

ELK HERD MANAGEMENT PLAN
Elk Herd Unit #18
Oquirrh/Stansbury
September 2016

BOUNDARY DESCRIPTION

Salt Lake, Tooele and Utah counties--Boundary begins at I-15 and I-80 in Salt Lake City; south on I-15 to SR-73; west on SR-73 to the Pony Express road; west on the Pony Express road to SR-36; south on SR-36 to Pony Express Road; west on this road to the Skull Valley road (SR 196); north on this road to I-80 at Rowley Junction; east on I-80 to I-15. The Carr Fork Wildlife Management Area is closed to motorized travel year-round. EXCLUDES ALL NATIVE AMERICAN TRUST LANDS WITHIN THIS BOUNDARY

LAND OWNERSHIP

Ownership	Yearlong range		Summer Range		Winter Range	
	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	41,763	28	807	5	25,193	19
Bureau of Land Management	37,664	25	2470	14	45,338	35
Utah State Institutional Trust Lands	7358	5	776	4	5856	4
Native American Trust Lands	0	0	0	0	3537	3
Private	63,452	42	13,462	77	50,466	39
Department of Defense	1388	1	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	0	0	0	0	0	0
TOTAL	151,625	100	17,515	100	130,390	100

UNIT MANAGEMENT GOALS

Manage for a population of healthy animals capable of providing a broad range of recreational opportunities, including hunting and viewing. Balance elk herd impacts on human needs, such as private property rights, agricultural crops and local economies. Maintain the population at a level that is within the long-term capability of the available habitat and is in proper balance with other range users such as domestic livestock. Strive for consistency and simplicity in elk management programs.

UNIT MANAGEMENT OBJECTIVES

Habitat

The unit habitat objectives will follow the goals and objectives outlined in the statewide elk plan with the primary goal to "conserve and improve elk habitat throughout the state." This will be done by maintaining sufficient habitat to support elk herds at population objectives and reduce competition for forage between elk and livestock and reducing adverse impacts to elk herds and elk habitat.

This will include the following projects

Remove juniper encroachment into winter range sagebrush parks and summer transitional range mountain brush communities.

Coordinate with federal agencies to improve water development while helping to maintain existing water sources. Identify new potential water sources.

Coordinate with federal agencies to protect and enhance aspen communities on summer habitats. Management techniques that assure a diverse age structure of aspen communities will be utilized.

Cooperate with livestock operators and federal agencies to improve range management practices in such a way to optimize both livestock and elk forage production and thus minimize conflicts.

Coordinate with sportsman's groups, grazers, private land owners, dedicated hunters, federal agencies and other partners on habitat projects.

Population Management Objectives

Population Objective 1: Maintain healthy elk populations at biologically and socially sustainable levels

Population Objective 2: Foster support among stakeholders for Utah's elk management program.

Population Objective 3: Achieve a proper distribution of elk on private and public lands.

Target Winter Herd Size – Maintain a wintering elk population of 1,650 elk (computer modeled estimate). This is an increased objective from the previous plan. The increase will occur on the Stansbury portion of the unit, increasing from 250 to 1000. Elk will be distributed among the following sub-populations:

<u>Wintering Area (counting unit)</u>	<u>Target Population</u>
North Oquirrh Mountains	350
South Oquirrh Mountains	300
<u>Stansbury</u>	<u>1,000</u> TOTAL
	1,650

The elk population objective will be evaluated each time the unit management plan is up for renewal. In this management unit however, desired elk population levels are also guided by public and political tolerance of elk. This influences population objective recommendations as well as habitat conditions.

Herd Composition - Maintain an average age of 5.5 to 6.0 year old bulls in the harvest.

CURRENT STATUS OF ELK MANAGEMENT

Habitat

Habitat Conditions: In 2012, 16 range trend studies were read on unit 18. These trend studies sample big game winter and summer range sites. Overall trends on unit 18 are stable to improving. Improving browse trends were found at South Palmer Point, Salt Mountain, south of Broons Canyon, Hatch Ranch, and East Hickman Canyon. All other sites were considered stable.

Cooperative DWR/BLM/USFS spring range rides have shown relatively low elk utilization patterns on winter ranges.

When looking at elk population objectives, the Division has taken into account factors which include, 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) overall range health.

Factors limiting elk populations: Drought is the primary factor that impacts elk populations. Forage production and vigor is severely limited during drought years. Current and future urban expansion will continue to fragment existing elk habitat and displace elk to less productive areas. Conflicts between elk and domestic livestock operators are also a primary limiting factor. This occurs in the form of crop depredation in farmlands as well as competition for forage on rangelands. Elk numbers may be maintained at levels below the stated objective if excessive levels of crop depredation or forage consumption on private rangelands occur.

Habitat projects completed and proposed: Federal agencies, private landowners and the UDWR have cooperated on habitat improvement projects targeted at various wildlife species that have also benefited elk. Below is a list of current and future projects.

