

ELK HERD UNIT MANAGEMENT PLAN
Elk Herd Unit #22
BEAVER
2023

BOUNDARY DESCRIPTION

Beaver, Garfield, Iron, Millard, Piute and Sevier counties—Boundary begins at SR-130 and I-15; north on SR-130 to SR-21; north on SR-21 to SR-257; north on SR-257 to Black Rock Road; east on this road to I-15; south on I-15 to I-70; east on I-70 to US-89; south on US-89 to SR-20; west on SR-20 to I-15; south on I-15 to SR-130. Excludes all CWMUs.

Any Bull Elk Unit Boundary

Beaver, West (West of I-15) - Beaver, Iron, and Millard Counties--Boundary begins at SR-130 and I-15; north on SR-130 to SR-21; north on SR-21 to SR-257; north on SR-257 to Black Rock Road; east on Black Rock Road to I-15; south on I-15 to SR-130. EXCLUDES ALL NATIVE AMERICAN TRUST LANDS WITHIN THIS BOUNDARY. Excludes all CWMUs.

Limited Entry Bull Elk Unit Boundary

Beaver, East (East of I-15) - Beaver, Garfield, Iron, Millard, Piute, and Sevier Counties – Boundary begins at I-15 and I-70; east on I-70 to US-89; south on US-89 to SR-20; west on SR-20 to I-15; north on I-15 to I-70. EXCLUDES ALL NATIVE AMERICAN TRUST LANDS WITHIN THIS BOUNDARY. Excludes all CWMUs.

UNIT MANAGEMENT GOALS

- Manage for a population of healthy animals capable of providing a broad range of recreational opportunities including hunting and viewing
- Consider impacts of the elk herd on other land uses and public interests including private property rights, agricultural crops, private development rights, and local economies
- Maintain the population at a level that is within the long-term capability of the available habitat to support

UNIT MANAGEMENT OBJECTIVES

Habitat

- Maintain and/or enhance forage production through direct range improvements throughout the unit to achieve population management objectives.
- Projects that remove decadent conifer stands and promote aspen re-generation are a top priority for the unit. Work with private and federal agencies to maintain and protect crucial and existing winter range from future losses.
- Provide improved habitat security and escapement opportunities for elk.
- Provide as much opportunity as possible for elk to navigate roadways safely.
- Utilize GPS technology to learn more about elk movement on the unit as funding and workloads allow.

Population - Target population objective will range from 1150 to 1350 elk (modeled estimate) on the Beaver, East portion of the unit. Previously, the population objective was static at 1050 total elk on both portions of the unit. DWR will manage towards the top or bottom of the range depending on forage availability. DWR will communicate annually with land management agencies regarding forage conditions. If livestock permittees are forced to limit use on public land due to poor forage conditions caused by drought, DWR will manage towards the lower end of the population objective. Elk numbers on the Beaver, West portion (west of I-15) will be kept as low as possible.

The 2023 Beaver elk plan committee recommends a mid-plan review in 5 years following the statewide elk mid-plan review in order to discuss increasing the elk population objective. The committee recognizes that in order to increase the elk population objective further, more habitat work will need to be completed. Specifically, the committee recommends a minimum of 15,000 acres be improved South of Highway 153 that will increase the carrying capacity of the range. The main purpose of the mid-plan review will be to

discuss increasing the population objective if that 15,000 minimum acreage goal has been met.

Bull Elk Harvest Objectives - Maintain a 3-year average bull harvest age of 6.5-7.0 years for all hunt types on the Beaver, East unit per the Statewide Elk Plan. Utilize public hunting as much as possible to manage elk on the unit. Provide antlerless, general season spike-only, limited entry bull, and general any-bull hunting opportunities.

