2012 - JCR Evaluation Form

SPECIES: Mule Deer
PERIOD: 6/1/2012 - 5/31/2013

HERD: MD101 - TARGHEE

HUNT AREAS: 149, 900

PREPARED BY: DOUG BRIMEYER

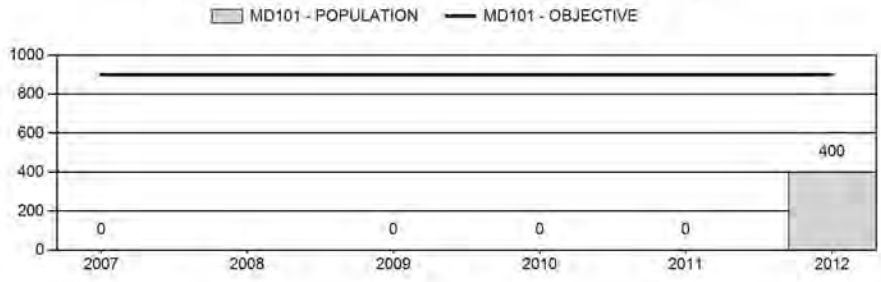
	2007 - 2011 Average	2012	2013 Proposed
Population:	0	400	N/A
Harvest:	26	12	15
Hunters:	147	50	50
Hunter Success:	18%	24%	30%
Active Licenses:	147	50	50
Active License Percent:	18%	24%	30%
Recreation Days:	932	298	275
Days Per Animal:	35.8	24.8	18.3
Males per 100 Females	0	0	
Juveniles per 100 Females	0	0	

Population Objective:	900
Management Strategy:	Recreational
Percent population is above (+) or below (-) objective.	-55.6%
Number of years population has been + or - objective in recent trend:	0
Model Date:	None

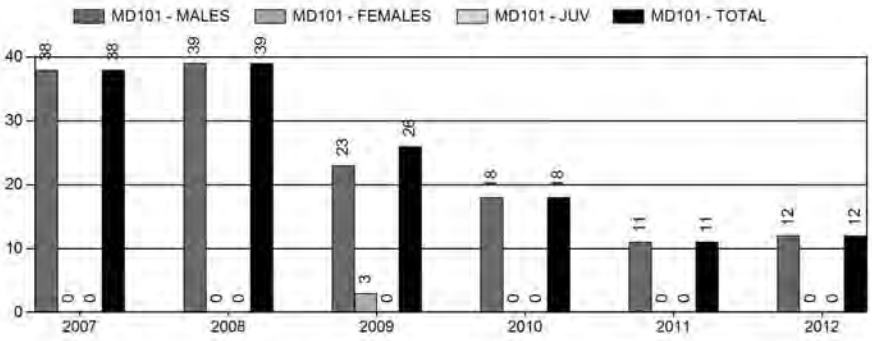
Proposed harvest rates (percent of pre-season estimate for each sex/age group):

	JCR Year	Proposed
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%

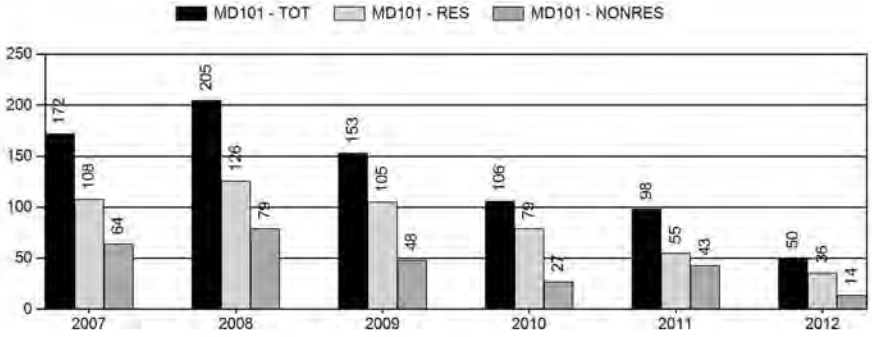
Population Size - Postseason



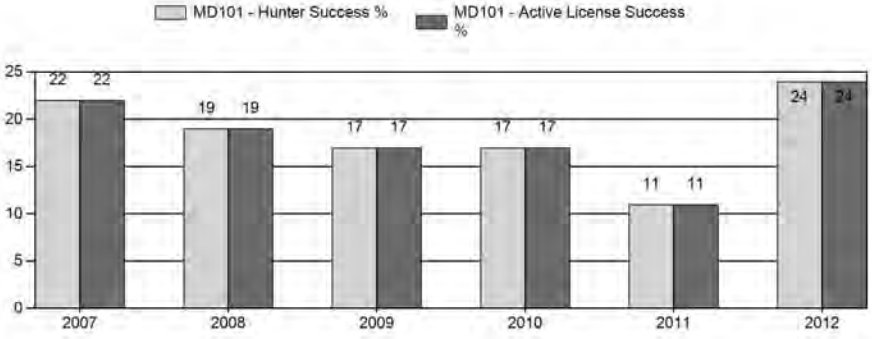
Harvest



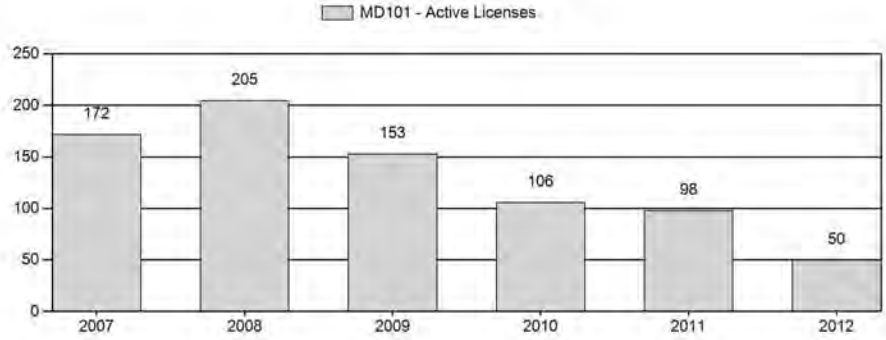
Number of Hunters



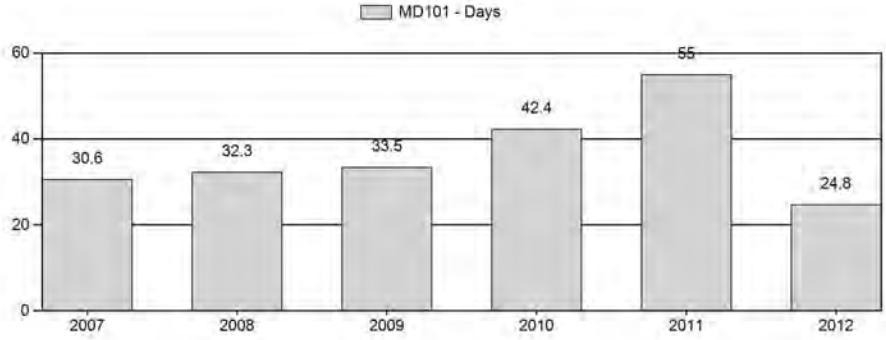
Harvest Success



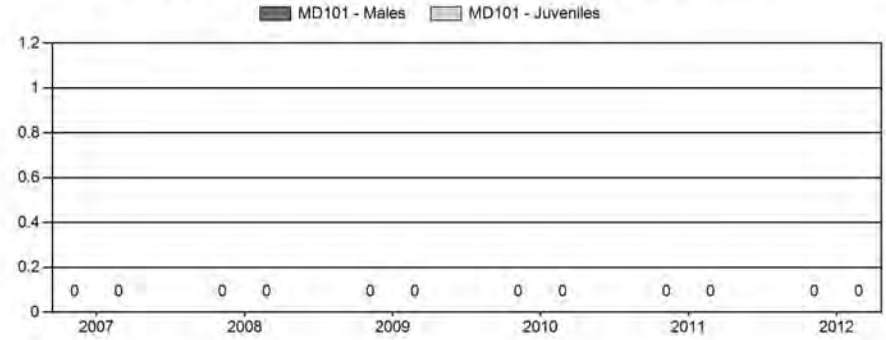
Active Licenses



Days per Animal Harvested



Postseason Animals per 100 Females



2013 HUNTING SEASONS

SPECIES: MULE DEER HERD UNIT: TARGHEE (MD101)

