

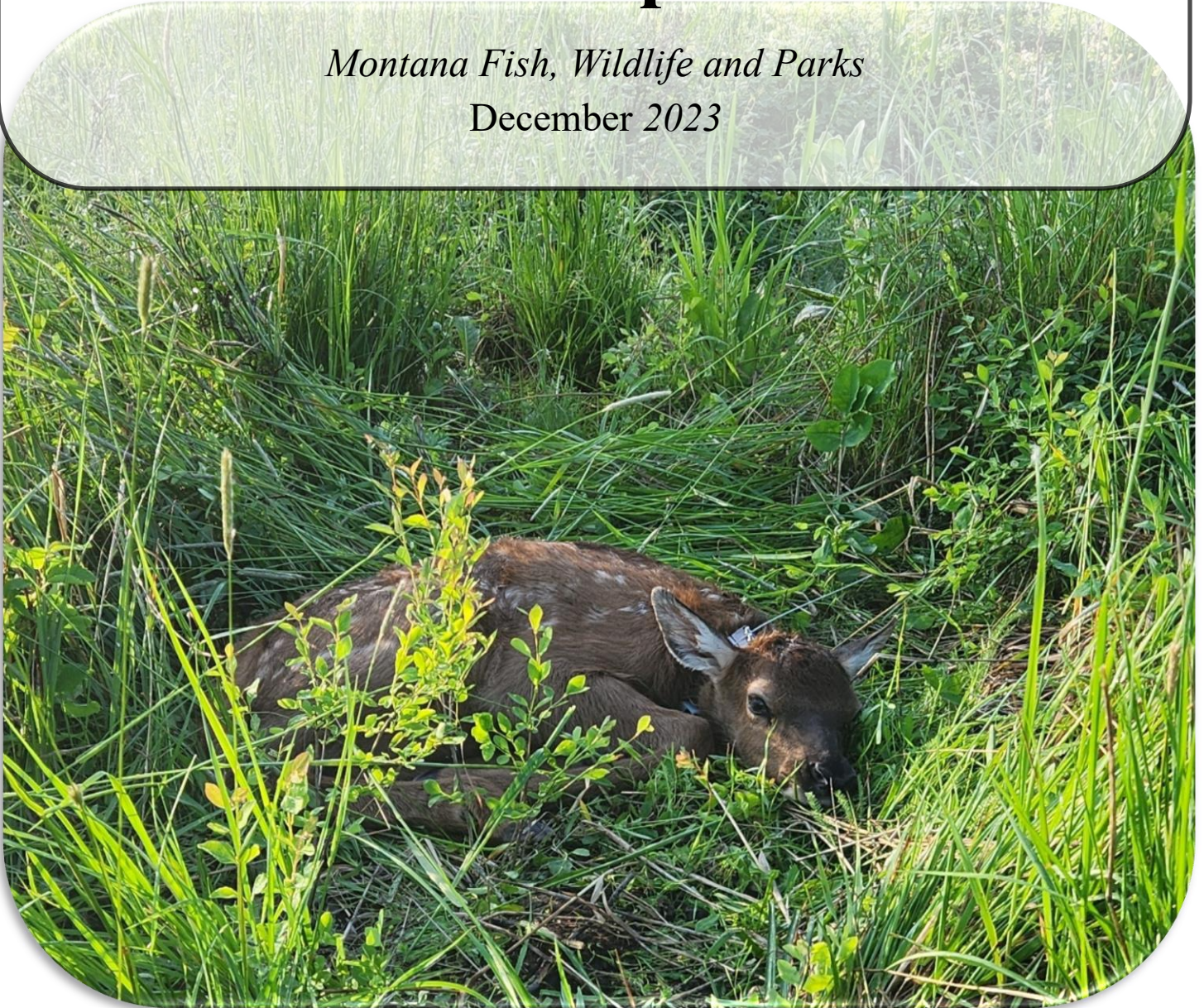
2022

# Region One

# Elk Report

*Montana Fish, Wildlife and Parks*

December 2023



## PURPOSE

This report summarizes biological data that Montana Fish, Wildlife and Parks (FWP) collects annually for elk (*Cervus canadensis*) within FWP administrative Region One (R1). These data are used to inform wildlife biologists, managers, as well as fish and wildlife commissioners and the public in making management recommendations and decisions. Factors which affect elk populations are complex, with management decisions made according to biological, social, and political concerns. This report is not intended to serve as comprehensive evaluation of R1 elk management, and care should be taken when interpreting population data without additional context.

## INTRODUCTION

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. Elk are managed within 15 hunting districts (HDs)\* whole boundaries generally follow known distributions of elk populations that share similar movement patterns and habitat types (Figure 1).

*\*Note: During the 2022/2023 biennial season setting process, several HDs were combined to simplify hunting regulations. HDs 101 and 109 were combined into HD 101, and HD 102 and 103 were combined into 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.*

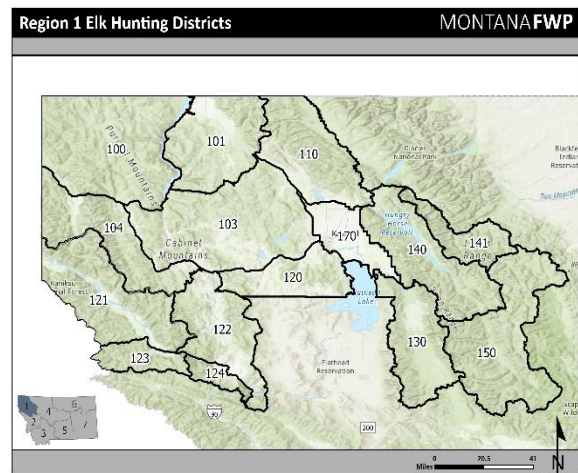


Figure 1. Region 1 elk hunting districts.

## MANAGEMENT STRATEGY

In Montana, elk are managed according to the statewide Elk Management Plan (EMP, 2023), which was updated in 2023. Within the plan, elk management is guided by statewide objectives with specific goals for each HD that specifically address current management and population concerns (e.g., distribution). HDs with either similar habitat and/or in close proximity are still grouped within elk management units (EMU) but management focus is at the HD level.

HD goals have strategies and measures of success which allows for transparency and monitoring of meeting these goals. In addition, this new approach allows biologists to utilize available tools (or acknowledges the need for developing new methods) to tailor elk management to the uniqueness (both ecological and social) of each HD.

In R1, the ability to survey animals from the air is extremely limited due to the prevalence of dense conifer forest. Biologists are only able to conduct reliable aerial surveys in HD 103, 121, 123, 140, and 150, some of which are only partial surveys (103, 150). While these surveys provide important information for some of the more robust elk populations in R1, population trend and associated HD goals are most often assessed using annual harvest data (estimated from annual phone survey), which is available for every HD.

All R1 HDs have the following minimum bull elk harvest goals: 1) 5-year bull harvest average increasing toward long-term average, and 2)  $\geq 25\%$  of bulls harvested have  $\geq 6$  points on one antler. Long-term average (LTA) is measured by the total number of bulls harvested starting when data was collected for that unit to 5 years prior to the current year in order to compare to the 5-year bull harvest average. In 2022, 8 HDs met the goal of an increasing 5-year average in bull harvest, 4 HDs met the 5-year bull harvest average being at or above the LTA bull harvest goal, and 8 HDs met the 25% of the bulls harvested having 6 points or more on at least one antler goal (Table 1). Meeting bull harvest goals does not indicate that R1 elk populations are at historic levels, simply it indicates that the current trajectory is headed in a

positive direction. In addition to these 2 bull harvest goals, some HDs have additional objectives related to other population or harvest trend metrics such as recruitment, total elk counted during spring surveys, and bull to cow ratios. All HDs have objectives concerning distribution, habitat, monitoring needs and public elk recreation opportunities that are not evaluated here (EMP, 2023).

**Table 1. 2022 Harvest Goals for R1 Elk Hunting Districts**

HD	Prior 5yr Avg. Bull Harvest (2017-2021)	Current 5yr Avg. Bull Harvest (2018-2022)	Meeting Increasing 5yr Avg. Bull Harvest Goal	LTA Bull Harvest	Meeting 5yr Avg. ≥ LTA Bull Harvest Goal	2022 Bull Harvest	25% of 2022 Bull Harvest	2022 ≥ 6pt Bull Harvest	Meeting Yearly 6pt Bull Harvest Goal
100	46	61	YES	80	NO	101	25	28	YES
101	53	55	YES	53	YES	70	18	6	NO
103	66	71	YES	72	NO	75	19	16	NO
104	51	50	NO	62	NO	39	10	10	YES
110	18	20	YES	45	NO	32	8	20	YES
120	28	32	YES	26	YES	48	12	6	NO
121	133	139	YES	197	NO	144	36	40	YES
122	50	59	YES	53	YES	70	18	38	YES
123	32	28	NO	40	NO	19	5	3	NO
124	11	13	YES	16	NO	24	6	0	NO
130	43	35	NO	52	NO	29	7	9	YES
140	23	22	NO	60	NO	16	4	3	NO
141	10	10	NO	31	NO	13	3	6	YES
150	54	54	NO	114	NO	67	17	40	YES
170	14	13	NO	5	YES	10	2	0	NO

## 2022 SEASON STRUCTURE

The Fish and Wildlife Commission approved season structure changes that were initiated in 2022 and include: combining HDs 101 and 109 (eliminating 109) and combining HDs 102 and 103 (eliminating 102), antlerless elk permits were changed to B licenses, eliminated antlerless elk permits in HDs with <25 available (110, 120, 130), and allowing holders of a permit to hunt from a vehicle (PTHFV) to harvest antlerless elk on a general license in some hunting districts (previously a permit; 100, 101, 103, 104, 120, 121, 122, 130). In 2022, the general season structure in all districts was either-sex during archery season, brow-tined bull only during the general and traditional muzzleloader season. Additionally, antlerless harvest opportunities via B licenses existed in 100, 101, 103, 104, 121, 122, 123, and 124 with some early (101: Aug 15 – Oct 20) and late (101, 121: Nov 27 - Feb 15) season opportunities.

## 2022 HARVEST SUMMARY

An estimated 995 (937-1053 CI 80%) elk were harvested in R1, accounting for 3.3% of Montana's 2022 total elk harvest ( $n=29,647$ ). Of the 995 estimated harvested elk in R1, 757 were males and 232 were females (Figure 2). The 2022 male harvest is an increase to that observed during the past 9 years, the 3<sup>rd</sup> consecutive year of increased harvest, and is near the average bull harvest between 1986-2012 ( $\bar{x} = 751$ ), which includes both the all-time low (523 in 1999) and high harvest (1,455 in 2006).

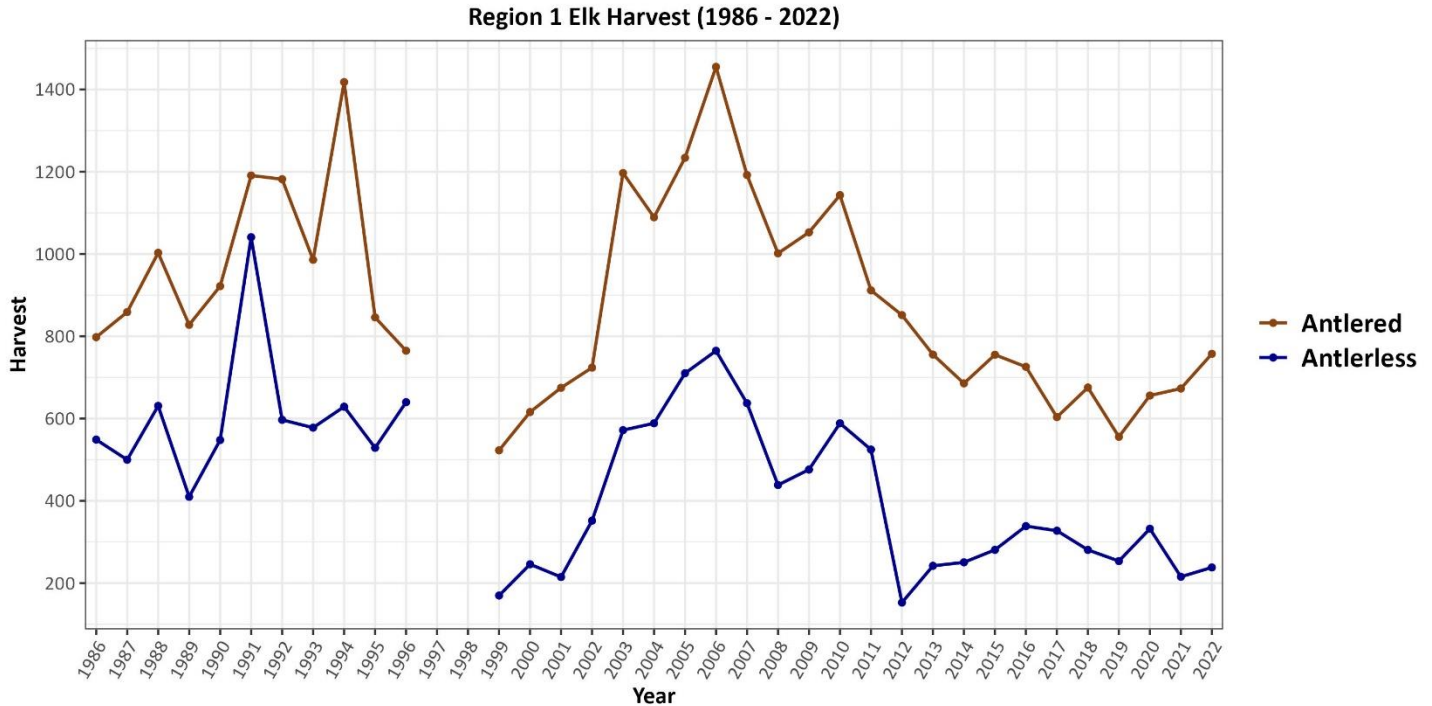


Figure 2. Region 1 elk harvest by antlered or not from 1986-2022.

An estimated 66.5% of elk were harvested on public land and 33.5% on private land (including private land open to public hunting). Of the estimated 995 elk harvested in R1, 716 (72%) were harvested with a rifle, 246 (24.7%) with bow, and 33 (3.3%) with a muzzleloader. Residents harvested 84% (837) of the total harvested elk in Region 1, while nonresidents harvested 16% (158) which is near their respective LTAs (Resident  $\bar{x} = 88\%$ , Nonresident  $\bar{x} = 18\%$ ; Figure 3).