HABITAT PROJECTS COMPLETED AND PROPOSED – Oquirrh Stansbury Mts. Unit

Completed Projects and acreage– 2002 through 2016		Proposed Projects and acreage– 2016 and beyond	
Lee Canyon/ BLM	700	Clover Creek PJ thinning/ private	250
Round Canyon PJ thinning/ BLM	650	Herbicide treatment/ Kennecott	225
Clover Creek PJ thinning/BLM	500	Bio control w/goats/ Kennecott	150
Iosepa PJ thinning/BLM	400	Weed mapping/Kennecott	300
St John wildfire rehab/ SITLA/private	1200	Toadflax Beetle distribution/ Kennecott	5
East Onaqui sagebrush enhancement/ BLM	200	Habitat fencing/ Kennecott	50
Dix Monroe sagebrush enhancement SITLA/private	800	Seeding/ Kennecott	50
Cunningham chaining/ private	120	Wildfire prevention plan/ Kennecott	
Big Hollow PJ thinning/BLM	500	Wildfire treatments/ Kennecott	100
East Onaqui PJ thinning/ BLM	600	Reclamation	800
Clover Creek sagebrush harrow/ private	170		
Toadflax Beetle distrb./ Kennecott	3		
Seeding/ Kennecott	300		
Reclamation	4900		
TOTAL	11043	TOTAL	1930

Population

This population has been a slow but steady increase over the past 10 years. There are three target herd objectives for this unit, North Oquirrh (primarily Kennecott lands), South Oquirrh, and Stansbury. This unit was surveyed in 2016, and population estimates were 744 for all three wintering areas. Antlerless permits are the primary way to target areas over objective. Most of the increase has occurred on Heaston East CWMU. In recent years increased pressure on the south part of the unit has moved elk to the north.

Limited entry bull harvest on the unit has remained relatively stable with very minor permit changes. Spike harvest has been relatively constant. The average age of harvested limited entry bull has remained stable as well.

Population Size - Results from the annual harvest survey of public and CWMU hunters, age and sex classification surveys, aerial census or trend counts and estimates of mortality from causes other than lawful hunting are utilized to monitor population status and trends. A dynamic computer model, which utilizes some or all of the previously mentioned data, will be used as an aid to assessing population status. Its primary use, however, will be to assist in determining ongoing harvest requirements necessary to manipulate herd size and composition.

Bull Age Structure - The primary means to monitor this parameter will be winter aerial classifications conducted every 3 years. Tooth aging data will be used to manage this population to the approved age objective of 5.5-6.0 year old bulls.

Harvest - Whenever possible, harvest recommendations will be crafted to simultaneously manage overall population size, age class and also address concerns in specific areas such as depredation problems or localized range overuse by elk. The primary means to achieve this will be through antlerless harvest. A variety of harvest strategies, seasons and type of permits are available for this purpose. Monitoring of harvested animals will occur through the use of the uniform statewide harvest.

BARRIERS TO ACHIEVING MANAGEMENT OBJECTIVES

Habitat

- Loss of winter range due to urban expansion.
- Drought impacts to rangeland forage condition and abundance.
- Loss of winter ranges and summer shrub habitats to pinion-juniper encroachment and shrub decadence.
- Competition for forage with domestic livestock on both summer and winter ranges.

Population

- Public input on numbers of bull hunting permits used to manage mean age of harvest.

Other Barriers

- Land ownership and access
- Crop depredation
- Weather extremes
- Other mortality causes

STRATEGIES FOR REMOVING BARRIERS AND REACHING UNIT MANAGEMENT OBJECTIVES

Habitat

Monitoring

- Continue to monitor permanent range trend studies throughout the winter range.
- Annually inspect rangeland vegetative community impacts and health through cooperative DWR/BLM habitat assessment surveys that include ocular field assessments, utilization transects, and range rides.
- Continue to develop and implement Habitat Management Plans for UDWR owned properties on the unit.

Actions to Remove Habitat Barriers

- Cooperate with federal agencies to establish natural fire policies that will allow wild fires to burn in beneficial and non-threatening areas to recover lost elk habitat.

- Continue to improve forage production on winter and other shrublands by aggressive pinion-juniper removal.
- Cooperate with federal agencies to assure a diverse age structure of aspen communities on summer habitats.
- Pursue conservation easements on critical parcels of private property to protect important elk habitat from development.
- Cooperate with federal agencies to develop access management plans to enhance elk habitat value. This may include seasonal road closures or vehicle restrictions.
- Involve livestock operators in spring range rides and assessments in an effort to keep good relationships and address any potential concerns about competition between livestock and elk.

Population

Monitoring

Population Size - The population is monitored using harvest data, aerial trend counts and classification, preseason classification, and survival estimates.

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 the statewide uniform harvest survey and the mandatory harvest reporting for the limited entry hunts. Target population size will be maintained through the use of antlerless harvest using a variety of harvest methods and seasons.

Actions to Remove Population Barriers

- Target depredation hunts to address elk herds that habitually move into agricultural areas.
- Cooperate with private landowners to fence all haystacks and provide compensation when necessary in high winter depredation areas.
- Utilize antlerless hunts to address range concerns in specific areas.
- Translocate elk to locations where population densities are low. A list of sites for translocation includes Muskrat Canyon and Mack Canyon (Appendix 1)

Appendix 1. Elk transplant sites on the Stansbury Mountains. Release sites include Muskrat Canyon and Mack Canyon.