CURRENT STATUS OF ELK MANAGEMENT

Habitat

Range Area and Approximate Ownership

Beaver, East Elk Habitat						
	Summer Range		Winter Range		Total	
Ownership	Area (Acres)	%	Area (Acres)	%	Area (Acres)	%
BLM	7,408	3	95,329	49	102,737	24
DNR	350	0	1,508	1	1,858	0
Private	14,904	6	18,165	9	33,069	8
SITLA	1,977	1	10,244	5	12,221	3
Tribal	-	0	-	0	-	0
UDOT	-	0	-	0	-	0
USFS	212,633	90	70,548	36	283,181	65
Total	237,272		195,764		433,066	

Beaver, West Elk Habitat						
	Year-long Range		Winter Range		Total	
Ownership	Area (Acres)	%	Area (Acres)	%	Area (Acres)	%
BLM	63,975	81	9,422	85	73,398	81
DNR	39	0		0	39	0
Private	8,682	11	1,201	11	9,883	11
SITLA	6,555	8	513	5	7,068	8
Tribal	-	0	-	0	-	0
UDOT	-	0	-	0	-	0
USFS	-	0	-	0	-	0
Total	79,251		11,136		90,388	

Habitat Projects Completed 2016 - 2023

Project Title	Acres
Cinder Cone Fire Restoration Project	602
Cove Creek Fire Rehab	990
First Spring Road Harrow	66
Fremont-Little Valley Mastication	1322
Chipman Peak - Paragonah Allotment Vegetation Treatment	2754
Beaver Ridge Stewardship	136
Beaver River Watershed Improvement, Phase 1 WRI and Shared Stewardship	889
South Beaver and Little Dog Valley Watershed Imp, Phase I	2358
Indian Creek South Pasture II	2751
Indian Creek South Pasture	2439
Skull Flat Fire Rehabilitation and Stabilization Project	514
Beaver Ridge Stewardship Seeding	136
Deer Flat Lop and Scatter Project	725
Beaver WMA's Cheatgrass Control Project	770
North Beaver Prescribed Fire and Seeding (Baker/Face)	1003
Little Bear Valley to Fremont Canyon Sagebrush Steppe Habitat Restoration	6467
Project Maintenance - South Beaver	4252
Dog Valley Hand Thinning	9768
South Beaver Buckskin Valley Phase II	1039
Indian Creek West Drag Chaining	1684
Indian Creek (Upper Wildcat)	1573
Deer Flat/Ekker Ranch Discretionary Seed Project	80
Indian Creek Wildcat	1244

Population - As of 2023, the elk population on this unit is estimated to be under the previous objective of 1,050 elk. An aerial survey was conducted on this unit in February 2022. During this flight 644 elk were counted, giving a population estimate of 850 animals. The average age of harvested bulls in 2022 was above objective at 8.6, with the three-year average at 8.4. Permit numbers for bulls remained relatively stable from 2016-2022, but increased significantly in 2022 from 38 total permits to 65 in order to bring the average age of harvest closer to the objective of 7.5-8.0 yrs. The Statewide elk plan then decreased the age objective down to 6.5-7.0 in 2022 which resulted in another significant increase in permits for the 2023 hunting season.

BARRIERS TO ACHIEVING UNIT MANAGEMENT OBJECTIVES

Habitat - Invasion by spruce-fir and pinyon-juniper has reduced the productivity of much of the summer and winter ranges for elk. Heavy human activity along the Paiute ATV trail may also be responsible for reducing elk use of traditional calving areas and increasing elk use of posted private land and roadless areas on the Forest. The fencing of I-15 and I-70 has limited elk migration to important winter habitat in the areas west of Manderfield and Sulphurdale and east of Cove Fort. Winter range damage in these areas could become a potential problem if elk populations become too large. DWR will hold localized hunts to re-distribute elk in these areas if habitat degradation occurs due to over-use of elk.

