

ELK MANAGEMENT PLAN
Unit #22 Beaver
2016

BOUNDARY DESCRIPTION

Beaver, East (East of I-15; Limited Entry)

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.

Beaver, West (West of I-15; General Season, Any Bull)

Boundary begins at I-15 and SR-130; north on SR-130 to the Black Rock road; east on the Black Rock road to I-15; south on I-15 to SR-130.

LAND OWNERSHIP

(Total Unit Area: 1,150,656 acres; Elk Habitat: 530,647)

Ownership	Yearlong range		Summer Range		Winter Range	
	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	0	0%	218,968	90%	70,831	34%
Bureau of Land Management	63,957	81%	7,405	3%	104,723	50%
Utah State Institutional Trust Lands	6,554	8%	1,976	1%	12,895	6%
Native American Trust Lands	0	0%	0	0%	247	<1%
Private	8,683	11%	15,127	6%	17,254	8%
Department of Defense	0	0%	0	0%	0	0%
USFWS Refuge	0	0%	0	0%	0	0%
National Parks	0	0%	0	0%	0	0%
Utah State Parks	0	0%	0	0%	0	0%
Utah Division of Wildlife Resources	40	0%	480	0%	1,507	1%
TOTAL	79,234	100%	243,956	100%	207,457	100%

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.

POPULATION MANAGEMENT OBJECTIVES

Target Winter Herd Size: Achieve a target population objective of 1,050 elk (modeled estimate) on the unit. Elk numbers on the Beaver, West portion of the unit (west of I-15) will be kept as low as possible and will continue to be hunted as a general season any bull unit.

Bull Age Structure: Maintain a 3-year average bull harvest age of 7.5-8.0 years for all hunt types on the Beaver, East unit. Age structure will not be monitored on the Beaver, West portion of the unit.

Recruitment: Determine annual recruitment and population status of the herd.

Harvest: Provide antlerless, general season spike-only, general season any-bull, and limited entry any-bull hunt opportunities.

POPULATION MANAGEMENT STRATEGIES

Monitoring: Utilize harvest data, aerial trend counts, and pre-season classification data to estimate wintering elk population.

Bull Age Structure: Monitor age class structure of the bull population through the use of check stations, harvest surveys, field bag checks, preseason classification, tooth age data, and aerial classification. Age class will not be monitored on the Beaver, West 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 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.

CURRENT POPULATION STATUS

The elk population on this unit is estimated to be over the objective of 1,050 elk. An aerial survey was conducted on this unit in February 2016. During this flight 1,258 elk were counted, giving a population estimate of 1,550 animals.

The average age of harvested bulls in 2015 was 6.9, down from the three-year average of 7.2 years. The cow:calf ratio in 2015 was 54 calves per 100 cows. Permit numbers for bulls have decreased slightly over the last few years in order to bring the average age of bulls harvested in line with the objective of 7.5-8.0.

HABITAT MANAGEMENT OBJECTIVES

Range Improvements: Maintain and/or enhance forage production through direct range improvements throughout the unit to achieve population management objectives. By 2018, improve a minimum of 15,000 acres of elk habitat, with a minimum of 10,000 acres of this total completed in the mountain brush or aspen communities and may include rehabilitation after wildfires.

Winter Range: Work with private and federal agencies to maintain and protect crucial and existing winter range from future losses.

Corridors: Provide improved habitat security and escapement opportunities for elk. Provide as much opportunity as possible for elk to navigate roadways safely.

HABITAT MANAGEMENT STRATEGIES

Range Improvements: Maintain and/or enhance forage production on elk summer and winter range throughout the Beaver Unit. Coordinate with the Beaver Ranger District and BLM to complete projects designed to improve forage production for both elk and cattle and 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. Conduct annual spring range assessments of 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.

HABITAT IMPROVEMENT PROJECT FOCUS AREAS

The 2012 Beaver Elk Plan Committee designated three areas of focus for habitat improvement projects for elk on the unit: Pine Creek, Jimmy Reed, and South Creek. These areas include important summer and winter range that can be improved to better benefit elk and livestock. All of these areas have had projects completed since 2012.