Hunt Area	Type	Dates of Seasons Opens	Dates of Seasons Closes	Limited Quota	Limitations
149		Sep. 15	Oct. 6		General license; antlered deer

Special Archery Seasons

Hunt Area	Dates of Seasons Opens	Dates of Seasons Closes
149	Sep. 1	Sep. 14

Summary of Proposed License Changes

Area	Type	Change from 2012
149		+ 1 Day

Management Evaluation

Current Management Objective: 900
Management Strategy: Recreational
2012 Postseason Population Estimate: ~400
2013 Proposed Postseason Population Estimate: ~400

The management objective for the Targhee deer herd is 900 deer. Spreadsheet models developed for this herd do not appear to adequately simulate observed trends and therefore managers will develop an alternative proposal using secondary objectives as benchmarks for this population. The management strategy for this herd is designated as Recreational Management.

Herd Unit Issues

This population is likely below the post season management objective based on field observations along the Wyoming-Idaho State line and harvest statistics. Mule deer in this population spend summer and early fall in Wyoming and winter along drainages in Idaho. Late season hunts in Idaho and residential development restrain this population. Post-season classification surveys are not flown in this herd due to budget constraints. More restrictive hunting seasons have been implemented to allow this population to increase.

Weather

Weather conditions during 2012 were extremely dry during the late summer and through the hunting season. Drought conditions persisted into early winter; snowpack in the Snake River and Teton Range were reported below 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

No habitat data has been collected on mule deer summer and winter ranges. There are no established vegetation transects in this herd unit. Please refer to the 2012 Annual Report Strategic Habitat Plan Accomplishments, pages 61-77 for Jackson Region habitat improvement project summaries
(**http://wgfd.wyo.gov/web2011/wildlife-1000708.aspx)**.

Field Data

No field data was collected in the Targhee Herd Unit during the 2012 biological year.

Harvest Data

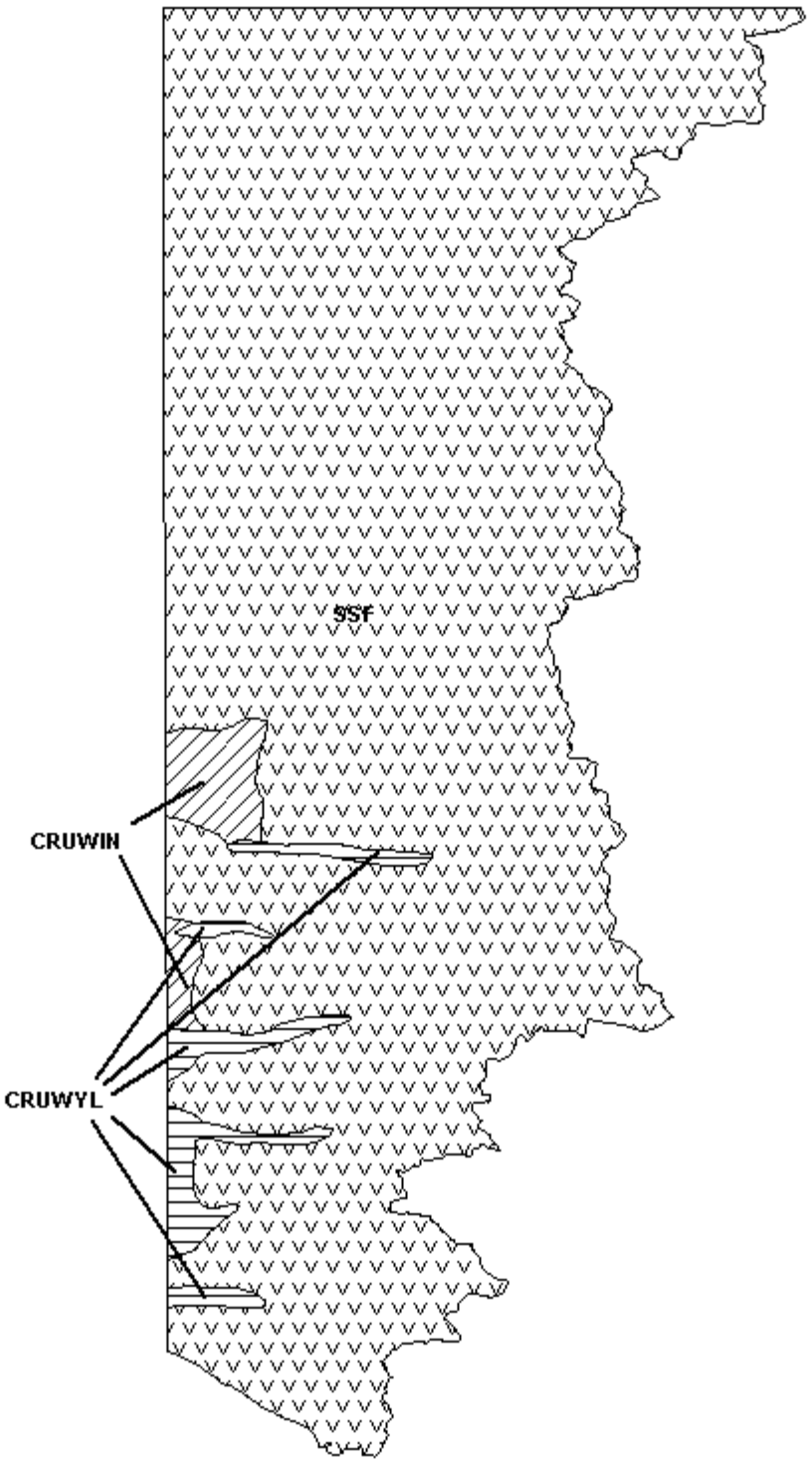
Based on harvest statistics, the density of mule deer in the Targhee Herd continues to be a concern. The overall number of mule deer harvested is the lowest harvest reported on the west side of the Teton Range since 1983. The number of hunters peaked in 1983 when 575 hunters participated in this hunt.

Population

This population likely declined following liberal hunting seasons in Idaho. Data are limited for this population and spreadsheet models do not simulate observed trends.

Management Summary

Due to the "Interstate" nature of this population, managing this herd is problematic. Observations of deer along the state line indicate this population remains at a low density even though hunting seasons are conservative. Antlered deer seasons proposed this year will close on October 6 to coincide with hunt season closures in adjacent hunt areas east of Jackson. Hunting seasons in Area 149 have minimal impact on this herd and it is likely that more harvest occurs in Idaho than Wyoming.