Population - Crop depredation near Marysville, Circleville, Beaver, Sulphurdale, and Manderfield present barriers to increasing elk numbers in these areas. Steps to minimize depredation as prescribed

by state law and DWR policy will be implemented as needed. DWR will be aggressive in allowing private landowners to apply hunting pressure on private land in order to re-distribute local elk populations. I-15 and I-70 were previously sources of significant highway mortality for elk. North and south lane fencing of these interstates has been completed since the fall of 2010 and has significantly decreased ungulate mortality along these roadways. Highway 20 and 89 are currently not a source of significant mortality. Development of the east bench of Beaver and LaBaron and Puffer lake areas has the potential to increase disturbance, disrupt movements of elk, increase vehicle collisions, and damage habitat. This plan supports steps taken to minimize development and protect areas of habitat and refuge for elk on the unit.

STRATEGIES FOR REMOVING BARRIERS AND REACHING UNIT MANAGEMENT OBJECTIVES

Beaver Elk Committee Input

- In May 2023, the Beaver elk committee met to discuss the elk management plan. We discussed many items including the following: changes in the statewide elk plan, current population objective, past population estimates, elk distribution, production rates, private land conflicts, forage competition between elk and cattle, etc. Below is a brief synopsis of the major decisions and discussion:

Much of the discussion centered on a possible increase in the population objective. The committee eventually reached a consensus with a flexible range objective of 1150-1350 that was dependent on annual forage production. This is an increase from the previous objective of 1050.

The majority of the committee supported a larger population objective increase with a range of 1300-1500. In order to reach a consensus however, the committee landed on the current recommendation of 1150-1350 with the caveat that in 5 years we will reconvene to review how things have gone with the new objective and discuss a further increase. It was also agreed upon that in 5 years the committee will not recommend an increase if a minimum of 15,000 acres of range improvement hasn't been completed South of Highway 153.

Another major point of discussion was how we can implement tools to distribute elk across the unit. Tools such as mitigation permits/vouchers and depredation hunts will continue to be aggressively used by DWR in order to pressure elk that cause damage on private lands. Public antlerless hunts will also be used on a more surgical basis to pressure elk away from any public land areas where concerns may arise of habitat degradation. A somewhat newer idea that was discussed heavily was using depredation hunter pool hunts in these efforts to quickly and reactively respond to high densities of elk causing damage in a localized area. DWR can often have hunters on the ground within a week to move elk during the hunting season using the depredation hunter pool to re-distribute animals. DWR will continue to communicate with land management agencies to monitor when this tool is needed.

Habitat - The 2023 Beaver Elk Plan Committee requests an increased focus for higher elevation (>8,000 ft) habitat improvement projects South of Highway 153. Recent changes in the landscape (mostly fire) has increased elk densities on the Northern half of the unit. In an effort to create more suitable habitat and better distribute elk, the committee recommends a focus be placed on the drainages South of Hwy 153 such as: Birch Creek Mountain, Big Twist, Thompson Ridge, South Fork of Beaver River, and Circleville Mountain.

- Range Improvements: Maintain and/or enhance forage production on elk summer and winter range throughout the Beaver Unit. Coordinate with the USFS and BLM to complete projects designed to improve forage production for elk to improve elk distribution across the unit. Support federal land management agencies in managing vehicle access in order to provide and maintain refuge areas for elk.
- Winter Range: Continue to monitor the permanent range trend studies located throughout the winter range. When helpful, conduct annual spring range rides to assess winter habitat with the land management agencies and the public.
- Corridors: Cooperate with land management agencies and private landowners to identify crucial areas of elk habitat and work together to maintain and enhance elk habitat corridors. Work with UDOT to maintain and enhance signing, wildlife ramps, over/underpasses, and other wildlife crossing structures.

Population

- Monitor age class structure of the bull population through the use of check stations, uniform harvest surveys, field bag checks, pre-season classification, tooth age data, and aerial

classification. Age class will not be monitored on the Beaver, West general season any bull portion of the unit.

