

2021

Region One
Mule Deer Report

Montana Fish, Wildlife and Parks
September 2022



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. A more detailed synthesis of mule deer management in Region One is scheduled for completion by the winter of 2022.

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 Region One, 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 101 and 123. 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 annual harvest data, which is available for every HD.

The AHM objectives for R1 is 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. As of 2021, only 4 HDs met AHM harvest objectives (HD 120,121,122,170). In addition to HD 103 which is within AHM aerial survey objectives, all HDs are managed under a standard regulation package. The remaining 10 HDs are below AHM objective and are managed under a restrictive regulation package (Table 1). However, it is important to note that there is little functional difference between the standard and restrictive regulation packages beyond the ability to offer localized antlerless harvest for game damage purposes. Antlerless mule deer harvest is restricted in R1, therefore harvest regulation alone is unlikely to significantly influence population growth in HDs below objective.

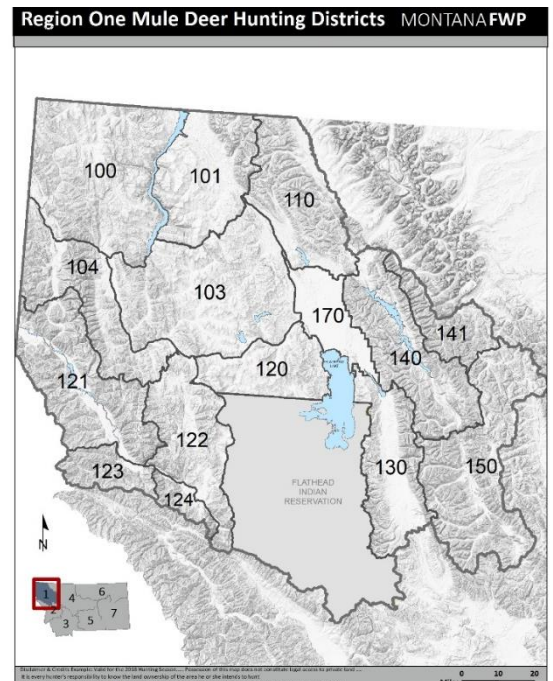


Table 1. AHM Harvest Objectives for R-1 Mule Deer HDs

HD	LTA	- 25%	+25%	2021Harvest	Meeting Objective?
100	226	170	283	153	NO
101	195	146	243	111	NO
103	333	249	416	186	YES (SURVEY)
104	94	71	118	57	NO
110	70	53	88	8	NO
120	45	34	56	36	YES
121	156	117	196	123	YES
122	140	105	174	119	YES
123	58	43	72	19	NO
124	40	30	50	27	NO
130	71	53	88	14	NO
140	49	37	61	28	NO
141	17	13	21	11	NO
150	55	41	69	8	NO
170	13	10	16	27	YES

2021 SEASON STRUCTURE

Since 2012, all antlerless mule deer harvest has been prohibited in R1. With a few exceptions (HDs 101, 103, 150), the mule deer hunting season during 2021 was structured as:

- 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

Note that 2021 was the first year that a **heritage muzzleloader season** took place in Montana, between December 10 and December 18. An estimated 31 antlered mule deer were harvested within 6 HDs during the late muzzleloader season (Table 2). While muzzleloader harvest accounts for less than 3 % of the total annual harvest, there is significant variation among HDs which should be considered as this new opportunity becomes familiar to hunters.

Hunting District	Muzzleloader Season Harvest	% Of Total Buck Harvest
100	8	5%
101	4	4%
103	7	3%
121	4	3%
150	4	50%
170	4	15%

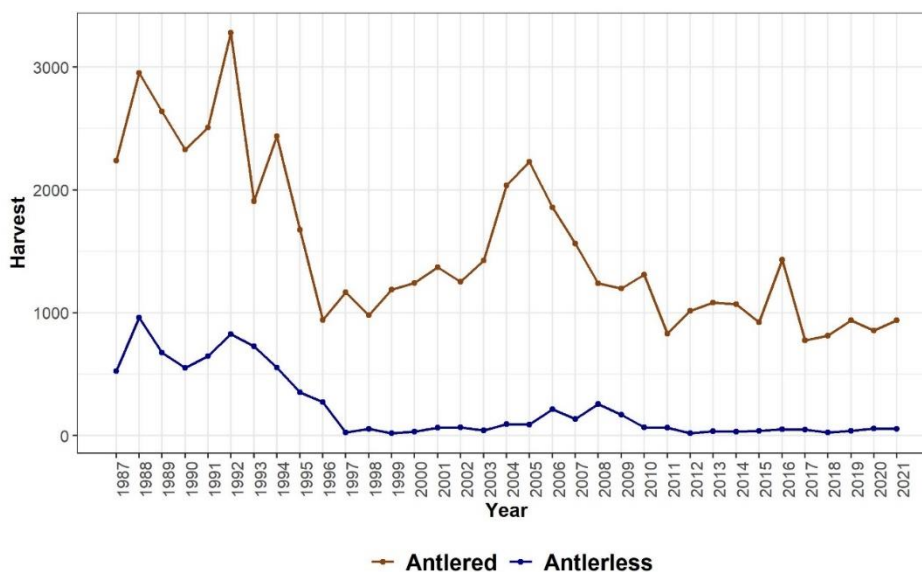
Exceptions to the above seasons structure were found in HDs 101, 103, 130 and 150.

- **HD 101** – General season opportunity is limited to antlered buck during the first three weeks of the season. Limited permits (n=10) 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 15th to provide additional backcountry opportunity for antlered mule deer.

2021 HARVEST SUMMARY

An estimated 995 (927-1064) mule deer were harvested in R1, the lowest regional harvest in the state, accounting for only 2% of Montana’s 2021 total mule deer harvest (n= 49,855). While 2021 harvest is comparable to that observed during the past 4 years following a long-term decline beginning in the early 2000s, estimates are comparable to that observed following the severe winters 1996-7 and reflect an all-time low. *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.*



2021 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.

During March and April 2022, biologists conducted trend area aerial surveys in HD 103 and 121, and a ground-based recruitment survey in HD 101 (Table 3). An additional flight was conducted in HD 103

Table 3. 2021 Region One Mule Deer Surveys						
HD	Name	Fawns	Adults	Unclassified	Total	Recruitment
101	Galton	62	169	8	239	37:100
103	Fisher River	53	178	1	232	30:100
121	Cougar Peak	64	193	4	261	33:100

in which 315 mule deer were observed, but difficult survey conditions resulted in a high number of unclassified animals. Recruitment was not estimated for this survey and is not presented here. All surveys were rated as either “Good” or

“Very Good”, though biologists noted that greening conditions seemed later than expected and survey timing may have been somewhat early in portions of the survey areas.

Among the three spring surveys, estimated recruitment was highest along the Galton foothills in HD 101 (37:100) and lowest in Fisher River trend area in HD 103 (30:100), and all three estimates indicate that recruitment was lower than that observed during the preceding spring of 2021, being at or below the LTA.

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. Care should be taken when interpreting individual point observations, as the data gains value when trend is interpreted across years such as with the long-term average.



HD 100

NORTH KOOTENAI

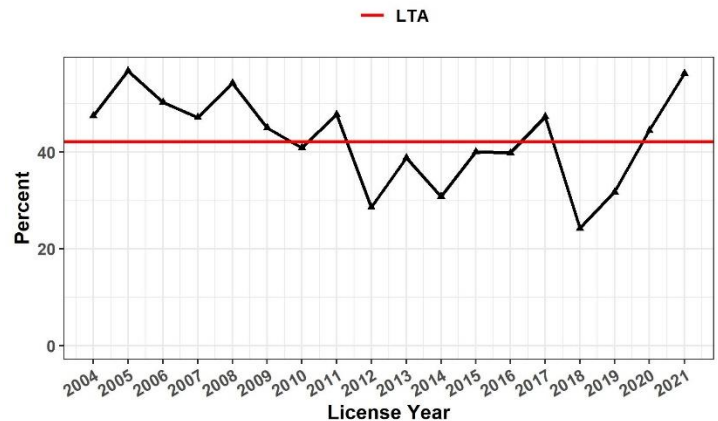
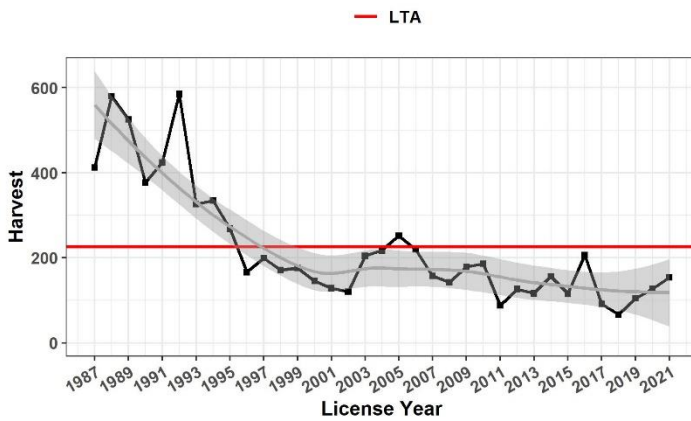
OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested or the total number of mule deer observed during trend survey efforts.



