

Montana Fish, Wildlife and Parks September 2024



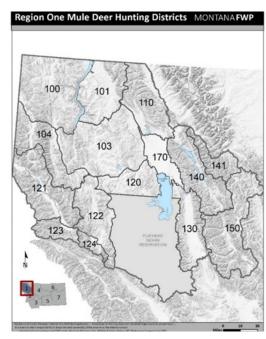
#### **PURPOSE**

This report summarizes biological data that Montana Fish, Wildlife and Parks (FWP) collects annually for mule deer (*Odocoileus hemionus*) within Region One and is used to inform wildlife biologists, managers, fish and wildlife commissioners and the public in making management recommendations and decisions. The factors which affect mule deer populations are complex, with management decisions made according to both biological and social demands. This report is not intended to serve as comprehensive evaluation of Region One mule deer management, and care should be taken when interpreting population data without additional context.

#### INTRODUCTION

FWP administrative Region One (R1) encompasses the northwestern corner of Montana and differs from much of the rest of the state due to its heavily forested landscape and relatively high amounts of annual precipitation. Mule deer are managed within 15 hunting districts (HDs)\* that generally follow known distributions of populations that share similar life histories (Figure 1).

\*Note: During the 2022/2023 biennial season setting process, several HDs were combined in an effort to simplify the hunting regulations. HDs 101 and 109 were combined into a single HD 101, and HD 102 and 103 were combined into a single HD 103. Although 2021 was the last year that these HDs were managed independently, the data presented here has been retroactively combined to reflect the new HD boundaries.



#### MANAGEMENT STRATEGY

In Montana, mule deer are managed according to an adaptive harvest management strategy (AHM, 2020) in which hunting regulation packages are recommended according to biological "triggers" that indicate a change in population trend (growth, stable or decline). These triggers are most often measured via aerial survey data (i.e., minimum counts, fawn to doe ratios, doe to buck ratios), collected within *trend areas* that are representative of the broader landscape.

In R1, the ability to survey animals from the air is limited due to the prevalence of dense conifer forest. Biologists are only able to conduct reliable aerial surveys portions in HD 103 and 121, and periodic or ground-based surveys in HD 100 and 101. While these surveys provide important information for some of the more robust mule deer populations in the Region, population trend and associated AHM objectives are most often assessed using estimated annual harvest data, which is available for every HD.

The AHM objectives for R1 are to maintain populations within 25% of the long-term average (LTA) as measured by the total number of bucks harvested or the total number of mule deer observed during trend survey efforts. Restrictive and liberal season structures may be recommended if a HDs buck harvest or survey trend has been below or above 25% for five consecutive years, respectively. Following the 2023 season, seven HDs were within or above AHM harvest objectives (Table 1). Of these, two HDs were previously below AHM objective in 2022 (HDs 121 and 123). HDs 122, 124 and 170 exceeded the AHM upper objective, but will need to remain above 25% LTA for 5 consecutive years before more liberal season structures can be considered. The remaining HDs (HD 100, 101, 103, 104, 110, 130, 141, 150) are below AHM harvest objective. HDs 103 and 121 are within AHM survey objective range (see Hunting District Summaries).

Table 1	. 2023 AHM	Harvest Ob	jectives for	R1 Mule De	er Hunting l	Districts
HD	LTA	3-year Ave.	2022Harvest	-25%	+25%	Within AHM
100	222	161	162	167	278	NO
101	190	107	102	142	237	NO
103	323	179	201	243	404	NO
104	91	49	56	69	114	NO
110	67	23	40	50	84	NO
120	45	43	44	33	56	YES
121	154	120	122	116	193	YES
122	139	152	186	104	174	YES
123	56	31	47	42	70	YES
124	41	54	62	31	51	YES
130	68	20	20	51	85	NO
140	48	35	40	36	60	YES
141	16	8	7	12	20	NO
150	52	8	9	39	65	NO
170	13	28	34	10	17	YES

#### SEASON STRUCTURE

Since 2012, all antierless mule deer harvest has been prohibited in R1. With a few exceptions (HDs 101, 130, 103, 150), the mule deer hunting season structure during 2023 was as follows:

6-week Antlered Buck Mule Deer – Archery Only

5-week Antlered Buck Mule Deer – General Season

9 -day Antlered Buck Mule Deer – Heritage Muzzleloader Season

Exceptions to the above seasons structure were found in HDs 101, 103, 130 and 150.

**HD 101** – General season opportunity is limited to antlered buck during the first three weeks of the season. Limited permits (n=15) are offered for the last two weeks of the general season.

Note: This season structure was only applied to the eastern portion of HD 101 (former HD 109) in 2021.

During regulation simplification and the 2022/2023 biennial season process, the season structure was adopted for the entirety of HD 101 and the limited permit quota raised to 15.

**HD 103** – Harvest is restricted in a portion of the HD (North Fisher) by limited permits (n = 13)

**HD 130** – Limited early season rifle permits (n=10) are offered for the Mission Mountains Wilderness portion of the HD

**HD 150** – General season begins September 15<sup>th</sup> to provide additional backcountry opportunity for antlered mule deer.

#### HARVEST SUMMARY

In 2023, an estimated 1,197 (CI = 1,130 - 1,264) mule deer were harvested in R1, accounting for roughly 2.9% of Montana's estimated total mule deer harvest (n = 41,377, CI = 41,377 - 41,716). Regional harvest is trending upwards from an all-time low estimate in 2017, though is still stable relative to the past 10 years (Figure 2).

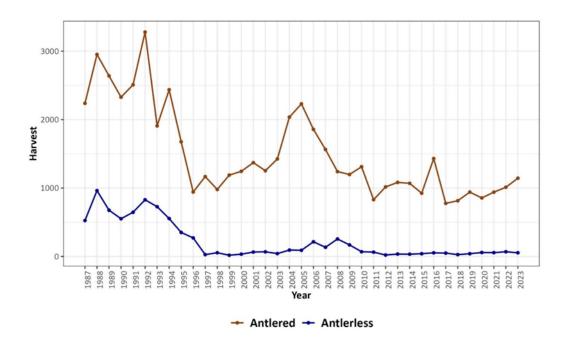


Figure 2. Estimated R1 antlered (brown line) and antlerless (blue line) mule deer harvest (1987-2023) derived from annual hunter harvest survey data. NOTE: Post 2012 antlerless harvest found in HD summary tables are most often the result of incorrect HD assignment during sampling efforts or localized harvest for game damage.

Of the estimated 1,197 mule deer harvested in R1, residents harvested 87% (n = 1,046), while nonresidents harvested 13% (n = 151) which are near their respective LTAs (Resident  $\bar{x}$  = 85%, Nonresident  $\bar{x}$  = 15%; Figure 3).

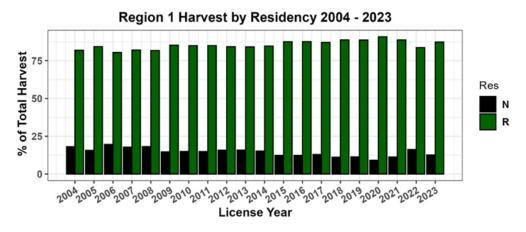


Figure 3. Percent of Region 1 total mule deer harvest according to hunter residency.

Since 2004, FWP has collected information regarding weapon type (i.e., rifle or archery) used to harvest mule deer. In 2021, a nine-day heritage muzzleloader season was implemented statewide. In 2023, an estimated 1,197 mule deer (96.7%) were harvested using a rifle, 30 (2.5%) using archery equipment, and 10 (0.8%) were harvested during the heritage muzzleloader season. Harvest was consistent with LTA values for each weapon type (Rifle  $\bar{x}$  = 97.4, Archery  $\bar{x}$  = 2.3, Muzzleloader  $\bar{x}$  =1.3; Figure 4).

