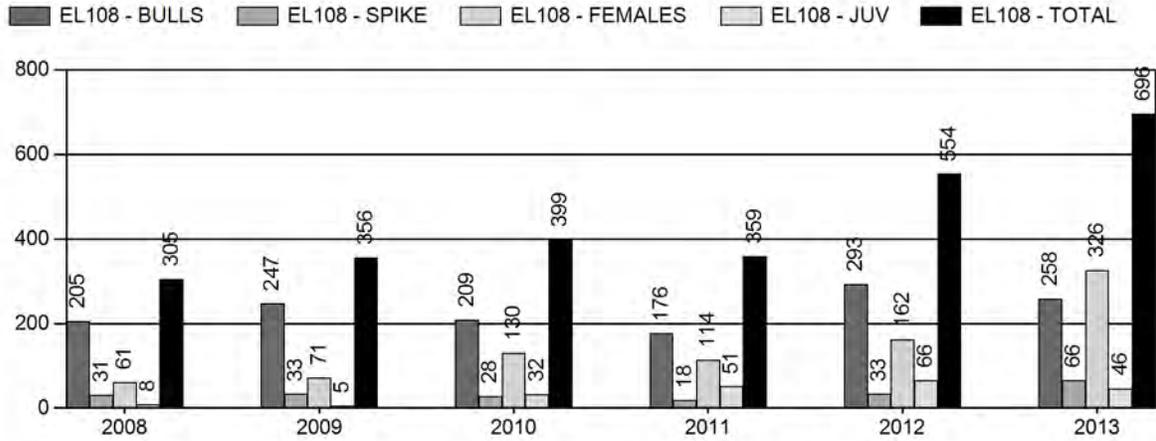
Trend Based Objective ( $\pm 20\%$ ) 1,900 (1520 - 2280)  
 Management Strategy: Recreational  
 Percent population is above (+) or (-) objective: 12%  
 Number of years population has been + or - objective in recent trend: 0

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

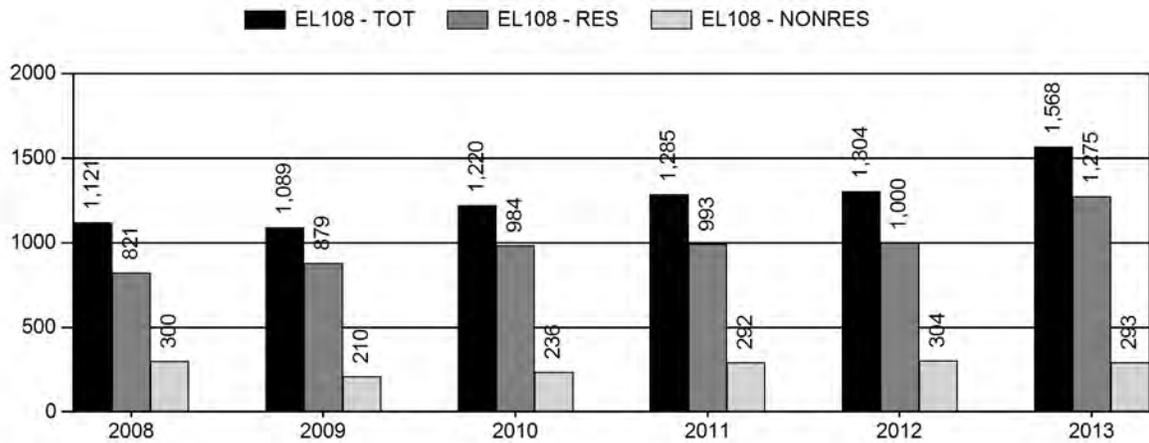
	<u>JCR Year</u>	<u>Proposed</u>
Females $\geq 1$ year old:	0%	0%
Males $\geq 1$ year old:	0%	0%
Juveniles (< 1 year old):	0%	0%