HD Summary	2021 Harvest		
Antlered MD Harvest			
Square miles	1,407	Harvest/mi ²	0.11
AHM objective range	170-283	Harvest	153
LTA (1987-2020)	226	Meeting objective?	No
10-year trend	Stable	3-year trend	Increase
% ≥ 4 points LTA	42	% ≥ 4 points	52

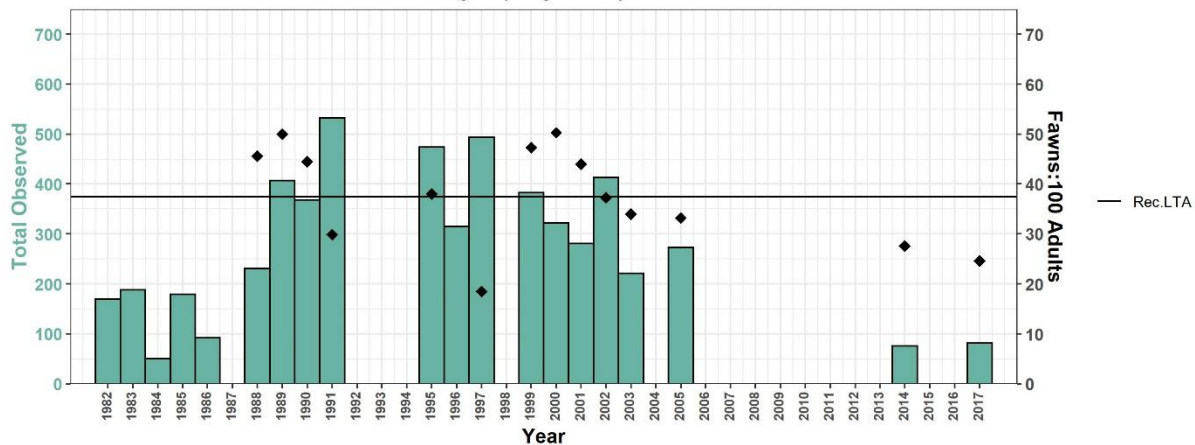
HD 100 Antlered Mule Deer Harvest

HD 100 % ≥ 4points



Horse Range Trend Survey Area Summary			
<i>Note: Flights were discontinued in this HD due conifer encroachment significantly diminishing ability to accurately count and classify deer</i>			
Survey area (mi ²)	15	Survey used for AHM Objective	No
Surveyed annually	No	Most recent survey	2017
Minimum Count LTA	277	3-year ave. minimum count	143
Recruitment LTA	37fawn:100adult	3-year ave. recruitment	25fawn:100adult

Horse Range Spring Survey 1982-2017



HD 100: Mule Deer Harvest Statistics 1987 - 2021				
Year	Antlered	Antlerless	Total	Percent4pt
1987	412	131	543	
1988	580	214	794	
1989	525	126	651	
1990	377	114	491	
1991	424	144	568	
1992	585	148	737	
1993	326	136	462	
1994	334	132	466	
1995	268	56	324	
1996	166	54	220	
1997	199	9	208	
1998	171	3	174	
1999	176	3	179	
2000	145	0	145	
2001	128	5	133	
2002	120	5	125	
2003	204	8	212	
2004	217	6	222	46
2005	252	6	258	55
2006	219	26	247	45
2007	157	30	187	40
2008	142	38	182	42
2009	178	20	198	40
2010	186	8	194	39
2011	88	3	91	46
2012	126	3	128	28
2013	116	3	119	38
2014	156	3	158	30
2015	115	0	115	40
2016	206	6	212	39
2017	91	6	97	44
2018	66	0	66	24
2019	104	0	104	32
2020	126	11	137	41
2021	153	11	165	52

Horse Range Mule Deer Surveys 1982 -2017						
Year	Date	Adults	Fawns	Unclass	Total	Fawn:100Ad
1982	4/18/1982			169	169	
1983	3/28/1983			188	188	
1984	4/18/1984			51	51	
1985	3/11/1985			179	179	
1986	4/19/1986			92	92	
1986	2/19/1987			104	104	
1988	3/22/1988	147	67	16	230	45.6
1988	4/14/1988	138	54	39	231	39.1
1989	4/18/1989	260	130	17	407	50
1990	4/16/1990	220	98	50	368	44.5
1991	4/21/1991	355	106	71	532	29.9
1995	4/6/1995	321	122	31	474	38
1996	3/2/1996			315	315	
1996	2/5/1997	197	67	11	275	34
1997	4/19/1997	416	77	0	493	18.5
1998	12/16/1998	101	52	0	153	51.5
1999	3/10/1999	48	26	46	120	54.2
1999	4/5/1999	260	123	0	383	47.3
1999	4/11/1999			279	279	
1999	4/12/1999			353	353	
1999	1/15/2000	79	41	0	120	51.9
2000	4/5/2000	177	89	0	266	50.3
2000	4/10/2000			322	322	
2000	4/11/2000			253	253	
2000	12/14/2000	225	97	0	322	43.1
2001	4/21/2001	195	86	281	281	44
2001	4/25/2001			232	232	
2001	4/26/2001			249	249	
2001	12/11/2001	218			218	
2002	4/15/2002	177	66	50	293	37.3
2002	4/18/2002			413	413	
2002	4/24/2002			360	360	
2003	4/8/2003	165	56	0	221	34
2005	4/8/2005	205	68	0	273	33.2
2014	5/1/2014	58	16	2	76	27.6
2017	5/2/ 2017	65	16	0	81	24.6



HD 101 Eureka

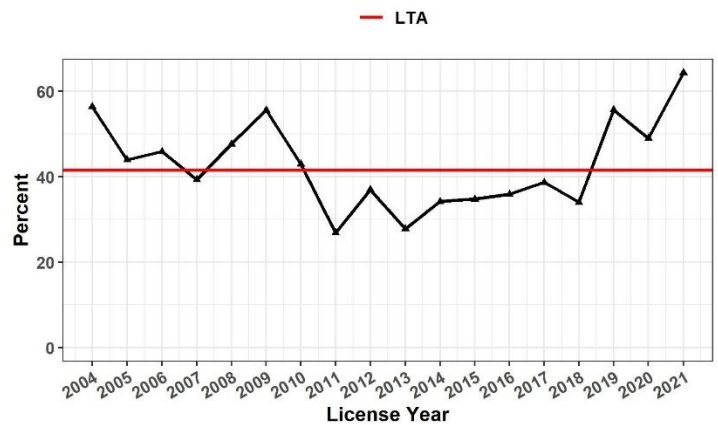
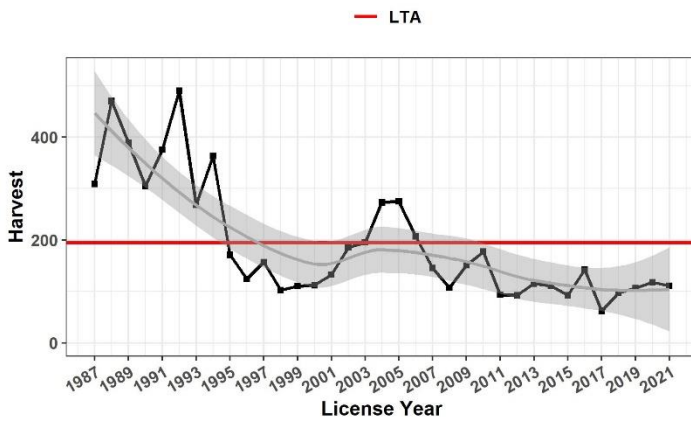
OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested



HD Summary		2021 Harvest	
Antlered MD Harvest			
Square miles	806	Harvest/mi ²	0.14
AHM objective range	146-243	Harvest	111
LTA (1987-2020)	195	Meeting objective?	No
10-year trend	Decline	3-year trend	Stable
% ≥ 4 points LTA	42	% ≥ 4 points	63

HD 101 Antlered Mule Deer Harvest

HD 101 % ≥ 4points

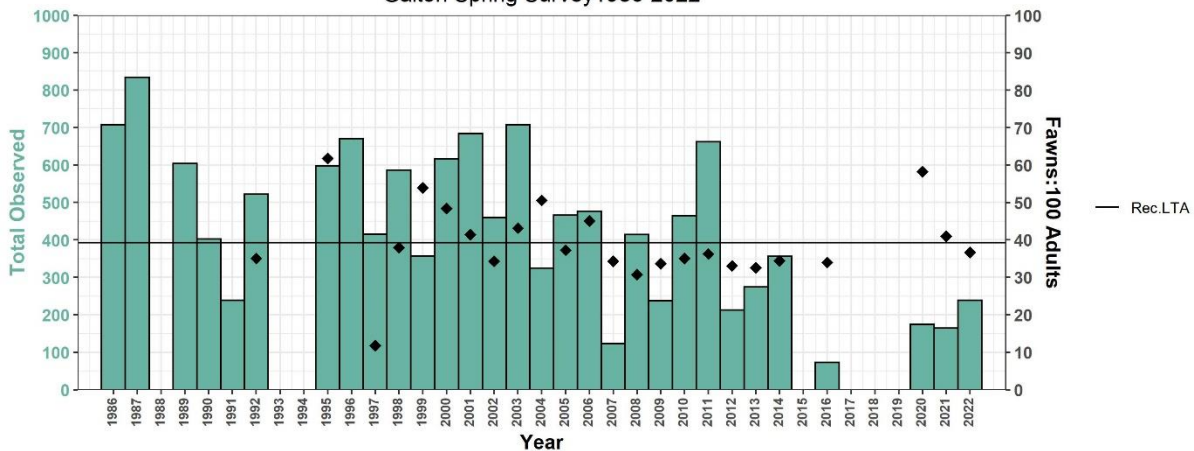


Galton Foothills Survey Area Summary

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 ²)	Variable	Survey used for AHM objective?	No
Surveyed annually	No	Most recent survey	2022
Minimum count LTA	442	3-year ave. minimum count	134
Recruitment LTA	39fawn:100adult	3-year ave. recruitment	40fawn:100adult