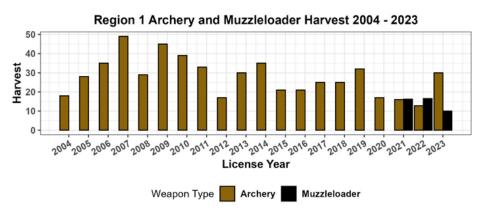


Figure 4. Estimated mule deer harvested using archery season or during the heritage muzzleloader season.

#### SURVEY SUMMARY

Surveys are conducted during the spring when deer concentrate on warmer aspects to forage on emerging vegetation. While biologists are unable to accurately classify bucks during this timeframe, spring surveys allow biologists to estimate *recruitment*, or the number of fawns that survived their first winter in relation to the number adults. This is typically expressed as a ratio of the number of fawns per 100 adults and gives biologists another data point from which to estimate population trend. There are two AHM designated trend areas in R1, the Fisher River (HD103) and Cougar Peak (121), which biologists attempt to survey annually. An additional spring survey is conducted along the Galton Foothills (HD 101), though due to increasing forest canopy has been restricted to ground based observation since 2014. Similarly, increased forest canopy in the Horse Range (HD 100) has reduced FWP's ability to accurately classify mule deer, and the survey is only performed occasionally as funding and annual priorities allow.

During the spring of 2024 only the Cougar Peak survey (HD 121) was successfully completed. No survey was conducted in the Fisher River (HD 103) trend area due to helicopter scheduling and maintenance conflicts. Additionally, no survey was recorded along the Galton foothills (HD 101) due to early green-up conditions and mule deer dispersal resulting in inadequate numbers of deer being observed.

The Cougar Peak survey in HD 121 was rated as good, though optimal green up conditions were not consistent and conditions were challenging due to timber, evening sun angle, and mule deer behavior. Overall classification ability was good (<5% unclassified), with a total of 264 deer observed (163ad, 88fawn, 13Unclassified). Estimated recruitment was 54:100, which is approximately 32% above the long-term average (LTA) of 41:100. While recruitment rates can be highly variable, biologists concur that winter conditions during 2023/2024 were relatively mild on most mule deer winter ranges in R1. Three-year average recruitment estimates for the Fisher River, Galton Foothills, and Cougar Peak trend areas (33:100, 36:100, and 41:100 respectively) are all at their respective LTAs (33:100, 37:100, 42:100 respectively) suggesting that mule deer populations will remain relatively stable.

#### **HUNTING DISTRICT SUMMARIES**

The following pages present the available information for mule deer in each of R1's 15 Hunt Districts (HDs). Of important note for those HDs where population surveys are possible: The data are presented without qualifying field notes regarding weather, green up conditions, and animal behavior. These factors can significantly influence survey results and the utility of the data. For HDs with surveys (HDs 100, 101,103,121), figures denote annual surveys as being either for "Trend" or "Not for Trend", in respect to the total number observed and recruitment. This is determined according the survey biologist's notes and ability to classify animals during the survey. All data is presented to maintain consistent reporting, but only "Trend" survey data is used to calculate LTAs, and evaluate AHM objectives and trend. Care should be taken when interpreting individual point observations, as the data gains value when trend is interpreted across years such as with the LTA.

Harvest data for each HD is collected through an annual hunter harvest telephone survey, which collects harvest and effort information from a random subset of license holders. This data does not provide an exact measure of annual harvest, but instead provides a representative estimate of harvest that can be compared over time. Antiered buck harvest has long been established as a reliable metric for assessing population trend. However, care should be taken when interpreting annual HD harvest estimates as several factors may introduce error (e.g. small sample size, incorrect reporting). Of note, R1 antierless mule deer harvest has been prohibited since 2012, yet occasional harvest is indicated through the hunter harvest survey in most HDs. While it is possible that some illegal harvest is being reported, these estimates are most likely the result of error introduced during the survey process.



### **NORTH KOOTENAL**

OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested

or the total number of mule deer observed during trend survey efforts.

HD Summary		2023 Harvest						
Antlered MD Harvest								
Square miles	1,407	Harvest/mi <sup>2</sup>	0.12					
AHM objective range	167-278	Harvest	162					
LTA (1987-2022)	222	Meeting objective?	No					
10-year trend	Stable	3-year trend	Stable					
% ≥ 4 points LTA	43	% ≥ 4 points	48					

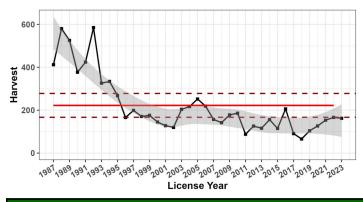


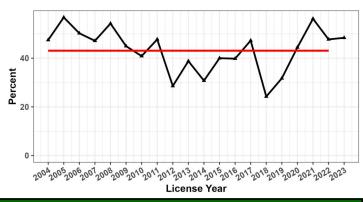
HD 100 Antlered Mule Deer Harvest

- LTA - · AHM Range

HD 100 % ≥ 4points

- LTA



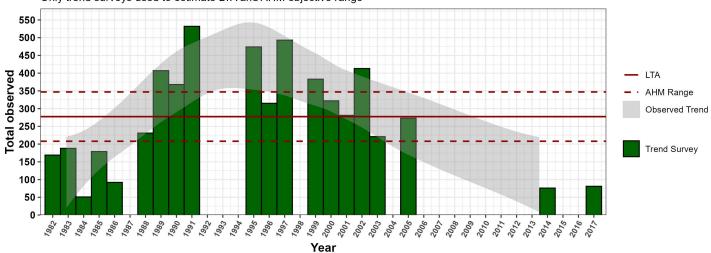


	HD 100 Mule Deer Harvest Statistics 1987 -2023										
Year	Antlered	Antlerless	Total	% >= 4pt	Year	Antlered	Antlerless	Total	% >= 4pt		
1987	412	131	543		2007	157	30	187	47		
1988	580	214	794		2008	142	38	182	54		
1989	525	126	651		2009	178	20	198	45		
1990	377	114	491		2010	186	8	194	41		
1991	424	144	568		2011	88	3	91	48		
1992	585	148	737		2012	126	3	128	29		
1993	326	136	462		2013	116	3	119	39		
1994	334	132	466		2014	156	3	158	31		
1995	268	56	324		2015	115	0	115	40		
1996	166	54	220		2016	206	6	212	40		
1997	199	9	208		2017	91	6	97	47		
1998	171	3	174		2018	66	0	66	24		
1999	176	3	179		2019	104	0	104	32		
2000	145	0	145		2020	126	11	137	45		
2001	128	5	133		2021	153	11	165	56		
2002	120	5	125		2022	166	9	176	48		
2003	204	8	212		2023	162	7	169	48		
2004	217	6	222	47							
2005	252	6	258	57							
2006	219	26	247	50							

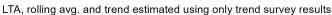
Horse Range Trend Survey Area Summary Note: Flights were discontinued in this HD due conifer encroachment significantly diminishing ability to accurately count and classify deer									
Survey area (mi <sup>2</sup> )	15	Survey used for AHM Objective No							
Surveyed annually	2017								
Minimum Count LTA 277 Most Recent Minimum		Most Recent Minimum Count	81						
Recruitment LTA	Recruitment LTA 37:100 3-year ave. recruitment NA								

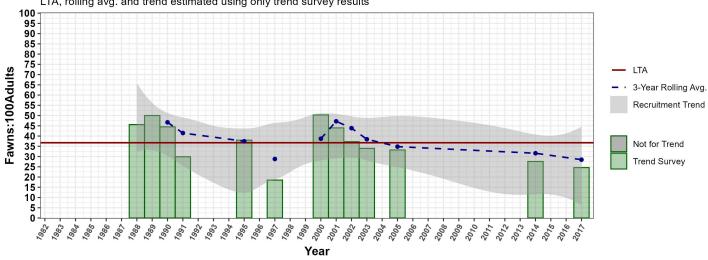
#### Horse Range Spring Mule Deer Survey 1982-2017