HABITAT IMPROVEMENT PROJECTS

Completed projects by BLM, NRCS, USFS, UDWR since 2006:

- SR Shrub Seedlings - 386 acres
- South Beaver Vegetation Enhancement Project Year 1 - 2664 acres
- P-Hill One-way Harrow - 2894 acres
- SR Shrub Seedlings Year 2 - 386 acres
- Beaver/Mtn Home Post Harrow PJ Cutting - 682 acres
- Dog Valley/Interchange Private Lands Fire Rehabilitation - 193 acres
- SR Shrub Seedlings Year 3 - 916 acres
- Bullion Pasture Watershed Improvement - 270 acres
- South Beaver Vegetation Enhancement Project Year 3 - 623 acres
- South Beaver SITLA vegetation enhancement - 651 acres
- Milford Flat Fire Rehabilitation - Missouri Flat - 3359 acres
- Milford Flat Fire Rehabilitation - JK - 382 acres
- Spry Sagebrush Restoration - 2818 acres
- Milford Flat Fire Rehabilitation and Contracting - 119052 acres
- South Beaver Vegetation Enhancement Yr 4 - 2476 acres
- SR Shrub Seedlings Yr 4 - 26 acres
- Indian Creek Chaining Project - 1100 acres
- Ranch Canyon Plateau - 393 acres
- Wildcat Discretionary Seed - 151 acres
- South Beaver Vegetation Enhancement Year 5 - 4394 acres
- Beaver North Creek WMA Habitat Improvement - 322 acres
- Panguitch Creek/South Beaver Dedicated Hunter Habitat Projects maintenance - 651 acres
- Twitchell Canyon Fire Rehab - 72648 acres
- Blue Valley Shrubsteppe Improvement Project - 313 acres
- Woodland Stewardship Project enhancement; Cedar City FO; FY 12 and 13 - 33 acres
- South Beaver Vegetation Enhancement Year 6 - 2439 acres
- City Creek Sagebrush-steppe Enhancement Year 1 - 1755 acres
- Beaver/Fillmore WMA Unauthorized Road Closures - 12 acres
- Youngsfield/Nixon WMA Herbicide Treatment - 152 acres
- Bucket Hollow Lop and Scatter - 923 acres

South Beaver Vegetation Enhancement Year 7 - 2218 acres

Indian Creek - 5142 acres

Project Maintenance - South Beaver - 6887 acres

Current projects:

Indian Creek West Drag Chaining - 2746 acres

Birch Creek - Bonneville Cutthroat Trout and Riparian Improvement - Phase 2 - 117 acres

North Beaver Prescribed Fire and Seeding (Baker/Face) - 15405 acres

Deer Flat Lop and Scatter Project - 1360 acres

LIMITING FACTORS TO REACHING OBJECTIVES

Crop Depredation: Crop depredation near Marysville, Circleville, Beaver, Sulphurdale, and Manderfield is a concern. Steps to minimize depredation as prescribed by state law and DWR policy will be implemented as needed.

Highway Mortality: I-15 and I-70 has been a source of 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: 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.

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 Piute ATV trail may also be responsible for reducing elk use of traditional calving areas and increasing use of 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.

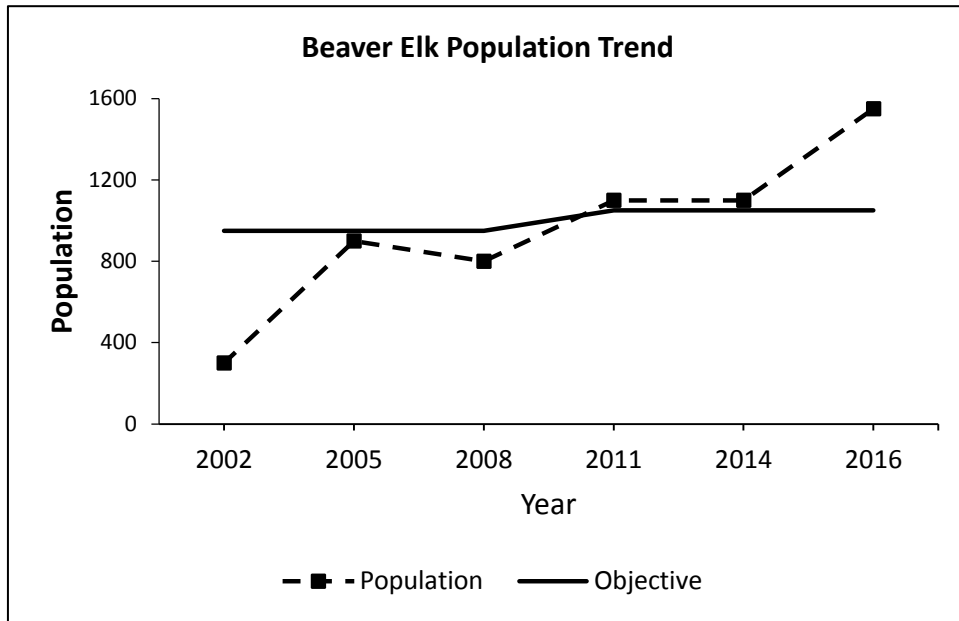
2016 BEAVER, EAST ELK COMMITTEE

In August 2016, the Beaver, East elk committee met to discuss the elk management plan. We discussed the current objective, current problems, and a possible increase in the population objective in the future. The possible increase was met with some resistance by cattlemen, but may be supported in the future with continued habitat work benefitting both elk and livestock. The current population objective will remain at 1,050 but may be looked at again in the next 3-5 years as more habitat projects are completed.