Galton Spring Survey 1986-2022



HD 101: Mule Deer Harvest Statistics 1987 - 2021				
Year	Antlered	Antlerless	Total	Percent4pt
1987	309	72	381	
1988	470	127	597	
1989	389	74	463	
1990	305	62	367	
1991	375	99	474	
1992	490	117	611	
1993	268	82	350	
1994	363	62	425	
1995	171	26	197	
1996	124	25	150	
1997	157	3	160	
1998	102	6	109	
1999	110	3	113	
2000	112	0	112	
2001	132	10	142	
2002	185	8	193	
2003	195	10	206	
2004	273	6	278	55
2005	275	16	290	42
2006	207	30	236	40
2007	145	18	164	35
2008	107	17	124	41
2009	151	9	160	52
2010	177	6	183	42
2011	93	7	99	25
2012	92	0	92	37
2013	115	0	115	28
2014	111	0	111	34
2015	92	5	96	33
2016	142	0	142	36
2017	62	0	62	39
2018	97	3	100	33
2019	106	7	113	52
2020	118	3	121	48
2021	111	3	114	63

Galton Foothills Mule Deer Surveys 1986 - 2022						
Year	Date	Adults	Fawns	Unclass	Total	Fawn :100adult
1986	4/26/1986			707	707	
1987	4/23/1987			834	834	
1989	4/30/1989			604	604	
1990	4/21/1990			402	402	
1991	5/11/1991			239	239	
1992	4/15/1992	316	111	95	522	35
1995	4/23/1995	136	84	461	597	62
1996	5/10/1996			671	671	
1997	5/1/1997	262	31	122	415	12
1998	4/23/1998	213	81	293	587	38
1998	12/18/1998	65	34	67	166	52
1999	5/5/1999	178	96	83	357	54
2000	4/8/2000	283	137	197	617	48
2000	12/19/2000	35	13	1	49	37
2001	4/24/2001	237	98	349	684	41
2002	4/17/2002	201	69	140	460	34
2003	4/21/2003	301	130	276	707	43
2004	4/22/2004	164	83	78	325	51
2005	4/11/2005	209	78	179	466	37
2006	4/20/2006	91	41	345	477	45
2006	4/23/2006	20	6	56	82	30
2007	4/17/2007	33	11	0	44	33
2007	4/30/2007	70	24	30	124	34
2008	4/1628/08	44	17	145	206	39
2008	4/28/2008	273	84	57	414	31
2009	4/130/09	163	55	20	238	34
2010	3/225/5/10	134	48	74	256	36
2010	4/19/2010	302	106	57	465	35
2011	3/154/19/11	344	125	193	662	36
2012	4/24/2012	147	40	26	213	27
2012	2/84/23/12	139	46	6	191	33
2013	4/18/2013	184	60	30	274	33
2013	4/26/2013	53	12	0	65	23
2014	4/16/2014	125	36	196	356	29
2014	4/214/23/14	131	45	0	176	34
2015	3/16/2015	8	6	0	14	75
2015	4/15/2015	8	4		12	50
2016	4/25/2016	50	17	6	73	34
2017	4/26/2017	28	4	0	32	14
2020	4/7/2020	110	64	0	174	58
2021	3/30/2021	47	19	0	66	40
2021	4/13/2021	69	29	0	98	42
2022	4/5/2022	169	62	8	239	37



HD 103

EAST FISHER-PLEASANT VALLEY-TALLY LAKE

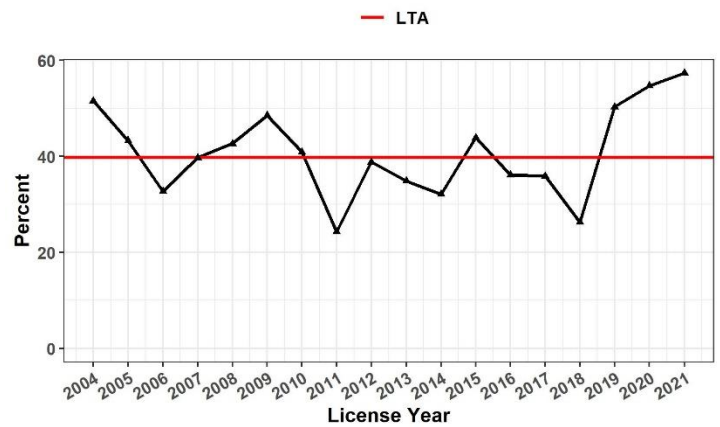
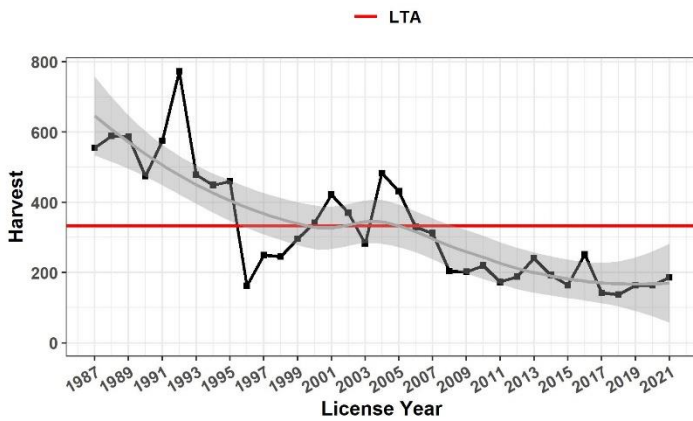
OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested or the total number of mule deer observed during trend survey efforts.



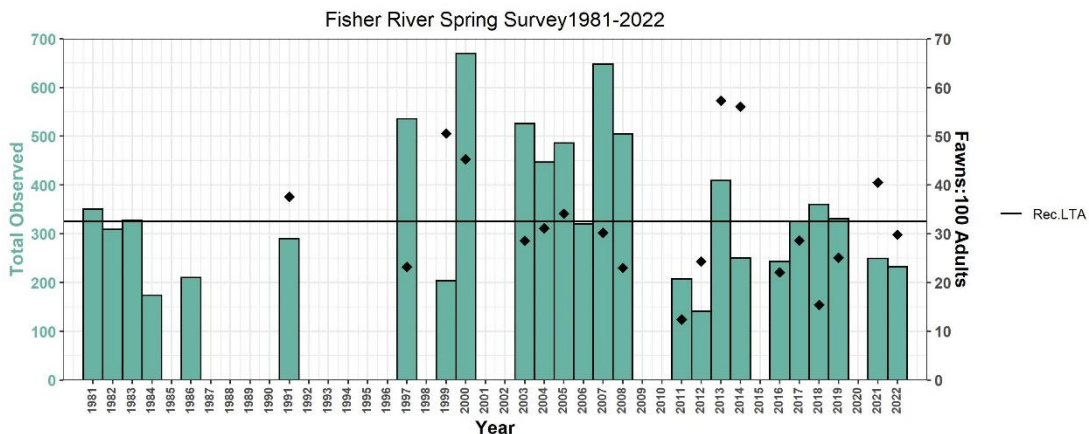
HD Summary		2021 Harvest	
Antlered MD Harvest			
Square miles	1,448	Harvest/mi ²	0.13
AHM objective range	249-416	Harvest	186
LTA (1987-2020)	333	Meeting objective?	No
10-year trend	Decline	3-year trend	Stable
% ≥ 4 points LTA	40	% ≥ 4 points	56

HD 103 Antlered Mule Deer Harvest

HD 103 % ≥ 4points



Fisher River Trend Area Survey Summary			
Survey area (mi ²)	36	Survey used for AHM objective?	Yes
Surveyed annually	Yes	Most recent survey	2022
Minimum count LTA	354	3-year ave. minimum count	271
Recruitment LTA	33fawn:100adult	3-year ave. recruitment	32fawn:100adult
AHM min. count objective range	265 - 443	Meeting objective?	Yes



HD 103: Mule Deer Harvest Statistics 1987 - 2021				
Year	Antlered	Antlerless	Total	Percent4pt
1987	555	139	694	
1988	589	249	838	
1989	587	151	738	
1990	474	148	622	
1991	575	148	723	
1992	773	241	1015	
1993	479	234	713	
1994	449	151	372	
1995	460	86	545	
1996	162	76	239	
1997	250	3	253	
1998	245	18	263	
1999	296	9	305	
2000	342	12	354	
2001	422	23	445	
2002	370	19	391	
2003	282	10	293	
2004	483	31	518	48
2005	432	25	457	41
2006	330	55	385	28
2007	312	40	352	35
2008	204	50	254	34
2009	202	18	220	45
2010	220	7	227	40
2011	173	3	176	24
2012	188	0	188	39
2013	241	6	246	34
2014	193	3	196	32
2015	164	0	164	44
2016	252	11	263	35
2017	142	18	160	32
2018	137	3	140	26
2019	163	2	165	50
2020	163	23	186	48
2021	186	6	192	56