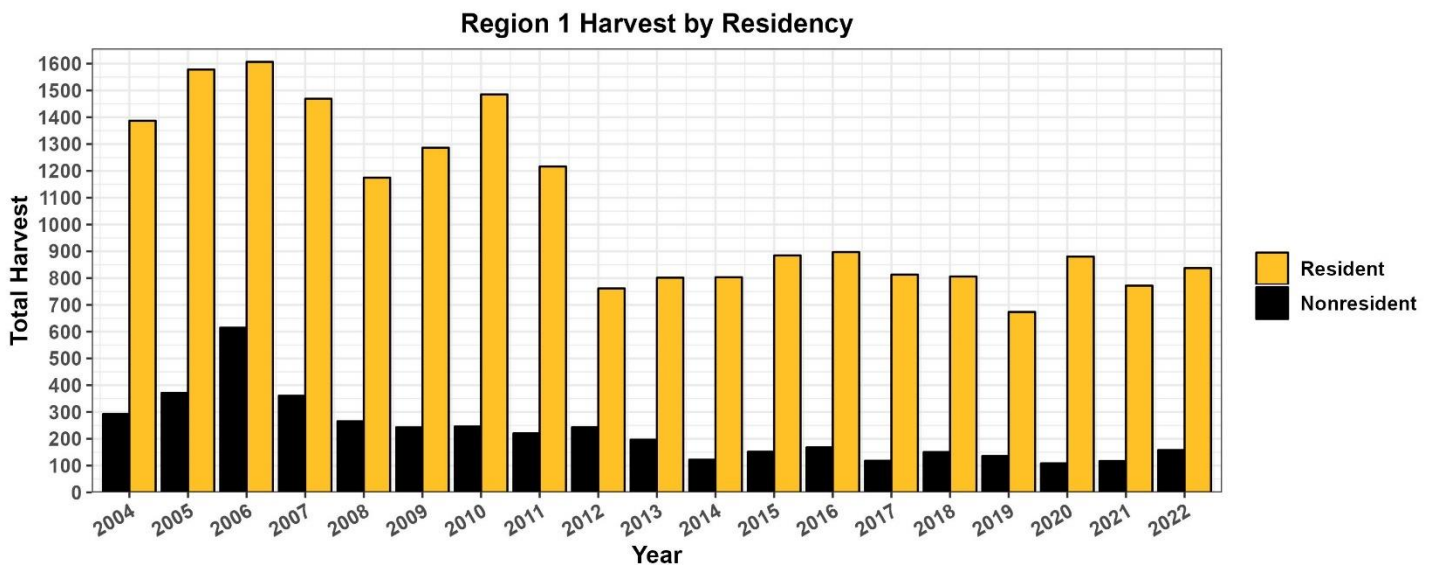


Figure 3. Region 1 elk harvest by residency from 2004 – 2022.

## 2023 SURVEY SUMMARY

Surveys are conducted during the spring when elk concentrate on warmer aspects and lower elevations to forage on emerging vegetation. Spring surveys allow biologists to estimate *recruitment*, or the number of calves that survived their first winter in relation to the number cows. This is typically expressed as a ratio of the number of calves per 100 cows and gives biologists another data point from which to estimate population trend. A demographic or population goal for Region 1 HDs is to maintain a 3-year running average of  $\geq 25$  calves:100 cows during spring surveys.

During April and May 2023, biologists conducted aerial surveys in HD 103, 121, 123, 140, and 150. Most of the surveys occurred during optimum green-up but due to difficulties with obtaining a helicopter paired with a very short green-up window, some surveys were mismatched with optimum conditions, resulting in data that could not be used for trend analysis. Among the five spring surveys, estimated recruitment was highest in HD 103 (33:100) and lowest in HD 140 (13:100). Currently, 3 of 5 HDs are meeting their calf:100 cows goal, 1 of 4 HDs are meeting their total count goal, and 2 of 2 HDs are meeting their bull:100 cows goal (Table 2).

**Table 2. Region 1 Elk Survey Goals (2023)**

HD	3yr Avg. Calf:100 Cows (2021-2023)	Calf:100 Cows Goal Minimum	Meeting Calf:100 Cows Goal	3yr Avg. Total Count (2021-2023)	Count Goal Range	Meeting Total Count Goal	3yr Avg. Bull:100 Cows (2021-2023)	Bull:100 Cows Goal Minimum	Meeting Bull:100 Cows Goal
103	33	25	YES	202	NA	NA	5	NA	NA
121	26	25	YES	1497	1350-1890	YES	12	10	YES
123	27	25	YES	344	360-510	NO	16	10	YES
140	13	25	NO	67	250-350	NO	11	NA	NA
150	16	25	NO	206	450-630	NO	15	NA	NA

## HUNTING DISTRICT SUMMARIES

The following pages present the available information for elk in each of R1's 15 HDs. Of important note for those HDs where population surveys are possible: missing data is often the result of either a survey not taking place, incomplete survey(s), or conditions did not allow for data to be collected adequately. 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

Purcell EMU

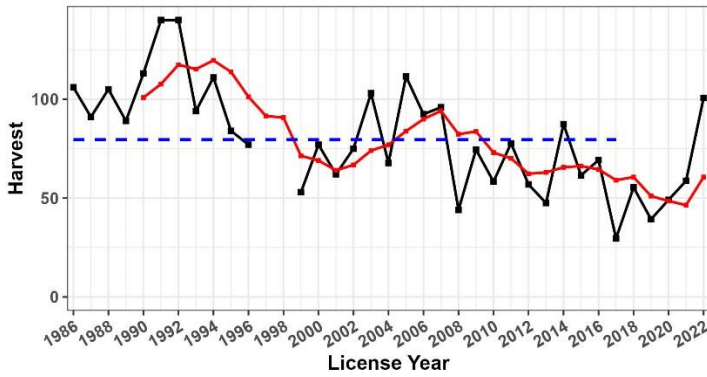
**NUMERICAL GOALS:**

- 5-year bull harvest average above or increasing toward long-term average
- $\geq 25\%$  of bulls harvested have  $\geq 6$  points on one antler



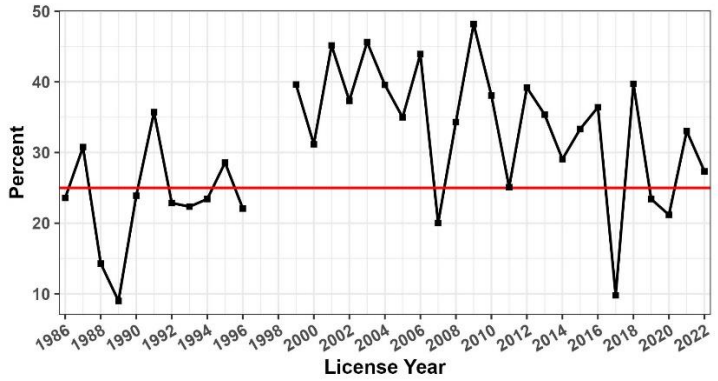
HD 100 Antlered Elk Harvest

— LTA — 5-Year Rolling Avg.



HD 100 %  $\geq 6$  Points

— Goal Minimum



**No Survey Data Available for HD 100**

**HD 100: Elk Harvest 1986 - 2022**

Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt
1986	106	54	160	24	1999	53	18	70	40	2012	57	8	64	39
1987	91	70	161	31	2000	77	16	93	31	2013	48	18	65	35
1988	105	95	200	14	2001	62	17	79	45	2014	87	7	94	29
1989	89	78	168	9	2002	75	28	103	37	2015	62	13	75	33
1990	113	79	193	24	2003	103	50	153	46	2016	69	4	73	37
1991	140	147	287	36	2004	68	56	124	39	2017	30	13	42	10
1992	140	66	207	23	2005	112	64	176	35	2018	55	10	66	40
1993	94	47	141	22	2006	92	111	203	44	2019	39	11	50	24
1994	111	55	166	23	2007	96	36	132	20	2020	49	16	65	21
1995	84	74	158	29	2008	44	39	83	34	2021	59	15	74	33
1996	77	42	119	22	2009	74	51	125	49	2022	101	11	112	27
1997	NA	NA	NA	NA	2010	58	54	113	38					
1998	NA	NA	NA	NA	2011	78	43	120	25					



# HD 101

## EUREKA

Eureka EMU

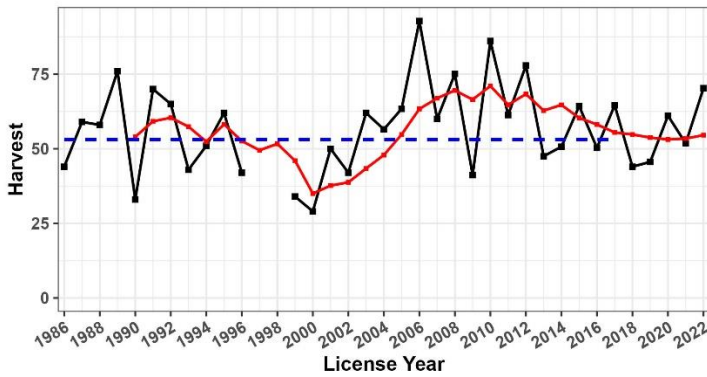
**NUMERICAL GOALS:**

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- $\geq 25\%$  of bulls harvested have  $\geq 6$  points on one antler



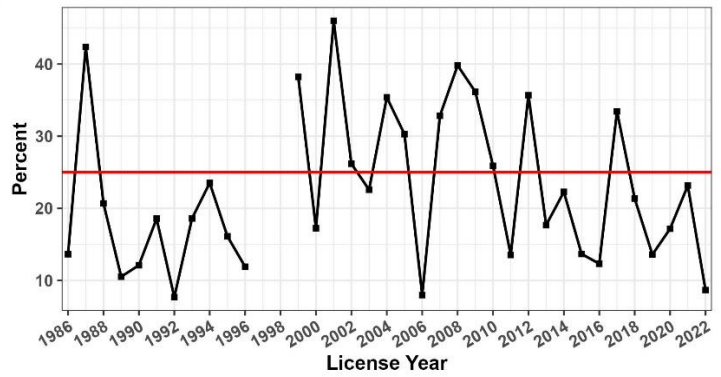
HD 101 Antlered Elk Harvest

— LTA — 5-Year Rolling Avg.



HD 101 %  $\geq 6$  Points

— Goal Minimum



**No Survey Data Available for HD 101**

**HD 101: Elk Harvest 1986 - 2022**

Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt
1986	44	34	78	14	1999	34	13	48	38	2012	78	25	103	36
1987	59	55	114	42	2000	29	12	41	17	2013	48	57	105	18
1988	58	46	106	21	2001	50	22	72	46	2014	51	36	86	22
1989	76	22	98	11	2002	42	27	69	26	2015	64	61	126	14
1990	33	7	41	12	2003	62	44	109	23	2016	50	72	122	12
1991	70	9	79	19	2004	56	59	116	36	2017	65	38	103	33
1992	65	12	78	8	2005	63	51	114	30	2018	44	36	80	21
1993	43	15	58	19	2006	93	69	162	8	2019	46	48	93	13
1994	51	13	64	24	2007	60	50	110	33	2020	61	34	96	17
1995	62	17	79	16	2008	75	55	130	40	2021	52	29	81	23
1996	42	27	69	12	2009	41	71	112	36	2022	70	33	103	9
1997	NA	NA	NA	NA	2010	86	64	150	26					
1998	NA	NA	NA	NA	2011	61	91	152	14					



# HD 103

## SALISH

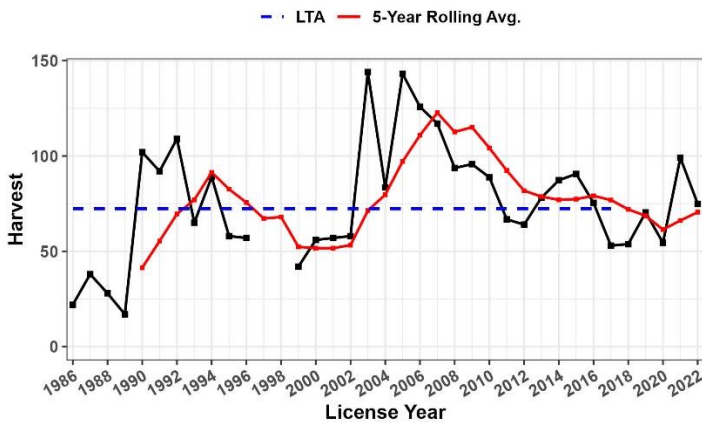
Salish EMU

**NUMERICAL GOALS:**

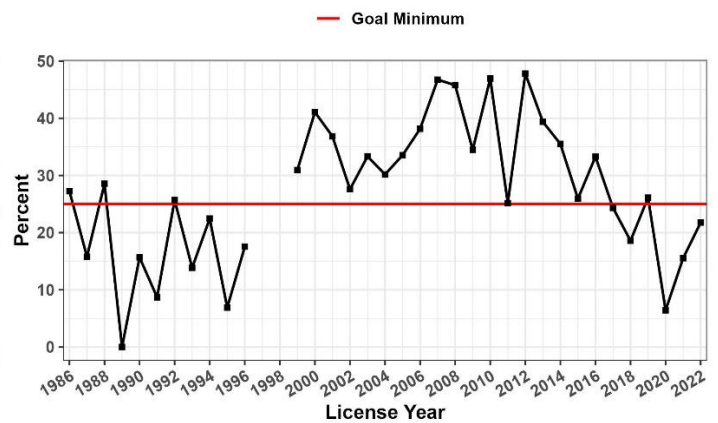
- 3-year average calf recruitment  $\geq 25$  calves:100 cows
- 5-year bull harvest average above or increasing toward long-term average
- $\geq 25\%$  of bulls harvested have  $\geq 6$  points on one antler