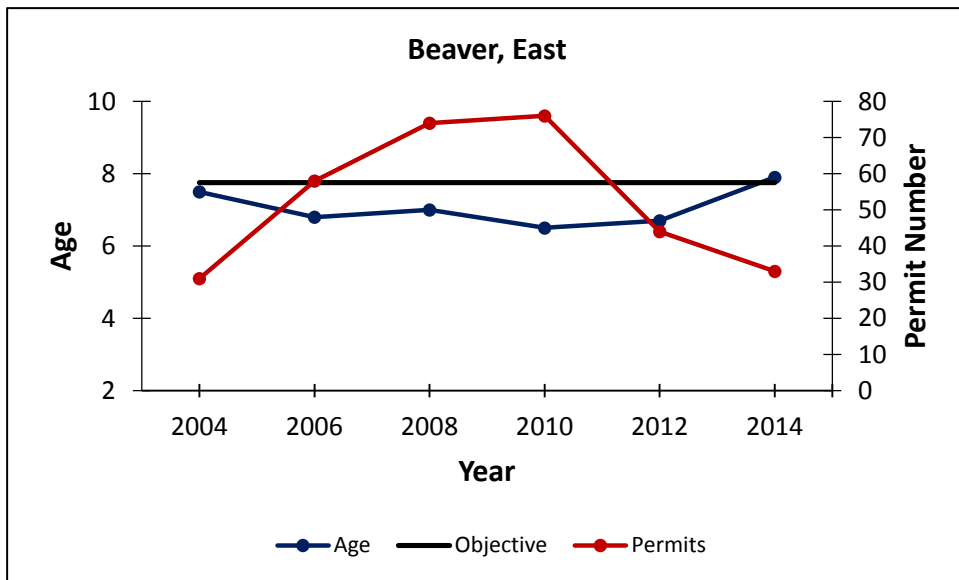
Comments/notes from the meeting

- Forest Service has completed more habitat work not listed above.
- Continue with aggressive harvest to bring population back to objective.
- Continue habitat projects.
- Most elk problems are during spring green up, focus habitat work in these areas.
- Protect deer winter range where we do not need elk.
- Ranchers would like an increase in AUM's before an increase in elk.
- Some ranchers could support and increase in elk if habitat work shows a substantial increase in forage production and if rangeland health shows an upward trend.
- Work on controlling elk populations where they are causing the most damage.
- If the elk objective is to increase in the future, consider where you want the elk to increase.

