

**ELK UNIT MANAGEMENT PLAN
PAUNSAUGUNT Unit #27
2016**

BOUNDARY DESCRIPTION

Garfield and Kane counties--Boundary begins at US-89A and the Utah-Arizona state line; north on US-89A to US-89; north on US-89 to SR-12; east on SR-12 to the Paria River; south along the Paria River to the Utah-Arizona state line; west along this state line to US-89A.

LAND OWNERSHIP

RANGE AREA AND APPROXIMATE OWNERSHIP*

Ownership	Yearlong range		Summer Range		Winter Range	
	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	0	0	94519	64	0	0
Bureau of Land Management	0	0	7862	5	40673	73
Utah State Institutional Trust Lands	0	0	2779	2	3925	7
Native American Trust Lands	0	0	0	0	0	0
Private	0	0	41358	28	11058	20
Department of Defense	0	0	0	0	0	0
USFWS Wildlife Refuge	0	0	0	0	0	0
National Parks	0	0	618	1	0	0
Utah State Parks	0	0	0	0	0	0
Utah Division of Wildlife Resources	0	0	0	0	0	0
TOTAL	0	0	147136	100	55656	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, other big game species and local economies.
- Maintain the population at a level that is within the long-term capability of the available habitat and that does not negatively impact the mule deer population.
- Continue with limited entry and cooperative programs with the landowners association and the Alton Cooperative Wildlife Management Unit.

POPULATION MANAGEMENT OBJECTIVES

Target Winter Herd Size: Continue to manage for a total of 140 total elk wintering across the unit. This recommendation is made largely to provide antlerless harvest opportunities and reduce potential negative impacts to mule deer on a premium mule deer unit.

Bull Age Structure: Maintain a 3-year average bull harvest age of 4.5-5.0 years for all hunt types on the unit.

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

Harvest: Provide antlerless, general season spike-only, 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. Opportunistic ground surveys in the winter months appear to also provide some useful trend data due to low overall numbers.

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.

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 with a focus on reducing potential negative impacts to mule deer. The Skutumpah area should be a focus for any antlerless harvest since this wintering herd is the closest to mule deer winter range. Antlerless harvest may be used if there is evidence of negative impacts to mule deer on additional ranges. Antlerless harvest will occur on the Alton CWMU, across the unit, and on private lands using private lands only permits.

CURRENT POPULATION STATUS:

Due to the rotation of aerial flights combined with poor winter conditions in recent years, an aerial census has not occurred on the unit since 2010. Provided there are adequate winter conditions, it will be flown during the winter of 2017.

Prior to the winter of 2009-10, very few elk were counted during census surveys since the Paunsaugunt was used by elk mainly in the summer months. Elk numbers have increased in the Skutumpah area. With the recent expansion, there are currently two different wintering herds on the Paunsaugunt; 1) Hatch Bench and 2) Skutumpah Terrace/Glendale Bench. Recent telemetry research suggests the Hatch Bench segment may also utilize areas on Mount Dutton during extreme snow during the winter months.

Population modeling is extremely difficult since the Paunsaugunt winters few elk in comparison to adjacent units and experiences higher numbers during summer months (Table 2) when census surveys are impractical.

BARRIERS AND ACTIONS

Depredation – Many of the local landowners and livestock owners on the unit express concern that an increase in the elk population would increase damages due to elk depredation. We will take all steps necessary to minimize depredation as prescribed by state law and DWR policy. We want to maintain the Alton CWMU and Paunsaugunt Elk Landowners Association to compensate for elk use of private lands. Issuing private-lands-only permits will be a management strategy to reduce depredation elk issues.

Competition – This unit is managed as a premium limited entry deer unit, and there are concerns that elk populations may compete with mule deer for resources. We will monitor for signs of competition between the two species and address situations where elk negatively impact mule deer habitat or populations.

UNIT HABITAT MANAGEMENT OBJECTIVES

- Continue to be committed to the statewide goal of supporting habitat projects that increase forage for both big game and livestock.
- Work with private, state and federal agencies to maintain and protect critical and existing range from future losses. Continue projects with USFS, BLM, state and private entities to enhance wildlife habitat.
- Provide improved habitat security and escapement opportunities for elk through support and cooperation of approved Dixie National Forest Travel Plan.
- Encourage the maintenance and development of water sources throughout the unit. Focus on providing water sources in remote areas or on abandoned / sources such as old water trough's, ponds, and tanks that can benefit both livestock and wildlife.
- Discourage the encroachment of Pinyon and Juniper (PJ) trees into sagebrush and other habitats. Seek opportunities to improve habitat through grazing practices, prescribed burning, and mechanical treatments to improve habitat where PJ encroachment is occurring.

HABITAT MANAGEMENT STRATEGIES

Focus habitat improvement projects in summer/winter habitats as well as water development and maintenance:

- Hatch bench – Winter range (SITLA/USFS)
- East fork Sevier – Calving/Summer range (USFS)
- Skutumpah Terrace and Glendale Bench – Year long range (BLM)

Work with USFS to continue projects with guzzlers, riparian improvement, and timber harvest in key calving habitat on the East Fork.

Work with the BLM and Grand Staircase Escalante National Monument to continue projects on vegetation enhancement, PJ encroachment, guzzlers, ponds and water distribution.

Continue to monitor the permanent range trend studies located throughout the winter range. Work with state range trend monitoring crew to establish new trend studies in areas where elk use or trend is a concern.