#### Horse Range Mule Deer Spring Recruitment 1982-2017





		HD 100 Hoi	rse Range M	1ule Deer S	urveys 1982	- 2023	
Year	Method	Season	Adults	Fawns	Uncl.	Total	Fawn:100 Adults
1982	Aerial	Spring			169	169	
1983	Aerial	Spring			188	188	
1984	Aerial	Spring			51	51	
1985	Aerial	Spring			179	179	
1986	Aerial	Spring			92	92	
1986	Aerial	Winter			104	104	
1988	Aerial	Spring	147	67	16	230	45.6
1988	Aerial	Spring	138	54	39	231	39.1
1989	Aerial	Spring	260	130	17	407	50
1990	Aerial	Spring	220	98	50	368	44.5
1991	Aerial	Spring	355	106	71	532	29.9
1995	Aerial	Spring	321	122	31	474	38
1996	Aerial	Spring	-		315	315	
1996	Aerial	Winter	197	67	11	275	34
1997	Aerial	Spring	416	77	0	493	18.5
1998	Aerial	Winter	101	52	0	153	51.5
1999	Aerial	Spring	48	26	46	120	54.2
1999	Aerial	Spring	260	123	0	383	47.3
1999	Aerial	Spring			279	279	11.2
1999	Aerial	Spring			353	353	
1999	Aerial	Winter	79	41	0	120	51.9
2000	Aerial	Spring	177	89	0	266	50.3
2000	Aerial	Spring			322	322	1
2000	Aerial	Spring			253	253	
2000	Aerial	Winter	225	97	0	322	43.1
2001	Aerial	Spring	195	86	0	281	44
2001	Aerial	Spring	255		232	232	
2001	Aerial	Spring			249	249	
2001	Aerial	Winter	218			218	
2002	Aerial	Spring	177	66	50	293	37.3
2002	Aerial	Spring			413	413	
2002	Aerial	Spring			360	360	
2003	Aerial	Spring	165	56	0	221	34
2004	Aerial	9,8					7.
2005	Aerial	Spring	205	68	0	273	33.2
2006	No Survey	2611118	203	00		2,3	33.2
2007	No Survey						
2008	No Survey		1				
2009	No Survey						
2010	No Survey						
2011	No Survey						
2012	No Survey		1				
2013	No Survey						
2014	Aerial	Spring	58	16	2	76	27.6
2015	No Survey	26111.02	1 30	15	_	, ,	27.10
2016	Aerial		1		1		
2017	Aerial	Spring	65	16	0	81	24.6
2017	No Survey	26111.02	1	15	† •	01	20
2019	No Survey						
2020	No Survey						
2021	No Survey						
2021	No Survey						
2022	No Survey						
2023	ivo sui vey		I .	1	1		

### Eureka

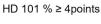
OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested

HD Summary		2023 Harvest					
Antlered MD Harvest							
Square miles	806	Harvest/mi <sup>2</sup>	0.13				
AHM objective range	142-237	Harvest	102				
LTA (1987-2023)	190	Meeting objective?	No				
10-year trend	Stable	3-year trend	Stable				
% ≥ 4 points LTA	43	% ≥ 4 points	69				

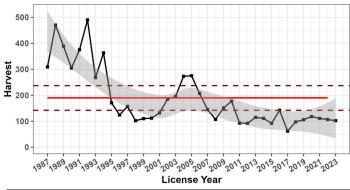


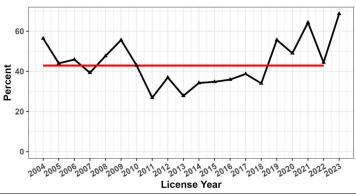
HD 101 Antlered Mule Deer Harvest

- LTA - · AHM Range



- LTA



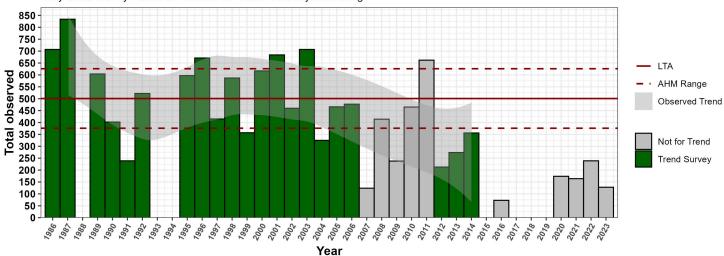


	HD 101 Mule Deer Harvest Statistics 1987 - 2023										
Year	Antlered	Antlerless	Total	Percent4pt	Year	Antlered	Antlerless	Total	Percent4pt		
1987	309	72	381		2007	145	18	164	39		
1988	470	127	597		2008	107	17	124	48		
1989	389	74	463		2009	151	9	160	56		
1990	305	62	367		2010	177	6	183	43		
1991	375	99	474		2011	93	7	99	27		
1992	490	117	611		2012	92	0	92	37		
1993	268	82	350		2013	115	0	115	28		
1994	363	62	425		2014	111	0	111	34		
1995	171	26	197		2015	92	5	96	35		
1996	124	25	150		2016	142	0	142	36		
1997	157	3	160		2017	62	0	62	39		
1998	102	6	109		2018	97	3	100	34		
1999	110	3	113		2019	106	7	113	56		
2000	112	0	112		2020	118	3	121	49		
2001	132	10	142		2021	111	3	114	64		
2002	185	8	193		2022	107	3	110	44		
2003	195	10	206		2023	102	3	106	69		
2004	273	6	278	56							
2005	275	16	290	44							
2006	207	30	236	46							

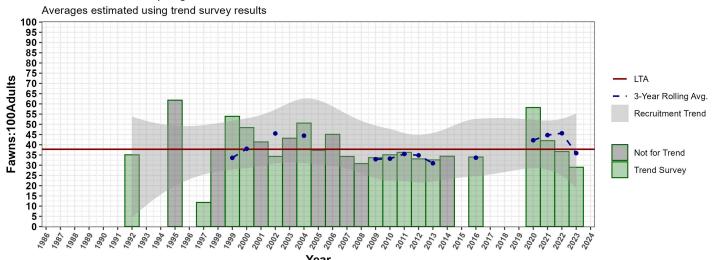
#### Galton Foothills Survey Area Summary Note: Aerial surveys were discontinued in this HD in 2014 due to expanding human infrastructure (i.e. fences) and difficulty of accurately classifying deer in dense timber. Survey is currently ground based. Survey area (mi<sup>2</sup>) Survey used for AHM objective? Variable No Surveyed annually 2023 No Most recent survey Minimum count LTA 500 Most recent minimum count 128 Recruitment LTA 37fawn:100adult 3-year avg. recruitment 36fawn:100adult