HD 103 Antlered Elk Harvest



HD 103 %  $\geq 6$  Points



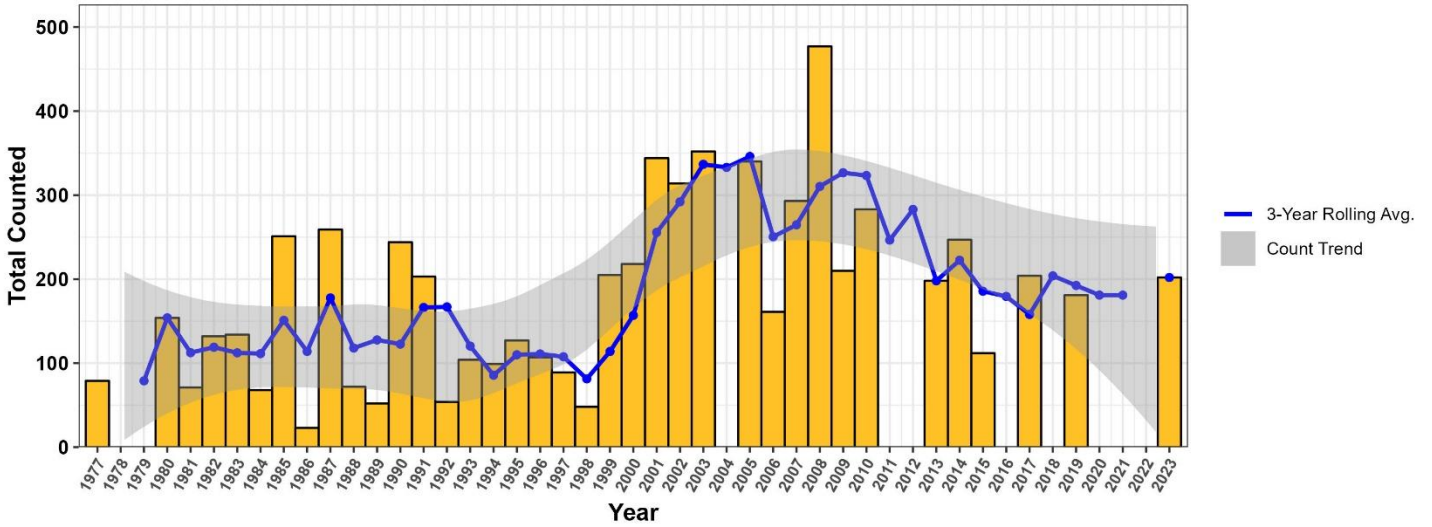
### HD 103: Elk Harvest Statistics 1986 - 2022

Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt
1986	22	23	44	27	1999	42	9	53	31
1987	38	22	59	16	2000	56	17	73	41
1988	28	7	35	29	2001	57	8	65	37
1989	17	2	20	0	2002	58	46	108	28
1990	102	62	164	16	2003	144	45	189	33
1991	92	153	246	9	2004	84	91	174	30
1992	109	43	153	26	2005	143	74	217	34
1993	65	63	128	14	2006	126	86	212	38
1994	89	58	147	22	2007	117	119	236	47
1995	58	75	133	7	2008	94	74	167	46
1996	57	49	106	18	2009	96	62	158	34
1997	NA	NA	NA	NA	2010	89	72	160	47
1998	NA	NA	NA	NA	2011	67	64	131	25
					2012	64	4	68	48
					2013	78	20	98	39
					2014	87	15	102	36
					2015	91	20	111	26
					2016	75	23	98	33
					2017	53	23	76	24
					2018	54	19	72	19
					2019	70	22	93	26
					2020	54	23	78	6
					2021	99	18	117	16
					2022	75	39	114	22

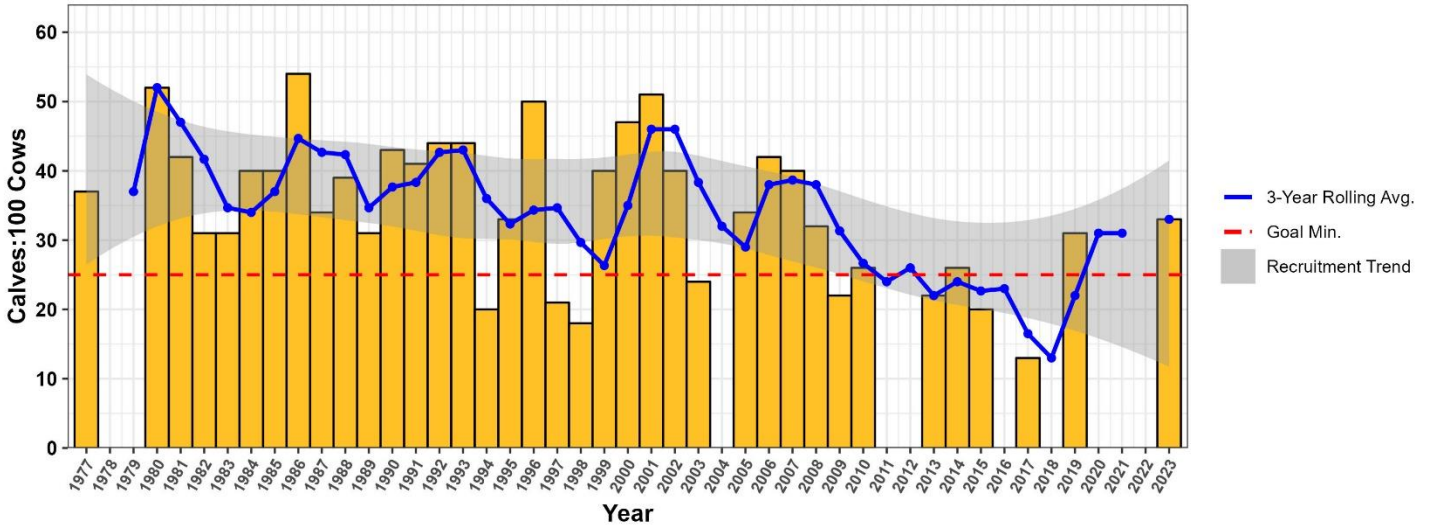




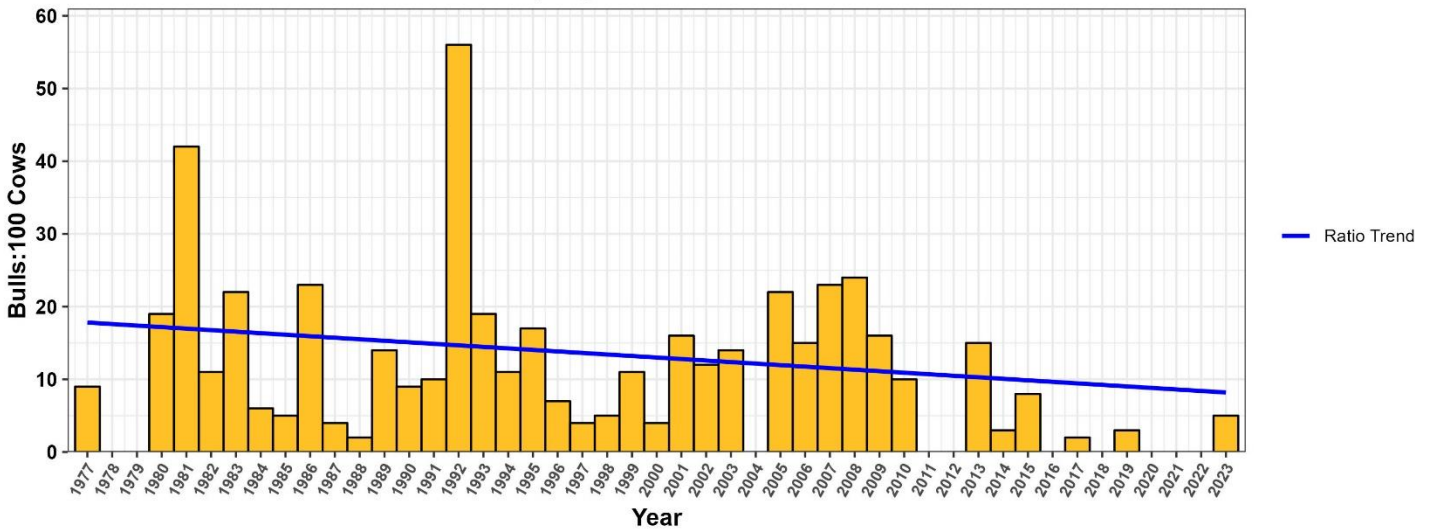
HD 103 Elk Spring Total Count 1977-2023



HD 103 Elk Spring Recruitment Survey 1977-2023



HD 103 Elk Spring Bull to Cow Ratio 1977-2023



### HD 103 Spring Elk Surveys 1977 - 2022

Year	Cows	Calves	Bulls	Unclass	Total	Calves: 100 Cows	Bulls:100 Cows
1977	54	20	5	0	79	37	9
1980	86	45	16	7	154	52	19
1981	38	16	16	1	71	42	42
1982	93	29	10	0	132	31	11
1983	86	27	19	2	134	31	22
1984	35	14	2	17	68	40	6
1985	174	69	8	0	251	40	5
1986	13	7	3	0	23	54	23
1987	188	63	8	0	259	34	4
1988	51	20	1	0	72	39	2
1989	36	11	5	0	52	31	14
1990	157	68	14	5	244	43	9
1991	134	55	14	0	203	41	10
1992	27	12	15	0	54	44	56
1993	64	28	12	0	104	44	19
1994	76	15	8	0	99	20	11
1995	85	28	14	0	127	33	17
1996	68	34	5	0	107	50	7
1997	70	15	3	1	89	21	4
1998	39	7	2	0	48	18	5
1999	136	54	15	0	205	40	11
2000	144	68	6	0	218	47	4
2001	206	106	32	0	344	51	16
2002	207	83	24	0	314	40	12
2003	255	61	36	0	352	24	14
2004	NA	NA	NA	NA	NA	NA	NA
2005	116	39	25	160	340	34	22
2006	103	43	15	0	161	42	15
2007	150	60	34	49	293	40	23
2008	258	82	61	76	477	32	24
2009	152	34	24	0	210	22	16
2010	209	54	20	0	283	26	10
2011	NA	NA	NA	NA	NA	NA	NA
2012	NA	NA	NA	NA	NA	NA	NA
2013	144	32	22	0	198	22	15
2014	191	50	6	0	247	26	3
2015	86	17	7	2	112	20	8
2016	45	5	0	0	50	11	NA
2017	178	23	3	0	204	13	2
2018	NA	NA	NA	NA	NA	NA	NA
2019	134	41	4	0	181	31	3
2020	NA	NA	NA	NA	NA	NA	NA
2021	NA	NA	NA	NA	NA	NA	NA
2022	NA	NA	NA	NA	NA	NA	NA
2023	144	48	10	0	202	33	5



# HD 104 CABINETS

Cabinet EMU

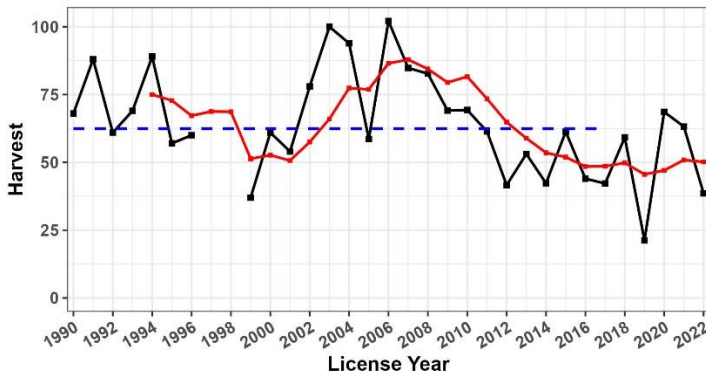
**NUMERICAL GOALS:**

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- $\geq 25\%$  of bulls harvested have  $\geq 6$  points on one antler



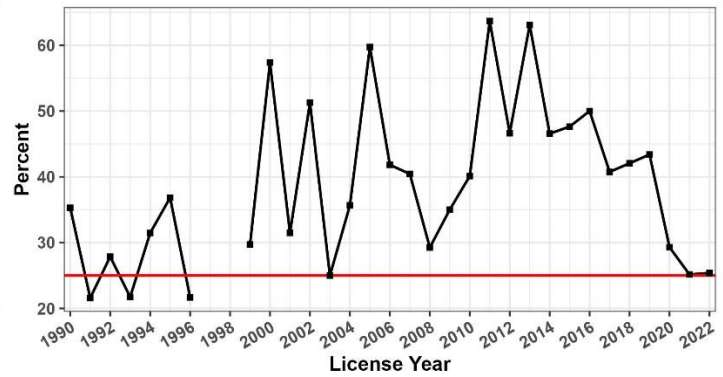
HD 104 Antlered Elk Harvest

— LTA — 5-Year Rolling Avg.



HD 104 %  $\geq 6$  Points

— Goal Minimum



**No Survey Data Available for HD 104**

**HD 104: Elk Harvest Statistics 1990 - 2022**

Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt
1990	68	37	105	35	2001	54	19	73	31	2012	42	11	53	46
1991	88	92	181	22	2002	78	55	133	51	2013	53	11	64	63
1992	61	40	101	28	2003	100	62	162	25	2014	42	3	45	47
1993	69	32	101	22	2004	94	30	124	36	2015	61	11	72	48
1994	89	49	137	31	2005	59	29	87	59	2016	44	20	64	50
1995	57	41	98	37	2006	102	67	169	42	2017	42	9	52	41
1996	60	50	109	22	2007	85	46	131	40	2018	59	23	82	42
1997	NA	NA	NA	NA	2008	83	28	111	29	2019	21	10	31	44
1998	NA	NA	NA	NA	2009	69	12	81	35	2020	69	15	83	29
1999	37	11	48	30	2010	69	38	108	40	2021	63	10	73	25
2000	61	17	78	57	2011	61	23	85	64	2022	39	22	61	25



# HD 110 WHITEFISH

Whitefish EMU

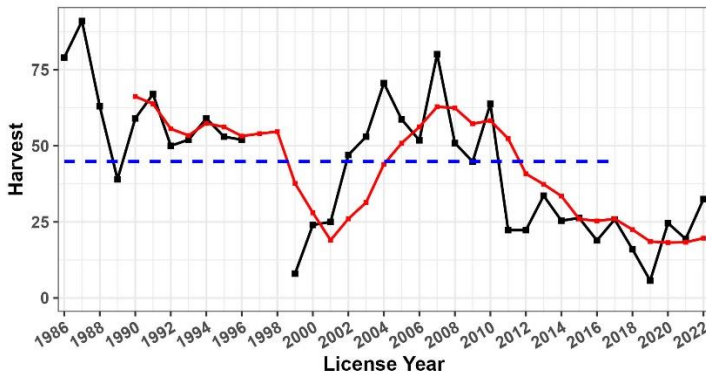
**NUMERICAL GOALS:**

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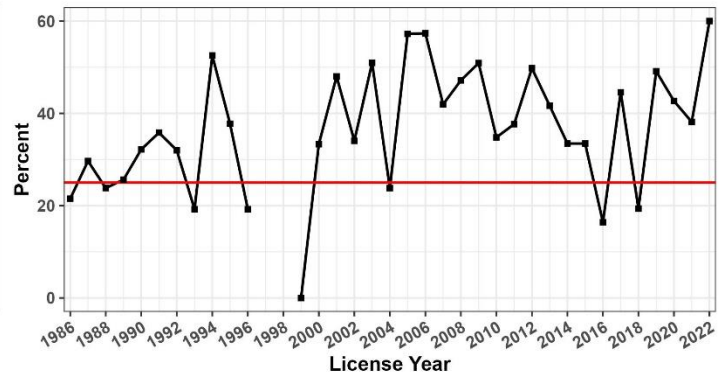
HD 110 Antlered Elk Harvest

— LTA — 5-Year Rolling Avg.