- Recruitment: Aerial and/or ground classification will be conducted annually to determine population status, calf recruitment, calf/cow ratios, and range distribution.
- Harvest: The primary means of monitoring harvest will be through the statewide uniform harvest survey, check stations, and field bag checks. The target population size will be achieved through antlerless harvest using a variety of harvest methods and seasons.
- Distribution: DWR may hold targeted cow elk hunts when it is necessary for private land conflicts, and range health on public land. Ideas discussed by the committee include public antlerless hunts, and quicker reaction efforts like depredation hunter pool hunts. These tools allow DWR to have hunters on the ground quickly pressure elk in small, isolated areas. DWR will also continue to be aggressive with issuing mitigation permits, doing DWR removals, and holding depredation hunts when private land conflicts occur on the Beaver unit.

Duration of This Management Plan - This Unit Management Plan was revised in 2023 following the revision of the Statewide Elk Management Plan. This Unit Management Plan will be revised after the next Statewide Elk Management Plan revision to ensure all current management tools are being used. CWMU operators and landowners requested a mid-plan review and revisions may take place when improved data or management tools become available, or to address future issues. Unit elk plan goals, objectives, and strategies are constrained within the sideboards set in the Statewide Elk Plan, which supersedes unit plans. It is possible that changes to the Statewide Elk Plan may affect unit plans. Additionally, changes to Utah State Code and/or Administrative Rule may also affect elk unit plans.

APPENDIX

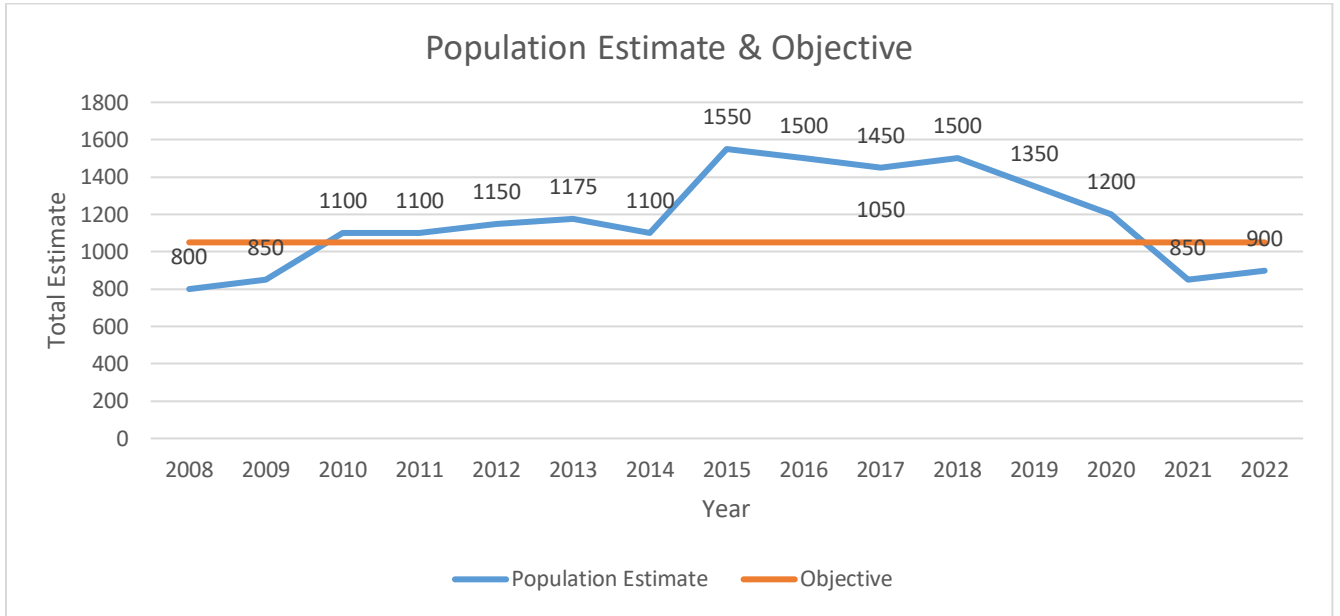


Figure 1. Beaver, East Unit elk population trends, Utah 2008 - 2022.

