

2023 Minnesota Elk Harvest Report

Barbara Keller, Big Game Program Leader Jason Wollin, Karlstad Area Wildlife Supervisor Kyle Arola, Thief Lake Wildlife Area Supervisor

Introduction

Legislation passed in 2016 (MN Statute 97B.516b) directed the Department of Natural Resources (DNR) to "...not manage an elk herd in Kittson, Roseau, Marshall, or Beltrami counties in a manner that would increase the size of the herd, including adoption or implementation of an elk management plan designed to increase an elk herd, unless the commissioner of agriculture verifies that crop and fence damages paid under section 3.7371 and attributed to the herd have not increased for at least two years." In response, DNR adopted an Interim Strategic Management Plan for Elk in 2016 that will maintain a status quo in elk numbers at the current population estimates. This set the Kittson Central herd goal at 50-60 elk. Plans will be made to update the Strategic Management Plan for Elk.

DNR conducts an annual aerial elk population survey every winter, when proper survey conditions exist, which consists of a minimum count of all elk observed during the survey. DNR staff use fixed-wing aircraft to conduct aerial elk surveys for the Grygla and Kittson elk herds. The survey for the Kittson Central herd was completed in February of 2023, and the area surveyed was consistent with past years. See Table 1 and Chart 1 for Kittson Central survey results. Total elk recorded within the Kittson Central block in 2023 was 75 and included: 50 antlerless and 25 bulls. Given the minimum elk count was above the population goal of 50-60 elk, the DNR continued with implementation of elk hunting seasons for 2023 consistent with past seasons.

In 2023, there were two established zones open for elk hunting in Minnesota: 1) Zone 20 - Kittson Central and 2) Zone 30 - Kittson Northeast (Figure 1). The Zone 20 – Kittson Central zone was expanded this year to the south and west. Elk hunting in Zone 10 - Grygla, has been closed since 2013 because the population is below goal (Figure 2). In an effort to move the Kittson Central herd towards goal range, this year the number of seasons held in Zone 20 was three regular season hunts. For the Zone 20 - Kittson Central there were six license/season date options: 1) Season A/D – Sept. 9 through Sept. 17; 2) Season B/E – Sept. 23 through Oct. 1; 3) Season C/F – Oct. 7 through Oct. 15. There were two regular season hunts in Zone 30 - Kittson Northeast for five licenses/season date options: 1) Season G – Sept. 9 through Sept. 17; 2) Season H – Sept. 23 through Oct. 1. All of the seasons were 9 days in length, including two weekends, centered around the elk rut. These dates were also chosen to avoid conflict with the Youth Firearm Deer Season on Oct. 19 through Oct. 22 and the Regular Firearm Deer Season Nov. 4 through Nov. 12. Overall, hunter success rates were lower this year.

Hunting season options and license lottery

A total of 17 licenses were available and 3,724 individuals or parties (up to two hunters) applied for the opportunity to hunt elk in Minnesota (Table 2). Applicants were given the opportunity to select both zone and season in which to hunt. Seasons in Zone 20 were also split between either-sex and antlerless-only licenses. This allowed applicants to choose the type of license desired during their application.

The Minnesota elk lottery is a three-step process. First, a lottery for applicants that had applied for 10 years or more (20% = 3 licenses offered in 2023) is conducted. The 10-year lottery is run when total licenses available in all zones combined is equal to or greater than five (20% of 5 licenses = 1 license for 10 year lottery pool). Once the 10 year applicant lottery is run, the second round was for qualifying landowner applicants for Zone 20 (20% = 2 licenses offered in 2023) and landowner applicants for Zone 30 (20% = 1 license offered in 2023). The landowner lottery is run when total licenses within a Zone (Zone 20 or 30) is equal to or greater than five, thus it was run for both Zone 20 and Zone 30 in 2023. All remaining applicants not selected in the first two steps were then placed into the general drawing with all the other applicant names for the remaining elk licenses (60%) available in the zone and season they had selected on their application.