HD 110  $\geq 6$  Points

— Goal Minimum



No Survey Data Available for HD 110

### HD 110: Elk Harvest Statistics 1986 - 2022

Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt
1986	79	67	146	22	1999	8	0	8	0	2012	22	6	28	50
1987	91	46	137	30	2000	24	0	24	33	2013	34	2	35	41
1988	63	58	121	24	2001	25	3	28	48	2014	25	0	25	34
1989	39	66	106	26	2002	47	3	50	34	2015	26	2	29	34
1990	59	49	108	32	2003	53	5	58	51	2016	19	4	23	16
1991	67	58	125	36	2004	71	14	84	24	2017	26	3	29	44
1992	50	36	86	32	2005	59	22	81	57	2018	16	9	25	19
1993	52	31	83	19	2006	52	22	74	57	2019	6	6	12	47
1994	59	10	69	53	2007	80	0	80	42	2020	25	6	31	42
1995	53	11	64	38	2008	51	4	55	47	2021	19	8	27	39
1996	52	2	55	19	2009	45	19	64	51	2022	32	10	42	61
1997	NA	NA	NA	NA	2010	64	20	84	35					
1998	NA	NA	NA	NA	2011	22	10	32	38					



# HD 120 BLACKTAIL

Salish EMU

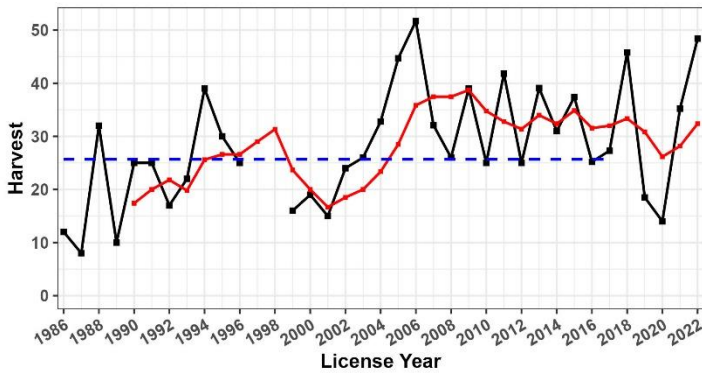
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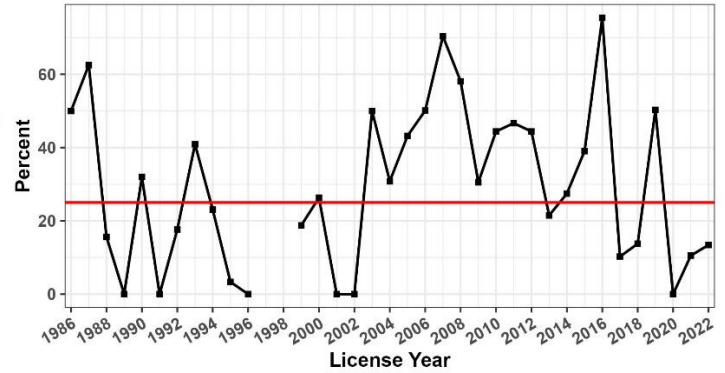
HD 120 Antlered Elk Harvest

--- LTA    — 5-Year Rolling Avg.



HD 120  $\geq 6$  Points

— Goal Minimum



**No Survey Data Available for HD 120**

**HD 120: Elk Harvest Statistics 1986 - 2022**

Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt
1986	12	6	17	50	1999	16	2	18	19	2012	25	0	25	44
1987	8	8	16	62	2000	19	3	22	26	2013	39	4	44	22
1988	32	2	34	16	2001	15	5	20	0	2014	31	0	31	27
1989	10	0	10	0	2002	24	5	29	0	2015	37	5	43	39
1990	25	0	25	32	2003	26	11	37	50	2016	25	5	30	76
1991	25	2	27	0	2004	33	7	40	31	2017	27	0	27	10
1992	17	2	19	18	2005	45	24	69	43	2018	46	3	49	14
1993	22	5	27	41	2006	52	24	77	50	2019	18	3	22	52
1994	39	12	51	23	2007	32	15	47	71	2020	14	0	14	0
1995	30	8	38	3	2008	26	20	46	58	2021	35	1	36	11
1996	25	15	40	0	2009	39	21	60	31	2022	48	0	48	14
1997	NA	NA	NA	NA	2010	25	25	50	44					
1998	NA	NA	NA	NA	2011	42	20	62	46					



# HD 121 WEST CLARK FORK

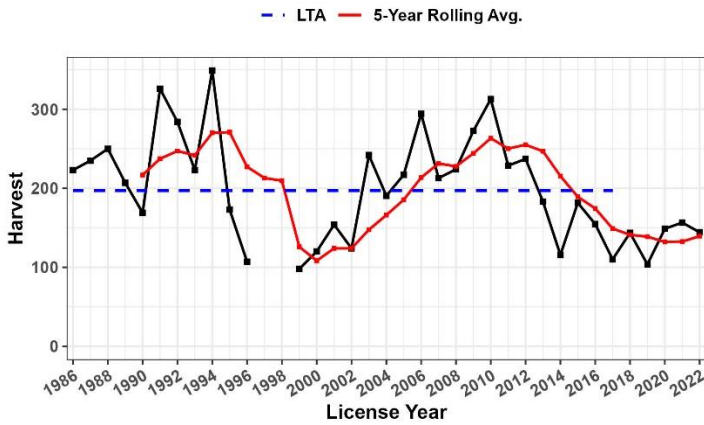
Lower Clark Fork EMU

NUMERICAL GOALS:

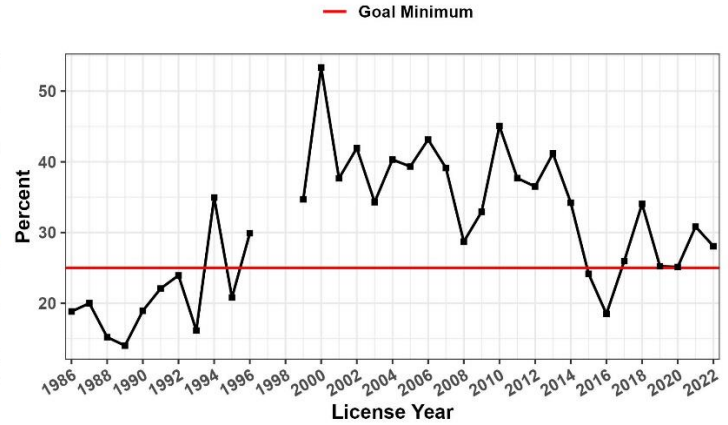
- 3-year average elk count within 1,350 – 1,890
- 3-year average calf recruitment  $\geq 25$  calves:100 cows
- 3-year average bull:cow  $\geq 10:100$
- 5-year bull harvest average above or increasing toward long-term average
- $\geq 25\%$  of bulls harvested have  $\geq 6$  points on one antler



HD 121 Antlered Elk Harvest



HD 121 %  $\geq 6$  Points

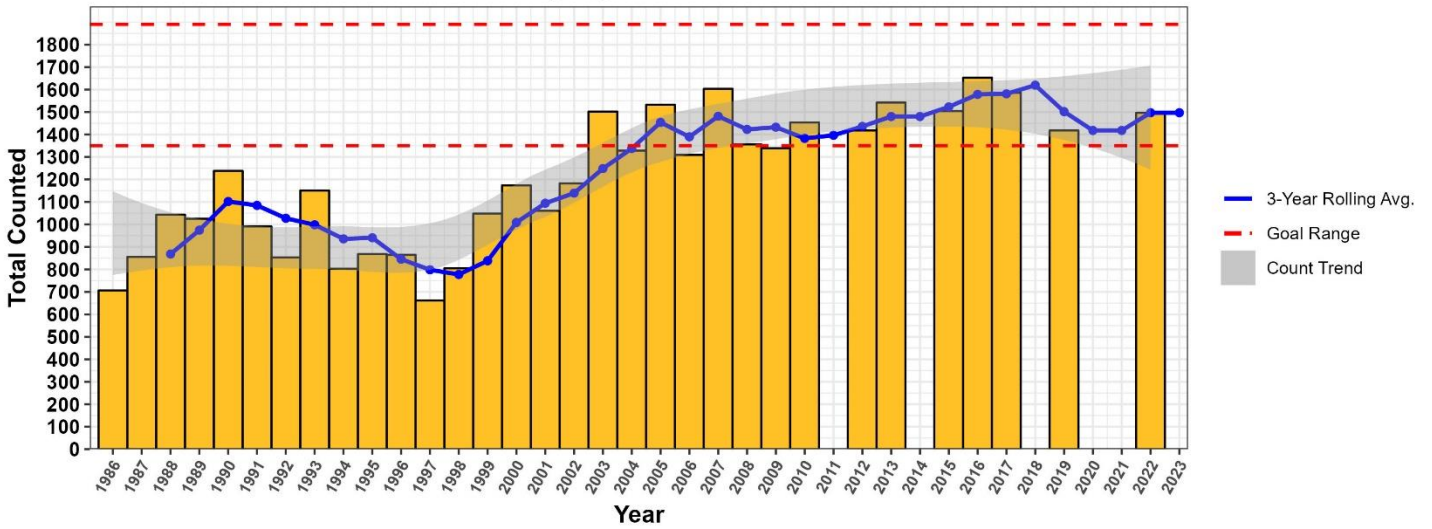


## HD 121: Elk Harvest Statistics 1986 - 2022

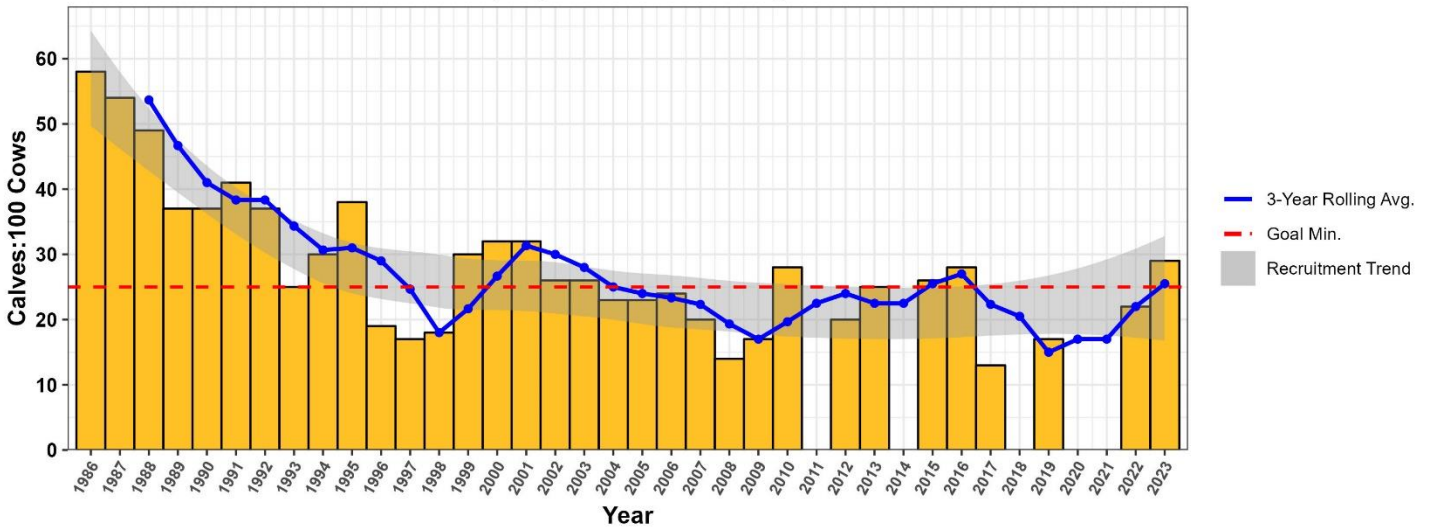
Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt
1986	223	191	414	19	2000	120	97	217	53	2013	183	61	244	41
1987	235	179	414	20	2001	154	85	239	38	2014	116	130	246	34
1988	250	190	440	15	2002	124	78	202	42	2015	182	83	265	24
1989	207	122	329	14	2003	242	236	483	34	2016	155	129	283	18
1990	169	184	354	19	2004	190	158	348	40	2017	110	138	248	26
1991	326	383	710	22	2005	217	236	453	39	2018	144	106	249	34
1992	284	167	451	24	2006	294	197	491	43	2019	104	90	194	25
1993	223	202	425	16	2007	213	184	397	39	2020	149	127	276	25
1994	349	226	578	35	2008	224	96	320	29	2021	157	59	216	31
1995	173	143	316	21	2009	273	114	387	33	2022	144	27	171	28
1996	107	169	275	30	2010	313	163	476	45					
1997	NA	NA	NA	NA	2011	229	132	361	38					
1998	NA	NA	NA	NA	2012	237	45	282	37					



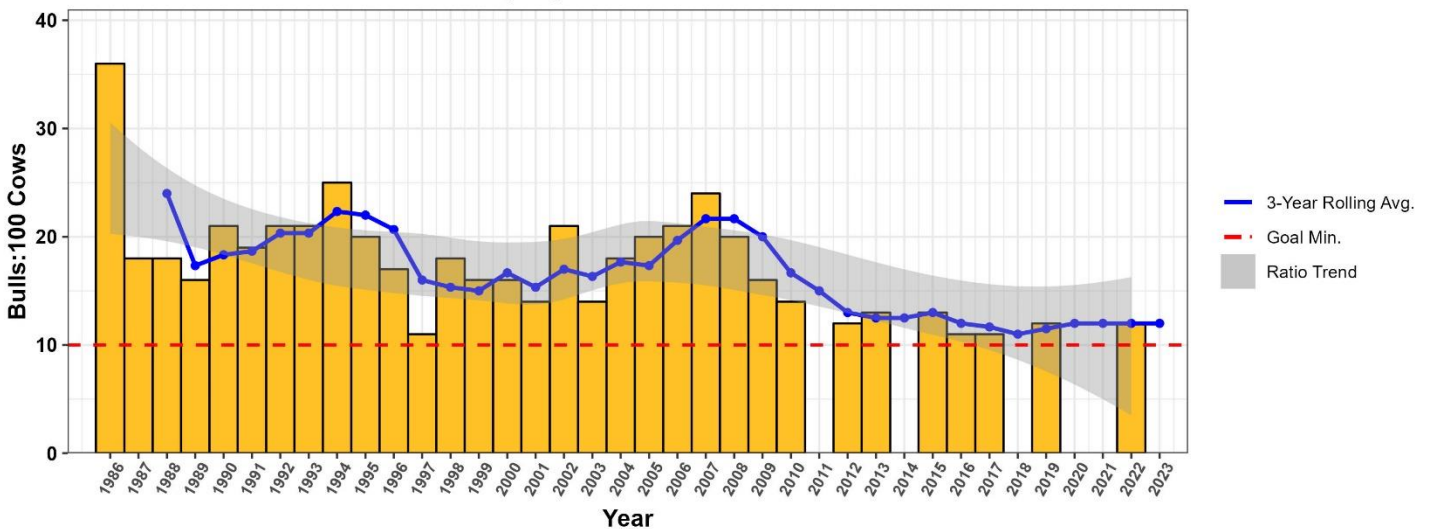
### HD 121 Elk Spring Total Count 1986-2023