### Galton Spring Mule Deer Survey 1986-2024

Only trend surveys used to estimate LTA and AHM objective range



#### Galton Mule Deer Spring Recruitment 1986-2024



HD 101 Galton Foothills Mule Deer Surveys 1986 - 2024								
Year	Method	Season	Adults	Fawns	Uncl.	Total	Fawns:100 Adult	
1986	Aerial	Spring			707	707		
1987	Aerial	Spring			834	834		
1989	Aerial	Spring			604	604		
1990	Aerial	Spring			402	402		
1991	Aerial	Spring			239	239		
1992	Aerial	Spring	316	111	95	522	35.1	
1995	Aerial	Spring	136	84	461	597	61.8	
1996	Aerial	Spring			671	671		
1997	Aerial	Spring	262	31	122	415	11.8	
1998	Aerial	Spring	213	81	293	587	38	
1998	Aerial	Winter	65	34	67	166	52.3	
1999	Aerial	Spring	178	96	83	357	53.9	
2000	Aerial	Spring	283	137	197	617	48.4	
2000	Aerial	Winter	35	13	1	49	37.1	
2001	Aerial	Spring	237	98	349	684	41.4	
2002	Aerial	Spring	201	69	140	460	34.3	
2003	Aerial	Spring	301	130	276	707	43.2	
2004	Aerial	Spring	164	83	78	325	50.6	
2005	Aerial	Spring	209	78	179	466	37.3	
2006	Aerial	Spring	91	41	345	477	45.1	
2006	Ground	Spring	20	6	56	82	30	
2007	Aerial	Spring	33	11	0	44	33.3	
2007	Ground	Spring	70	24	30	124	34.3	
2008	Ground	Spring	44	17	145	206	38.6	
2008	Aerial	Spring	273	84	57	414	30.8	
2009	Ground	Spring	163	55	20	238	33.7	
2010	Ground	Spring	134	48	74	256	35.8	
2010	Aerial	Spring	302	106	57	465	35.1	
2011	Ground	Spring	344	125	193	662	36.3	
2012	Aerial	Spring	147	40	26	213	27.2	
2012	Aerial	Winter	37	19	0	56		
2012	Ground	Spring	135	27	6	135	20	
2013	Aerial	Spring	184	60	30	274	32.6	
2013	Ground	Spring	53	12	0	65	22.6	
2014	Aerial	Spring	125	36	196	356	28.8	
2014	Ground	Spring	131	45	0	176	34.4	
2015	Ground	Spring	8	6	0	14	75	
2015	Ground	Spring	8	4	0	12	50	
2016	Ground	Spring	50	17	6	73	34	
2017	Ground	Spring	28	4	0	32	14.3	
2018	No Survey	· · · · · ·						
2019	No Survey							
2020	Ground	Spring	110	64	0	174	58.2	
2021	Ground	Spring	115	48	1	164	41.7	
2022	Ground	Spring	169	62	8	239	36.7	
2023	Ground	Spring	96	28	4	128	29	
2024	No Survey	· · ·						

## EAST FISHER-PLEASANT VALLEY-TALLEY LAKE

OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested

or the total number of mule deer observed during trend survey efforts.

HD Summary	1	2023 Harvest					
Antlered MD Harvest							
Square miles	1,448	Harvest/mi <sup>2</sup>	0.14				
AHM objective range	243-404	Harvest	201				
LTA (1987-2023)	323	Meeting objective?	No				
10-year trend	Stable	3-year trend	Stable				
% ≥ 4 points LTA	42	% ≥ 4 points	57				

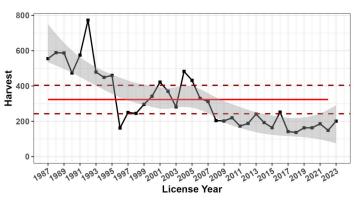


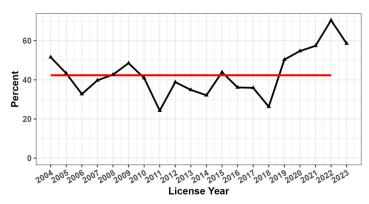
HD 103 Antlered Mule Deer Harvest

HD 103 % ≥ 4points

— LTA

- LTA - · AHM Range



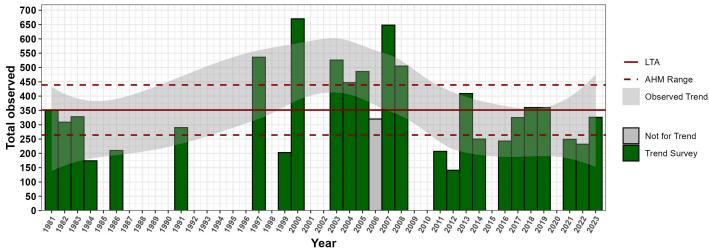


		HD :	103 Mule	Deer Harv	est Statist	ics 1987-2	2023		
Year	Antlered	Antlerless	Total	Percent4pt	Year	Antlered	Antlerless	Total	Percent4pt
1987	555	139	694		2007	312	40	352	40
1988	589	249	838		2008	204	50	254	43
1989	587	151	738		2009	202	18	220	49
1990	474	148	622		2010	220	7	227	41
1991	575	148	723		2011	173	3	176	24
1992	773	241	1015		2012	188	0	188	39
1993	479	234	713		2013	241	6	246	35
1994	449	151	372		2014	193	3	196	32
1995	460	86	545		2015	164	0	164	44
1996	162	76	239		2016	252	11	263	36
1997	250	3	253		2017	142	18	160	36
1998	245	18	263		2018	137	3	140	26
1999	296	9	305		2019	163	2	165	50
2000	342	12	354		2020	163	23	186	55
2001	422	23	445		2021	186	6	192	57
2002	370	19	391		2022	149	10	158	70
2003	282	10	293		2023	201	6	207	59
2004	483	31	518	52					
2005	432	25	457	43					
2006	330	55	385	33					

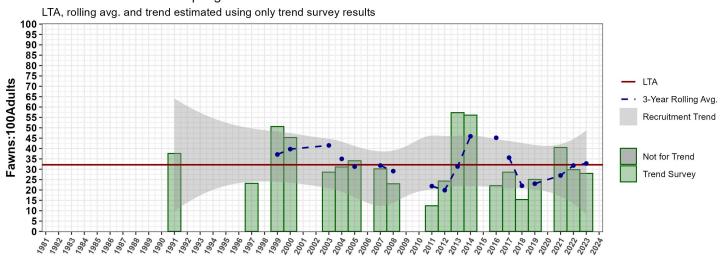
Fisher River Trend Area Survey Summary							
Survey area (mi <sup>2</sup> ) 36 Survey used for AHM objective? Yes							
Surveyed annually	Yes	Most recent survey	2023				
Minimum count LTA	351	Most recent count	326				
Recruitment LTA	33fawn:100adult	3-year avg. recruitment	33fawn:100adult				
AHM min. count objective range	264 - 439	Meeting objective?	Yes				

#### Fisher River Spring Mule Deer Survey 1981-2024





#### Fisher River Mule Deer Spring Recruitment 1981-2024



Year

		HD 103 Fish	er River Mu	ile Deer Sur	veys 1979 - 2	2024	
Year	Method	Season	Adults	Fawns	Uncl.	Total	Fawns:100 Adult
1979	Aerial	Winter	136	63	47	246	46.3
1981	Aerial	Spring			350	350	
1982	Aerial	Spring			309	309	
1983	Aerial	Spring			328	328	
1984	Aerial	Spring			174	174	
1986	Aerial	Spring			210	210	
1986	Aerial	Winter			361	361	
1991	Aerial	Spring	170	64	56	290	37.6
1994	No Survey				145	145	
1996	Aerial	Winter	362	134	33	529	37
1997	Aerial	Spring	423	98	15	536	23.2
1998	Aerial	Winter	58	29	0	87	50
1999	Aerial	Spring	87	44	72	203	50.6
2000	Aerial	Spring	428	194	38	670	45.3
2000	Aerial	Winter	124	64	0	188	51.6
2001	Aerial	Winter			380	380	
2003	Aerial	Spring	248	71	0	319	28.6
2003	Aerial	Spring			526	526	
2003	Aerial	Spring			387	387	1
2003	Aerial	Winter	136	50	0	186	36.8
2003	Aerial	Winter	121	53	0	187	43.8
2004	Aerial	Spring	121	33	447	447	45.0
2004	Aerial	Spring	251	78	36	365	31.1
2004	Aerial	Spring	251	78	311	311	31.1
2004	Aerial	Spring			391	391	
2005	Aerial	Spring	314	107	65	486	34.1
2005	Aerial	Spring	314	107	03	359	34.1
2006	Aerial	Spring				320	-
2007	Aerial	Spring				648	-
2007	Aerial	Spring	281	85	0	366	30.2
2008	Aerial	Spring	395	91	19	505	23
2008	Aerial	Spring	333	31	13	459	25
2011	Aerial	Spring	169	21	17	207	12.4
2012	Aerial	Spring	111	27	3	141	24.3
2013	Aerial	Spring	255	146	8	409	57.3
2014	Aerial	Spring	157	88	5	250	56.1
2015	Aerial	Spring	15,		†	233	30.1
2016	Aerial	Spring	199	44	0	243	22.1
2016	Aerial	Spring	100		†	43	22.1
2016	Aerial	Spring				72	
2017	Aerial	Spring	241	69	15	325	28.6
2017	Aerial	Spring	260	40	17	317	15.4
2018	Aerial	Spring	200	-10	<u> </u>	324	15.7
2018	Aerial	Spring				360	
2019	Aerial	Spring	300	57	3	360	
2019	Aerial	Spring	263	66	2	331	25.1
2020	No Survey	- Spi 1118	200		_	331	25.1
2021	Aerial	Spring	153	62	34	249	40.5
2021	Aerial	Spring	178	53	1	232	29.8
2022	Aerial	Spring	255	71	1	326	29.8
2023	No Survey	Shillig	233	/1		320	20
2024	ivo survey		<u> </u>	I		1	