Mule Deer (MD101) - Targhee
HA 149
Revised - 7/87

2012 - JCR Evaluation Form

SPECIES: Mule Deer
PERIOD: 6/1/2012 - 5/31/2013

HERD: MD131 - WYOMING RANGE

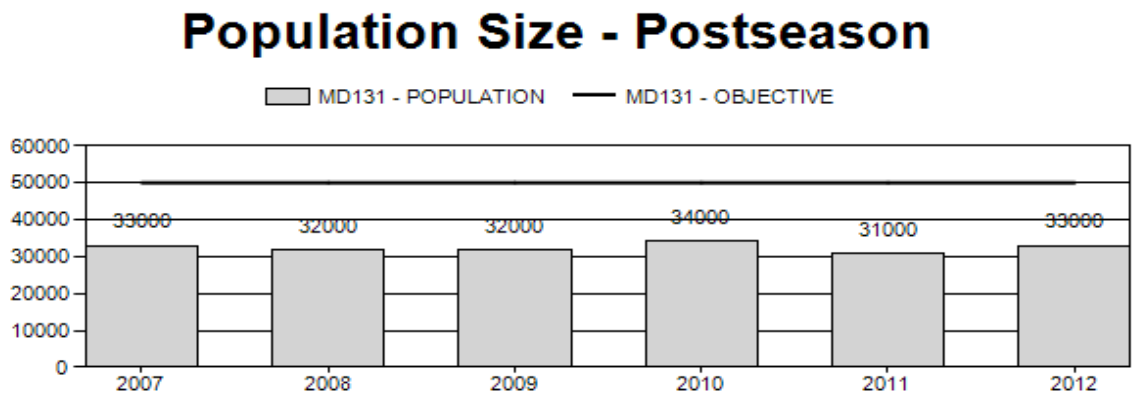
HUNT AREAS: 134-135, 143-145
PREPARED BY: GARY FRALICK

	2007 - 2011 Average	2012	2013 Proposed
Population:	32,400	33,000	34,000
Harvest:	2,149	2,298	2,058
Hunters:	5,308	5,277	5,212
Hunter Success:	40%	44%	39%
Active Licenses:	5,308	5,277	5,212
Active License Percent:	40%	44%	39%
Recreation Days:	29,271	27,331	26,786
Days Per Animal:	13.6	11.9	13.0
Males per 100 Females	37	31	
Juveniles per 100 Females	63	69	

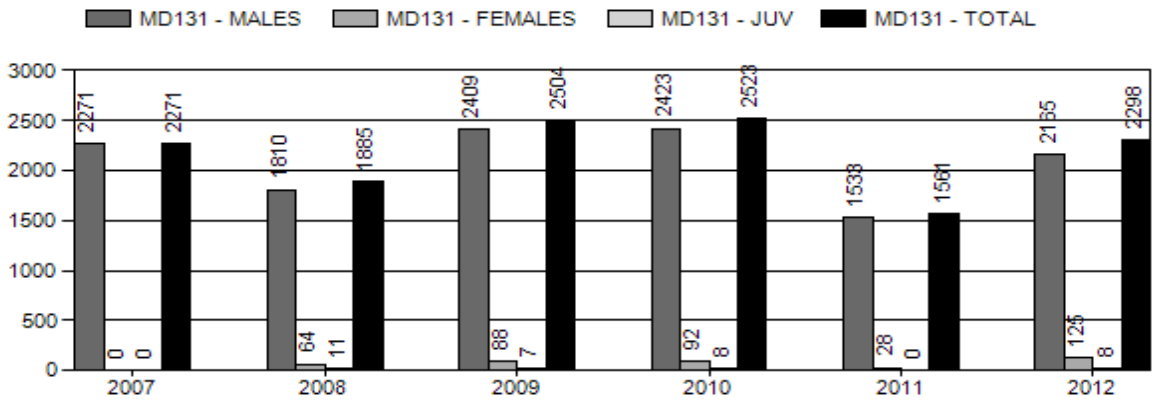
Population Objective:	50,000
Management Strategy:	Special
Percent population is above (+) or below (-) objective:	-34%
Number of years population has been + or - objective in recent trend:	20
Model Date:	2/27/2013

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

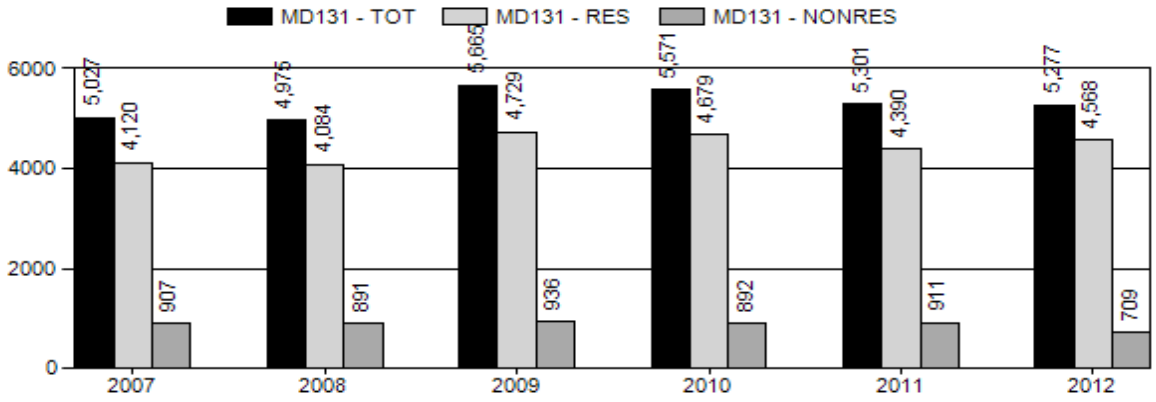
	JCR Year	Proposed
Females ≥ 1 year old:	0.1%	7%
Males ≥ 1 year old:	37%	26%
Juveniles (< 1 year old):	0%	0%
Total:	4%	4%
Proposed change in post-season population:	0.01%	2%