### HD 121 Elk Spring Recruitment Survey 1986-2023



### HD 121 Elk Spring Bull to Cow Ratio 1986-2023



### HD 121 Spring Elk Surveys 1986 - 2022

Year	Cows	Calves	Bulls	Unclass	Total	Calves: 100 Cows	Bulls:100 Cows
1986	314	183	114	95	706	58	36
1987	425	230	77	124	856	54	18
1988	550	268	97	128	1043	49	18
1989	656	243	107	20	1025	37	16
1990	768	283	159	28	1238	37	21
1991	605	249	115	22	991	41	19
1992	529	195	112	17	853	37	21
1993	763	194	161	33	1151	25	21
1994	501	152	126	24	803	30	25
1995	487	186	96	99	868	38	20
1996	638	121	106	0	865	19	17
1997	515	89	58	0	662	17	11
1998	553	101	98	53	805	18	18
1999	716	215	111	6	1048	30	16
2000	792	251	123	8	1174	32	16
2001	706	223	101	31	1061	32	14
2002	788	208	169	18	1183	26	21
2003	1039	272	148	43	1502	26	14
2004	906	211	165	46	1328	23	18
2005	943	215	185	189	1532	23	20
2006	878	210	184	37	1309	24	21
2007	1074	211	258	60	1603	20	24
2008	984	141	201	30	1356	14	20
2009	977	169	151	42	1339	17	16
2010	982	271	135	66	1454	28	14
2011	NA	NA	NA	NA	NA	NA	NA
2012	1022	202	120	74	1418	20	12
2013	1036	258	131	117	1542	25	13
2014	NA	NA	NA	NA	NA	NA	NA
2015	1065	273	133	33	1504	26	13
2016	1169	323	131	30	1653	28	11
2017	1260	164	143	19	1586	13	11
2018	NA	NA	NA	NA	NA	NA	NA
2019	1097	190	128	3	1418	17	12
2020	NA	NA	NA	NA	NA	NA	NA
2021	NA	NA	NA	NA	NA	NA	NA
2022	1077	263	128	29	1497	22	12
2023	860	253	NA	NA	NA	29	NA





# HD 122 THOMPSON RIVER

Salish EMU

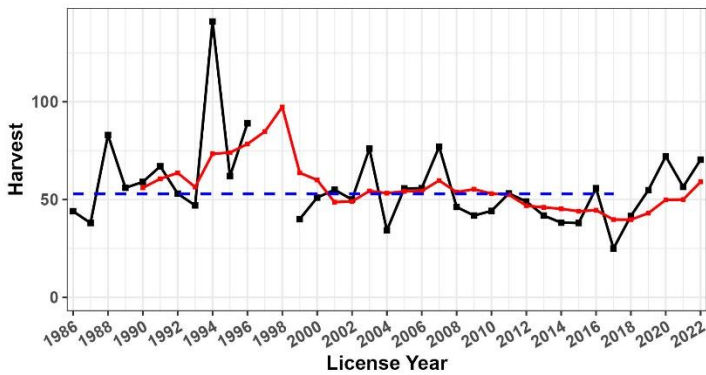
**NUMERICAL GOALS:**

- 5-year bull harvest average above or increasing toward long-term average
- $\geq 25\%$  of bulls harvested have  $\geq 6$  points on one antler



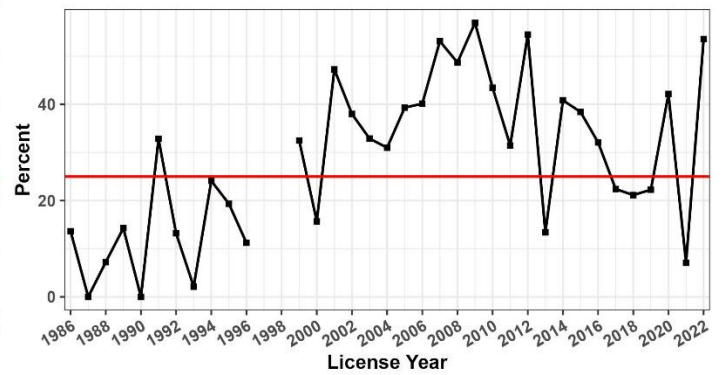
HD 122 Antlered Elk Harvest

— LTA — 5-Year Rolling Avg.



HD 122 %  $\geq 6$  Points

— Goal Minimum



**No Survey Data Available for HD 122**

**HD 122: Elk Harvest Statistics 1986 - 2022**

Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt
1986	44	13	57	14	1999	40	21	60	32	2012	49	6	55	54
1987	38	7	45	0	2000	51	27	78	16	2013	42	7	49	13
1988	83	7	90	7	2001	55	17	72	47	2014	38	19	57	41
1989	56	0	56	14	2002	50	48	99	38	2015	38	15	53	38
1990	59	5	64	0	2003	76	52	128	33	2016	56	21	77	32
1991	67	7	74	33	2004	34	33	67	31	2017	25	15	40	22
1992	53	8	61	13	2005	56	44	103	39	2018	42	16	58	21
1993	47	1	48	2	2006	56	47	102	40	2019	55	10	64	22
1994	141	14	155	24	2007	77	50	127	53	2020	72	30	102	42
1995	62	29	91	19	2008	46	32	78	49	2021	56	8	65	7
1996	89	40	129	11	2009	42	21	62	57	2022	70	15	85	54
1997	NA	NA	NA	NA	2010	44	34	79	44					
1998	NA	NA	NA	NA	2011	53	38	91	32					



# HD 123 CLARK MOUNTAIN

Lower Clark Fork EMU

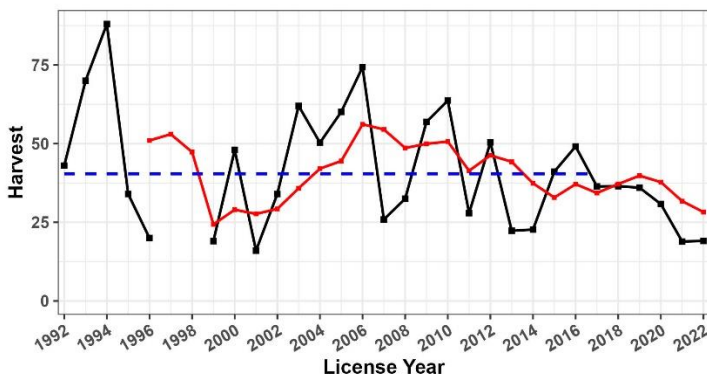
### NUMERICAL GOALS:

- 3-year average elk count within 360 – 510
- 3-year average calf recruitment  $\geq 25$  calves:100 cows
- 3-year average bull:cow  $\geq 10:100$
- 5-year bull harvest average above or increasing toward long-term average
- $\geq 25\%$  of bulls harvested have  $\geq 6$  points on one antler



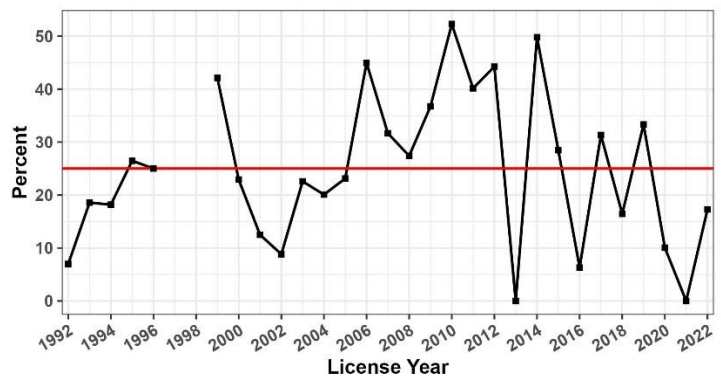
HD 123 Antlered Elk Harvest

— LTA — 5-Year Rolling Avg.



HD 123 %  $\geq 6$  Points

— Goal Minimum

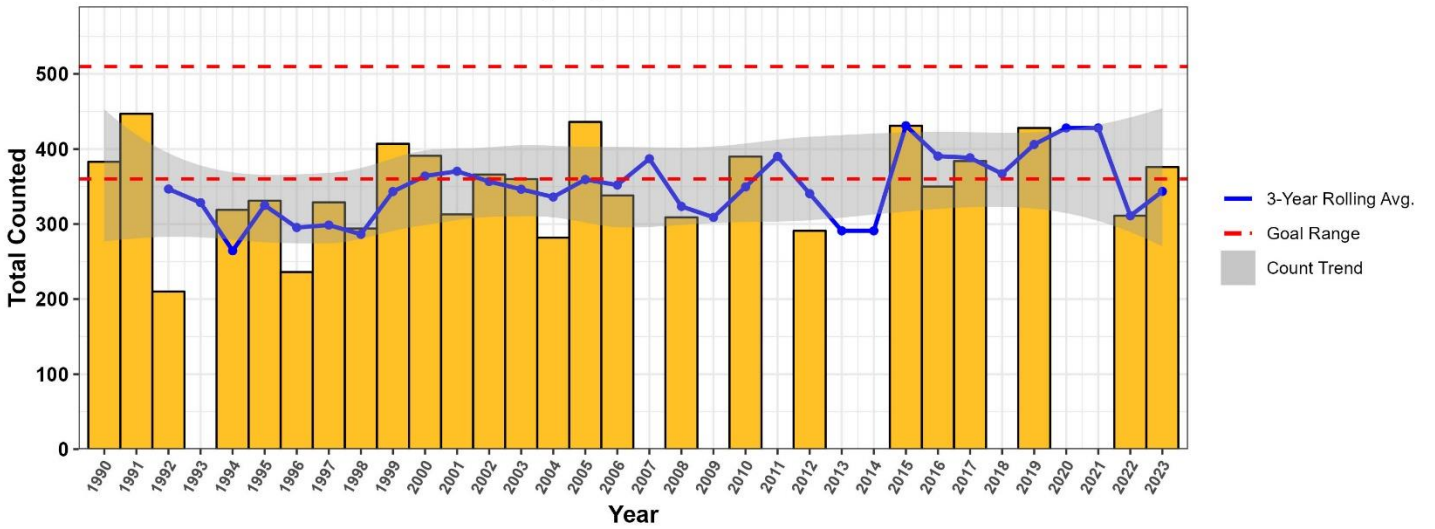


### HD 123: Elk Harvest Statistics 1992 - 2022

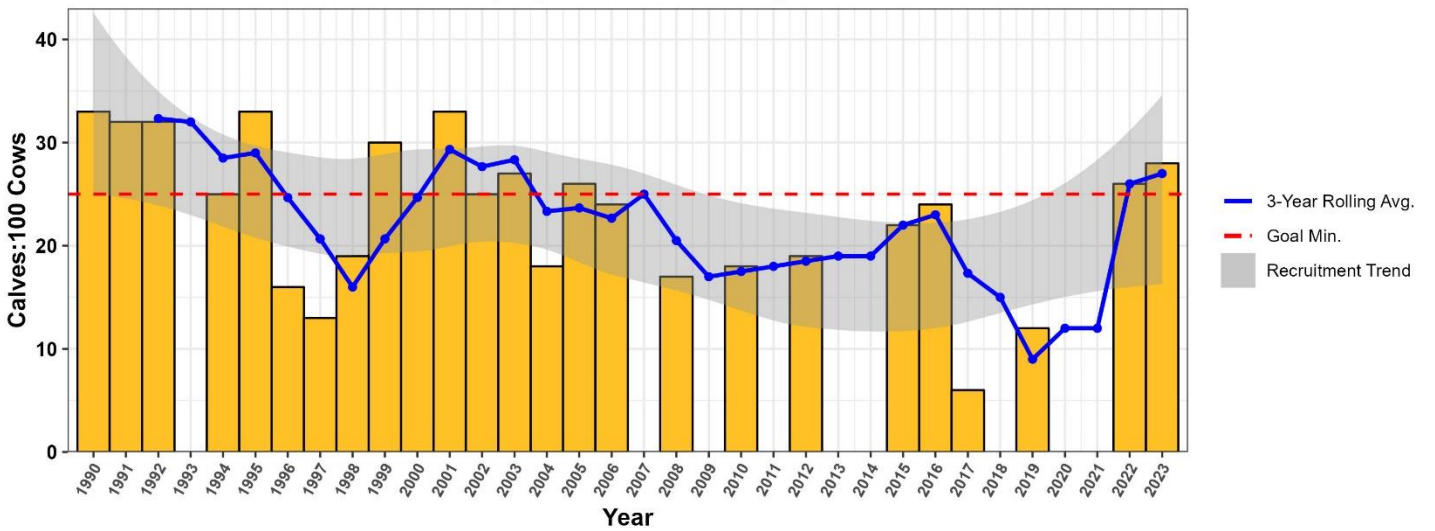
Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt
1992	43	43	86	7	2003	62	46	108	23	2014	23	13	35	49
1993	70	31	101	19	2004	50	29	81	20	2015	41	27	68	29
1994	88	33	120	18	2005	60	51	111	23	2016	49	20	69	6
1995	34	27	61	26	2006	74	64	138	45	2017	36	30	66	32
1996	20	69	89	25	2007	26	55	80	32	2018	36	17	54	17
1997	NA	NA	NA	NA	2008	32	20	52	28	2019	36	21	57	33
1998	NA	NA	NA	NA	2009	57	17	74	37	2020	31	26	56	10
1999	19	19	37	42	2010	64	23	87	52	2021	19	25	44	0
2000	48	30	78	23	2011	28	16	44	40	2022	19	24	43	17
2001	16	23	38	12	2012	50	9	59	45					
2002	34	29	63	9	2013	22	18	40	0					