## HD 104 CABINETS

OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested.

HD Summary		2023 Harvest						
Antlered MD Harvest								
Square miles	358	Harvest/mi <sup>2</sup>	0.16					
AHM objective range	69-114	Harvest	56					
LTA (1987-2023)	91	Meeting objective?	No					
10-year trend	Decline	3-year trend	Stable					
% ≥ 4 points LTA	59	% ≥ 4 points	70					

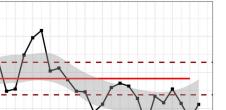


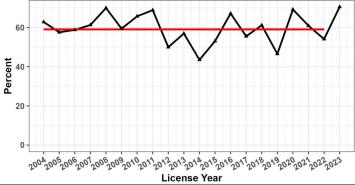
HD 104 Antlered Mule Deer Harvest

HD 104 % ≥ 4points

— LTA

- LTA - · AHM Range





	HD 104 Mule Deer harvest Statistics 1990 - 2023											
Year	Antlered	Antlerless	Total	Percent4pt	Year	Antlered	Antlerless	Total	Percent4pt			
1990	151	18	169		2007	106	1	108	61			
1991	109	20	128		2008	90	16	106	70			
1992	189	43	232		2009	74	6	80	59			
1993	116	11	127		2010	73	15	89	66			
1994	175	40	215		2011	45	5	49	69			
1995	86	30	115		2012	56	0	56	50			
1996	73	6	79		2013	79	0	79	57			
1997	89	3	92		2014	85	0	85	44			
1998	93	0	93		2015	81	3	83	53			
1999	63	0	63		2016	64	0	64	67			
2000	118	0	118		2017	27	2	29	56			
2001	74	0	74		2018	67	3	70	61			
2002	77	5	82		2019	58	4	62	47			
2003	124	0	124		2020	77	4	81	69			
2004	148	2	150	63	2021	57	0	57	61			
2005	158	8	166	58	2022	35	3	39	55			
2006	102	16	119	59	2023	56	4	59	70			

### **NORTH FORK**

OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested.

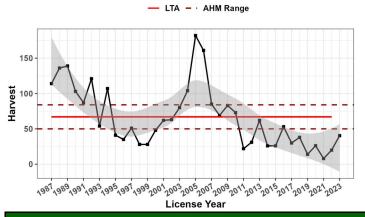
HD Summary		2023 Harvest					
Antlered MD Harvest							
Square miles	794	Harvest/mi <sup>2</sup>	0.01				
AHM objective range	50-84	Harvest	40				
LTA (1987-2022)	67	Meeting objective?	No				
10-year trend	Decline	3-year trend	Increase				
% ≥ 4 points LTA	65	% ≥ 4 points	68				

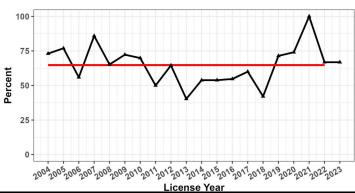


HD 110 Antlered Mule Deer Harvest

HD 110 % ≥ 4points

— LTA





	HD 110 Mule Deer Harvest Statistics 1987 - 2023											
Year	Antlered	Antlerless	Total	Percent4pt	Year	Antlered	Antlerless	Total	Percent4pt			
1987	114	29	143		2007	85	5	90	86			
1988	136	77	213		2008	69	6	75	65			
1989	139	40	179		2009	83	6	89	72			
1990	103	26	129		2010	73	3	76	70			
1991	87	15	103		2011	22	3	25	50			
1992	121	35	155		2012	31	0	31	65			
1993	54	22	76		2013	62	6	68	40			
1994	107	18	125		2014	26	0	26	54			
1995	41	11	52		2015	26	0	26	54			
1996	35	13	48		2016	53	0	53	55			
1997	51	0	51		2017	30	0	30	60			
1998	28	3	31		2018	38	0	38	42			
1999	28	0	28		2019	14	0	14	71			
2000	48	0	48		2020	26	3	30	75			
2001	62	5	67		2021	8	0	8	100			
2002	63	11	74		2022	20	0	20	66			
2003	80	2	82		2023	40	0	40	68			
2004	104	0	104	73								
2005	182	0	182	77								
2006	161	0	165	56								

## HD 120 BLACKTAIL

OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested.

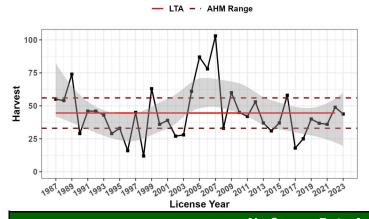
HD Summary		2023 Harvest			
	Antlered N	1D Harvest			
Square miles	493	Harvest/mi <sup>2</sup>	0.09		
AHM objective range 33-56		Harvest	44		
LTA (1987-2022)	45	Meeting objective?	Yes		
10-year trend	Stable	3-year trend	Increase		
% ≥ 4 points LTA	45	% ≥ 4 points	46		

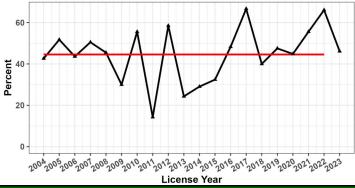


HD 120 Antlered Mule Deer Harvest

HD 120 % ≥ 4points

— LTA





		HD 1	.20 Mule	Deer Harv	vest Stati	stics 1987	7-2023		
Year	Antlered	Antlerless	Total	Percent4pt	Year	Antlered	Antlerless	Total	Percent4pt
1988	54	25	79		2006	78	18	96	44
1989	74	22	96		2007	103	0	103	50
1990	29	11	40		2008	33	6	39	45
1991	46	4	50		2009	60	7	67	30
1992	46	15	60		2010	45	3	48	56
1993	43	11	54		2011	42	1	43	14
1994	29		40		2012	53	0	53	58
1995	33		56		2013	37	3	40	24
1996	16		26		2014	31	0	31	29
1997	45		51		2015	37	5	42	32
1998	12	3	16		2016	58	3	61	48
1999	63	0	63		2017	18	1	19	67
2000	36	3	39		2018	25	3	28	40
2001	39	3	42		2019	40	3	43	48
2002	27	0	27		2020	37	0	37	45
2003	28	2	31		2021	36	0	36	56
2004	61	6	66	43	2022	49	0	49	66
2005	87	6	93	52	2023	44	3	47	46

### **WEST CLARK FORK**

OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested

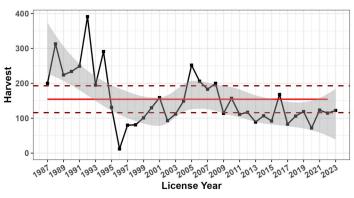
or the total number of mule deer observed during trend survey efforts.