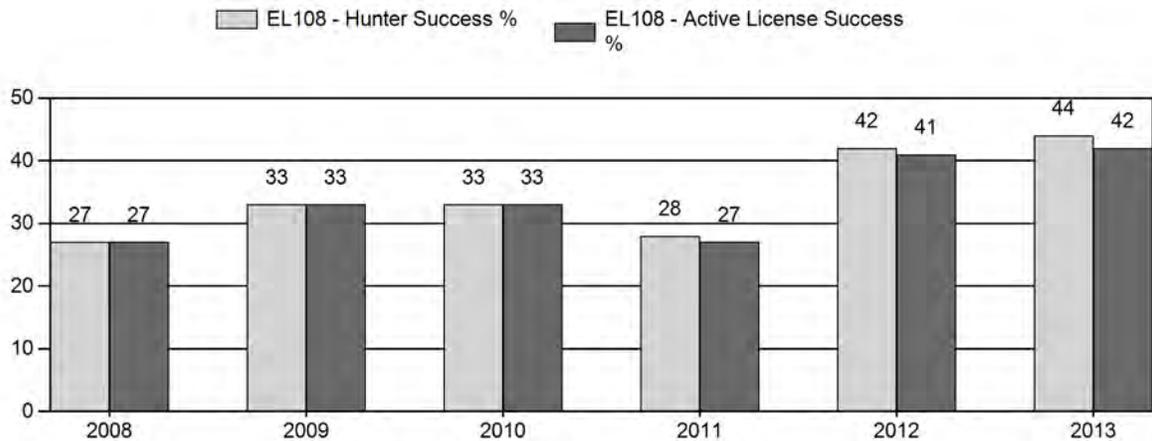
# Harvest



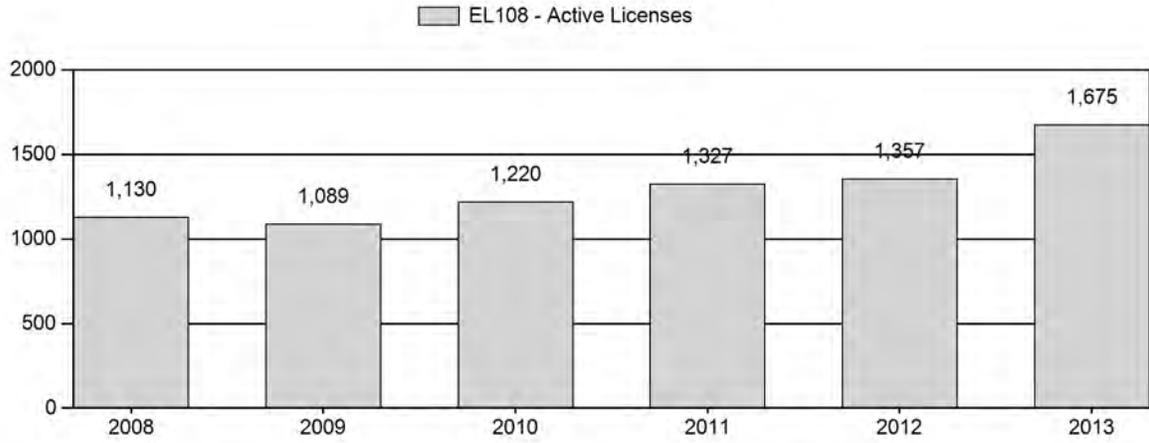
# Number of Hunters



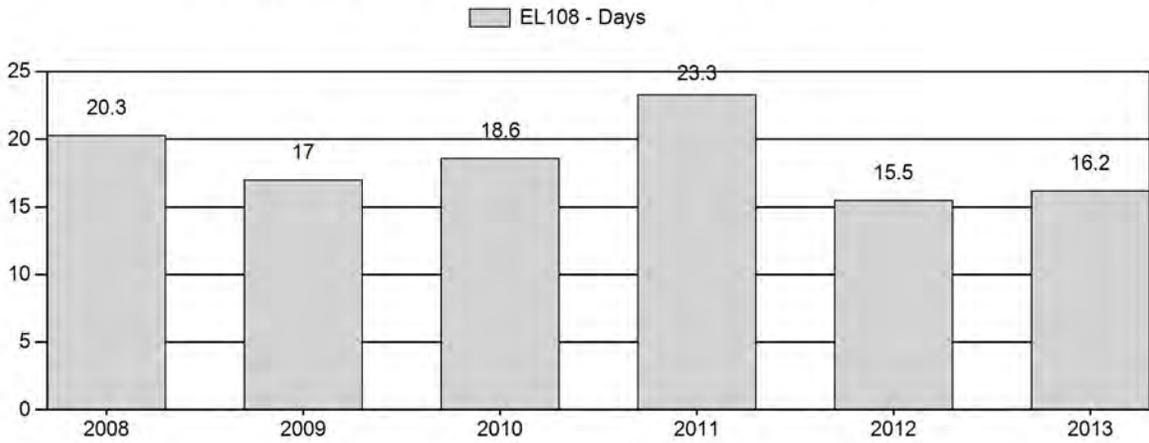
# Harvest Success



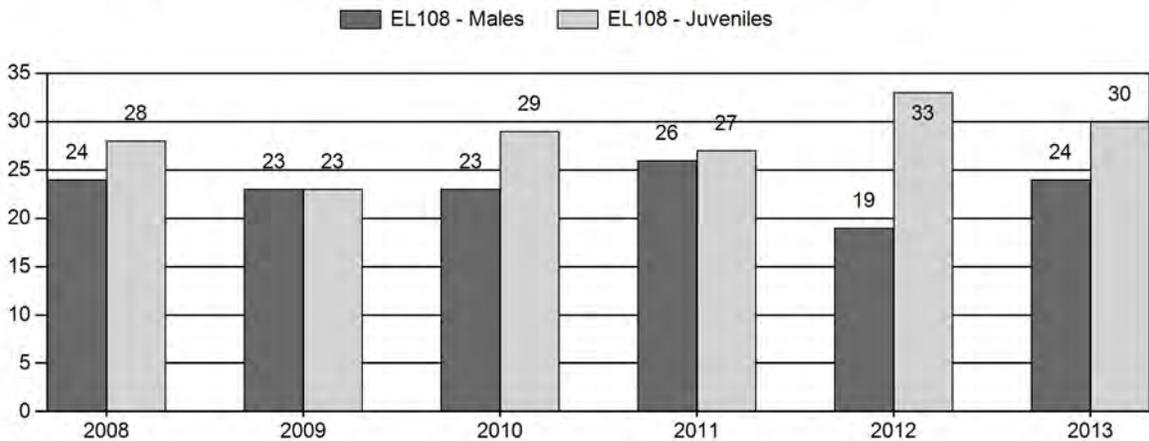
# Active Licenses



# Days per Animal Harvested



# Postseason Animals per 100 Females



**2008 - 2013 Postseason Classification Summary**

for Elk Herd EL108 - PINEDALE

Year	Post Pop	MALES				FEMALES		JUVENILES		Tot CIs	Cls Obj	Males to 100 Females			Young to			
		Ylg	Adult	Total	%	Total	%	Total	%			Yng	Adult	Total	Conf Int	100 Fem	Conf Int	100 Adult
2008	2,006	102	193	295	16%	1,239	66%	351	19%	1,885	303	8	16	24	± 0	28	± 0	23
2009	1,980	90	187	277	16%	1,203	69%	273	16%	1,753	240	7	16	23	± 0	23	± 0	18
2010	2,000	102	186	288	15%	1,253	66%	366	19%	1,907	315	8	15	23	± 0	29	± 0	24
2011	2,168	144	219	363	17%	1,401	66%	374	17%	2,138	296	10	16	26	± 0	27	± 0	21
2012	0	120	149	269	13%	1,404	66%	457	21%	2,130	368	9	11	19	± 0	33	± 0	27
2013	0	158	174	332	16%	1,383	65%	418	20%	2,133	334	11	13	24	± 0	30	± 0	24