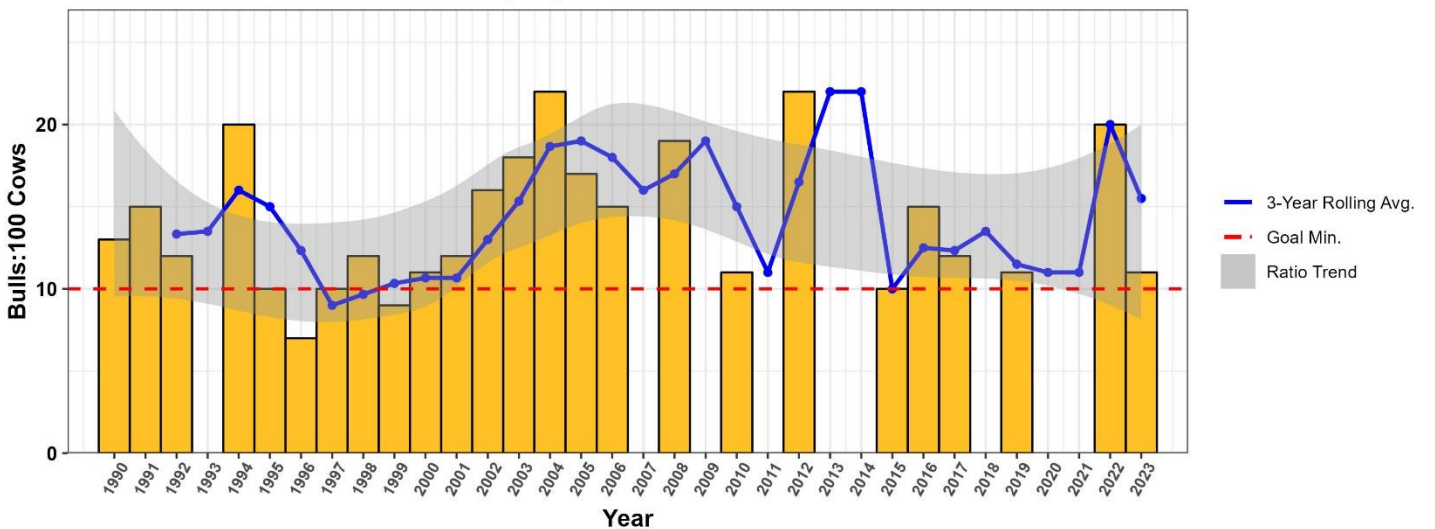
HD 123 Elk Spring Total Count 1990-2023



HD 123 Elk Spring Recruitment Survey 1990-2023



HD 123 Elk Spring Bull to Cow Ratio 1990-2023



### HD 123 Spring Elk Surveys 1990 - 2022

Year	Cows	Calves	Bulls	Unclass	Total	Calves: 100 Cows	Bulls:100 Cows
1990	258	85	34	6	383	33	13
1991	304	97	46	0	447	32	15
1992	144	46	17	3	210	32	12
1993	NA	NA	NA	NA	NA	NA	NA
1994	216	54	43	6	319	25	20
1995	204	67	21	39	331	33	10
1996	191	31	14	0	236	16	7
1997	255	33	25	16	329	13	10
1998	221	42	27	4	294	19	12
1999	293	89	25	0	407	30	9
2000	281	71	31	8	391	25	11
2001	217	71	25	0	313	33	12
2002	243	60	39	24	366	25	16
2003	246	67	44	3	360	27	18
2004	192	35	43	12	282	18	22
2005	297	77	51	11	436	26	17
2006	239	58	35	6	338	24	15
2007	NA	NA	NA	NA	NA	NA	NA
2008	214	36	41	18	309	17	19
2009	NA	NA	NA	NA	NA	NA	NA
2010	299	53	34	4	390	18	11
2011	NA	NA	NA	NA	NA	NA	NA
2012	207	39	45	0	291	19	22
2013	NA	NA	NA	NA	NA	NA	NA
2014	NA	NA	NA	NA	NA	NA	NA
2015	319	70	31	11	431	22	10
2016	247	58	38	7	350	24	15
2017	325	20	38	1	384	6	12
2018	NA	NA	NA	NA	NA	NA	NA
2019	347	42	38	1	428	12	11
2020	NA	NA	NA	NA	NA	NA	NA
2021	NA	NA	NA	NA	NA	NA	NA
2022	213	56	40	2	311	26	13
2023	266	75	30	5	376	28	11



# HD 124

## ARVILLA

Lower Clark Fork EMU

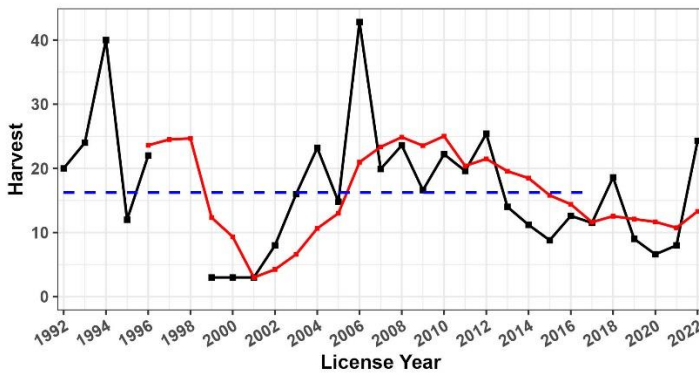
### NUMERICAL GOALS:

- 5-year bull harvest average above or increasing toward long-term average
- $\geq 25\%$  of bulls harvested have  $\geq 6$  points on one antler



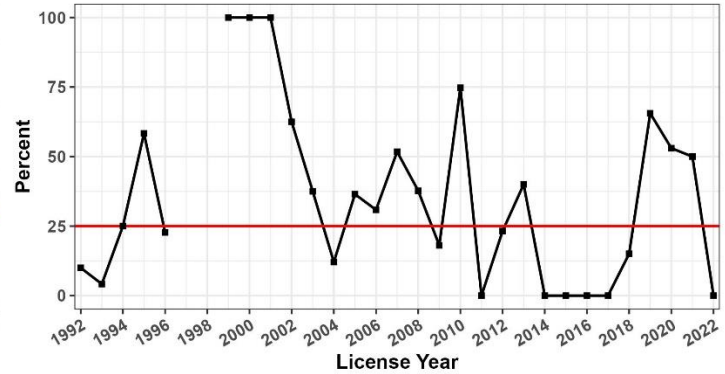
HD 124 Antlered Elk Harvest

— LTA — 5-Year Rolling Avg.



HD 124 %  $\geq 6$  Points

— Goal Minimum



No Survey Data Available for HD 124

### HD 124: Elk Harvest Statistics 1992 - 2022

Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt
1992	20	36	56	10	2003	16	8	24	38	2014	11	10	22	0
1993	24	34	58	4	2004	23	7	30	12	2015	9	2	10	0
1994	40	42	82	25	2005	15	12	27	36	2016	13	5	18	0
1995	12	19	31	58	2006	43	18	61	31	2017	12	17	28	0
1996	22	49	72	23	2007	20	18	38	52	2018	19	8	26	15
1997	NA	NA	NA	NA	2008	24	12	36	37	2019	9	14	23	66
1998	NA	NA	NA	NA	2009	17	16	33	18	2020	7	8	15	50
1999	3	4	7	100	2010	22	17	39	75	2021	8	18	26	50
2000	3	15	18	100	2011	20	13	32	0	2022	24	6	30	0
2001	3	7	10	100	2012	25	7	32	24					
2002	8	8	16	62	2013	14	4	18	40					



# HD 130 SWAN

Bob Marshall EMU

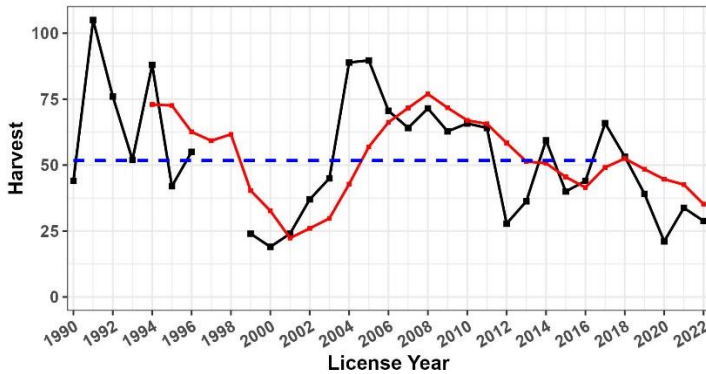
## NUMERICAL GOALS:

- 5-year bull harvest average above or increasing toward long-term average
- $\geq 25\%$  of bulls harvested have  $\geq 6$  points on one antler



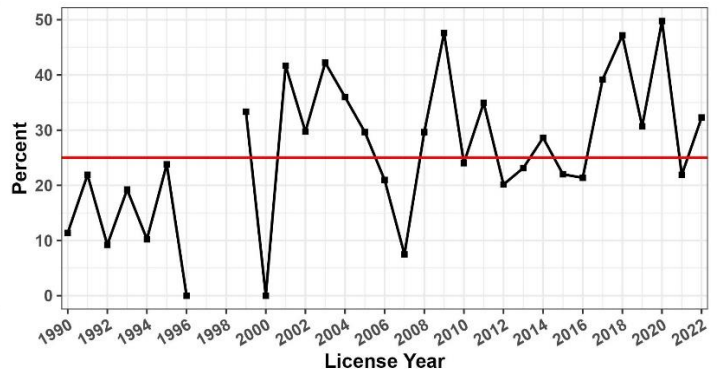
HD 130 Antlered Elk Harvest

— LTA — 5-Year Rolling Avg.



HD 130  $\geq 6$  Points

— Goal Minimum



No Survey Data Available for HD 130

### HD 130: Elk Harvest Statistics 1990 - 2022

Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt
1990	44	9	54	11	2003	45	1	46	42	2016	44	3	47	21
1991	105	16	122	22	2004	89	54	143	36	2017	66	14	80	39
1992	76	16	93	9	2005	90	48	138	30	2018	53	20	74	47
1993	52	7	59	19	2006	71	26	96	21	2019	39	7	46	31
1994	88	3	91	10	2007	64	26	90	8	2020	21	5	26	50
1995	42	6	48	24	2008	72	20	92	29	2021	34	6	40	22
1996	55	35	90	0	2009	63	29	92	47	2022	29	10	39	32
1997	NA	NA	NA	NA	2010	66	43	109	24					
1998	NA	NA	NA	NA	2011	64	42	106	35					
1999	24	3	27	33	2012	28	5	33	20					
2000	19	0	19	0	2013	36	6	42	23					
2001	24	3	29	42	2014	59	11	70	29					
2002	37	1	38	30	2015	40	11	51	22					



# HD 140 LOWER SOUTH FORK

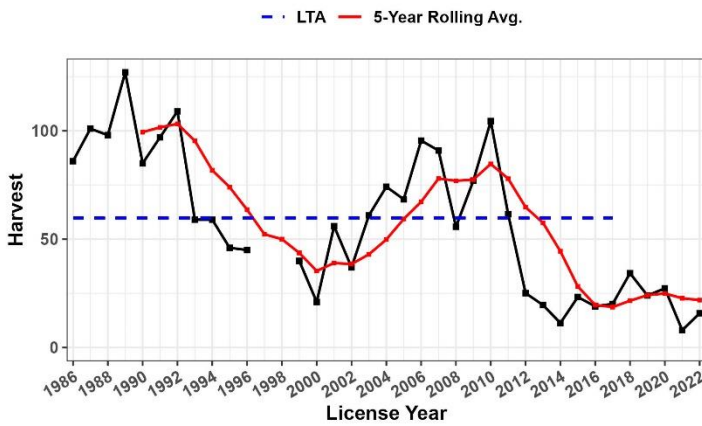
Bob Marshall EMU

## NUMERICAL GOALS:

- 3-year average elk count within 250 – 350
- 3-year average calf recruitment  $\geq 25$  calves:100 cows
- 5-year bull harvest average above or increasing toward long-term average
- $\geq 25\%$  of bulls harvested have  $\geq 6$  points on one antler