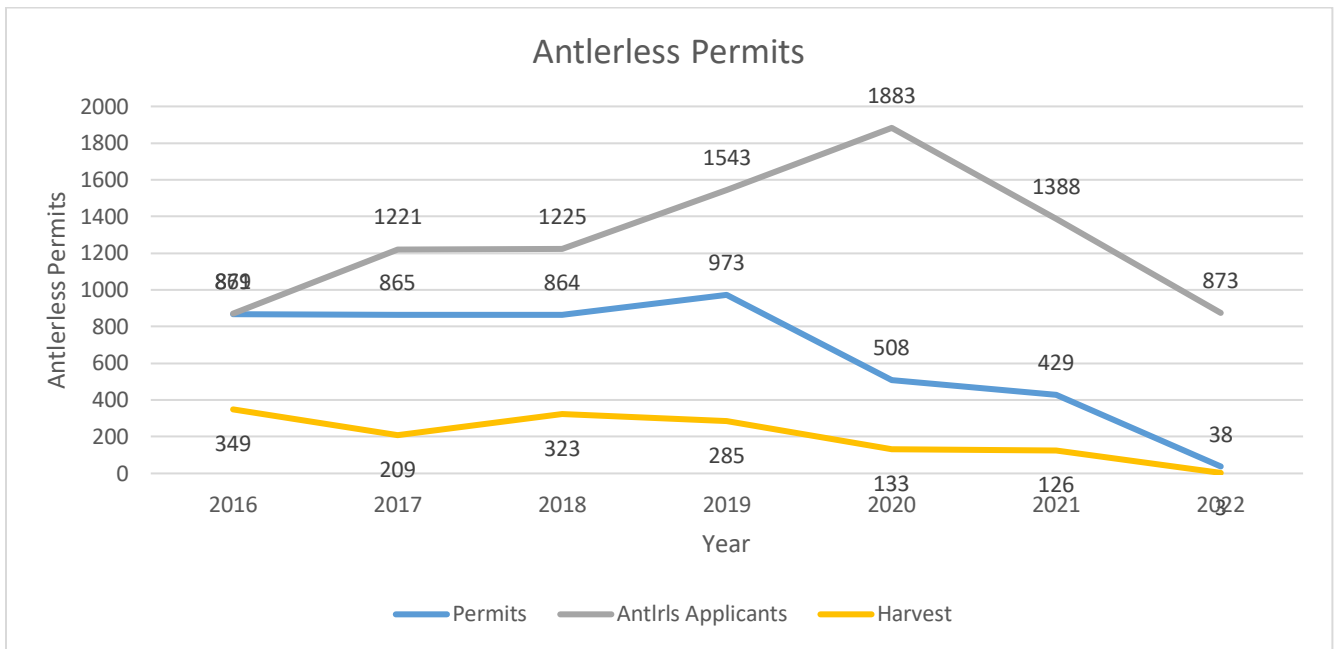


Figure 2. General season antlerless elk permits issued on the Beaver, East. 2016-2022.