Fisher River Mule Deer Surveys 1979 - 2022						
Year	Date	Adults	Fawns	Unclass	Total	Fawn: 100Ad
1979	2/22/1980	136	63	47	246	46
1981	4/13/1981			350	350	
1982	4/19/1982			309	309	
1983	4/5/1983			328	328	
1984	4/19/1984			174	174	
1986	3/19/1986			210	210	
1986	2/20/1987			361	361	
1991	4/21/1991	170	64	56	290	38
1996	2/6/1997	362	134	33	529	37
1997	4/20/1997	423	98	15	536	23
1998	12/16/1998	58	29	0	87	50
1999	3/9/1999	87	44	72	203	51
2000	4/6/2000	428	194	38	670	45
2000	12/18/2000	124	64	0	188	52
2001	2/28/2002			380	380	
2003	4/9/2003	248	71	0	319	29
2003	4/18/2003			526	526	
2003	4/20/2003			387	387	
2003	12/16/2003	136	50	0	186	37
2003	12/16/2003	121	53		187	44
2004	4/19/2004			447	447	
2004	4/20/2004	251	78	36	365	31
2004	4/21/2004			311	311	
2005	4/9/2005			391	391	
2005	4/10/2005	314	107	65	486	34
2005	4/11/2005				359	
2006	4/12/2006				320	
2007	4/11/2007				648	
2007	4/16/2007	281	85	0	366	30
2008	4/8/2008	395	91	19	505	23
2008	4/27/2008				459	
2011	4/26/2011	169	21	17	207	12
2012	4/24/2012	111	27	3	141	24
2013	4/24/2013	255	146	8	409	57
2014	4/7/2014	157	88	5	250	56
2015	4/21/2015					
2016	4/1/2016	199	44	0	243	22
2016	4/8/2016				43	
2016	4/17/2016				72	
2017	5/2/2017	241	69	15	325	29
2018	4/26/2018	260	40	17	317	15
2018	4/26/2018				324	
2018	4/27/2018				360	
2019	4/29/2019	300	57	3	360	
2019	4/30/2019	263	66	2	331	25
2021	4/29/2021	153	62	34	249	41
2022	4/8/2022	178	53	1	232	30



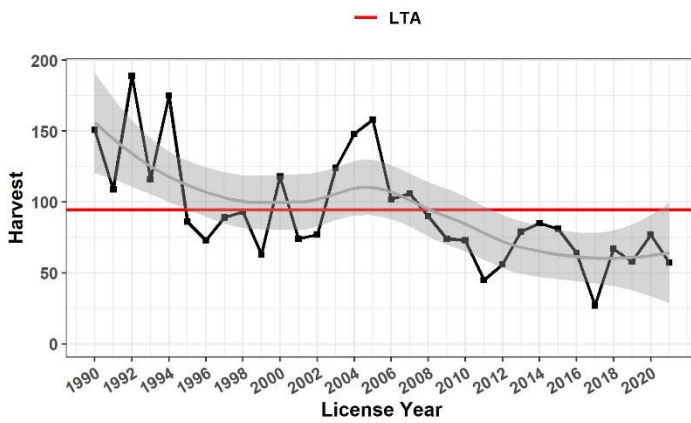
HD 104 CABINETS

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

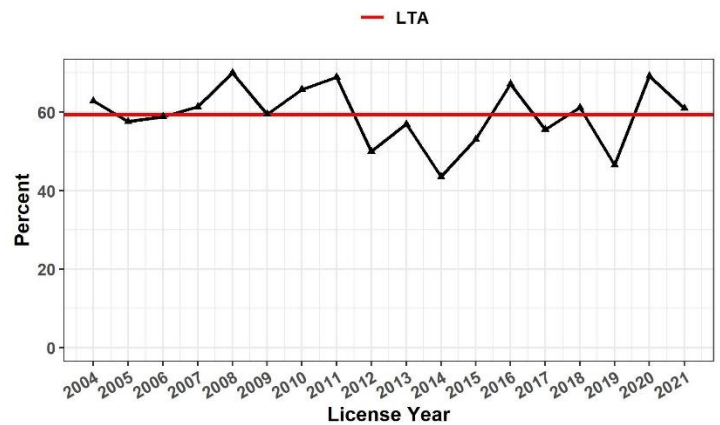


HD Summary		2021 Harvest	
Antlered MD Harvest			
Square miles	358	Harvest/mi ²	0.16
AHM objective range	71-118	Harvest	57
LTA (1987-2020)	94	Meeting objective?	No
10-year trend	Decline	3-year trend	Stable
% ≥ 4 points LTA	59	% ≥ 4 points	61

HD 104 Antlered Mule Deer Harvest



HD 104 % ≥ 4 points



No Survey Data Available for HD 104

HD 104: Mule Deer Harvest Statistics 1990 – 2021

Year	Antlered	Antlerless	Total	Percent4pt
1990	151	18	169	
1991	109	20	128	
1992	189	43	232	
1993	116	11	127	
1994	175	40	215	
1995	86	30	115	
1996	73	6	79	
1997	89	3	92	
1998	93	0	93	
1999	63	0	63	
2000	118	0	118	
2001	74	0	74	
2002	77	5	82	
2003	124	0	124	62
2004	148	2	150	55
2005	158	8	166	
2006	102	16	119	50
2007	106	1	108	60
2008	90	16	106	59
2009	74	6	80	55
2010	73	15	89	54
2011	45	5	49	63
2012	56	0	56	50
2013	79	0	79	57
2014	85	0	85	44
2015	81	3	83	52
2016	64	0	64	67
2017	27	2	29	52
2018	67	3	70	59
2019	58	4	62	44
2020	77	4	81	66
2021	57	0	57	61



HD 110 NORTH FORK

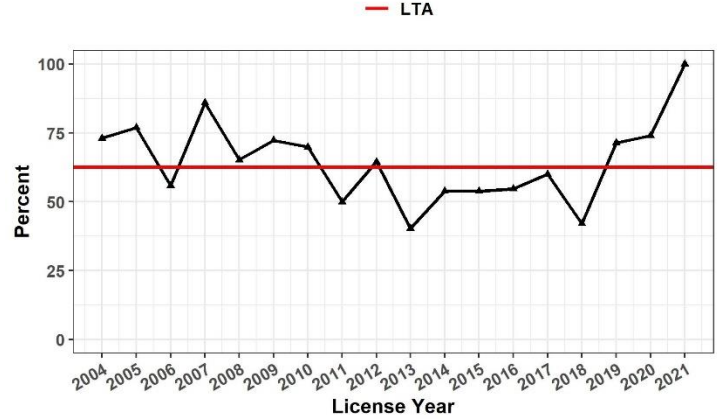
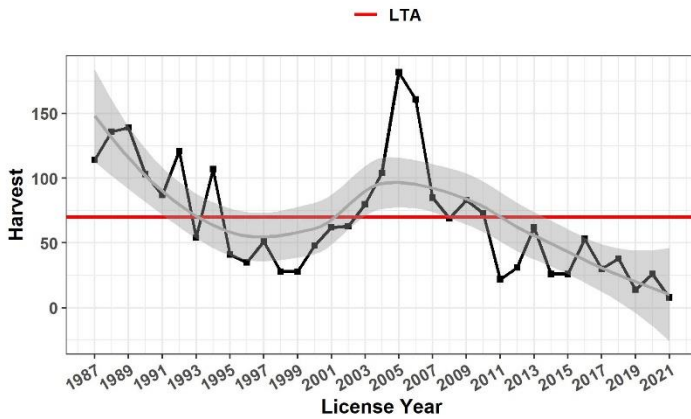
OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested



HD Summary		2021 Harvest	
Antlered MD Harvest			
Square miles	794	Harvest/mi ²	0.01
AHM objective range	71-118	Harvest	8
LTA (1987-2020)	94	Meeting objective?	No
10-year trend	Decline	3-year trend	Decline
% ≥ 4 points LTA	63	% ≥ 4 points	100

HD 110 Antlered Mule Deer Harvest

HD 110 % ≥ 4points



No Survey Data Available for HD 110

HD 110: Mule Deer Harvest Statistics 1987 – 2021

Year	Antlered	Antlerless	Total	Percent4pt	Year	Antlered	Antlerless	Total	Percent4pt
1987	114	29	143		2005	182	0	182	77
1988	136	77	213		2006	161	0	165	55
1989	139	40	179		2007	85	5	90	81
1990	103	26	129		2008	69	6	75	60
1991	87	15	103		2009	83	6	89	67
1992	121	35	155		2010	73	3	76	67
1993	54	22	76		2011	22	3	25	44
1994	107	18	125		2012	31	0	31	65
1995	41	11	52		2013	62	6	68	37
1996	35	13	48		2014	26	0	26	54
1997	51	0	51		2015	26	0	26	54
1998	28	3	31		2016	53	0	53	55
1999	28	0	28		2017	30	0	30	60
2000	48	0	48		2018	38	0	38	42
2001	62	5	67		2019	14	0	14	71
2002	63	11	74		2020	26	3	30	65
2003	80	2	82		2021	8	0	8	100
2004	104	0	104	73					



HD 120 BLACKTAIL

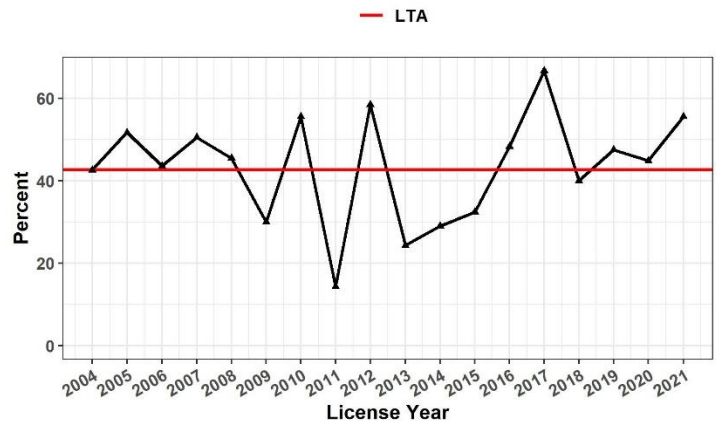
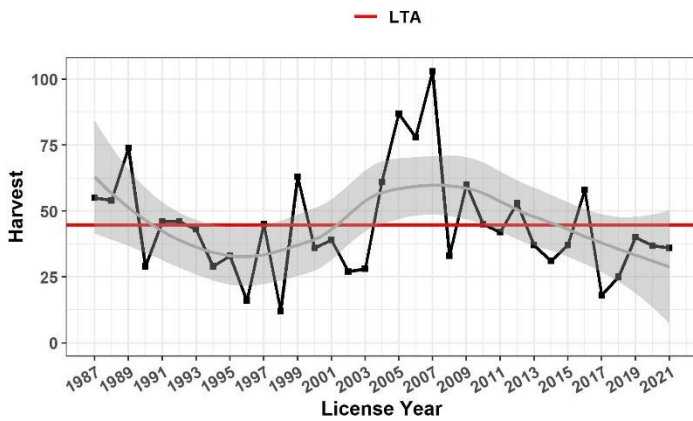
OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested.