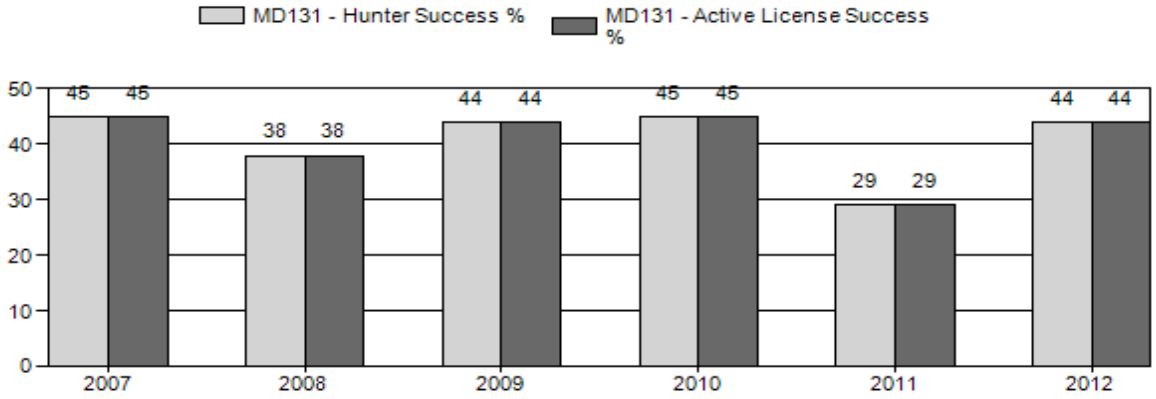
Harvest



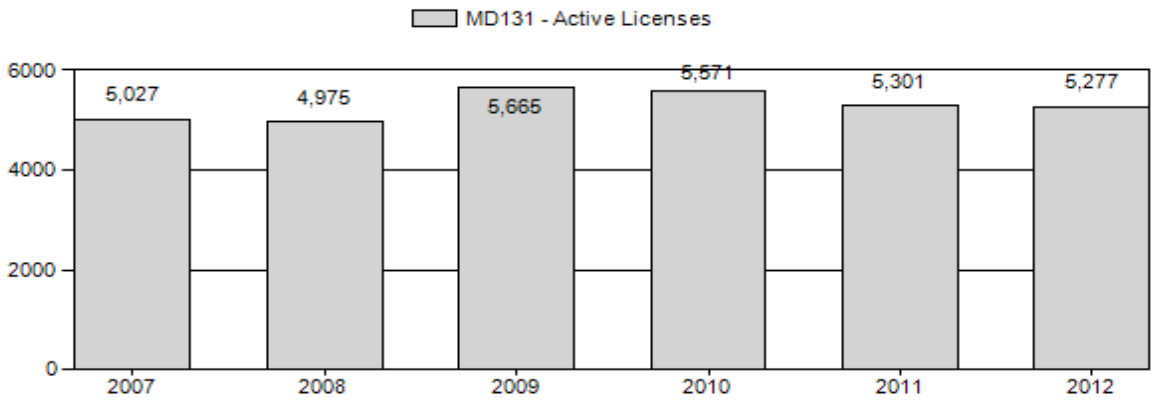
Number of Hunters



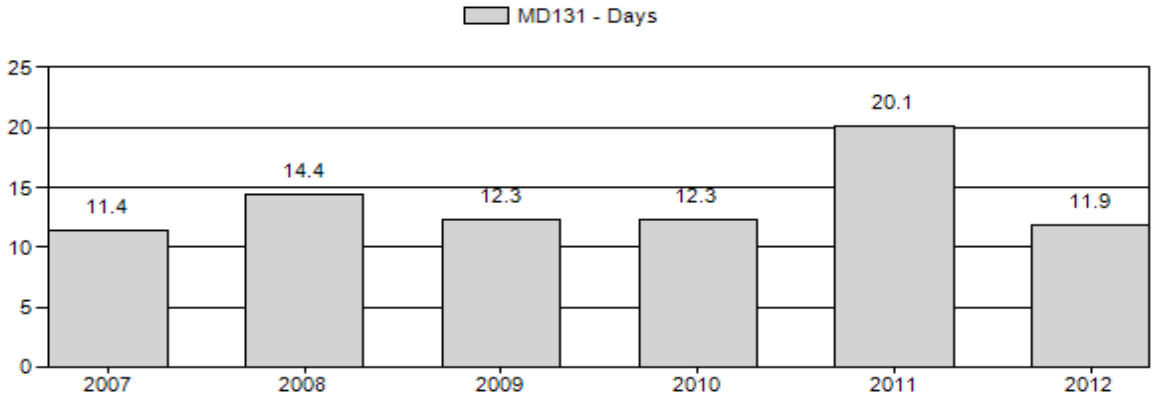
Harvest Success



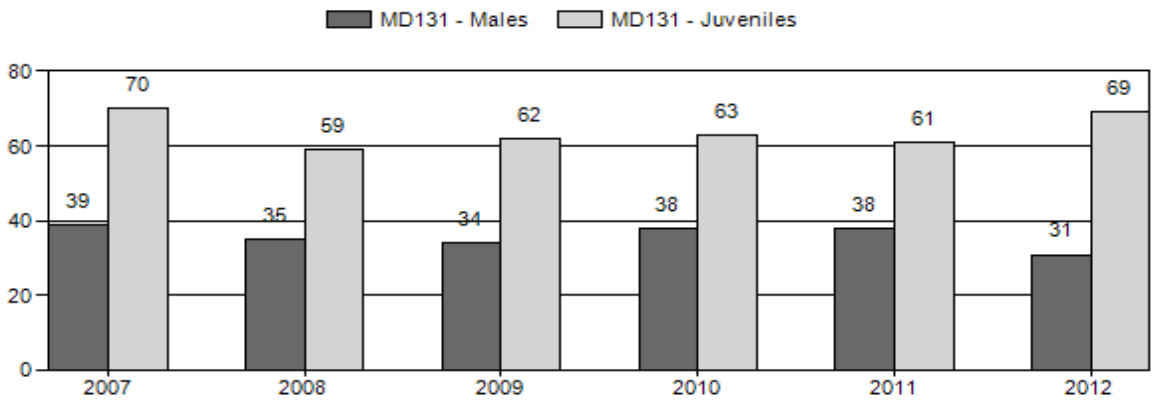
Active Licenses



Days per Animal Harvested



Postseason Animals per 100 Females



2007 - 2012 Postseason Classification Summary

for Mule Deer Herd MD131 - WYOMING RANGE

		MALES				FEMALES		JUVENILES				Males to 100 Females				Young to		
Year	Post Pop	Ylg	Adult	Total	%	Total	%	Total	%	Tot Cls	Cls Obj	Ylng	Adult	Total	Conf Int	100 Fem	Conf Int	100 Adult
2007	33,000	746	817	1,563	19%	3,982	48%	2,797	34%	8,342	2,510	19	21	39	± 1	70	± 2	50
2008	32,000	494	693	1,187	18%	3,370	51%	2,004	31%	6,561	1,148	15	21	35	± 1	59	± 2	44
2009	32,000	466	760	1,226	17%	3,617	51%	2,249	32%	7,092	1,240	13	21	34	± 1	62	± 2	46
2010	34,000	494	688	1,182	19%	3,124	50%	1,960	31%	6,266	0	16	22	38	± 1	63	± 2	46
2011	31,000	340	998	1,338	19%	3,563	50%	2,173	31%	7,074	1,224	10	28	38	± 1	61	± 2	44
2012	33,000	251	439	690	15%	2,256	50%	1,556	35%	4,502	0	11	19	31	± 2	69	± 3	53

2013 HUNTING SEASONS

SPECIES: MULE DEER **HERD UNIT: WYOMING RANGE (MD131)**

HUNT AREA	TYPE	OPENS	CLOSES	QUOTA	LIMITATIONS
134		Oct.1	Oct.11		General license; antlered deer
		Oct.1	Oct.14		General youth license; any deer
135		Oct.1	Oct.11		General license; antlered deer
		Oct.1	Oct.14		General youth license; any deer
143		Sept. 15	Oct. 6		General license; antlered deer
144		Sept. 15	Oct. 6		General license; antlered deer
145		Sept. 15	Oct. 6		General license; antlered deer
	8	Nov. 1	Jan. 31	35	Limited quota; doe or fawn white-tailed deer
134, 135		Sept. 1	Sept. 30		General license; Archery Only, Refer to Section 4
143, 144, 145		Sept. 1	Sept. 14		General license; Archery Only, Refer to Section 4

REGION G – NONRESIDENT LICENSE QUOTA – 600 LICENSES

SUMMARY OF CHANGES BY LICENSE TYPE

Area	License Type	Change from 2012
134, 135	General	Change closing dates from Oct. 12 to Oct. 11
143, 144, 145	General	Change closing dates from Oct. 5 to Oct. 6
145	8	+35
Herd Unit Total	Region G	+35

Management Evaluation

Current Management Objective: 50,000
Management Strategy: Special
2012 Postseason Population Estimate: ~33,000
2013 Proposed Postseason Population Estimate: ~34,000

The population objective for Wyoming Range mule deer herd is 50,000 deer. The management strategy is special and the objective and management strategy were last revised in 1994. The current population estimate is approximately 33,000 deer.