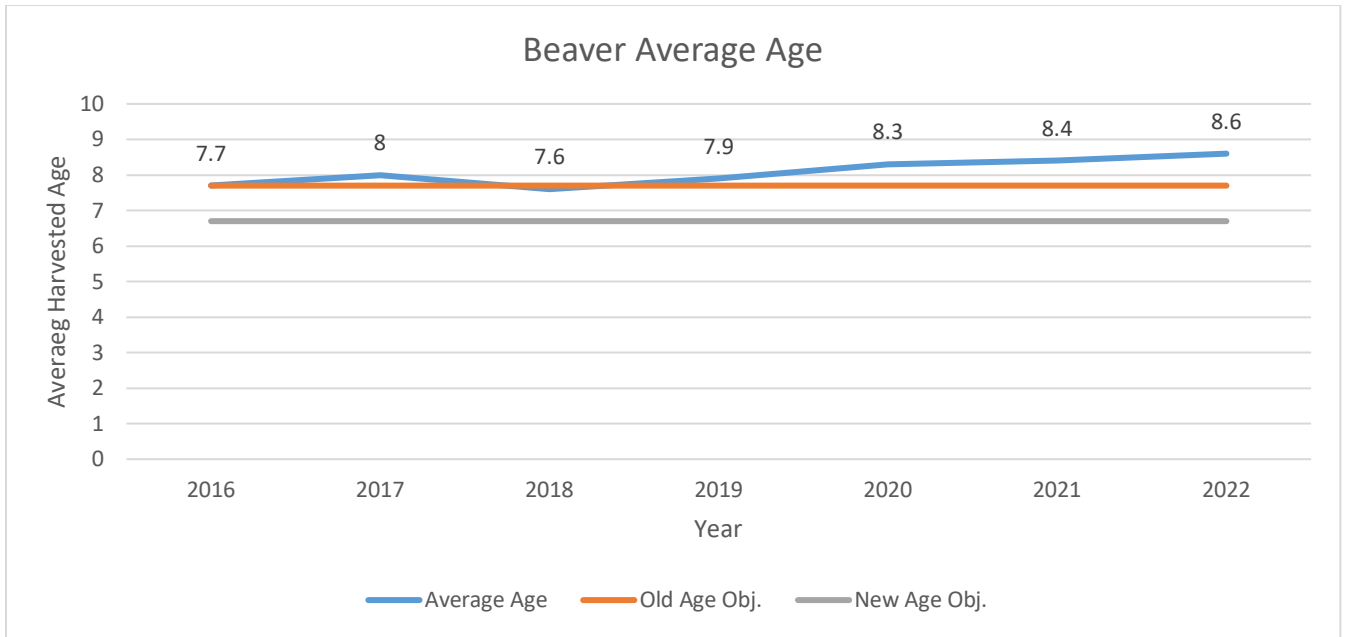


Figure 3. Average age of harvested bulls and permit numbers for the Beaver, East Unit. 2016-2022

