

ELK HERD UNIT MANAGEMENT PLAN
Elk Herd Unit # 17
WASATCH MOUNTAINS
December 2023

BOUNDARY DESCRIPTION

Carbon, Salt Lake, Summit, Wasatch, Duchesne, Utah counties - Boundary begins at the junction of I-15 and I-80 in Salt Lake City; east on I-80 to US-40; south on US-40 to SR-32; east on SR-32 to SR-35; southeast on SR-35 to SR-87; south on SR-87 to Duchesne and US-191; south on US-191 to US-6; northeast on US-6 to I-15; north on I-15 to I-80 in Salt Lake City.
EXCLUDES ALL NATIVE AMERICAN TRUST LANDS.

RANGE AREA AND APPROXIMATE OWNERSHIP SUB-UNIT 17A

Sub-Unit 17a	Spring-Fall		Summer Range		Winter Range		Yearlong range	
	Area (acres)	%	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	406,817	77	75,006	83	58,373	38	2,221	18
Bureau of Land Management	472	>1	0	0	2,354	2	0	0
Utah State Institutional Trust Lands	669	>1	0	0	2,744	2	0	0
Native American Trust Lands	1,952	>1	768	>1	0	0	0	0
Private	105,054	20	13,737	15	71,081	46	9,523	75
Department of Defense	0	0	0	0	0	0	0	0
USFWS Refuge	0	0	0	0	0	0	0	0
National Parks	235	>1	0	0	0	0	0	0
Utah State Parks	11,917	2	0	0	7,524	5	0	0
Utah Division of Wildlife Resources	431	>1	521	>1	12,015	8	929	7
Water	87	>1	71	>1	0	0	0	0
TOTAL	527,634	100	90,102	100	154,090	100	12,673	100

RANGE AREA AND APPROXIMATE OWNERSHIP SUB-UNIT 17B&C

Sub-Unit 17b&c	Spring-Fall		Summer Range		Winter Range		Yearlong range	
	Area (acres)	%	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	79,259	62	65,968	52	24,470	7	20,360	21
Bureau of Land Management	0	0	6,751	5	2,294	>1	8,729	9
Utah State Institutional Trust Lands	21,949	17	3,715	3	6,064	2	2,466	3
Native American Trust Lands	0	0	42	>1	62,970	18	9,107	9
Private	19,372	15	32,019	25	186,467	53	41,745	43
Department of Defense	0	0	0	0	0	0	0	0
USFWS Refuge	0	0	0	0	0	0	0	0
National Parks	0	0	0	0	0	0	0	0
Utah State Parks	0	0	0	0	1,150	>1	0	0
Utah Division of Wildlife Resources	6,135	5	19,273	15	70,780	20	15,244	16
Water	290	>1	0	0	0	0	0	0
TOTAL	127,005	100	127,768	100	354,195	100	97,650	100

UNIT MANAGEMENT GOALS

- Manage and sustain a healthy population of elk at the current population objectives.
- Provide a variety of high quality recreational opportunities for viewing and harvesting elk.
- Maintain an elk population consistent with the available range resources.
- Strive for protection of key habitats with continued habitat improvements to mitigate losses to development.
- Continue to provide “spike only” general season as well as “limited entry” elk hunting opportunities. Limited entry hunts will be divided into archery, any weapon, muzzleloader and premium hunts as an opportunity to hunt all three weapon types.

UNIT MANAGEMENT OBJECTIVES

Habitat

Enhance elk habitat through direct range improvements to maintain population management objectives. Pursue protection of elk habitat through Conservation Easements, CWMUs, Conservation agreements, etc.

Population

Target Winter Herd Size – 8,400 wintering elk distributed in the following Subpopulations:

Wasatch Mountains West:	3,400
Currant Creek:	3,200
Avintaquin:	1,800

Winter aerial counts are scheduled every three years and are dependent upon operating budgets and weather conditions.

Herd Composition - Maintain a three-year average age of harvested bulls at 5.5-6.0 years as directed in the statewide elk management plan.

CURRENT STATUS OF ELK MANAGEMENT

Habitat - Overall, range conditions for elk are good on this unit.