**2014 Seasons – Pinedale Elk Herd Unit (EL108)**

Hunt Area	Type	Opens	Closes	Quota	License	Limitations
97	Gen	Oct. 1	Oct. 15		General	Any elk
		Oct. 16	Nov. 20			Antlerless elk
	1	Sept. 20	Oct. 31	300	Limited quota	Any elk
		Nov. 1	Nov. 20			Unused Area 97 Type 1 licenses valid for antlerless elk
	6	Sept. 20	Nov. 20	125	Limited quota	Cow or calf elk
98	Gen	Oct. 1	Oct. 15		General	Any elk
		Oct. 16	Nov. 20			Antlerless elk
	1	Sept. 20	Oct. 31	350	Limited quota	Any elk
		Nov. 1	Nov. 20			Unused Area 98 Type 1 licenses valid for antlerless elk
	4	Sept. 20	Nov. 20	75	Limited quota	Limited quota; antlerless elk
	6	Sept. 20	Nov. 20	300	Limited quota	Limited quota; cow or calf elk
1,4,6	Nov. 21	Jan. 31			Unused Area 98 Type 1, Type 4, and Type 6 licenses valid for antlerless elk in that portion of Area 98 between the Scab Creek and the East Fork River drainage, excluding Irish Canyon Creek and Muddy Creek Drainages.	
<b>Archery Seasons</b>						
97,98		Sept. 1	Sept. 19			Refer to Section 3