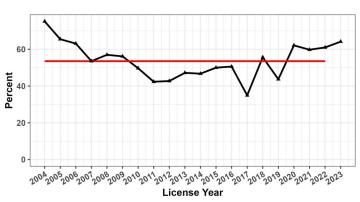
HD Summary		2023 Harvest				
Antlered MD Harvest						
Square miles	976	Harvest/mi <sup>2</sup>	0.11			
AHM objective range 116-193		Harvest	122			
LTA (1987-2022)	154	Meeting objective?	Yes			
10-year trend	Stable	3-year trend	Stable			
% ≥ 4 points LTA	54	% ≥ 4 points	64			



HD 121 % ≥ 4points - LTA

HD 121 Antlered Mule Deer Harvest - LTA - · AHM Range

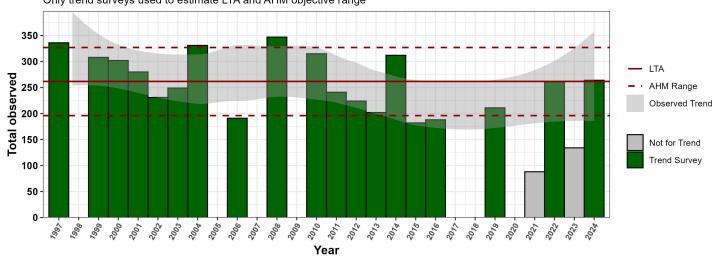




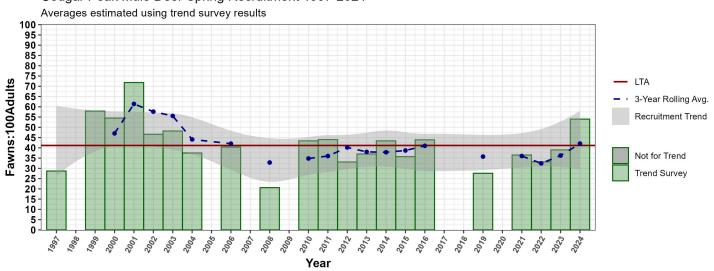
		HD 12	21 Mule D	Deer Harve	est Statist	ics 1987 -	2023		
Year	Antlered	Antlerless	Total	Percent4pt	Year	Antlered	Antlerless	Total	Percent4pt
1987	200	42	242		2007	183	5	187	54
1988	313	60	373		2008	200	32	232	57
1989	224	63	287		2009	114	14	128	56
1990	234	49	283		2010	157	8	164	50
1991	249	30	279		2011	111	7	118	42
1992	391	81	475		2012	117	0	117	43
1993	195	75	270		2013	89	8	97	47
1994	291	27	318		2014	107	3	110	47
1995	131	41	172		2015	92	6	98	50
1996	12	19	143		2016	168	11	179	51
1997	80	0	80		2017	83	10	92	35
1998	81	0	81		2018	106	0	106	56
1999	101	0	101		2019	119	0	119	44
2000	130	3	133		2020	72	0	72	62
2001	159	4	163		2021	123	6	130	60
2002	93	5	98		2022	115	6	120	61
2003	112	2	115		2023	122	8	131	64
2004	149	7	157	75					
2005	252	4	256	65					
2006	206	12	219	63					

Cougar Peak Trend Area Survey Summary							
Survey area (mi <sup>2</sup> )	26	Survey used for AHM Objective	Yes				
Surveyed annually	Yes	Most recent survey	2024				
Minimum Count LTA	262	Most Recent Count	264				
Recruitment LTA	41fawn:100adult	3-year avg. recruitment	42fawn:100adult				
AHM min. count objective range	196—327	Meeting objective?	Yes				





#### Cougar Peak Mule Deer Spring Recruitment 1997-2024



	HD 121 Cougar Peak Mule Deer Surveys 1997 -2024											
Year	Method	Season	Adults	Fawns	Uncl.	Total	Fawns:100 Adults					
1997	Aerial	Spring	261	75		336	28.7					
1998	Aerial	Winter	48	19		67	39.6					
1999	Aerial	Spring	195	113		308	57.9					
2000	Aerial	Spring	191	104	7	302	54.5					
2001	Aerial	Spring	163	117		280	71.8					
2002	Aerial	Spring	148	69	14	231	46.6					
2003	Aerial	Spring	164	79	6	249	48.2					
2004	Aerial	Spring	232	87	12	331	37.5					
2005	No Survey											
2006	Aerial	Spring	136	55	0	191	40.4					
2007	Aerial	Spring										
2008	Aerial	Spring	272	56	19	347	20.6					
2009	No Survey	Spring										
2010	Aerial	Spring	212	92	11	315	43.4					
2011	Aerial	Spring	166	73	2	241	44					
2012	Aerial	Spring	166	55	3	224	33.1					
2013	Aerial	Spring	146	54	2	202	37					
2014	Aerial	Spring	212	92	8	312	43.4					
2015	Aerial	Spring	129	46	7	182	35.7					
2016	Aerial	Spring	123	54	11	188	43.9					
2017	No Survey											
2018	No Survey											
2019	Aerial	Spring	152	42	17	211	27.6					
2020	No Survey											
2021	Aerial	Spring	63	23	2	88	36.5					
2022	Aerial	Spring	193	64	4	261	33.2					
2023	Aerial	Spring	93	36	5	134	39					
2024	Aerial	Spring	163	88	13	264	54					

### THOMPSON RIVER

OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested.

HD Summary		2023 Harvest			
	Antlered N	1D Harvest			
Square miles	713	Harvest/mi <sup>2</sup>	0.26		
AHM objective range 104-174		Harvest	186		
LTA (1987-2022)	LTA (1987-2022) 139		Yes		
10-year trend	Increase	3-year trend	Increase		
% ≥ 4 points LTA	44	% ≥ 4 points	34		

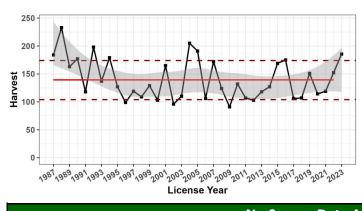


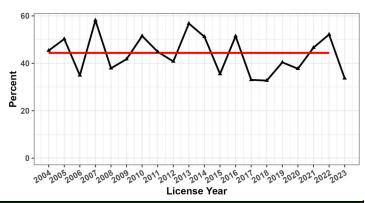
HD 122 Antlered Mule Deer Harvest

- LTA - · AHM Range

HD 122 % ≥ 4points

— LTA





	HD 122 Mule Deer Harvest Statistics 1987 - 2023											
Year	Antlered	Antlerless	Total	Percent4pt	Year	Antlered	Antlerless	Total	Percent4pt			
1987	184	25	209		2007	172	4	176	58			
1988	233	72	305		2008	124	28	152	38			
1989	163	66	229		2009	91	26	117	42			
1990	177	26	203		2010	132	3	135	52			
1991	118	57	176		2011	107	10	116	45			
1992	198	70	267		2012	103	3	106	41			
1993	137	36	173		2013	118	3	120	57			
1994	179	66	245		2014	127	2	129	51			
1995	127	56	183		2015	169	3	172	36			
1996	99	22	121		2016	175	0	175	51			
1997	119	0	119		2017	106	0	106	33			
1998	109	9	118		2018	107	6	113	33			
1999	129	0	129		2019	151	0	151	40			
2000	103	0	103		2020	114	2	117	38			
2001	165	2	168		2021	119	4	123	47			
2002	96	3	99		2022	152	5	158	52			
2003	110	0	110		2023	186	3	189	34			
2004	205	4	208	45								
2005	191	10	201	50								
2006	106	9	115	35								

### **CLARK MOUNTAIN**

OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested.