Hunter orientation and elk sample collection

All elk hunters are required to attend a mandatory orientation session the Friday before a given hunt. At this session, DNR staff go over the logistics of the elk hunt and explain how we collect biological samples from their harvested animal. Hunters must register their animal in person within 24 hours at the local DNR office and provide biological samples. DNR staff help map the harvest location, provide a possession tag, and collect biological samples. DNR staff collect lymph nodes, the obex (brain stem), muscle, hair, and a tooth so an accurate age can be determined via cementum annuli. Alternative arrangements are made for the collection of some samples, if immediate collection would interfere with a hunter's planned taxidermy mount. DNR staff submit all biological samples to the DNR Wildlife Health Program for disease testing and other monitoring projects.

Elk harvest results

In 2023, a total of 11 elk were harvested in Zones 20 and 30 combined (Table 3), for an overall hunter success rate of 50% for Zone 20 and 100% for Zone 30. Although success rates were lower than in the past, there was a gradual decrease in success rates for Zone 20 as the seasons progressed. Three bull elk were taken from hunters using either-sex licenses for Zone 20, and three antlerless elk were taken by hunters using antlerless-only licenses. Five bull elk were taken by hunters using either-sex licenses for Zone 30. Long-term elk harvest for all zones is depicted in Tables 4, 5, and 6.

Elk hunt in the 1863 Treaty Territory

In 2023, the Red Lake Band of Chippewa Indians offered a lottery for 30 permits for tribal members to hunt elk in the area included under the 1863 Old Crossing Treaty. Elk harvest was capped at 15. Hunting season dates were Sept. 15 to Dec. 31, 2023 and permits could be used to harvest either antlered or antlerless elk. Ten elk were reported to be taken during this season.

Year	Number of bulls surveyed	Number of antlerless surveyed	Total number surveyed				
2008	14	46	60				
2009	16	29	45				
2010	NO S	NO SURVEY COMPLETED THIS YEAR					
2011	12	31	43				
2012	NO S	URVEY COMPLETED THIS	YEAR				
2013	17	28	45				
2014	17	20	37				
2015	18	16	34				
2016	18	34	52				
2017	16	45	61				
2018	18	57	75				
2019	33	61	94				
2020	33	69	102				
2021	NO SURVEY COMPLETED THIS YEAR						
2022	33	51	84				
2023	25	50	75				

Table 1. Kittson Central (Zone 20) elk survey count, 2008-2023

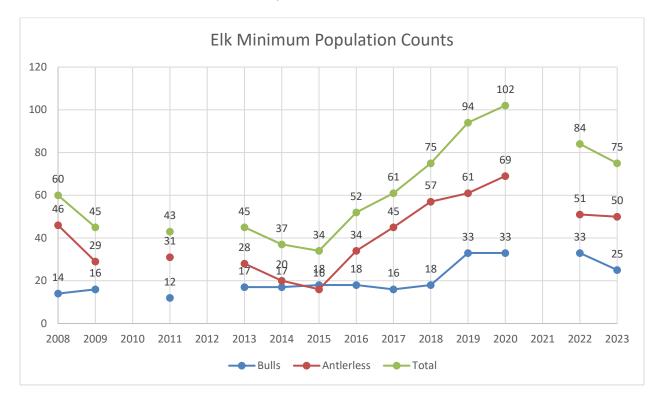


Chart 1. Kittson Central (Zone 20) elk survey count, 2008-2023

Zone	Season Dates	Either-Sex	Antlerless- Only	Total	Total Applicants
Zone 20	A: Sept. 9–Sept. 17	2	0	2	818
Zone 20	D: Sept. 9–Sept. 17	0	2	2	74
Zone 20	B: Sept. 23–Oct. 1	2	0	2	761
Zone 20	E: Sept. 23–Oct. 1	0	2	2	81
Zone 20	C: Oct. 7–Oct. 15	2	0	2	545
Zone 20	F: Oct. 7–Oct. 15	0	2	2	69
Zone 30	G: Sept. 9–Sept. 17	3	0	3	915
Zone 30	H: Sept. 23–Oct. 1	2	0	2	461
OVERALL	TOTAL	11	6	17	3,724

Table 2. License allocation and application numbers of the 2023 Minnesota elk seasons

Table 3. Distribution of the 2023 Minnesota elk harvest.