Biological carrying capacity of range

When looking at biological carrying capacity for the writing of this plan, the Division has taken into account the following barriers:

- 1) Depredation issues,
- 2) Winter range that is beyond division control,
- 3) Social and political factors,
- 4) Current range improvements,
- 5) Future range improvements, and
- 6) Rangeland health.

Factors that reduce carrying capacity of Unit

Several factors reduce the carrying capacity of this unit including agricultural depredation, urban encroachment, competition for forage with domestic livestock, and over utilization of winter browse in areas of heavy concentration of deer and elk during hard winters.

Population - The most recent aerial census was conducted in February 2022, the following are the counted numbers and population estimates for each subunit:

Wasatch West 17a-

2,928 elk counted, population estimate is 3,500

Currant Creek 17b-

3,273 elk counted, population estimate is 4,300

Avintaquin 17c-

2,101 elk counted, population estimate is 2,600

Wasatch Mountains Unit Total-

8,302 elk were counted, unit population estimate is 10,400

BARRIERS TO ACHIEVING UNIT MANAGEMENT OBJECTIVES

Habitat

- Loss of winter range and habitat fragmentation due to development.
- Loss of winter range due to loss of sagebrush and resulting cheatgrass expansion.

- Poor range conditions during drought years.
- Conifer and PJ invasion of grasslands and browse areas critical for wildlife.
- Loss of winter range due to expanding oil & gas development.

Population

- Resistance to increasing limited entry bull harvest to reduce the mean age of harvest.
- Difficulty in harvesting antlerless animals for population control due to elk behavior, refuge on private and Ute Tribal lands, and refuge in rugged terrain.

Other Barriers

- Agricultural depredation by elk on privately owned crops and rangelands.
- Weather Extremes - Periodic climatic extremes, especially severe winters or prolonged conditions, can cause fluctuations in overall population size, survival rates, and herd productivity.
- Other Mortality Causes - Occasionally, other sources of elk mortality such as unlawful harvest, highway mortality, winter loss, and disease could reach a point that they affect the population.

STRATEGIES FOR REMOVING BARRIERS AND REACHING UNIT MANAGEMENT OBJECTIVES

Habitat

Monitoring

- Monitor permanent range trend studies located across the unit.
- Develop and implement Habitat Management Plans for each of the DWR Wildlife Management Areas on the unit.

Actions to Remove Habitat Barriers

- Cooperate with USFS & BLM to re-institute natural fire interval in conifer zone to recover lost elk habitat.
- Cooperate with USFS, BLM, & Ute Tribe to increase vegetative under story and reduce Pinyon/Juniper invasion of the sagebrush step zone to increase winter forage to reduce depredation on private property.
- Explore Conservation Easements on critical parcels of private property to protect important elk habitat from development.
- Implement habitat enhancement & watershed initiative projects whenever opportunities arise.
- Assist landowners by providing seed, labor or machinery to implement improvements on private rangelands that will benefit wildlife.
- Cooperate with USFS, BLM, and local governments to prepare access management plans to enhance wildlife habitats, range conditions and escape opportunities for elk.

Population

Population Monitoring

- Winter aerial counts are scheduled every three years but are dependent upon budgets and weather conditions.
- Utilizing harvest data, preseason classification, and mortality estimates, a model has been developed to estimate winter population size derived from aerial trend counts conducted every three years when weather permits.
- Use new GPS collar study data to better understand seasonal elk movements and movements between management units.

Bull Age Structure - Monitor age class structure of the bull population through the use of annual preseason ground classification and winter aerial classification. Average age of harvest will be determined by tooth age data from limited entry harvest.

Harvest

- The primary means of monitoring harvest will be through statewide mandatory harvest reporting. Target population size will be maintained through the use of antlerless harvest using a variety of harvest methods and seasons; including private lands only permits, antlerless control permits, and any other legal hunting strategies.
- Bull permit numbers will be developed through the RAC and Wildlife Board process to achieve the average age of 5.5-6.0 year old harvested.

Management Actions to Remove Population Barriers

- Target depredation hunts to address elk that habitually move into agricultural or urban areas.
- Cooperate with private landowners to fence haystacks in winter depredation areas.
- Cooperate with UDOT to pursue funding to reduce vehicle mortalities.

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. Revision of this plan may also take place as needed to address future issues or incorporate new management strategies. Unit elk plan goals, objectives, recommendations 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 plans.