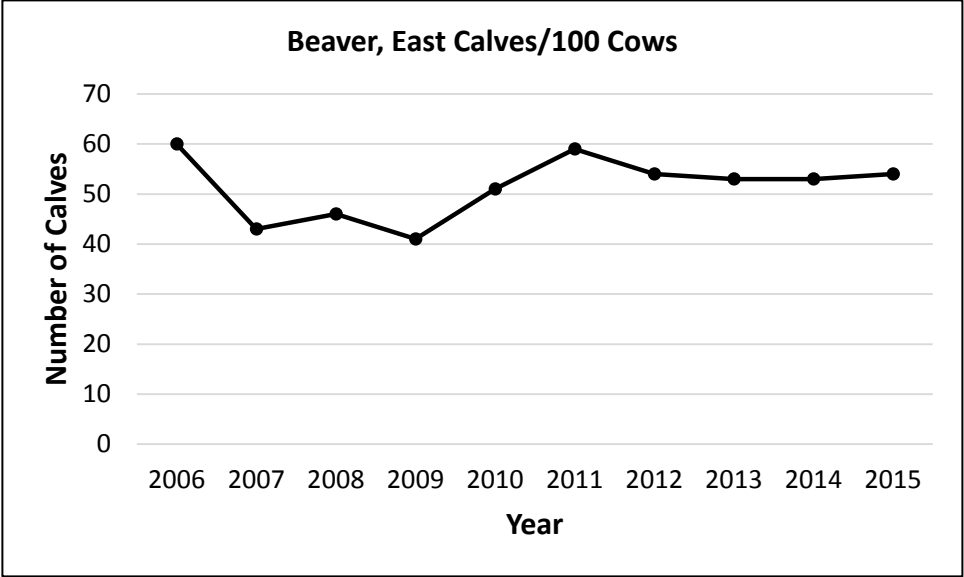
APPENDIX



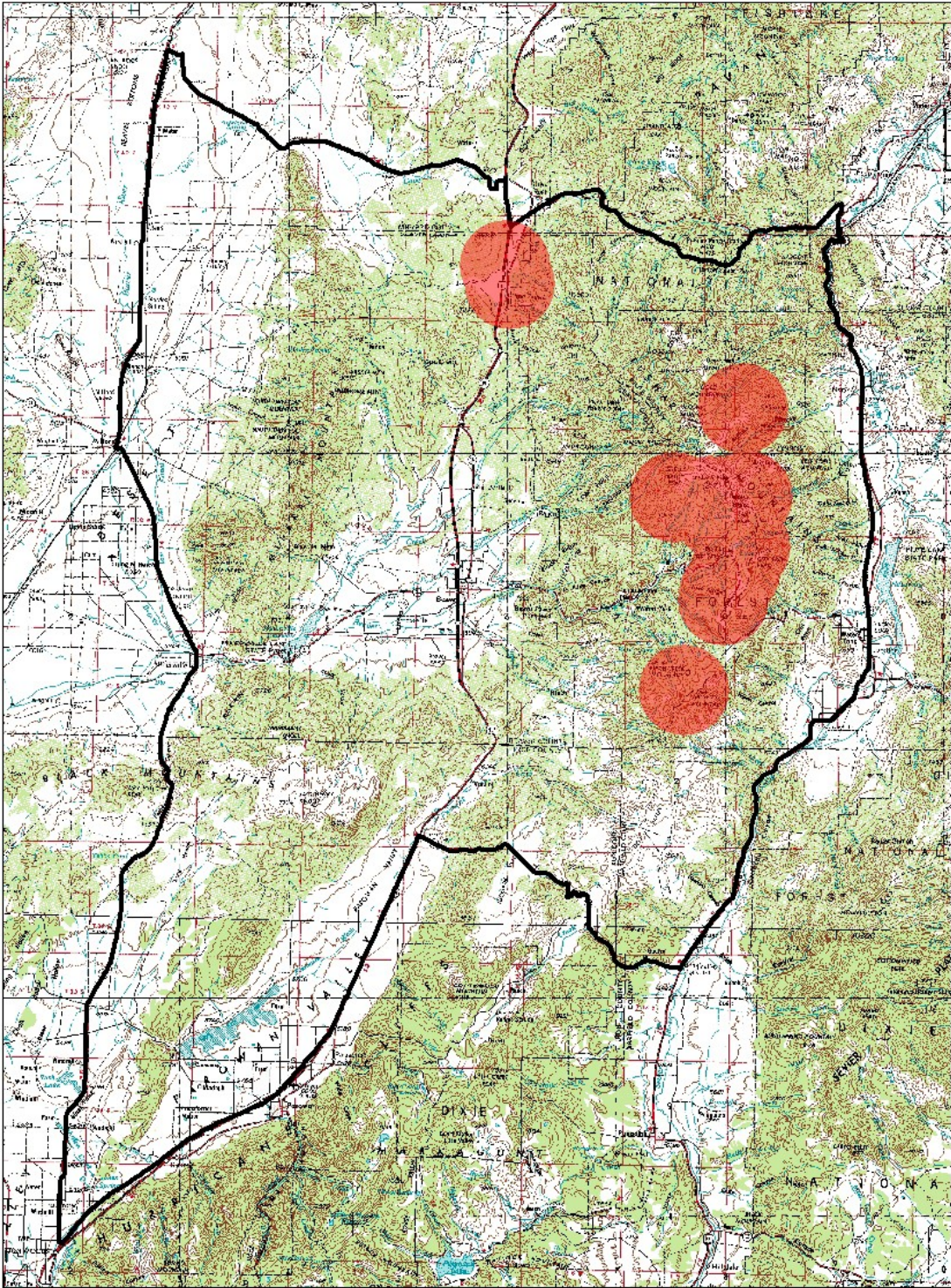
Beaver, East Unit elk population trends, Utah 2002 - 2016.



Average age of harvested bulls and permit numbers for the Beaver, East Unit



Beaver, East Cow/Calf ratios 2006 - 2015



Important elk calving habitat on the Beaver Unit