HERD UNIT ISSUES

Management strategies since 1993 have emphasized hunting antlered deer in an effort to promote population growth. Antlered deer hunts occur in mid -September and early October throughout the herd unit. Hunt seasons close in the northern hunt areas prior to the onset of the annual fall migration in order to minimize vulnerability of bucks. Sustained population growth has been difficult because of the frequency of high overwinter mortality every 3 years on crucial winter ranges, and low vigor and productivity of important winter range browse.

WEATHER

Weather conditions during 2012 were extremely dry during the late summer and through the hunting season. Drought conditions persisted into early winter; snowpack in the Salt River and Wyoming Ranges were reported below normal. Precipitation data from the NOAA weather station near Big Piney documented this to be the driest April through June since 1895, when monitoring started at this site. For additional information, 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

Since the late 1990s, winter range browse was measured each spring and fall to assess production and utilization. The growing conditions were extremely poor in 2012 due to lack of precipitation in the spring and preceding winter. Many shrubs were unable to produce leaders, and leaf production was stunted in many cases. Ephemeral leaf drop occurred in August on many plants, just one of many responses to the extremely dry conditions. Seed production was very minimal for all species. For additional site specific information, please refer to the 2012 Annual Report

Strategic Habitat Plan Accomplishments, pages104-123 for Pinedale Region habitat improvement project summaries (**http://wgfd.wyo.gov/web2011/wildlife-1000708.aspx**).

FIELD DATA

The Wyoming Range deer herd has been unable to sustain population growth for more than 3 consecutive years since the early 1990s. Population growth has been severely compromised by moderate to severe winter mortality in 1992-93, 1996-97, 2001-02, 2003-04, 2004-05, 2005-06, 2007-08, and 2010-2011. Over-winter mortality has suppressed this population's ability to sustain growth because of poor survival and recruitment of fawns and yearlings during the last 21 years.

An on-going effort to monitor population dynamics with posthunt herd composition surveys (Appendix A) provides an assessment of buck recruitment and fawn production and survival. Buck:doe ratios have met or exceeded the special management objective of 30-45 bucks:100 does in the posthunt population over the last 6 years. Moderate to high overwinter survival has ensured recruitment of 1.5+ year old bucks into the population. Buck:doe ratios on the northern winter ranges have averaged 41 bucks:100 does from 2007-2011, and reflect the differential overwinter survival between northern (LaBarge area) and southern (Kemmerer/Evanston) winter ranges. Winter severity, frequent intervals of high winter mortality, and poor habitat conditions on the southern winter ranges has resulted in a 5-year average (2007-2011) buck:doe ratio of 32 bucks:100 does. The differential trend in buck:doe ratios between northern (37 bucks:100 does) and southern (27 bucks:100 does) winter ranges was observed again in 2012. This trend of higher buck:doe ratios on the northern winter ranges versus the southern areas is anticipated to continue because of more frequent severe winters and associated higher mortality on the southern ranges.

Perhaps the premier issue in the overall population dynamic of the northern segment of the herd, is the general decline in productivity and survival of fawns on the LaBarge/Big Piney winter ranges (Area 143) as seen in fawn:doe ratios from 1996- present. During the 5-year period from 1996-2000, an average of 82 fawns:100 does were observed on this winter range. During a subsequent 5-years period (2008-2012), the average fawn:100 does ratio was 62:100.

On the southern winter ranges, low fawn recruitment is of concern, and is believed to be related to habitat conditions. Poor browse production related to persistent drought, and an increase in decadent and over-mature forage plants on crucial winter ranges are factors that dictate over-winter deer survival even in mild and open winters. Additional factors are the declining trend in vigor, and increase in dead and decadence, of aspen communities in parturition and summer ranges. The condition of aspen communities is believed to be significant contributors to declining neonatal fawn survival and recruitment.

Over the last 21 years, posthunt herd composition surveys have been followed by post-winter change-in-ratio (CIR) surveys. These surveys provide a metric of over-winter survival of the juvenile cohort by comparing December to April changes in proportions of fawns (Appendix B).

Since 1992, early winter and early spring herd composition surveys have been conducted to compare the proportion of fawns lost through the winter based on the change in fawn: 100 adult ratios. The percent change between the December and April fawn: 100 adult ratios are used to assess over-winter fawn mortality.

Changes in ratio classifications have proven successful in identifying winters in which significant mule deer losses have occurred (Appendix B). These classifications, in conjunction with spring mortality surveys, enable deer managers to estimate which age/sex classes bore the highest levels of mortality. Since change in ratio classification surveys were initiated in 1992, high levels of change between December and April fawn:adult ratios have occurred after the winters of 1992-1993, 1996-1997, 2001-2002, 2003-04, 2007-08, and 2010-11. The losses of mule deer during these winters were considered to be normal to severe depending on the specific winter range complex. Years of normal to below normal deer mortality occurred in 1993-94, 1998-99, and 2000-01. There have been six years when over-winter mortality was determined to be minimal; 1994-95, 1999-2000, 2006-07, 2008-09, 2011-12, and 2012-13.

HARVEST

Hunting seasons since 1993 have been designed to allow 7-14 days of hunting in the southern areas (Areas 134,135) and 16-23 days of hunting in the northern areas (Areas 143-145). Antlered only hunting, and the near absence of antlerless harvest has failed to produce the desired increase in population trend. Nonresident licenses were reduced to 600 for Region G in 2012. Buck:doe ratios totaled 31:100 in 2012 and fall within the special management threshold of 30-45 bucks:100 does. The conservative management approach of closing hunting seasons prior to annual fall migration in the northern hunt areas has ensured that trophy class bucks continue to be recruited into the posthunt population.

Hunter success was estimated at 44% in 2012 with a total harvest of 2300 deer. Harvest success rebounded in 2012 after low success in 2011 following the severe winter of 2010-11. Fewer nonresident hunters hunted in 2012 because of a significant reduction in Region G licenses. This contingent of hunters comprised only 13% of the herd unit hunters in 2012, which is a decline from an average of 17% nonresident hunters over the previous 5-years.

POPULATION

The model evaluation is considered excellent based on the criteria associated with years of data, availability of ratio data, juvenile and adult survival estimates, model alignment, and the current model is biologically defensible. The only criterion that was not achieved was the absence of at least two sample-based population estimates. The “Time Sensitive Juvenile – Constant Adult Mortality Rate” (TSJ,CA) spreadsheet model was used to derive the post season population

estimate. The TSJ,CA model showed the best overall fit compared the suite of available models (Fit=6, Relative AICc=121). This model tracks observed buck:100 doe ratios extremely well.

MANAGEMENT SUMMARY

The 2013 hunting season is designed to promote population growth, permit the take of antlerless deer by youth hunters, and retain bucks in the posthunt population by closing hunt seasons prior to the onset of the fall migration. Nonresident Region G licenses will remain at 600 licenses in response to public desire to minimize hunter crowding.

The 2013 season in Hunt Area 134 and 135 will allow 11 days of general season antlered deer hunting. This is a reduction of one day from 2012. The one day reduction will close the season before the second weekend. In light of the earlier closure for general license hunters, and in consideration of youth hunting opportunities, the youth only hunting season will remain open through October 14. Hunt Areas 143-145 will close on October 6 in 2013. The Sunday closing date will offer hunting through 4 weekends in the northern hunt areas. In Area 145, a limited quota doe or fawn white-tailed deer hunt will allow hunters to take white-tailed deer in an area where chronic damages to stored crops on private property have been occurring.

The 2013 hunting seasons are projected to harvest approximately 2000 deer. The projected harvest should allow the population to remain stable at approximately 34,000 deer following the 2013 hunting seasons.