HD Summary		2021 Harvest	
Antlered MD Harvest			
Square miles	493	Harvest/mi ²	0.07
AHM objective range	34-56	Harvest	36
LTA (1987-2020)	45	Meeting objective?	Yes
10-year trend	Decline	3-year trend	Stable
% ≥ 4 points LTA	43	% ≥ 4 points	56

HD 120 Antlered Mule Deer Harvest

HD 120 % ≥ 4points



No Survey Data Available for HD 120

**HD 120 Mule Deer Harvest Statistics
1987 – 2021**

Year	Antlered	Antlerless	Total	Percent4pt
1987	55	4	59	
1988	54	25	79	
1989	74	22	96	
1990	29	11	40	
1991	46	4	50	
1992	46	15	60	
1993	43	11	54	
1994	29		40	
1995	33		56	
1996	16		26	
1997	45		51	
1998	12	3	16	
1999	63	0	63	
2000	36	3	39	
2001	39	3	42	
2002	27	0	27	
2003	28	2	31	
2004	61	6	67	
2005	87	6	93	48
2006	78	18	96	35
2007	103	0	103	50
2008	33	6	39	38
2009	60	7	67	27
2010	45	3	48	52
2011	42	1	43	14
2012	53	0	53	58
2013	37	3	40	22
2014	31	0	31	29
2015	37	5	42	29
2016	58	3	61	46
2017	18	1	19	63
2018	25	3	28	36
2019	40	3	43	44
2020	37	0	37	45
2021	36	0	36	56



HD 121

WEST CLARK FORK

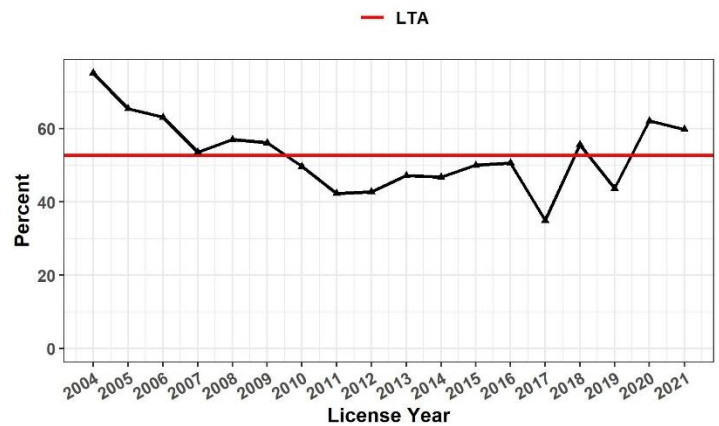
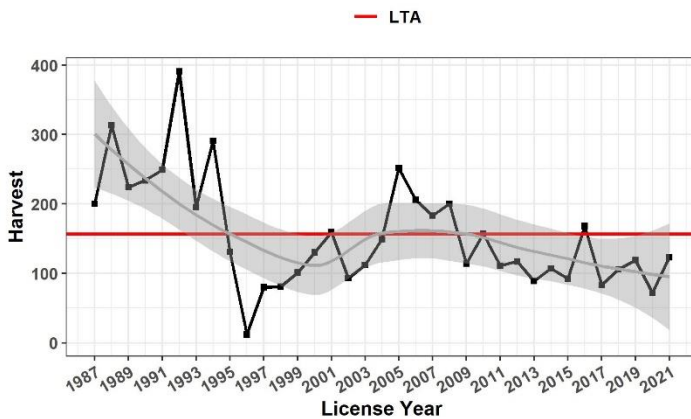
OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested or the total number of mule deer observed during trend survey efforts.



HD Summary		2021 Harvest	
Antlered MD Harvest			
Square miles	976	Harvest/mi ²	0.11
AHM objective range	117-196	Harvest	123
LTA (1987-2020)	156	Meeting objective?	Yes
10-year trend	Stable	3-year trend	Stable
% ≥ 4 points LTA	53	% ≥ 4 points	57

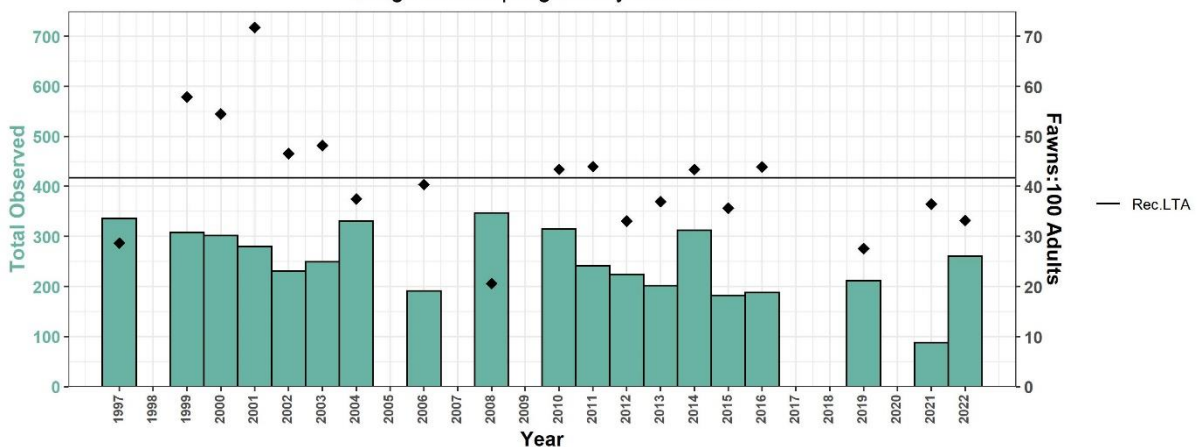
HD 121 Antlered Mule Deer Harvest

HD 121 % ≥ 4points



Cougar Peak Trend Area Survey Summary			
Survey area (mi ²)		Survey used for AHM Objective	Yes
Surveyed annually	Yes	Most recent survey	2022
Minimum Count LTA	252	3-year ave. minimum count	187
Recruitment LTA	42fawn:100adult	3-year ave. recruitment	32fawn:100adult
AHM min. count objective range	189 - 315	Meeting objective?	Yes

Cougar Peak Spring Survey 1997-2022



HD 121: Mule Deer Harvest Statistics 1987 - 2021				
Year	Antlered	Antlerless	Total	Percent4pt
1987	200	42	242	
1988	313	60	373	
1989	224	63	287	
1990	234	49	283	
1991	249	30	279	
1992	391	81	475	
1993	195	75	270	
1994	291	27	318	
1995	131	41	172	
1996	12	19	143	
1997	80	0	80	
1998	81	0	81	
1999	101	0	101	
2000	130	3	133	
2001	159	4	163	
2002	93	5	98	
2003	112	2	115	
2004	149	7	157	71
2005	252	4	256	64
2006	206	12	219	59
2007	183	5	187	52
2008	200	32	232	49
2009	114	14	128	50
2010	157	8	164	48
2011	111	7	118	40
2012	117	0	117	43
2013	89	8	97	43
2014	107	3	110	45
2015	92	6	98	47
2016	168	11	179	47
2017	83	10	92	32
2018	106	0	106	56
2019	119	0	119	44
2020	72	0	72	62
2021	123	6	130	57

Cougar Peak Mule Deer Surveys 1997 -2017						
Year	Date	Adults	Fawns	Unclass	Total	Fawn:100Ad
1997	4/20/1997	261	75		336	29
1998	12/17/1998	48	19		67	40
1999	4/28/1999	195	113		308	58
2000	4/19/2000	191	104	7	302	55
2001	4/22/2001	163	117		280	72
2002	4/21/2002	148	69	14	231	47
2003	4/14/2003	164	79	6	249	48
2004	4/18/2004	232	87	12	331	38
2006	4/20/2006	136	55	0	191	40
2007	No Survey					
2008	4/26/2008	272	56	19	347	21
2009	No Survey					
2010	4/17/2010	212	92	11	315	43
2011	4/23/2011	166	73	2	241	44
2012	4/17/2012	166	55	3	224	33
2013	4/26/2013	146	54	2	202	37
2014	4/25/2014	212	92	8	312	43
2015	4/16/2015	129	46	7	182	36
2016	4/14/2016	123	54	11	188	44
2017	No Survey					
2018	No Survey					
2019	4/23/2019	152	42	17	211	28
2020	No Survey					
2021	4/28/2021	63	23	2	88	37
2022	4/29/2022	193	64	4	261	33