HD 140 Antlered Elk Harvest



HD 140 %  $\geq 6$  Points

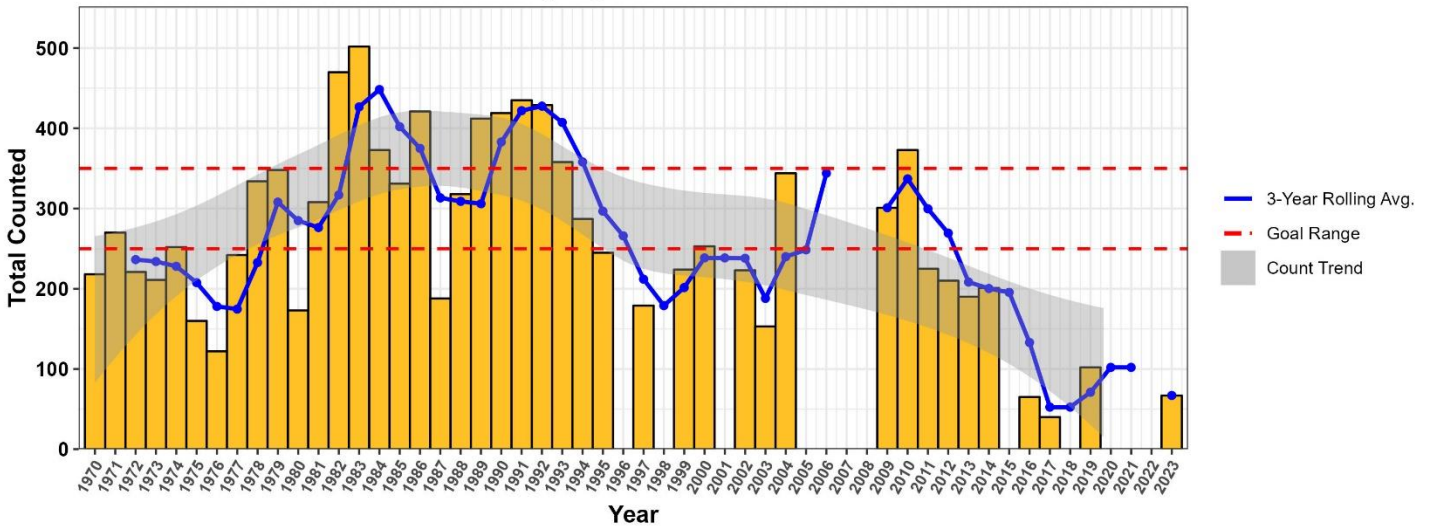


## HD 140: Elk Harvest Statistics 1986 - 2022

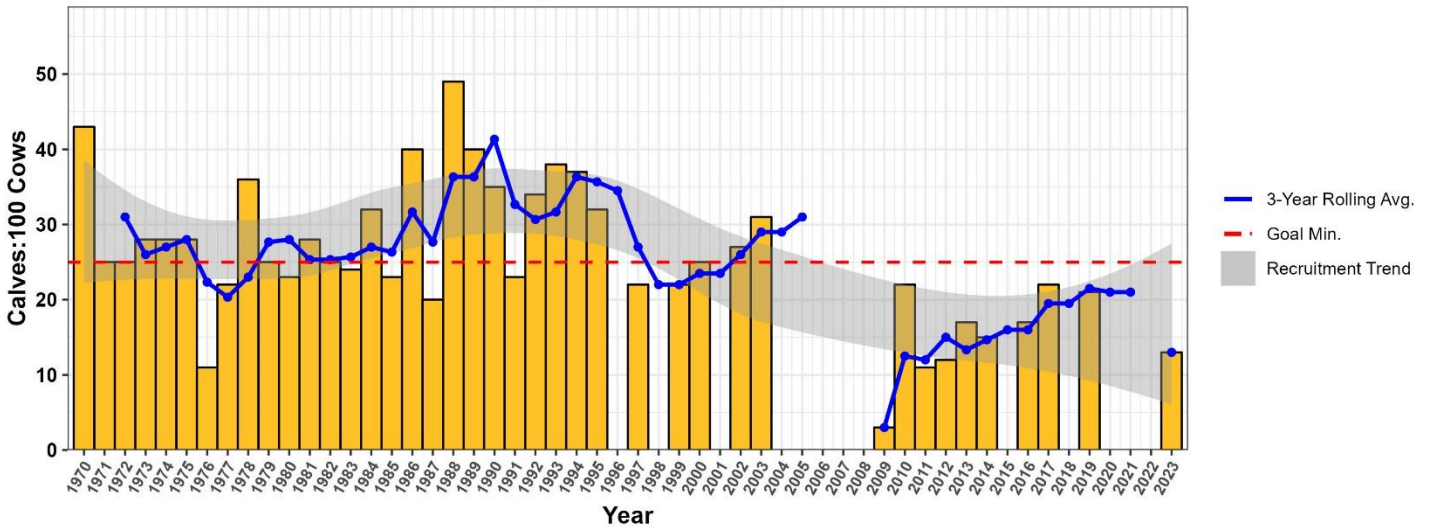
Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt
1986	86	82	167	23	1999	40	2	42	28	2012	25	6	31	67
1987	101	41	142	32	2000	21	0	21	48	2013	20	6	26	70
1988	98	125	223	14	2001	56	0	56	0	2014	11	2	13	25
1989	127	64	191	22	2002	37	3	40	22	2015	23	14	37	63
1990	85	44	129	13	2003	61	5	66	36	2016	19	9	28	49
1991	97	72	169	12	2004	74	18	93	30	2017	20	1	21	72
1992	109	57	168	34	2005	68	7	75	51	2018	34	4	39	37
1993	59	61	121	20	2006	96	4	99	35	2019	24	0	24	50
1994	59	48	107	27	2007	91	4	95	50	2020	27	10	38	23
1995	46	23	68	41	2008	56	12	67	43	2021	8	0	8	0
1996	45	24	69	33	2009	77	12	89	49	2022	16	3	19	21
1997	NA	NA	NA	NA	2010	104	16	121	63					
1998	NA	NA	NA	NA	2011	62	7	68	59					



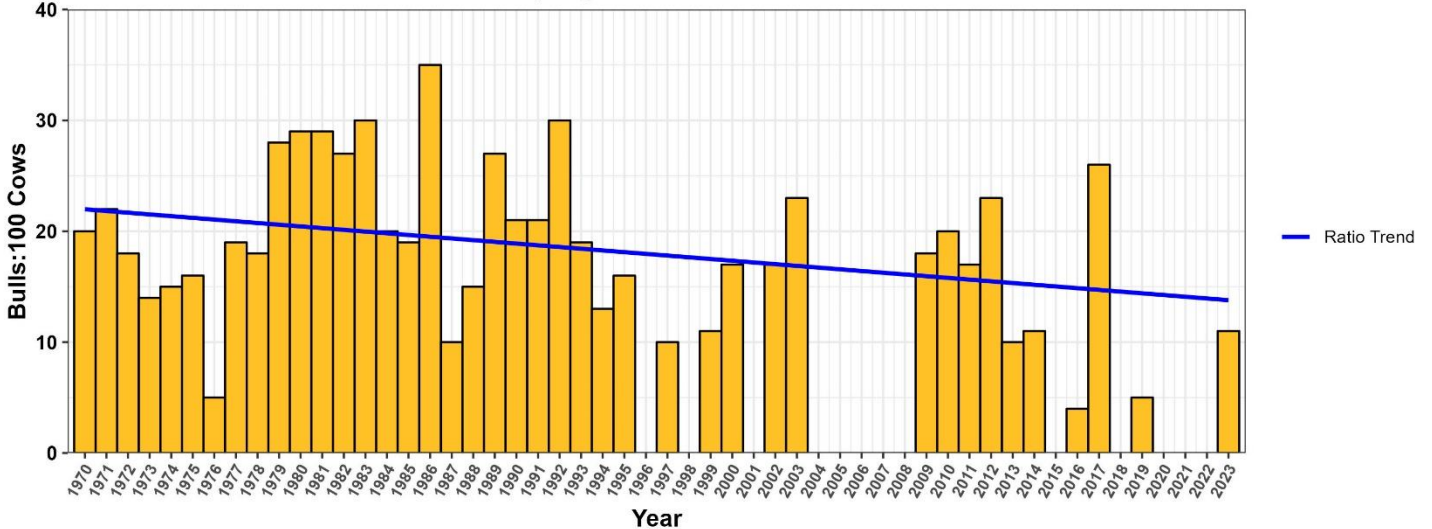
HD 140 Elk Spring Total Count 1970-2023



HD 140 Elk Spring Recruitment Survey 1970-2023



HD 140 Elk Spring Bull to Cow Ratio 1970-2023





## HD 140 Spring Elk Surveys 1970 - 2022

Year	Cows	Calves	Bulls	Unclass	Total	Calves: 100 Cows	Bulls:100 Cows
1970	134	57	27	0	218	43	20
1971	184	46	40	0	270	25	22
1972	154	39	28	0	221	25	18
1973	149	41	21	0	211	28	14
1974	177	49	26	0	252	28	15
1975	111	31	18	0	160	28	16
1976	105	12	5	0	122	11	5
1977	172	37	33	0	242	22	19
1978	217	78	39	0	334	36	18
1979	228	57	63	0	348	25	28
1980	114	26	33	0	173	23	29
1981	154	43	44	67	308	28	29
1982	303	76	83	8	470	25	27
1983	213	51	64	174	502	24	30
1984	210	68	41	54	373	32	20
1985	213	50	40	28	331	23	19
1986	157	63	55	146	421	40	35
1987	144	29	15	0	188	20	10
1988	171	83	26	38	318	49	15
1989	240	96	64	12	412	40	27
1990	203	72	43	101	419	35	21
1991	189	44	39	163	435	23	21
1992	242	83	73	31	429	34	30
1993	122	46	23	167	358	38	19
1994	167	61	22	37	287	37	13
1995	135	43	22	45	245	32	16
1996	NA	NA	NA	NA	NA	NA	NA
1997	135	30	13	1	179	22	10
1998	NA	NA	NA	NA	NA	NA	NA
1999	169	37	18	0	224	22	11
2000	179	44	30	0	253	25	17
2001	NA	NA	NA	NA	NA	NA	NA
2002	132	36	22	29	223	27	17
2003	99	31	23	0	153	31	23
2004	86	28	21	209	344	33	24
2005	NA	NA	NA	NA	NA	NA	NA
2006	NA	NA	NA	NA	NA	NA	NA
2007	NA	NA	NA	NA	NA	NA	NA
2008	NA	NA	NA	NA	NA	NA	NA
2009	179	6	33	83	301	3	18
2010	264	57	52	0	373	22	20
2011	176	19	30	0	225	11	17
2012	156	18	36	0	210	12	23
2013	150	25	15	0	190	17	10
2014	159	24	18	0	201	15	11
2015	NA	NA	NA	NA	NA	NA	NA
2016	54	9	2	0	65	17	4
2017	27	6	7	0	40	22	26
2018	NA	NA	NA	NA	NA	NA	NA
2019	81	17	4	0	102	21	5
2020	NA	NA	NA	NA	NA	NA	NA
2021	NA	NA	NA	NA	NA	NA	NA
2022	NA	NA	NA	NA	NA	NA	NA
2023	54	7	6	0	67	13	11



# HD 141 LOWER MIDDLE FORK

Bob Marshall EMU

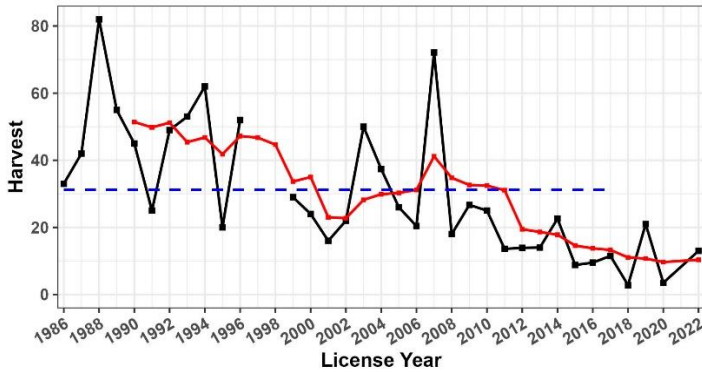
**NUMERICAL GOALS:**

- 5-year bull harvest average above or increasing toward long-term average
- $\geq 25\%$  of bulls harvested have  $\geq 6$  points on one antler



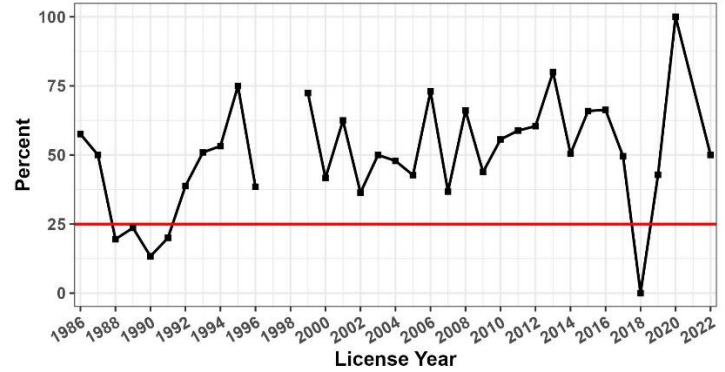
HD 141 Antlered Elk Harvest

— LTA — 5-Year Rolling Avg.



HD 141 %  $\geq 6$  Points

— Goal Minimum



No Survey Data Available for HD 141

**HD 141: Elk Harvest Statistics 1986 - 2022**

Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt
1986	33	26	59	58	1999	29	6	35	72	2012	14	3	17	60
1987	42	22	65	50	2000	24	1	25	42	2013	14	0	14	80
1988	82	54	146	20	2001	16	3	19	62	2014	23	0	23	50
1989	55	35	91	24	2002	22	7	29	36	2015	9	0	9	64
1990	45	23	68	13	2003	50	7	57	50	2016	10	0	10	63
1991	25	40	65	20	2004	37	6	43	48	2017	12	0	12	48
1992	49	32	81	39	2005	26	14	40	43	2018	3	0	3	0
1993	53	20	73	51	2006	20	14	34	74	2019	21	0	21	43
1994	62	39	100	53	2007	72	4	76	37	2020	4	0	4	88
1995	20	31	51	75	2008	18	6	24	66	2022	13	3	16	50
1996	52	50	102	38	2009	27	9	36	43					
1997	NA	NA	NA	NA	2010	25	11	36	56					
1998	NA	NA	NA	NA	2011	14	0	14	57					



# HD 150 UPPER SOUTH FORK

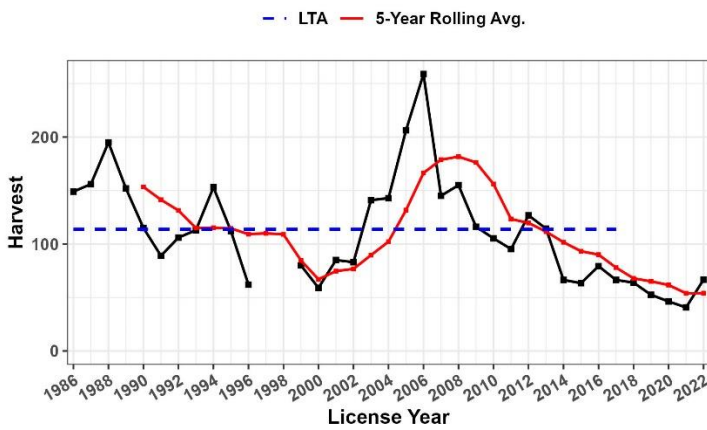
Bob Marshall EMU

## NUMERICAL GOALS:

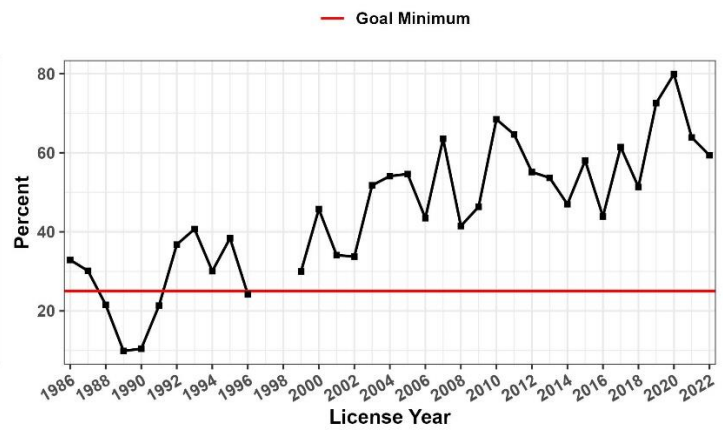
- 3-year average elk count within 450 – 630
- 3-year average calf recruitment  $\geq$  25 calves:100 cows
- 5-year bull harvest average above or increasing toward long-term average
- $\geq$  25% of bulls harvested have  $\geq$  6 points on one antler