**Summary of Changes in License Numbers**

Area	Type	Changes from 2013
98	6	+25
<b>EL107 Totals</b>	<b>6</b>	<b>+25</b>

## **Management Evaluation**

**Current Mid-Winter Trend Count Management Objective:** 1,900

**Management Strategy:** Recreational

**2012 Trend Count:** 2133

**Most Recent 3-year Running Average Trend Count:** 2175

The Pinedale Herd Unit encompasses approximately 2,474 square miles of which only 522 square miles are considered occupied elk habitat. Only a small portion of this herd unit, located on the south end, is located in Sweetwater County, while the majority lies in Sublette County. Hunt Area 97 (Pinedale) and Area 98 (Boulder) make up the Pinedale Herd Unit. This herd unit is managed under a mid-winter trend objective of 1,900 ( $\pm 20\%$ ) with a herd estimate derived from 3-year trend count average on feedgrounds and native range combined. This herd is managed under “recreational” management, with a management objective for bull: 100 cow ratio of 15 to 29.

## **Herd Unit Issues**

Managers believe a very high proportion (>90%) of elk are typically counted in this herd unit and are located on feedgrounds during the winter. This is an extremely “leaky” herd unit and as a result, a population model has not been successfully developed. Well over half of these Forest Service managed lands are designated as Wilderness (Bridger Wilderness) where access is limited to foot or horseback travel. The remaining Forest Service lands outside wilderness have moderate vehicle and trail access. Hunting opportunities for self-guided non-residents is limited in this herd unit because non-residents are required by law to have a licensed guide or outfitter while hunting in designated wilderness areas. Lack of public access on private lands in Area 98 along Scab and Silver Creeks provides a “refuge” for elk, continuing to limit harvest and compromising female elk harvest goals.

## **Weather**

Three elk feedgrounds (Fall Creek, Scab Creek, and Muddy Creek) are located within this herd unit to winter animals that otherwise would not be able survive the harsh winter conditions. Feedgrounds also reduce depredation to stored hay and reduce risk of disease transmission to livestock (primarily brucellosis).

## **Habitat**

Roughly 32 square miles of crucial native winter range have been identified in this herd unit, wintering roughly 100-150 elk in recent years. Since over 90% of the elk rely on supplemental feeding (feedgrounds) within this herd unit, winter and other seasonal habitats are not limiting herd dynamics.

## Field Data

The 2013 elk trend count of 2,133 was lower than the 2,253 elk counted in 2012. The 2012 trend count was the highest documented in the past 10 years (Table 1). Snow conditions were below normal during the first half of the 2013-14 winter with heavy snow accumulations in February, resulting in good counting conditions on feedgrounds and native winter range. A higher than normal proportion of elk (12%) than normal were documented on native winter range, due to mild winter conditions prior to aerial counts being conducted. The Halfmoon, Cottonwood Creek, and Silver Creek areas account for the majority of elk counted on native winter range in 2013.

Table 1. Herd Composition Counts in the Pinedale Elk Herd Unit, 2004-2013.

Location	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Fall Creek F.G	438	506	529	494	527	0	554	655	675	660
Scab Creek F.G	825	810	750	776	754	600	780	806	912	727
Muddy Creek F.G.	396	431	383	376	510	422	467	557	522	499
<u>N.W.R.</u>	<u>61</u>	<u>111</u>	<u>96</u>	<u>68</u>	<u>154</u>	<u>766</u>	<u>161</u>	<u>120</u>	<u>144</u>	<u>247</u>
<b>Herd Unit Total</b>	<b>1720</b>	<b>1858</b>	<b>1758</b>	<b>1714</b>	<b>1944</b>	<b>1788</b>	<b>1962</b>	<b>2138</b>	<b>2253</b>	<b>2133</b>

Herd composition counts in 2013 documented a bull:cow:calf ratio of 24:100:30. Compared to 2012, the bull ratio increased while the calf ratio decreased in 2013. The previous 5-year average bull:cow:calf ratio was 23:100:28, similar to that observed in 2013.