Zone 20									
Season	Either-Sex Licenses	Antlerless Licenses	Bulls taken	Antlerless taken	Total elk taken	Success rate			
Season A & D (Sept. 9–Sept. 17)	2	2	2	1	3	75%			
Season B & E (Sept. 23–Oct. 1)	2	2	1	1	2	50%			
Season C & F (Oct. 7–Oct. 15)	2	2	0	1	1	25%			
Total	6	6	3	3	6	50%			

Kittson County Central Hunt

Kittson County Northeast Hunt

Zone 30

Season	Either-Sex Licenses	Antlerless Licenses	Bulls taken	Antlerless taken	Total elk taken	Success rate		
Season G (Sept. 9–Sept. 17)	3	0	3	0	3	100%		
Season H (Sept. 23–Oct. 1)	2	0	2	0	2	100%		
Total	5	0	5	0	5	100%		

Year	Total Bull or Either-Sex Licenses	Total Bulls Harvested	Total Antlerless Licenses	Total Antlerless Harvested	Total Harvest	Hunter Success Rate
1987	2	1	2	1	2	50%
1996	2	2	7	6	8	89%
1997	5	1	5	2	3	30%
1998	4	2	0	0	2	50%
2004	1	1	4	2	3	60%
2005	1	0	4	0	0	0%
2006	2	2	6	2	4	50%
2007	0	0	6	6	6	100%
2008	2	2	10	6	8	67%
2009	2	2	12	12	14	100%
2010	2	1	5	3	4	57%
2011	2	2	3	0	2	40%
2012	2	1	3	0	1	20%

Table 4. Grygla (Zone 10) elk harvests, 1987-2012

Year	Total Bull or Either-Sex Licenses	Total Bulls Harvested	Total Antlerless Licenses	Total Antlerless Harvested	Total Harvest	Hunter Success Rate
2008	1	1	10	10	11	100%
2009	12	9	4	5	14	88%
2010	1	1	3	3	4	100%
2011	2	3	6	4	7	88%
2012	3	3	13	3	6	38%
2013	6	4	15	6	10	48%
2014	7	4	0	0	4	57%
2015	5	3	0	0	3	60%
2016	5	3	0	0	3	60%
2017	6	5	2	1	6	75%
2018	4	3	16	12	15	75%
2019	4	4	21	10	14	56%
2020	18	15	24	20	35	83%
2021	8	7	20	16	23	82%
2022	8	7	20	8	15	54%
2023	6	3	6	3	6	50%

Table 5. Kittson Central (Zone 20) elk harvests, 2008-2023

Year	Total Bull or Either-Sex Licenses	Total Bulls Harvested	Total Antlerless Licenses	Total Antlerless Harvested	Total Harvest	Hunter Success Rate
2012	2	1	0	0	1	50%
2013	2	2	0	0	2	100%
2014	2	2	0	0	2	100%
2015	2	2	0	0	2	100%
2016	2	2	0	0	2	100%
2017	5	4	0	0	4	80%
2018	2	2	0	0	2	100%
2019	2	1	0	0	1	50%
2020	2	2	0	0	2	100%
2021	2	2	0	0	2	100%
2022	2	2	0	0	2	100%
2023	5	5	0	0	5	100%

Table 6. Kittson Northeast (Zone 30) elk harvests, 2012-2023

Figure 1. Kittson County Elk Hunt Zones.

Minnesota Elk Hunt Zones