Literature Cited

Monteith, K.L., M.J. Kauffman, G.L. Fralick, S.G. Smith. 2012. Nutritional carrying capacity and factors limiting population growth of mule deer in the Wyoming Range. Wyoming Cooperative Fish and Wildlife Research Unit. University of Wyoming, Laramie. 17 pp.

Monteith, K.L. 2013. Wyoming Range mule deer project, April 2013 update. Wyoming Cooperative Fish and Wildlife Research Unit. University of Wyoming, Laramie. 7 pp.

Monteith, K. L. 2013a. Wyoming Range mule deer project, spring update. Wyoming Cooperative Fish and Wildlife Research Unit, University of Wyoming, Laramie. 5 pp.

INPUT	
Species:	Mule Deer
Biologist:	Gary Fralick
Herd Unit & No.:	Wyoming Range
Model date:	02/27/13

☐ Clear form

MODELS SUMMARY		Fit	Relative AICc	Check best model to create report	Notes
CJ,CA	**Constant Juvenile & Adult Survival**	225	234	☐ CJ,CA Model	
SCJ,SCA	**Semi-Constant Juvenile & Semi-Constant Adult Survival**	125	146	☐ SCJ,SCA M	
TSJ,CA	**Time-Specific Juvenile & Constant Adult Survival**	6	121	☑ TSJ,CA Model	

Population Estimates from Top Model

Year	Posthunt Population Est.		Trend Count	Predicted Prehunt Population			Total	Predicted Posthunt Population			Total	Objective
	Field Est	Field SE		Juveniles	Total Males	Females		Juveniles	Total Males	Females		
1993				6437	4938	13754	25129	6391	3884	13126	23400	
1994				7805	5302	12785	25892	7805	3925	12785	24515	
1995				9555	6690	13865	30110	9555	5016	13865	28435	
1996				10538	6341	13506	30384	10538	4792	13506	28836	
1997				9253	5988	13044	28284	9253	4676	13044	26973	
1998				11029	7828	14603	33460	11029	5619	14603	31251	
1999				13101	9513	16788	39402	13101	6654	16788	36543	
2000				15121	10436	18641	44197	15081	7040	18328	40449	
2001				12161	9882	19022	41066	12118	6896	18747	37761	
2002				10932	8007	17604	36543	10895	5597	17149	33640	
2003				11775	7623	16976	36374	11707	5208	16664	33578	
2004				11065	6559	15835	33458	11006	4489	15395	30890	
2005				11010	6860	15690	33560	11010	5061	15660	31731	
2006				10965	7406	15989	34360	10965	5346	15989	32300	
2007				12560	9263	17881	39704	12560	6765	17881	37206	
2008				10074	7990	16991	35055	10062	5999	16920	32981	
2009				10794	8600	17444	36838	10786	5950	17347	34083	
2010				11803	9672	18900	40375	11794	7007	18799	37600	
2011				10854	8279	17827	36960	10854	6592	17797	35243	
2012				11352	7509	16581	35442	11343	5123	16446	32912	
2013				9631	8742	17911	36284	9622	6597	17801	34020	
2014												
2015												
2016												
2017												
2018												
2019												
2020												
2021												
2022												
2023												
2024												
2025												

Survival and Initial Population Estimates

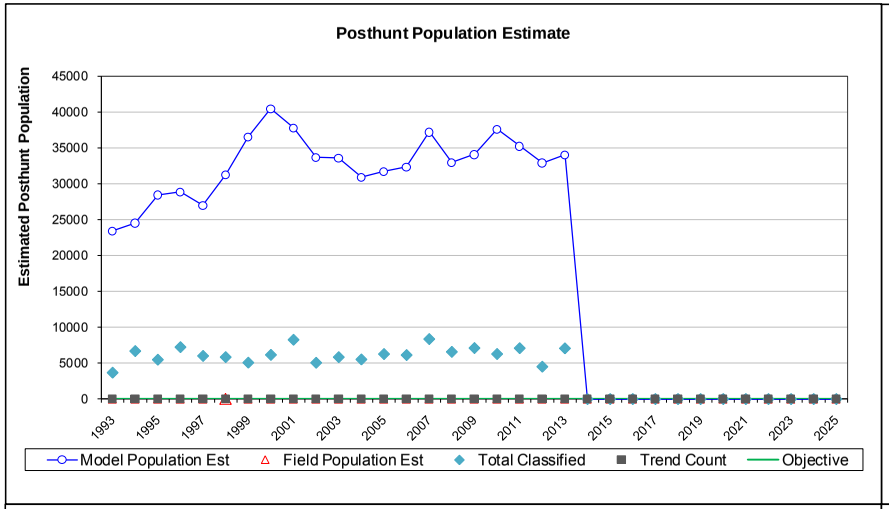
Year	Winter Juvenile Survival Rates			Annual Adult Survival Rates		
	Model Est	Field Est	SE	Model Est	Field Est	SE
1993	0.67			0.81		
1994	0.90			0.81		
1995	0.48			0.81		
1996	0.40			0.81		
1997	0.87			0.81		
1998	0.90			0.81		
1999	0.77			0.81		
2000	0.55			0.81		
2001	0.40			0.81		
2002	0.57			0.81		
2003	0.40			0.81		
2004	0.59			0.81		
2005	0.60			0.81		
2006	0.90			0.81		
2007	0.40			0.81		
2008	0.74			0.81		
2009	0.90			0.81		
2010	0.44			0.81		
2011	0.40			0.81		
2012	0.81			0.81		
2013	0.72			0.81		
2014						
2015						
2016						
2017						
2018						
2019						
2020						
2021						
2022						
2023						
2024						
2025						

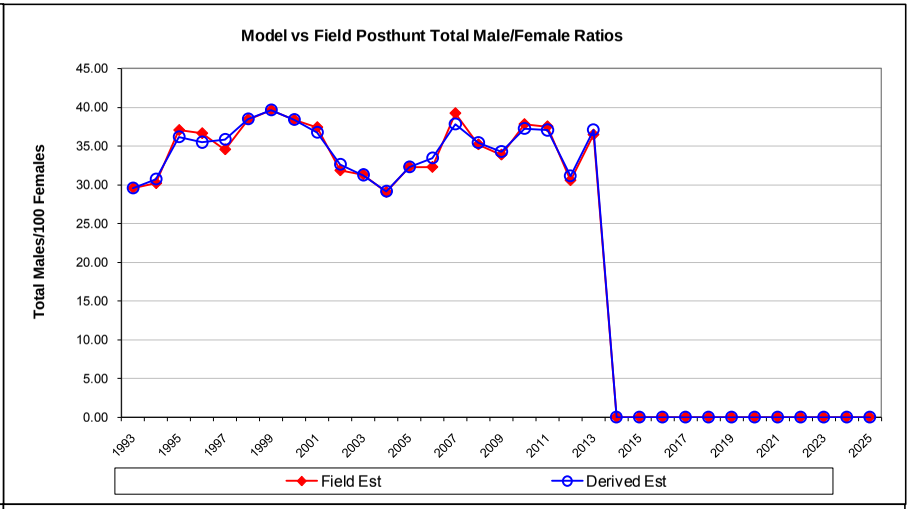
Parameters:	Optim cells
Adult Survival =	0.810
Initial Total Male Pop/10,000 =	0.388
Initial Female Pop/10,000 =	1.313