HD 150 Antlered Elk Harvest



HD 150 %  $\geq$  6 Points

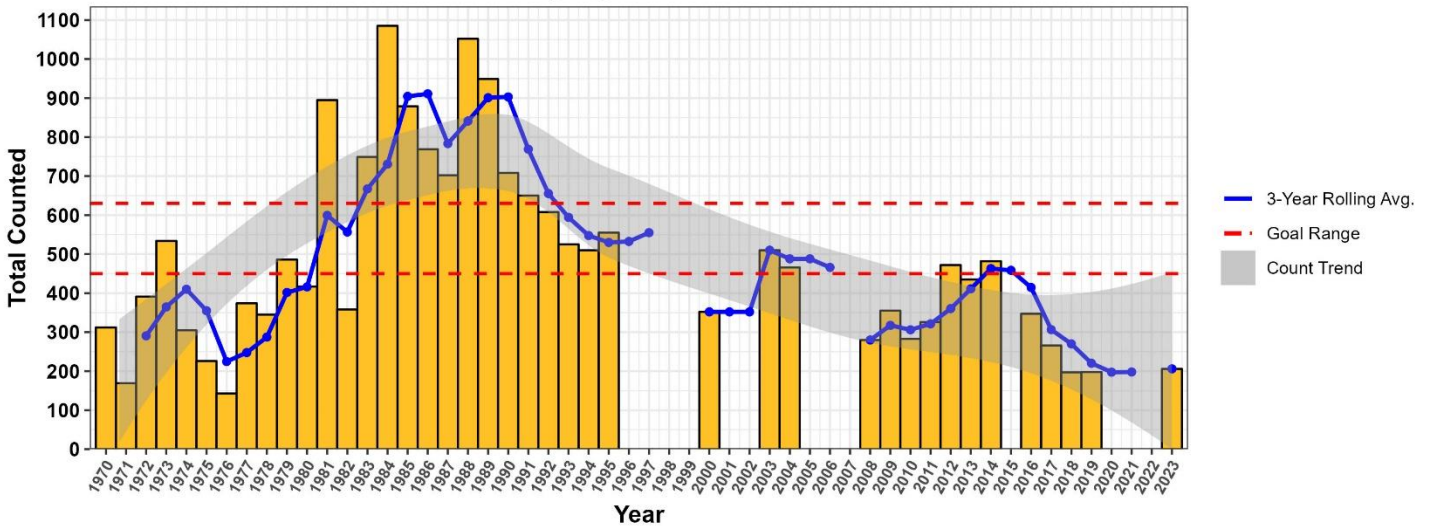


## HD 150: Elk Harvest Statistics 1986 - 2022

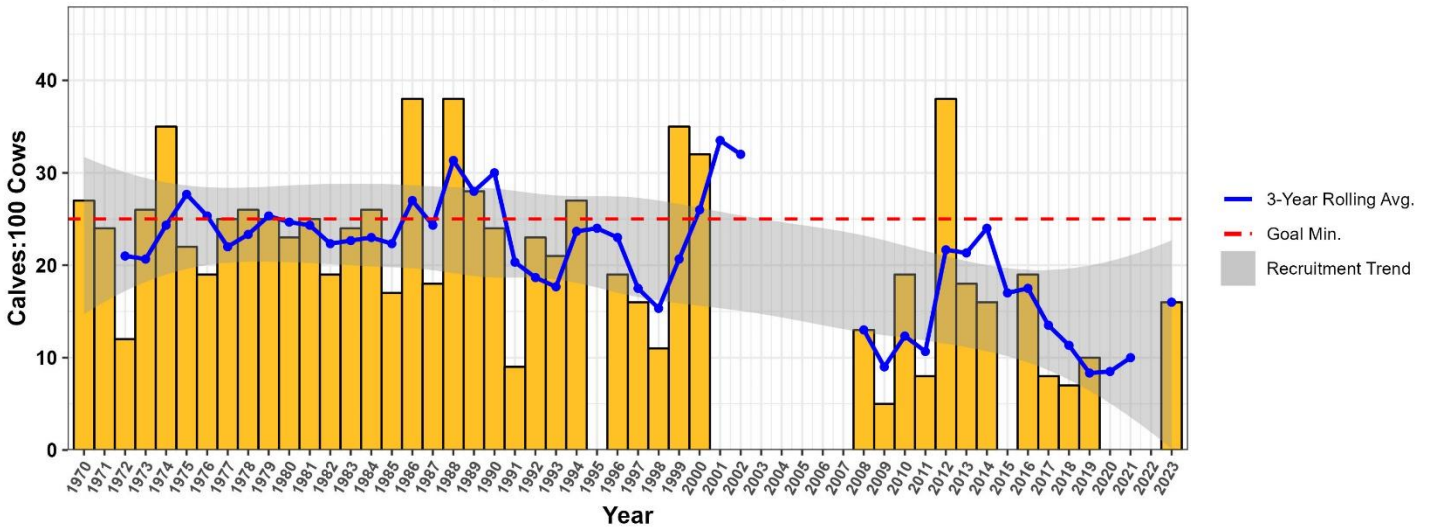
Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt
1986	149	48	197	33	1999	80	3	83	30	2012	127	11	138	55
1987	156	50	206	30	2000	59	0	59	46	2013	114	8	123	54
1988	195	47	241	22	2001	85	0	85	34	2014	66	3	69	47
1989	152	19	172	10	2002	83	9	92	34	2015	63	3	66	58
1990	115	49	165	10	2003	141	0	141	52	2016	79	10	89	44
1991	89	57	147	21	2004	143	3	146	54	2017	66	3	69	62
1992	106	39	145	37	2005	206	23	229	55	2018	64	3	67	51
1993	113	29	143	41	2006	259	11	270	43	2019	52	3	55	73
1994	153	27	181	30	2007	145	30	175	64	2020	46	4	50	80
1995	112	25	136	38	2008	155	8	163	41	2021	41	0	41	63
1996	62	19	82	24	2009	116	9	125	46	2022	67	0	67	59
1997	NA	NA	NA	NA	2010	105	0	105	69					
1998	NA	NA	NA	NA	2011	95	11	107	65					



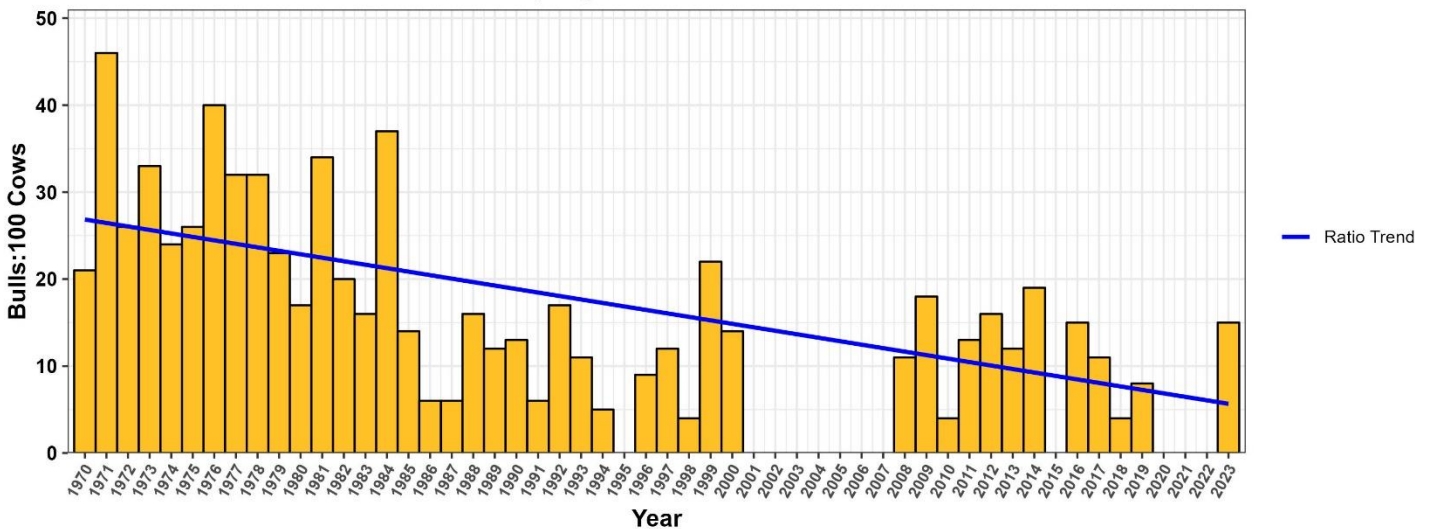
HD 150 Elk Spring Total Count 1970-2023



HD 150 Elk Spring Recruitment Survey 1970-2023



HD 150 Elk Spring Bull to Cow Ratio 1970-2023



## HD 150 Spring Elk Surveys 1970 - 2022

Year	Cows	Calves	Bulls	Unclass	Total	Calves: 100 Cows	Bulls:100 Cows
1970	228	42	49	0	312	27	21
1971	99	24	46	0	169	24	46
1972	283	35	73	0	391	12	26
1973	337	86	111	0	534	26	33
1974	192	67	46	0	305	35	24
1975	152	34	40	0	226	22	26
1976	90	17	36	0	143	19	40
1977	237	60	77	0	374	25	32
1978	218	57	70	0	345	26	32
1979	328	83	75	0	486	25	23
1980	299	68	50	0	417	23	17
1981	146	36	50	663	895	25	34
1982	259	48	51	0	358	19	20
1983	406	97	63	183	749	24	16
1984	337	87	126	535	1085	26	37
1985	421	73	57	328	879	17	14
1986	466	179	28	96	769	38	6
1987	510	93	32	67	702	18	6
1988	456	175	74	347	1052	38	16
1989	633	179	74	63	949	28	12
1990	505	120	64	19	708	24	13
1991	565	51	34	0	650	9	6
1992	342	77	57	132	608	23	17
1993	397	83	45	0	525	21	11
1994	251	68	13	178	510	27	5
1995	NA	NA	NA	555	555	NA	NA
1996	119	22	11	NA	NA	19	9
1997	210	33	26	NA	NA	16	12
1998	217	24	9	NA	NA	11	4
1999	107	37	24	NA	NA	35	22
2000	236	75	33	8	352	32	14
2001	NA	NA	NA	NA	NA	NA	NA
2002	NA	NA	NA	NA	NA	NA	NA
2003	87	21	64	338	510	24	74
2004	127	36	49	254	466	28	39
2005	NA	NA	NA	NA	NA	NA	NA
2006	NA	NA	NA	NA	NA	NA	NA
2007	NA	NA	NA	NA	NA	NA	NA
2008	225	30	25	0	280	13	11
2009	235	12	42	66	355	5	18
2010	225	42	16	0	283	19	4
2011	269	21	36	0	326	8	13
2012	305	117	50	0	472	38	16
2013	325	57	53	0	435	18	12
2014	357	56	69	0	482	16	19
2015	NA	NA	NA	NA	NA	NA	NA
2016	259	49	39	0	347	19	15
2017	226	18	22	0	266	8	11
2018	165	12	7	13	197	7	4
2019	168	16	14	0	198	10	8
2020	NA	NA	NA	NA	NA	NA	NA
2021	NA	NA	NA	NA	NA	NA	NA
2022	NA	NA	NA	NA	NA	NA	NA
2023	157	25	24	0	206	16	15



# HD 170 FLATHEAD RIVER

Flathead River EMU

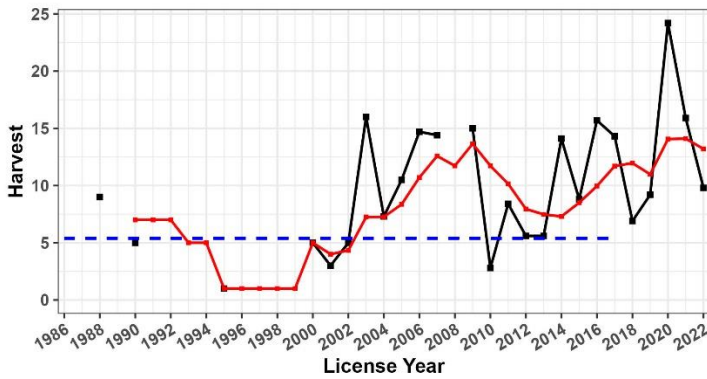
**NUMERICAL GOALS:**

- 5-year bull harvest average above or increasing toward long-term average



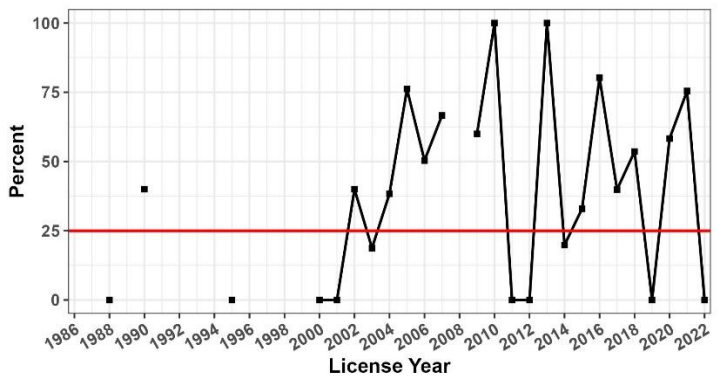
HD 170 Antlered Elk Harvest

— LTA — 5-Year Rolling Avg.



HD 170 % ≥ 6 Points

— Goal Minimum



No Survey Data Available for HD 170

### HD 170: Elk Harvest Statistics 1986 - 2022

Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt	Year	Antlered	Antlerless	Total	% 6pt
1986	0	5	5	NA	1999	0	3	3	NA	2012	6	8	14	0
1987	NA	NA	NA	NA	2000	5	11	16	0	2013	6	20	25	93
1988	9	0	9	0	2001	3	3	6	0	2014	14	3	17	20
1989	0	2	2	NA	2002	5	5	10	40	2015	9	12	20	32
1990	5	0	5	40	2003	16	0	16	19	2016	16	13	28	79
1991	0	5	5	0	2004	7	24	31	40	2017	14	25	39	41
1992	NA	NA	NA	NA	2005	10	8	19	80	2018	7	6	13	53
1993	NA	NA	NA	NA	2006	15	4	18	49	2019	9	6	15	0
1994	NA	NA	NA	NA	2007	14	0	14	69	2020	24	28	52	59
1995	1	0	1	0	2008	0	12	12	NA	2021	16	15	31	75
1996	NA	NA	NA	NA	2009	15	15	30	60	2022	10	29	39	0
1997	NA	NA	NA	NA	2010	3	6	8	93					
1998	NA	NA	NA	NA	2011	8	14	22	0					





## 2022 Region One Elk Report

Version: 2022.5

Date: 5-Dec-23

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