HD 122

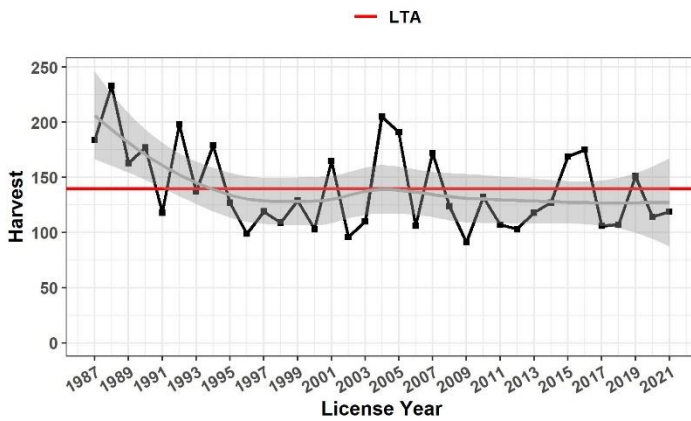
THOMPSON RIVER

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

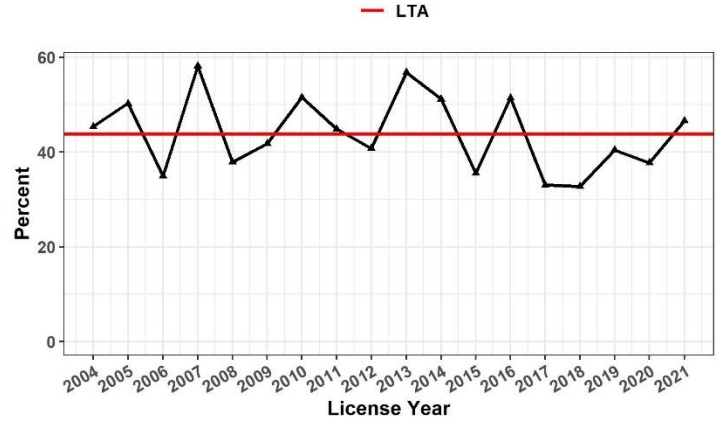


HD Summary		2021 Harvest	
Antlered MD Harvest			
Square miles	713	Harvest/mi ²	0.17
AHM objective range	105-174	Harvest	119
LTA (1987-2020)	140	Meeting objective?	Yes
10-year trend	Stable	3-year trend	Stable
% ≥ 4 points LTA	44	% ≥ 4 points	45

HD 122 Antlered Mule Deer Harvest



HD 122 % ≥ 4points



No Survey Data Available for HD 122

HD 122 Mule Deer Harvest Statistics 1987 – 2021

Year	Antlered	Antlerless	Total	Percent4pt	Year	Antlered	Antlerless	Total	Percent4pt
1987	184	25	209		2005	191	10	201	48
1988	233	72	305		2006	106	9	115	32
1989	163	66	229		2007	172	4	176	57
1990	177	26	203		2008	124	28	152	31
1991	118	57	176		2009	91	26	117	32
1992	198	70	267		2010	132	3	135	50
1993	137	36	173		2011	107	10	116	41
1994	179	66	245		2012	103	3	106	40
1995	127	56	183		2013	118	3	120	56
1996	99	22	121		2014	127	2	129	50
1997	119	0	119		2015	169	3	172	35
1998	109	9	118		2016	175	0	175	51
1999	129	0	129		2017	106	0	106	33
2000	103	0	103		2018	107	6	113	31
2001	165	2	168		2019	151	0	151	40
2002	96	3	99		2020	114	2	117	37
2003	110	0	110		2021	119	4	123	45
2004	205	4	208	45					

HD 123

CLARK MOUNTAIN

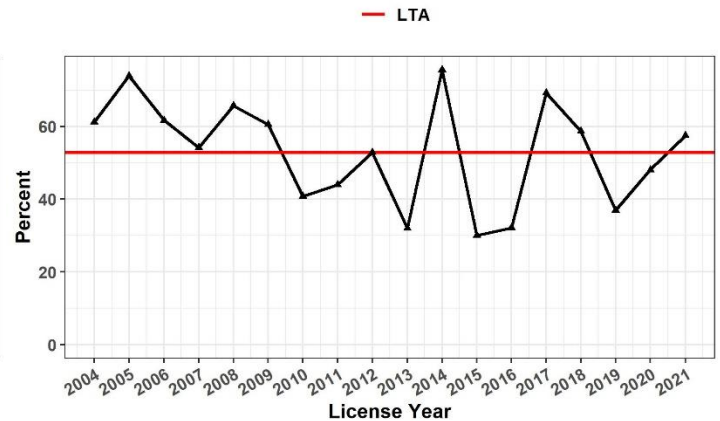
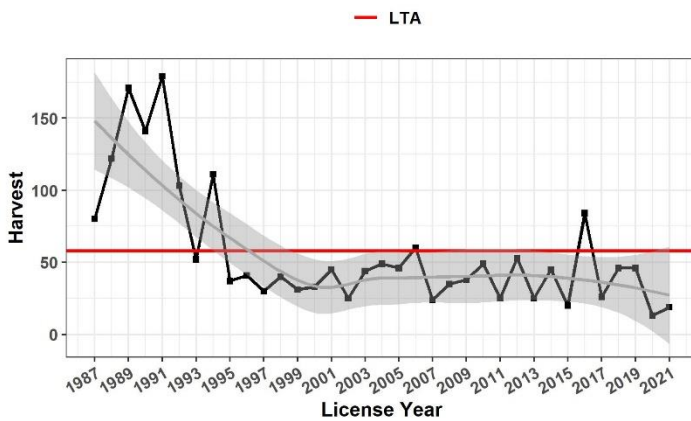
OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested.



HD Summary		2021 Harvest	
Antlered MD Harvest			
Square miles	254	Harvest/mi ²	0.07
AHM objective range	43-72	Harvest	19
LTA (1987-2020)	58	Meeting objective?	No
10-year trend	Stable	3-year trend	Decline
% ≥ 4 points LTA	53	% ≥ 4 points	57

HD 123 Antlered Mule Deer Harvest

HD 123 % ≥ 4points



No Survey Data Available for HD 123

HD 123 Mule Deer Harvest Statistics					1987 – 2021				
Year	Antlered	Antlerless	Total	Percent4pt	Year	Antlered	Antlerless	Total	Percent4pt
1987	80	13	93		2005	46	5	51	67
1988	122	47	169		2006	60	7	71	52
1989	171	22	193		2007	24	8	32	41
1990	141	19	160		2008	35	11	46	50
1991	179	42	221		2009	38	21	59	39
1992	103	0	103		2010	49	3	51	39
1993	52	44	96		2011	25	2	27	41
1994	111	15	126		2012	53	0	53	53
1995	37	0	37		2013	25	0	25	32
1996	41	6	47		2014	45	0	45	76
1997	30	0	30		2015	20	0	20	30
1998	40	0	40		2016	84	3	87	31
1999	31	0	31		2017	26	0	26	69
2000	33	0	33		2018	46	0	46	59
2001	45	0	45		2019	46	4	50	34
2002	25	0	25		2020	13	0	13	48
2003	44	0	44		2021	19	0	19	57
2004	49	0	49	61					



HD 124

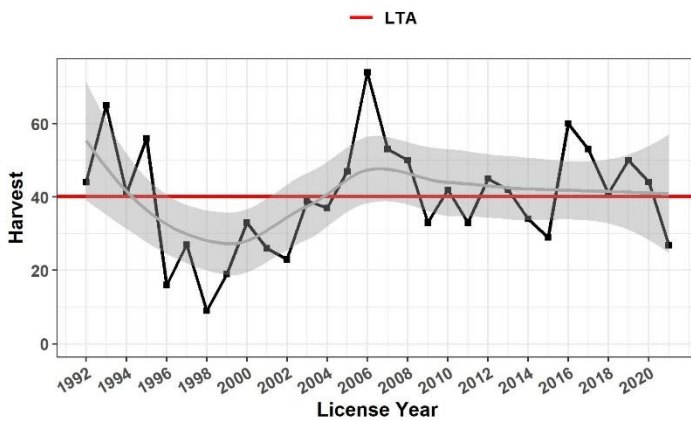
ARVILLA

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

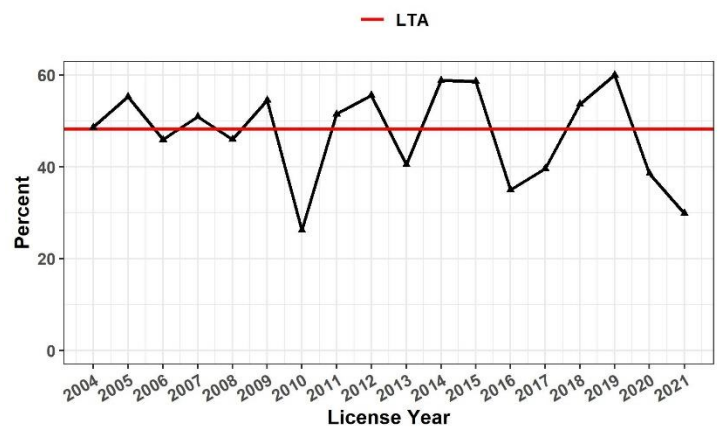


HD Summary		2021 Harvest	
Antlered MD Harvest			
Square miles	131	Harvest/mi ²	0.21
AHM objective range	30-50	Harvest	27
LTA (1987-2020)	40	Meeting objective?	No
10-year trend	Stable	3-year trend	Decline
% ≥ 4 points LTA	48	% ≥ 4 points	30