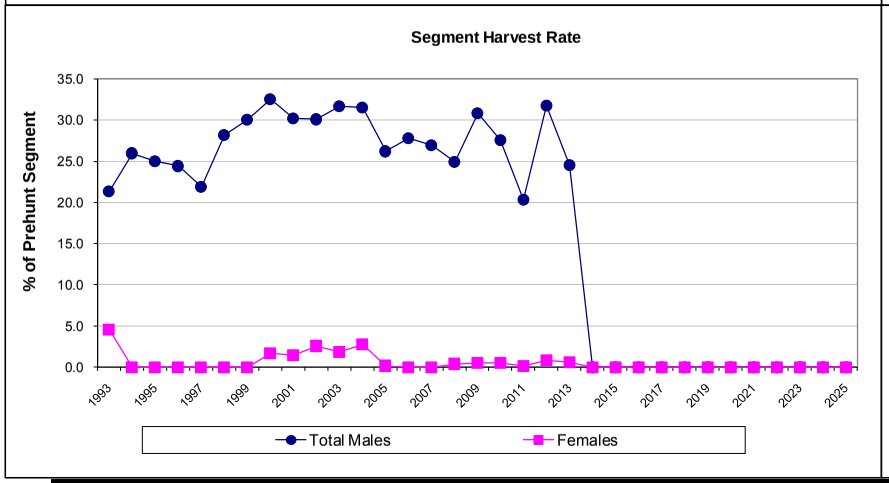
MODEL ASSUMPTIONS	
Sex Ratio (% Males) =	50%
Wounding Loss (total males) =	10%
Wounding Loss (females) =	10%
Wounding Loss (juveniles) =	10%

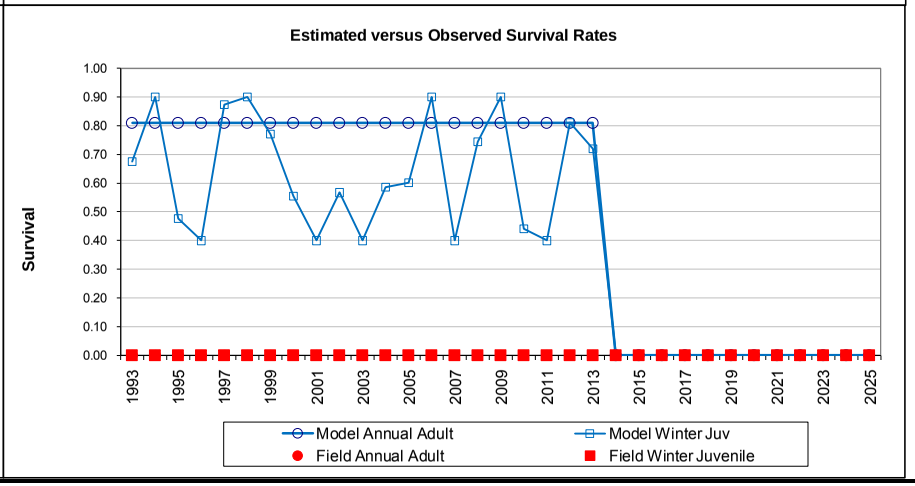
Year	Classification Counts: Juvenile/Female Ratio			Classification Counts: Total Male/Female Ratio			Harvest					Harvest: Segment Harvest Rate (% of Prehunt Segment)	
	Derived Est	Field Est	Field SE	Derived Est	Field Est w/o bull adj	Field SE	Juv	Yrl males	2+ Males	Females	Total Harvest	Total Males	Females
1993		48.69	1.88	29.59	29.59	1.37	42	0	958	571	1571	21.3	4.6
1994		61.05	1.68	30.70	30.21	1.06	0	0	1252	0	1252	26.0	0.0
1995		68.91	2.09	36.18	37.07	1.38	0	0	1522	0	1522	25.0	0.0
1996		78.03	2.03	35.48	36.66	1.22	0	0	1408	0	1408	24.4	0.0
1997		70.94	2.04	35.85	34.58	1.26	0	0	1192	0	1192	21.9	0.0
1998		75.52	2.21	38.48	38.46	1.40	0	0	2008	0	2008	28.2	0.0
1999		78.04	2.44	39.64	39.66	1.54	0	0	2599	0	2599	30.1	0.0
2000		82.29	2.32	38.41	38.41	1.38	36	0	3087	285	3408	32.5	1.7
2001		64.64	1.61	36.78	37.44	1.12	39	0	2715	250	3004	30.2	1.4
2002		63.53	2.01	32.64	31.86	1.28	34	0	2191	414	2639	30.1	2.6
2003		70.25	2.03	31.25	31.34	1.19	62	0	2195	284	2541	31.7	1.8
2004		71.50	2.11	29.16	29.09	1.17	53	0	1881	400	2334	31.5	2.8
2005		70.30	1.97	32.32	32.32	1.18	0	0	1635	27	1662	26.2	0.2
2006		68.58	1.95	33.44	32.30	1.18	0	0	1873	0	1873	27.8	0.0
2007		70.24	1.73	37.83	39.25	1.17	0	0	2271	0	2271	27.0	0.0
2008		59.47	1.68	35.45	35.22	1.19	11	0	1810	64	1885	24.9	0.4
2009		62.18	1.67	34.30	33.90	1.12	7	0	2409	88	2504	30.8	0.6
2010		62.74	1.81	37.27	37.84	1.29	8	0	2423	92	2523	27.6	0.5
2011		60.99	1.66	37.04	37.55	1.20	0	0	1533	28	1561	20.4	0.2
2012		68.97	2.27	31.15	30.59	1.33	8	0	2169	123	2300	31.8	0.8
2013		54.05	1.50	37.06	36.49	1.16	8	0	1950	100	2058	24.5	0.6
2014													
2015													
2016													
2017													
2018													
2019													
2020													
2021													
2022													
2023													
2024													
2025													

FIGURES









Comments:

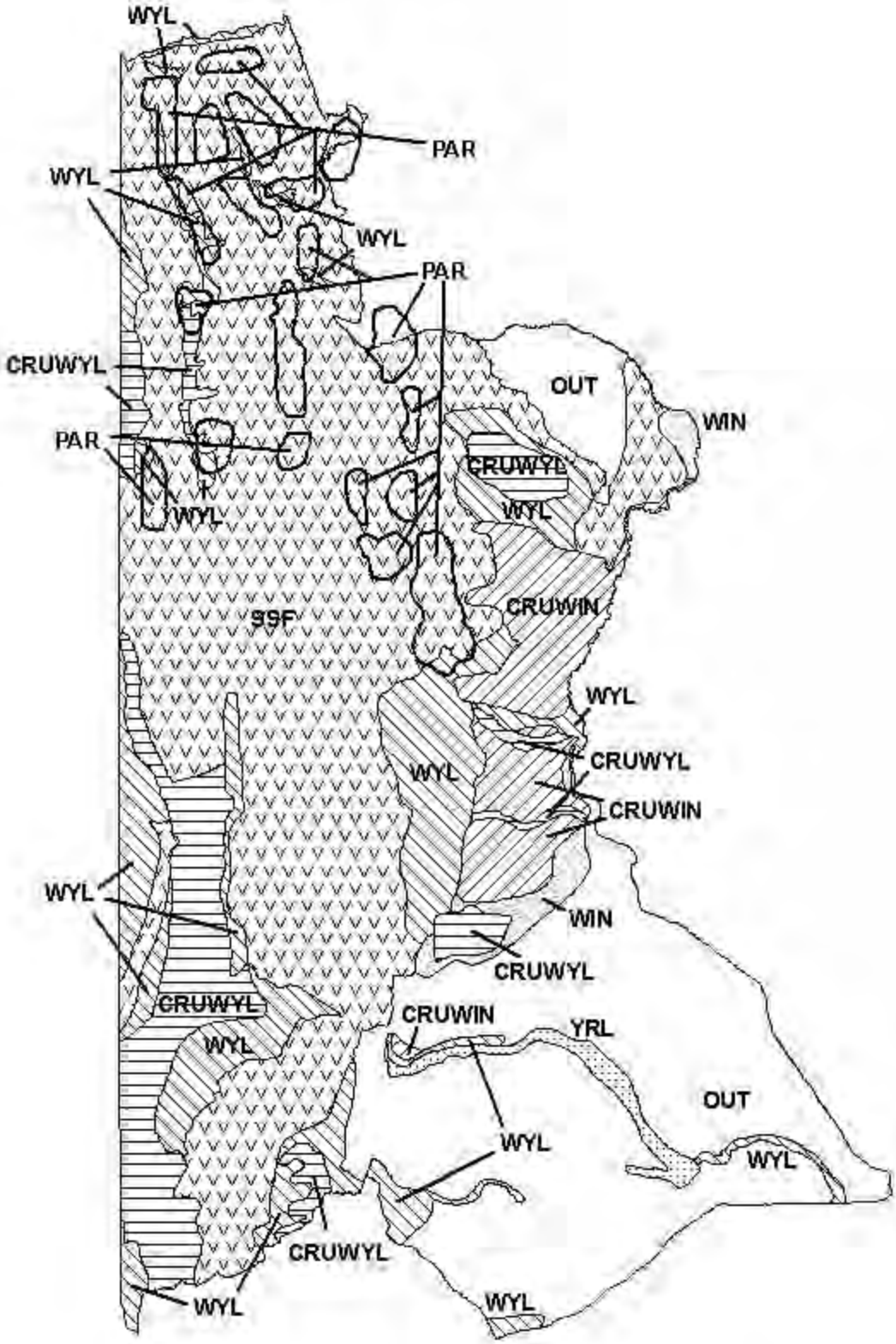
END

Appendix A. Wyoming Range Mule Deer Herd, posthunt herd composition data, 2006-2012.

							Ratio:100 Females			
2006	Yrlng Males	Adult Males	Total Males	Does	Fawns	Total	Yrlng Males	Adult Males	Total Males	Fawns
HA134	51	107	158	522	344	1024	10	20	30	66
HA135	84	136	220	624	462	1306	13	22	35	74
HA143	251	295	546	1707	1136	3389	15	17	32	66
144/145	24	36	60	193	147	400	12	19	31	76
TOTAL	410	574	984	3046	2089	6119	13	19	32	69
2007										
HA134	141	162	303	922	736	1961	15	18	33	80
HA135	133	175	258	890	657	1855	15	20	35	74
HA143	472	480	952	2170	1404	4526	22	22	44	65
144/145	Survey conducted in February 2008					902				
TOTAL	746	817	1563	3982	2797	9244	19	20	39	70
2008										
HA134	66	123	189	667	403	1259	10	18	28	60
HA135	137	260	397	1164	731	2292	12	22	34	63
HA143	291	319	601	1539	870	3010	19	20	39	56
144/145	No Survey conducted in February 2009					NA				
TOTAL	494	693	1187	3370	2004	6561	15	20	35	59
2009										
HA134	49	139	188	766	430	1384	6	18	24	56
HA135	126	226	352	1057	642	2051	12	21	33	61
HA143	291	395	686	1794	1177	3657	16	22	38	65
144/145	Survey conducted in February 2010					627				
TOTAL	466	760	1226	3617	2249	7719	13	21	34	62
2010										
HA134	85	127	212	658	379	1249	13	19	32	57
HA135	163	231	394	1055	622	2071	15	22	37	59
HA143	246	330	576	1411	959	2946	17	23	41	68
144/145	Survey conducted in February 2011					768				
TOTAL	494	688	1182	3124	1960	7034	16	22	38	63
2011										
HA134	27	164	191	653	415	1259	4	25	29	63
HA135	53	317	370	1017	675	2062	5	31	36	66
HA143	260	517	777	1893	1083	3753	14	27	41	57
144/145	Survey conducted in February 2012					752				
TOTAL	340	998	1338	3563	2173	7826	9	28	37	61
2012										
HA134	55	103	158	635	404	1197	9	16	25	64
HA135	80	159	239	822	647	1708	10	19	29	79
HA143	116	177	293	799	505	1597	14	22	37	63
144/145	Survey conducted in February 2013					764				
TOTAL	251	439	690	2256	1556	5266	11	19	30	69

Appendix B. A comparison between December and April classification data, Wyoming Range Mule Deer Herd, 1992-2013.

	No. Deer Classified				Change in Ratio		
	December		April		December	April	%
2012-13	Adults	Fawns	Adults	Fawns	Juv:100 Adults	Juv:100 Adults	Change
HA134	793	404	199	71	50.9	35.6	-30.0
HA135	1061	647	254	95	60.9	37.4	-38.6
HA143	1092	505	1498	585	46.2	39.0	-15.6
TOTAL	2946	1556	1951	751	52.8	38.4	-27.2
2011-12							
HA134	844	415	No Data	No Data	49.2	No Data	No Data
HA135	1387	675	133	52	48.7	Small Sample Size	No Data
HA143	2670	1083	1046	375	40.6	35.8	-11.8
TOTAL	4901	2173	1179	427	44.3	36.2	-11.8
2010-11							
HA134	870	379	722	77	43.5	10.6	-75.6
HA135	1449	622	611	73	42.9	11.9	-72.2
HA143	1987	959	1069	227	48.2	21.2	-56.0
TOTAL	4306	1960	2402	377	45.5	15.6	-65.7
2009-10							
HA134	954	430	772	289	45.0	37.4	-16.8
HA135	1409	642	428	166	45.5	38.7	-14.9
HA143	2480	1177	1278	503	47.4	39.3	-17.0
TOTAL	4843	2249	2478	958	46.4	38.6	-16.8
2008-09							
HA134	856	403	622	238	47.0	38.3	-18.5
HA135	1561	731	207	76	46.8	36.7	-21.6
HA143	2140	870	1415	522	40.6	36.9	-9.1
TOTAL	4557	2004	2244	836	44.8	37.3	-16.7
2007-08							
HA134	1225	736	787	171	60.0	21.7	-63.8
HA135	1198	657	565	137	54.8	24.2	-55.8
HA143	3122	1404	1315	525	44.9	39.9	-11.1
TOTAL	5545	2797	2667	833	50.4	31.2	-38.1
2006-07							
HA134	680	344	249	104	50.6	41.7	-17.6
HA135	844	462	444	191	54.7	43.0	-21.4
HA143	2253	1136	520	223	50.4	42.8	-15.1
TOTAL	3777	1942	1213	518	51.4	42.7	-16.9
2005-06							
HA134	732	442	391	174	60.4	44.5	-26.3
HA135	1075	644	435	157	59.9	36.1	-39.7
HA143	2279	1085	1177	413	47.6	35.1	-26.2
TOTAL	4086	2171	2003	744	53.1	37.1	-30.1
2004-05							
HA134	942	537	515	135	57.0	26.2	-54.0
HA135	854	534	790	232	62.5	29.4	-52.9
HA143	1750	893	1156	461	51.0	39.8	-21.9
TOTAL	3546	1964	2461	828	55.3	33.6	-39.2



Mule Deer (MD131) - Wyoming Range
HA134, 135-137, 143-145, 147
Revised - 3/05