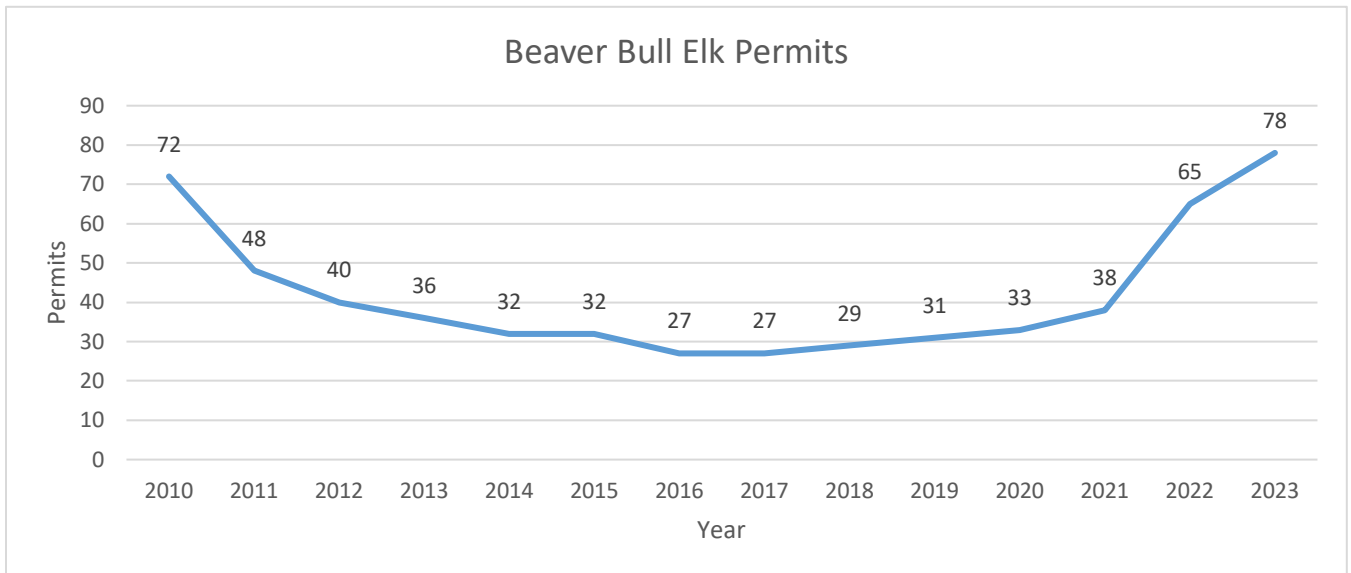


Figure 4. Limited entry bull elk permits issued on the Beaver, East. 2010-2023

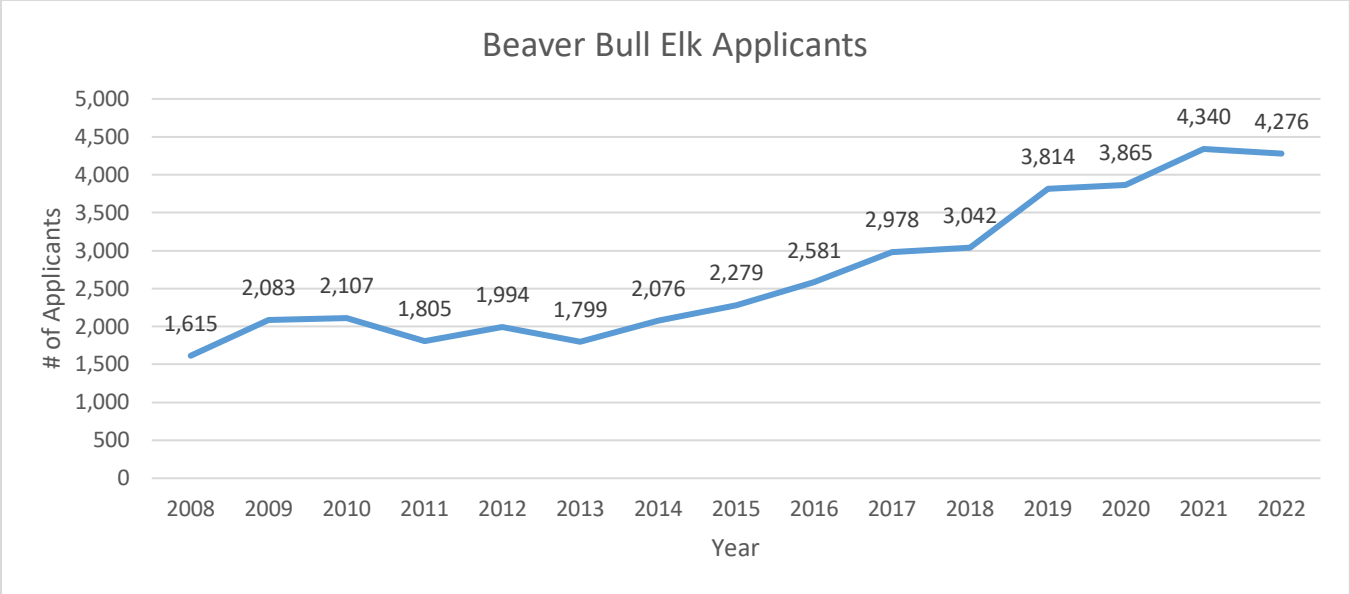


Figure 5. Total number of permit applicants for limited entry bull elk on Beaver, East. 2008-2022