HD 124 Antlered Mule Deer Harvest



HD 124 % ≥ 4points



No Survey Data Available for HD 124

HD 124 Mule Deer Harvest Statistics 1992 – 2021

Year	Antlered	Antlerless	Total	Percent4pt
1992	44	14	58	
1993	65	18	83	
1994	41	4	45	
1995	56	11	67	
1996	16	6	22	
1997	27	6	33	
1998	9	0	9	
1999	19	0	19	
2000	33	3	36	
2001	26	2	28	
2002	23	0	23	
2003	39	2	41	
2004	37	6	42	43
2005	47	0	47	55
2006	74	7	82	41
2007	53	0	53	51
2008	50	2	52	44
2009	33	7	39	46
2010	42	1	44	25
2011	33	0	33	52
2012	45	3	47	53
2013	42	3	45	38
2014	34	5	39	51
2015	29	0	29	59
2016	60	0	60	35
2017	53	0	53	40
2018	41	0	41	54
2019	50	0	50	60
2020	44	0	44	39
2021	27	0	27	30



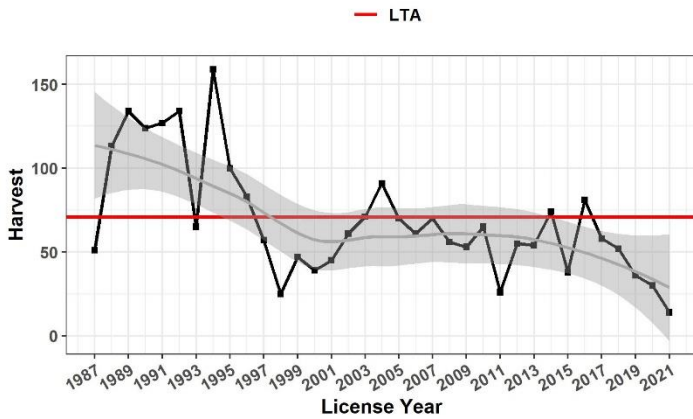
HD 130 SWAN

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

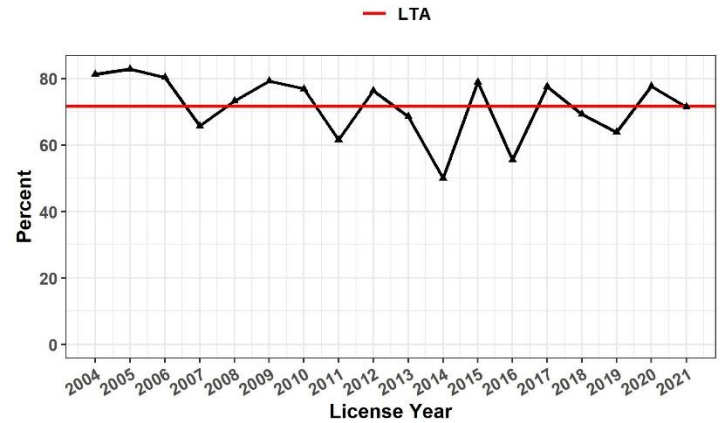


HD Summary		2021 harvest	
Antlered MD Harvest			
Square miles	672	Harvest/mi ²	0.02
AHM objective range	53-88	Harvest	14
LTA (1987-2020)	71	Meeting objective?	No
10-year trend	Decline	3-year trend	Decline
% ≥ 4 points LTA	72	% ≥ 4 points	71

HD 130 Antlered Mule Deer Harvest



HD 130 % ≥ 4points



No Survey Data Available for HD 130

HD 130 Mule Deer Harvest Statistics 1987 – 2021

Year	Antlered	Antlerless	Total	Percent4pt	Year	Antlered	Antlerless	Total	Percent4pt
1987	51	21	72		2005	70	5	76	76
1988	113	11	124		2006	61	17	77	64
1989	134	48	182		2007	70	4	74	62
1990	124	34	158		2008	56	26	82	50
1991	127	30	157		2009	53	9	62	68
1992	134	25	159		2010	65	3	68	74
1993	65	21	86		2011	26	5	32	50
1994	159	19	178		2012	55	0	55	76
1995	100	11	22		2013	54	3	57	65
1996	83	28	111		2014	74	0	74	50
1997	57	3	60		2015	38	0	38	79
1998	25	6	31		2016	81	11	92	49
1999	47	0	47		2017	58	6	64	70
2000	39	3	42		2018	52	3	55	65
2001	45	2	48		2019	36	0	36	64
2002	61	7	69		2020	30	3	33	71
2003	71	4	77		2021	14	0	14	71
2004	91	14	104	71					



HD 140

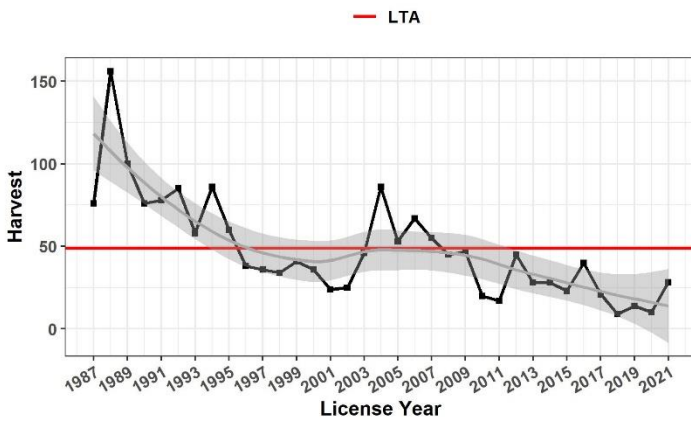
LOWER SOUTH FORK

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

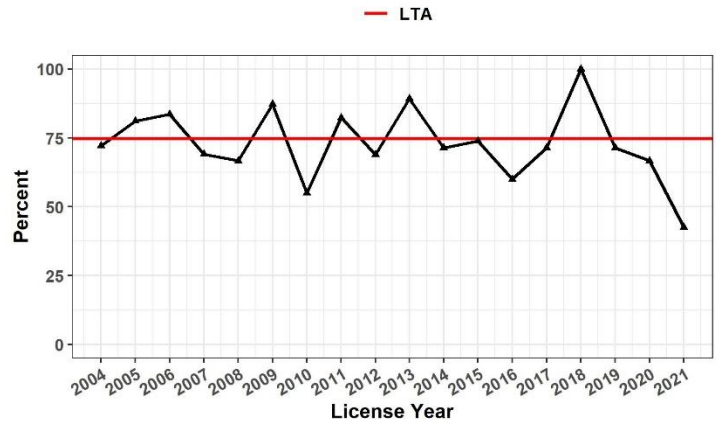


HD Summary		2021 Harvest	
Antlered MD Harvest			
Square miles	878	Harvest/mi ²	0.03
AHM objective range	37-61	Harvest	28
LTA (1987-2020)	49	Meeting objective?	No
10-year trend	Decline	3-year trend	Stable
% ≥ 4 points LTA	75	% ≥ 4 points	43

HD 140 Antlered Mule Deer Harvest



HD 140 % ≥ 4points



No Survey Data Available For HD 140

HD 140 Mule Deer Harvest Statistics 1987 – 2021

Year	Antlered	Antlerless	Total	Percent4pt
1987	76	25	101	
1988	156	35	191	
1989	100	15	115	
1990	76	8	84	
1991	78	20	97	
1992	85	21	106	
1993	58	14	72	
1994	86	12	98	
1995	60	4	64	
1996	38	0	38	
1997	36	0	36	
1998	34	0	34	
1999	41	0	41	
2000	36	3	33	
2001	24	4	28	
2002	25	3	29	
2003	46	0	46	
2004	86	4	90	69
2005	53	0	53	81
2006	67	0	67	84
2007	55	5	60	63
2008	45	0	45	67
2009	47	6	53	77
2010	20	0	20	55
2011	17	3	20	70
2012	45	0	45	69
2013	28	0	28	89
2014	28	3	31	65
2015	23	0	23	74
2016	40	0	40	60
2017	21	0	21	71
2018	9	0	9	100
2019	14	4	18	56
2020	10	0	10	68
2021	28	0	28	43



HD 141 LOWER MIDDLE FORK

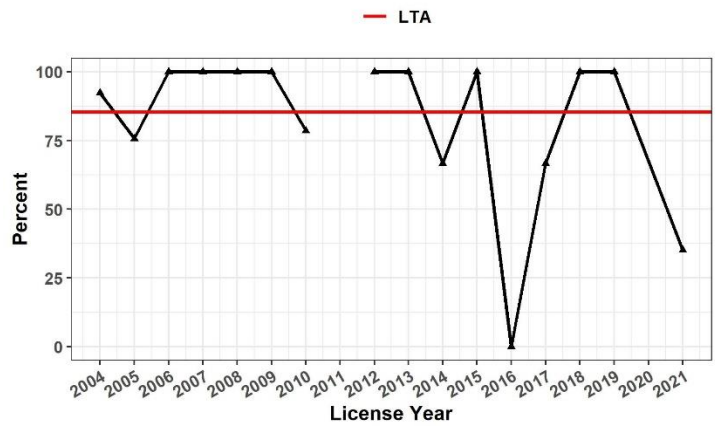
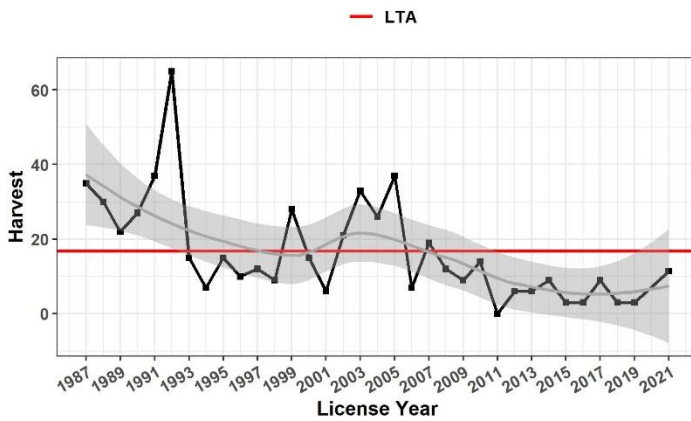
OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested.