HD Summary		2023 Harvest					
Antlered MD Harvest							
Square miles	254	Harvest/mi <sup>2</sup>	0.19				
AHM objective range	HM objective range 42-70		47				
LTA (1987-2022)	56	Meeting objective?	Yes				
10-year trend	0-year trend Stable		Increase				
% ≥ 4 points LTA	54	% ≥ 4 points	72				

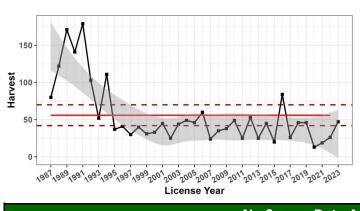


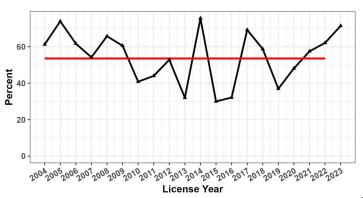
HD 123 Antlered Mule Deer Harvest

- LTA - · AHM Range

HD 123 % ≥ 4points

— LTA





	HD 123 Mule Deer Harvest Statistics 1987 - 2023										
Year	Antlered	Antlerless	Total	Percent4pt	Year	Antlered	Antlerless	Total	Percent4pt		
1987	80	13	93		2007	24	8	32	54		
1988	122	47	169		2008	35	11	46	66		
1989	171	22	193		2009	38	21	59	61		
1990	141	19	160		2010	49	3	51	41		
1991	179	42	221		2011	25	2	27	44		
1992	103	0	103		2012	53	0	53	53		
1993	52	44	96		2013	25	0	25	32		
1994	111	15	126		2014	45	0	45	76		
1995	37	0	37		2015	20	0	20	30		
1996	41	6	47		2016	84	3	87	32		
1997	30	0	30		2017	26	0	26	69		
1998	40	0	40		2018	46	0	46	59		
1999	31	0	31		2019	46	4	50	37		
2000	33	0	33		2020	13	0	13	48		
2001	45	0	45		2021	19	0	19	57		
2002	25	0	25		2022	26	0	26	62		
2003	44	0	44		2023	47	0	47	72		
2004	49	0	49	61							
2005	46	5	51	74							
2006	60	7	71	62							

### **ARVILLA**

OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested.

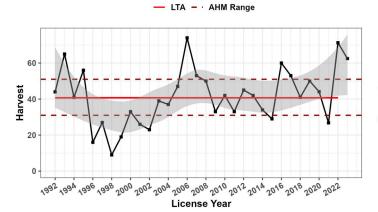
HD Summary		2023 Harvest					
Antlered MD Harvest							
Square miles	131	Harvest/mi <sup>2</sup>	0.47				
AHM objective range 31-51		Harvest	62				
LTA (1987-2022)	LTA (1987-2022) 41		Yes				
10-year trend	10-year trend Increase		Increase				
% ≥ 4 points LTA	47	% ≥ 4 points	42				

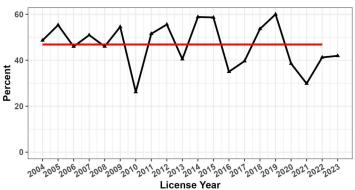


HD 124 Antlered Mule Deer Harvest

HD 124 % ≥ 4points

— LTA



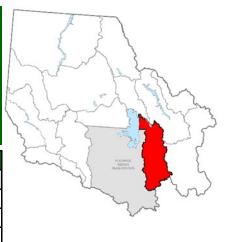


	HD 124 Mule Deer Harvest Statistics 1992 -2023											
Year	Antlered	Antlerless	Total	Percent4pt	Year	Antlered	Antlerless	Total	Percent4pt			
1992	44	14	58		2009	33	7	39	55			
1993	65	18	83		2010	42	1	44	26			
1994	41	4	45		2011	33	0	33	52			
1995	56	11	67		2012	45	3	47	56			
1996	16	6	22		2013	42	3	45	40			
1997	27	6	33		2014	34	5	39	59			
1998	9	0	9		2015	29	0	29	59			
1999	19	0	19		2016	60	0	60	35			
2000	33	3	36		2017	53	0	53	40			
2001	26	2	28		2018	41	0	41	54			
2002	23	0	23		2019	50	0	50	60			
2003	39	2	41		2020	44	0	44	39			
2004	37	6	42	49	2021	27	0	27	30			
2005	47	0	47	55	2022	71	0	71	41			
2006	74	7	82	46	2023	62	2	65	42			
2007	53	0	53	51								
2008	50	2	52	44								

### **SWAN**

OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested.

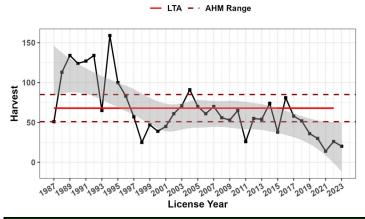
HD Summary		2023 harvest					
Antlered MD Harvest							
Square miles	672	Harvest/mi <sup>2</sup>	0.03				
AHM objective range	51-80	Harvest	20				
LTA (1987-2022) 68		Meeting objective?	No				
10-year trend Decline		3-year trend	Stable				
% ≥ 4 points LTA	72	% ≥ 4 points	100				

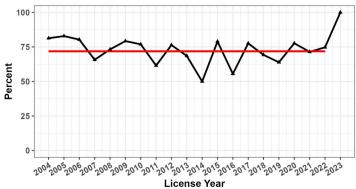


HD 130 Antlered Mule Deer Harvest

HD 130 % ≥ 4points

— LTA



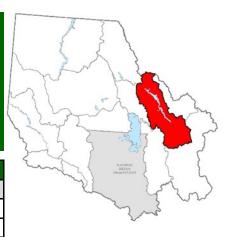


	HD 130 Mule Deer Harvest Statistics 1987 - 2023										
Year	Antlered	Antlerless	Total	Percent4pt	Year	Antlered	Antlerless	Total	Percent4pt		
1987	51	21	72		2006	61	17	77	80		
1988	113	11	124		2007	70	4	74	66		
1989	134	48	182		2008	56	26	82	73		
1990	124	34	158		2009	53	9	62	79		
1991	127	30	157		2010	65	3	68	77		
1992	134	25	159		2011	26	5	32	62		
1993	65	21	86		2012	55	0	55	76		
1994	159	19	178		2013	54	3	57	69		
1995	100	11	22		2014	74	0	74	50		
1996	83	28	111		2015	38	0	38	79		
1997	57	3	60		2016	81	11	92	56		
1998	25	6	31		2017	58	6	64	78		
1999	47	0	47		2018	52	3	55	69		
2000	39	3	42		2019	36	0	36	64		
2001	45	2	48		2020	30	3	33	78		
2002	61	7	69		2021	14	0	14	71		
2003	71	4	77		2022	26	7	33	75		
2004	91	14	104	81	2023	20	0	20	100		
2005	70	5	76	83							

### LOWER SOUTH FORK

OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested.