## Harvest Data

With the termination of the Test and Removal Pilot Project after the 2009-10 winter, hunting seasons were modified in 2010 to increase female harvest opportunities by adding Type 4 and Type 6 licenses, and allowing general license hunters to harvest “any” elk instead of “antlered” elk, which doubled female harvest in 2010. During 2011, the combination of mild temperatures and limited precipitation contributed to the poor harvest, as seasons were designed to increase female harvest. In 2012 seasons were designed to increase female harvest opportunities, while 2013 seasons further increased female harvest opportunities while reducing bull harvest opportunities. The 2013 harvest survey reported approximately 700 total elk taken, a significant increase from approximately 350 in 2011 and 550 in 2012. The increased harvest in 2013 is primarily due to increased cow/calf harvest by 145 cows/calves. During the 2013 hunting season it took an average of 16 days to kill an elk with a 42% success rate being reported, similar to 2012.

## Population

Starting in 2012, a mid-winter trend count will be utilized to manage this herd unit instead a hand-derived population model estimates. This is a somewhat “leaky” herd unit and as a result, a functional computer simulation model has not been developed, which may also be attributed to

high bull harvest annually reported in this herd unit. The mid-winter trend objective for this herd is 1,900 elk ( $\pm 20\%$ ). The 2011-2013 3-year trend average is 2,175 elk, which is within this herd objective.

## **Management Summary**

Trend counts in this herd unit indicate elk declined from 2004-2007, recovered during 2008, stabilized somewhat in 2009 and 2010, increased in 2011 and 2012, and stabilized in 2013. Recent counts indicate bull:cow:calf ratios are adequate, although the highest bull harvest reported during the last 10 years occurred in 2012 and 2013. The bull harvest annually reported for this herd unit is questionable as managers are confident  $>90\%$  elk are counted (classified) annually and bull harvest rates range from 50%-60% on most years. Documented elk numbers in 2013 are currently within the management objectives, but are near the upper threshold. Maintaining similar female harvest rates as those reported in 2013 is needed to stabilize and decrease elk numbers in this herd unit.

The harvest objectives for the 2014 seasons are similar to 2013, designed to increase female harvest while reducing opportunities for bull harvest. The season closing date for antlerless harvest will be extended to November 20 (+5 days) in both Area 97 and 98. Limited quota, Type 1 "any" elk licenses in Area 97 will remain at 300 licenses, although the demand for these licenses has been below this level in recent years attributed to limited harvest opportunities outside the Bridger Wilderness. The season length for Type 1 licenses will be Sept. 20 – Nov. 20, valid for antlerless elk from Nov 1. – Nov. 20. The Type 6 licenses will remain at 125, valid from Sept. 20 – Nov. 20 for antlerless elk.

In Area 98, the quota for Type 1 licenses ( $n=350$ ) with a Sept. 20 – Nov. 20 season, valid for antlerless elk from Nov 1. – Nov. 20. Limited quota, Type 4 licenses will remain at 75 and Type 6 licenses will increase to 300(+25) with a Sept. 20 – Nov. 20 season. Similar to past years, further antlerless harvest opportunities will be provided for unused limited quota licenses (Type 1, 4, and 6) from Nov. 16 – Jan 31 between Scab Creek and the East Fork River to address damage and cattle co-mingling issues. The opportunity to harvest bulls from Jan. 16 – Jan. 31 on those lands enrolled in the Chimney Butte HMA was eliminated for 2014.

General license seasons in both Area 97 and 98 will remain the same in 2014. From Oct. 1 – Oct. 15 General licenses will be valid for "any" elk. From Oct. 16 – Nov. 20 General licenses will be valid for "antlerless" elk

The hunting seasons for 2014 should result in the harvest of approximately 250 bulls, 250 cows, and 50 calves for a total harvest of 550 elk. This season should result in a postseason 2014 trend count estimate of approximately 2,000 elk.



E108 - Pinedale  
HA 97, 98  
Revised - 12/88

 Parturition Area