Encourage and provide support to other land management agencies, private landowners, and stakeholders when developing habitat projects that will enhance or improve elk habitat throughout the management unit.

Encourage habitat restoration project funding proposals through a diversity of sources including UPCD and Alton Coal.

CURRENT STATUS OF ELK HABITAT MANAGEMENT

Overall, elk habitat on the Paunsaugunt unit is good with stable range conditions throughout most of their range. Some challenges facing elk habitat include; 1) conifer encroachment of aspen stands, 2) degradation of rangelands by increased woody vegetation, and 3) water availability.

Many habitat restoration projects have been completed in the past 5-10 years that have improved elk habitat. There are also several thousand acres across the unit currently proposed for treatment. Many of these projects are listed in Appendix 2.

BARRIERS TO ACHIEVING UNIT HABITAT MANAGEMENT OBJECTIVES

- Water distribution, development and maintenance.
- Degradation of summer and winter rangelands.
- Conifer encroachment of aspen stands.

STRATEGIES FOR REMOVING BARRIERS AND REACHING UNIT HABITAT MANAGEMENT OBJECTIVES

- Use range trend and habitat improvement data to make appropriate decisions regarding population objectives. Antlerless harvest may be recommended if there is excessive habitat utilization.
- Support habitat improvement projects in the Skutumpah Terrace and Glendale Bench areas that could attract elk and other wildlife away from private land at lower elevations. Focus on public lands in PJ or sagebrush areas.
- Continue to focus on improving habitat in upper elevation calving habitat on the East Fork of the Sevier. Projects that provide for aspen and water at higher elevations would be beneficial.
- Conduct large-scale habitat projects to help prevent elk and other wildlife from concentrating on isolated patches of improved habitat.
- Encourage projects on private land that maintain habitat for elk over the long-term.
- Work closely with State Trust Lands (SITLA) to conserve crucial / key winter habitat along the Hatch bench.
- Continue projects with USFS, BLM, state and private landowners to enhance overall elk habitat.
- To reduce potential negative impacts on the mule deer population, habitat projects will be needed to improve range conditions on both summer and winter ranges.

Appendix 1. Seasonal habitat use on the Paunsaugunt WMU #27.

Paunsaugunt Elk Habitat	Sum_Acres	% of available habitat	% of WMU
Summer Crucial	60615	17	6
Summer Substantial	83854	23	9
Winter Crucial	17489	5	2
Winter Substantial	20991	6	2
Year Long Substantial	175970	49	18
TOTAL ELK HABITAT	358919	100	37
Wildlife MGMT Unit Total Area	957122		100

Appendix 2 Paunsaugunt WMU #27 habitat projects listed in WRI database 2012-2017.

Title	Status	Lead Agency	Fiscal Year	Acres
2012 North Paunsaugunt habitat enhancement	Completed	U.S. Forest Service	2012	770
South Alton Browse Seeding Project	Completed	Utah Division of Wildlife Resources	2012	142
Pine Point Handthin	Completed	Bureau of Land Management	2013	4,674
Hatch Bench Vegetation Enhancement Phase II	Completed	Utah Division of Wildlife Resources	2014	4,773
Upper Kanab Creek Phase II Bullhog - Bald Knoll	Completed	Bureau of Land Management	2014	2,256
UKC Thompson Creek	Completed	Bureau of Land Management	2014	1,520
Sieler Stewardship	Completed	U.S. Forest Service	2014	1,621
Upper Kanab Creek Bald Knoll - Phase 3	Completed	Bureau of Land Management	2015	1,945
Paunsaugunt Rabbit Brush Removal Phase II	Completed	Utah Division of Wildlife Resources	2015	492
Coal Hollow, Kane County	Completed	Bureau of Land Management	2015	316
UKC - Elbow Spring Phase I	Current	Bureau of Land Management	2016	998
UKC - Cottonwood Spring- Phase I	Current	Bureau of Land Management	2016	5,837
UKC - Carly Knoll/Mill Creek	Current	Bureau of Land Management	2016	1,091
Alton/South Canyon Retreatment - large tree removal	Current	Bureau of Land Management	2016	1,653
Coal Hollow, Kane County - Phase II	Current	Bureau of Land Management	2016	1,753
Sunset Cliffs Rabbitbrush Treatment	Current	Private Landowner	2016	526
Sieler Stewardship Project Phase 2	Current	U.S. Forest Service	2016	638
Dixie National Forest FY 2016 Exclosure Repair and Rebuild project	Current	U.S. Forest Service	2016	10
Broad Hollow Rabbitbrush Removal	Current	Utah Division of Wildlife Resources	2016	609
Kanab Area Project Maintenance	Current	Utah Division of Wildlife Resources	2016	2,857
Hatch Bench Vegetation Enhancement Phase III	Current	Utah Division of Wildlife Resources	2016	3,537
Left Fork Stewardship Project	Current	Mule Deer Foundation	2017	2,004
UKC Cottonwood Phase II	Current	Bureau of Land Management	2017	4,146
UKC - Upper Sink Valley	Current	Bureau of Land Management	2017	2,744
UKC - Coal Hollow Phase III	Current	Bureau of Land Management	2017	821
Sieler Stewardship Project Phase 3	Current	Mule Deer Foundation	2017	792
South Canyon (Coal Pit Wash)	Current	Bureau of Land Management	2017	4
Paunsaugunt boreal toad habitat improvement project	Current	U.S. Forest Service	2017	107
Bulldog Bench-First Point Handthin	Current	Bureau of Land Management	2017	3,127

Total Acres: 51,763