HD Summary		2023 Harvest					
Antlered MD Harvest							
Square miles	878	Harvest/mi <sup>2</sup>	0.05				
AHM objective range 36-60		Harvest	40				
LTA (1987-2022)	48	Meeting objective?	No				
10-year trend	Decline	3-year trend	Increase				
% ≥ 4 points LTA	74	% ≥ 4 points	76				

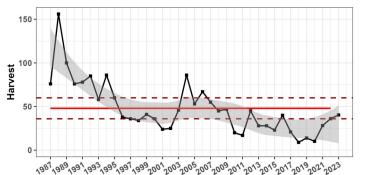


HD 140 Antlered Mule Deer Harvest

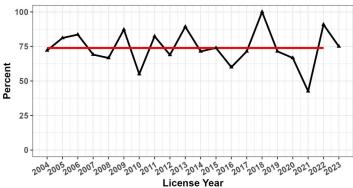
LTA - AHM Range

HD 140 % ≥ 4points

— LTA



License Year



	HD 140 Mule Deer Harvest Statistics 1987 - 2023										
Year	Antlered	Antlerless	Total	Percent4pt	Year	Antlered	Antlerless	Total	Percent4pt		
1987	76	25	101		2006	67	0	67	84		
1988	156	35	191		2007	55	5	60	69		
1989	100	15	115		2008	45	0	45	67		
1990	76	8	84		2009	47	6	53	87		
1991	78	20	97		2010	20	0	20	55		
1992	85	21	106		2011	17	3	20	82		
1993	58	14	72		2012	45	0	45	69		
1994	86	12	98		2013	28	0	28	89		
1995	60	4	64		2014	28	3	31	71		
1996	38	0	38		2015	23	0	23	74		
1997	36	0	36		2016	40	0	40	60		
1998	34	0	34		2017	21	0	21	71		
1999	41	0	41		2018	9	0	9	100		
2000	36	3	33		2019	14	4	18	71		
2001	24	4	28		2020	10	0	10	68		
2002	25	3	29		2021	28	0	28	43		
2003	46	0	46		2022	36	0	36	91		
2004	86	4	90	72	2023	40	3	44	76		
2005	53	0	53	81							

### **LOWER MIDDLE FORK**

OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested.

HD Summary		2023 Harvest					
Antlered MD Harvest							
Square miles	339	Harvest/mi <sup>2</sup>	0.02				
AHM objective range 12-20		Harvest	7				
LTA (1987-2022)	16	Meeting objective?	No				
10-year trend Stable		3-year trend	Stable				
% ≥ 4 points LTA	83	% ≥ 4 points	96				

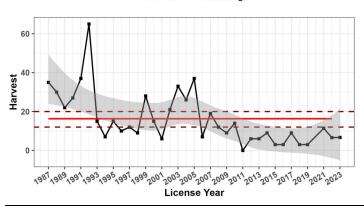


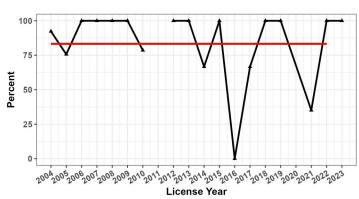
HD 141 Antlered Mule Deer Harvest

HD 141 % ≥ 4points

— LTA

- LTA - · AHM Range





		HD 14	41 Mule [	Deer Harv	est Statist	tics 1987 -	-2023		
Year	Antlered	Antlerless	Total	Percent4pt	Year	Antlered	Antlerless	Total	Percent4pt
1987	35	0	35		2006	7	0	7	100
1988	30	4	34		2007	19	0	19	100
1989	22	7	29		2008	12	0	12	100
1990	27	4	31		2009	9	0	9	100
1991	37	4	40		2010	14	0	14	79
1992	65	0	65		2011	0	0	0	
1993	15	0	15		2012	6	0	6	100
1994	7	4	11		2013	6	0	6	100
1995	15	4	19		2014	9	0	9	67
1996	10	0	10		2015	3	3	6	100
1997	12	0	12		2016	3	0	3	0
1998	9	0	9		2017	9	0	9	67
1999	28	0	28		2018	3	0	3	100
2000	15	0	15		2019	3	0	3	100
2001	6	0	6		2021	11	0	11	36
2002	21	0	21		2022	7	0	7	94
2003	33	2	36		2023	7	3	10	96
2004	26	0	26	92					
2005	37	1	38	76					

### **UPPER SOUTH FORK**

OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested.

HD Summar	у	2021 Harvest					
Antlered MD Harvest							
Square miles	1169	Harvest/mi <sup>2</sup>	0.01				
AHM objective range 39-65		Harvest	9				
LTA (1987-2022)	52	Meeting objective?	No				
10-year trend	Decline	3-year trend	Stable				
% ≥ 4 points LTA	79	% ≥ 4 points	100				

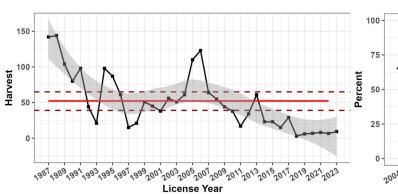


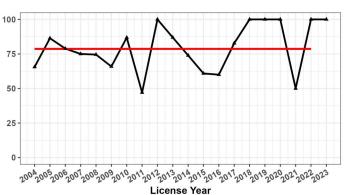
HD 150 Antiered Mule Deer Harvest

LTA - AHM Range

HD 150 % ≥ 4points

— LTA





		HD 15	50 Mule D	Deer Harve	est Statist	ics 1987 -	2023		
Year	Antlered	Antlerless	Total	Percent4pt	Year	Antlered	Antlerless	Total	Percent4pt
1987	142	13	137		2006	123	0	127	79
1988	144	30	176		2007	64	0	64	75
1989	104	24	141		2008	55	0	55	75
1990	80	13	55		2009	44	0	44	66
1991	98	8	126		2010	38	0	38	87
1992	44	4	69		2011	17	0	17	47
1993	21	12	86		2012	34	0	34	100
1994	98	4	102		2013	61	0	61	87
1995	87	8	94		2014	23	0	23	74
1996	61	16	77		2015	23	0	23	61
1997	15	0	15		2016	15	0	15	60
1998	21	3	25		2017	29	0	29	83
1999	51	0	51		2018	3	0	3	100
2000	45	0	45		2019	6	0	6	100
2001	38	4	72		2020	7	0	7	97
2002	56	2	58		2021	8	0	8	50
2003	51	0	51		2022	7	3	10	94
2004	61	0	61	66	2023	9	0	9	100
2005	110	0	110	86					

### **FLATHEAD RIVER**

OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested.

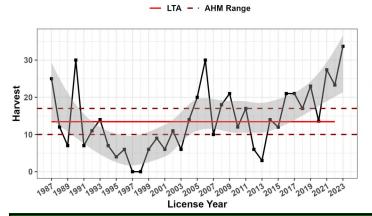
HD Summary		2023 Harvest							
Antlered MD Harvest									
Square miles	362	Harvest/mi <sup>2</sup>	0.09						
AHM objective range	10-17	Harvest	34						
LTA (1987-2022)	13	Meeting objective?	Yes						
10-year trend	Increase	3-year trend	Increase						
% ≥ 4 points LTA	55	% ≥ 4 points	30						

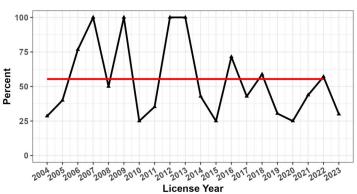


HD 170 Antlered Mule Deer Harvest

HD 170 % ≥ 4points

— LTA





HD 170 Mule Deer Harvest Statistics 1987 - 2023											
Year	Antlered	Antlerless	Total	Percent4pt	Year	Antlered	Antlerless	Total	Percent4pt		
1987	25	11	29		2006	30	12	42	77		
1988	12	11	36		2007	10	11	20	100		
1989	7	18	23		2008	18	23	41	50		
1990	30	19	25		2009	21	20	41	100		
1991	7	25	45		2010	12	9	21	25		
1992	11	14	32		2011	17	14	31	35		
1993	14	11	25		2012	6	12	18	100		
1994	7	0	7		2013	3	0	3	100		
1995	4	7	11		2014	14	14	28	43		
1996	6	0	6		2015	12	15	26	25		
1997	0	0	0		2016	21	5	27	71		
1998	0	3	3		2017	21	6	27	43		
1999	6	3	9		2018	17	6	23	59		
2000	9	6	15		2019	23	16	39	30		
2001	6	0	6		2020	14	0	14	24		
2002	11	0	11		2021	27	20	48	44		
2003	6	0	6		2022	23	17	40	58		
2004	14	3	17	29	2023	34	10	44	30		
2005	20	2	23	40							



2023 REGION ONE MULE DEER REPORT

Version: 2024.2

Date: 1-September-24

Prepared by: Ethan Lula ~ Wildlife Biologist (Eureka)