HD Summary		2021 Harvest	
Antlered MD Harvest			
Square miles	339	Harvest/mi ²	0.03
AHM objective range	13-21	Harvest	11
LTA (1987-2020)	17	Meeting objective?	No
10-year trend	Stable	3-year trend	Stable
% ≥ 4 points LTA	85	% ≥ 4 points	36

HD 141 Antlered Mule Deer Harvest

HD 141 % ≥ 4points



No Survey Data Available for HD 141

HD 141 Mule Deer Harvest Statistics 1987 – 2021				
Year	Antlered	Antlerless	Total	Percent4pt
1987	35	0	35	
1988	30	4	34	
1989	22	7	29	
1990	27	4	31	
1991	37	4	40	
1992	65	0	65	
1993	15	0	15	
1994	7	4	11	
1995	15	4	19	
1996	10	0	10	
1997	12	0	12	
1998	9	0	9	
1999	28	0	28	
2000	15	0	15	
2001	6	0	6	
2002	21	0	21	
2003	33	2	36	
2004	26	0	26	92
2005	37	1	38	74
2006	7	0	7	100
2007	19	0	19	100
2008	12	0	12	100
2009	9	0	9	100
2010	14	0	14	79
2011	0	0	0	
2012	6	0	6	100
2013	6	0	6	100
2014	9	0	9	67
2015	3	3	6	50
2016	3	0	3	0
2017	9	0	9	67
2018	3	0	3	100
2019	3	0	3	100
2021	11	0	11	36



HD 150

UPPER SOUTH FORK

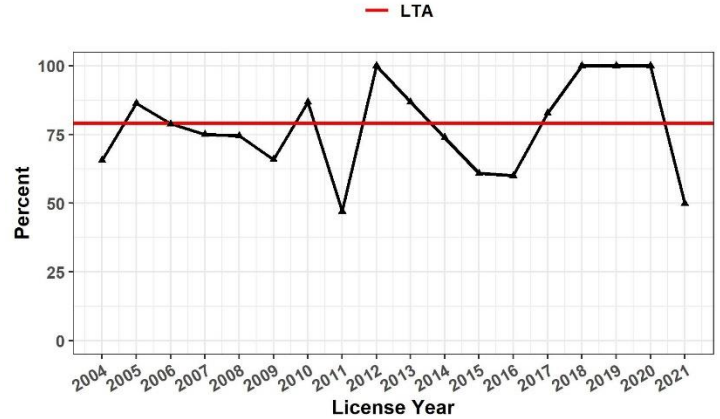
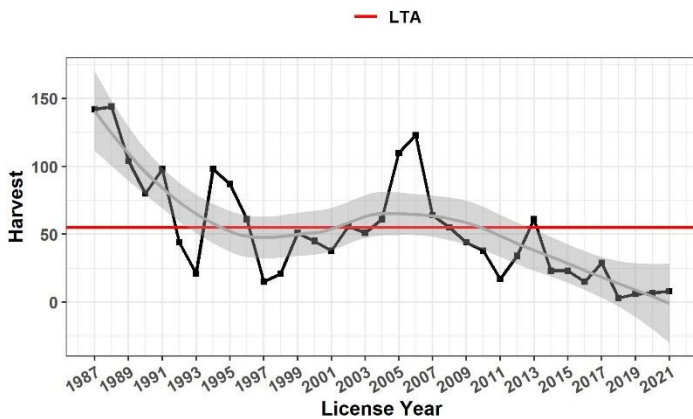
OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested.



HD Summary		2021 Harvest	
Antlered MD Harvest			
Square miles	1169	Harvest/mi ²	0.01
AHM objective range	41-69	Harvest	8
LTA (1987-2020)	55	Meeting objective?	No
10-year trend	Decline	3-year trend	Stable
% ≥ 4 points LTA	79	% ≥ 4 points	50

HD 150 Antlered Mule Deer Harvest

HD 150 % ≥ 4points



No Survey Data Available for HD 150

HD 150 Mule Deer Harvest Statistics 1987 – 2021

Year	Antlered	Antlerless	Total	Percent4pt
1987	142	13	137	
1988	144	30	176	
1989	104	24	141	
1990	80	13	55	
1991	98	8	126	
1992	44	4	69	
1993	21	12	86	
1994	98	4	102	
1995	87	8	94	
1996	61	16	77	
1997	15	0	15	
1998	21	3	25	
1999	51	0	51	
2000	45	0	45	
2001	38	4	72	
2002	56	2	58	
2003	51	0	51	
2004	61	0	61	66
2005	110	0	110	86
2006	123	0	127	76
2007	64	0	64	75
2008	55	0	55	75
2009	44	0	44	66
2010	38	0	38	87
2011	17	0	17	47
2012	34	0	34	100
2013	61	0	61	87
2014	23	0	23	74
2015	23	0	23	61
2016	15	0	15	60
2017	29	0	29	83
2018	3	0	3	100
2019	6	0	6	100
2020	7	0	7	97
2021	8	0	8	50



HD 170 FLATHEAD RIVER

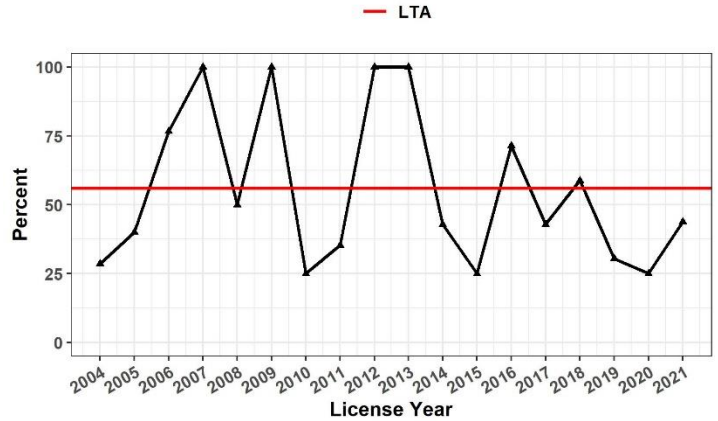
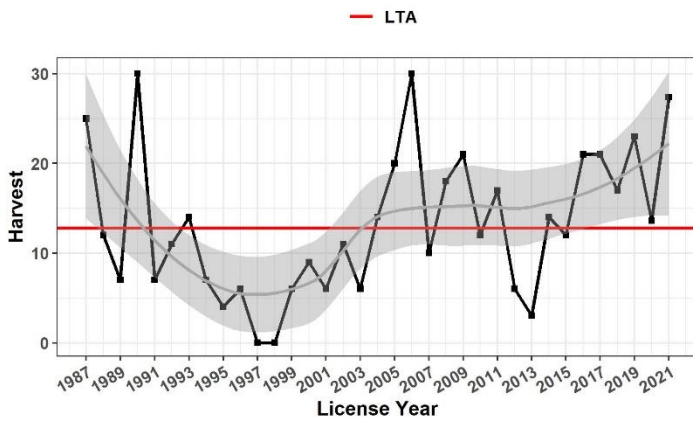
OBJECTIVE: Maintain the population within 25% of the long-term average as measured by the total number of bucks harvested.



HD Summary		2021 Harvest	
Antlered MD Harvest			
Square miles	362	Harvest/mi ²	0.07
AHM objective range	10-16	Harvest	27
LTA (1987-2020)	13	Meeting objective?	Yes
10-year trend	Increase	3-year trend	Increase
% ≥ 4 points LTA	56	% ≥ 4 points	25

HD 170 Antlered Mule Deer Harvest

HD 170 % ≥ 4points



No Survey Data Available for HD 170

HD 170 Mule Deer Harvest Statistics 1987 – 2021

Year	Antlered	Antlerless	Total	Percent4pt
1987	25	11	29	
1988	12	11	36	
1989	7	18	23	
1990	30	19	25	
1991	7	25	45	
1992	11	14	32	
1993	14	11	25	
1994	7	0	7	
1995	4	7	11	
1996	6	0	6	
1997	0	0	0	
1998	0	3	3	
1999	6	3	9	
2000	9	6	15	
2001	6	0	6	
2002	11	0	11	
2003	6	0	6	
2004	14	3	17	24
2005	20	2	23	35
2006	30	12	42	55
2007	10	11	20	50
2008	18	23	41	22
2009	21	20	41	51
2010	12	9	21	14
2011	17	14	31	19
2012	6	12	18	33
2013	3	0	3	100
2014	14	14	28	21
2015	12	15	26	12
2016	21	5	27	56
2017	21	6	27	33
2018	17	6	23	43
2019	23	16	39	18
2020	14	0	14	24
2021	27	20	48	25





2021 Region One Mule Deer Report

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Prepared by: Ethan S. Lula ~ Wildlife Biologist (Eureka)

