

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

This draft ecological site description is approved for field use and testing for a one year period beginning MM, YYYY.
Additional information and comments on this site should be sent to the Utah State Range Management Specialist.

STATE: Utah

SITE TYPE: Rangeland

ECOLOGICAL SITE NAME: Desert Stony Loam (Shadscale-Bud sagebrush)

SITE NUMBER: 035XY136UT

MLRA: 035

Original Site Description: Author: GSC

Date: 04/15/1984

Revised Site Description: Author: GSC

Date: 09/22/1993

Approved by: Title: State Range Cons. Signed: Pat Shaver

Date: 05/27/1994

Ecological Site Definition - A distinctive kind of land, with specific physical characteristics, which differs from other kinds of land in its ability to produce a distinctive kind and amount of vegetation, and in its response to management.

A. PHYSICAL CHARACTERISTICS

(description narrative of this particular site)

1. SOILS

Depth: >60 inches

Surface Textures:

Surface Fragments(<=3" % cover, >3" % cover):

Subsurface Textures: Loamy-skeletal

Subsurface Fragments(<=3" % vol, >3" % vol): >50%

Geologic Parent Materials: Mixed Alluvium from Sandstone and Shale

Moisture Regime:

Temperature Regime: Mesic

Runoff:

Permeability(min-max):

Drainage Class(min-max): Well Drained

Water Erosion Hazard:

Wind Erosion Hazard:

Electrical Conductivity (EC in mmhos/cm):

Sodium Adsorption Ration (SAR):

Soil Reaction (1:1 water):

Soil Reaction (0.1 M CaCl₂):

pH Range:

Available Water Capacity (inches):

Major Soils Associated With This Site:

Soil Survey Area: 631

Blackston

Additional information may be found in Section II of the Field Office Technical Guide.

2. PHYSIOGRAPHIC FEATURES

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1. Potential Plant Community Description and Ecological Factors

The dominant aspect of the plant community is shadscale and galleta. The composition by air-dry weight is approximately 40 percent perennial grasses, 10 percent forbs and 50 percent shrubs. Of note, sparsely scattered singleleaf ash is the only tree species found in the potential natural plant community.

2. Plant Community Composition by Weight and Percentage

Grasses and Grasslike, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Galleta	HIJA		100	150	20	30
Indian ricegrass	ACHY		25	50	5	10
Sand dropseed	SPCR		15	25	3	5
Bottlebrush squirreltail	ELEL5	1	5	15	1	3
Purple threeawn	ARPU9	1	5	15	1	3
Other perennial grasses	PPGG	1	15	25	3	5
Other annual grasses	AAGG	1	15	25	3	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Woolly milkvetch	ASMO7		15	25	3	5
Flatcrown wild buckwheat	ERDE6	2	5	15	1	3
Pacific aster	ASCH2	2	5	15	1	3
Badland mulesears	WYSC	2	5	15	1	3
Redroot wild buckwheat	ERRA3	2	5	15	1	3
Gooseberryleaf globemallow	SPGR2	2	5	15	1	3
Matted crinklemat	TILA6	2	5	15	1	3
Stemless fournerve daisy	TEACA2	2	5	15	1	3
Thorny wirelettuce	STSP6	2	5	15	1	3
Woolly plantain	PLPA2	2	5	15	1	3
Spreading skyrocket	IPPO2	2	5	15	1	3
Tumble mustard	SIAL2	2	5	15	1	3
Skyblue scorpionweed	PHCO	2	5	15	1	3
Broadflower pincushion	CHST	2	5	15	1	3
Western sticktight	LAOC3	2	5	15	1	3
Other perennial forbs	PPFF	2	25	50	5	10
Other annual forbs	AAFF	2	25	50	5	10

Shrubs/Vines, %

Common Name	National Symbol	Group	Pounds per Acre	% by Weight of Total Composition
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			Low	High	Low	High
Shadscale	ATCO		75	100	15	20
Bud sagebrush	ARSP5		50	75	10	15
Bigelow sagebrush	ARBI3		15	25	3	5
Torrey jointfir	EPTO		15	25	3	5
Broom snakeweed	GUSA2	3	5	15	1	3
Low rabbitbrush	CHVI8	3	5	15	1	3
Crispleaf wild buckwheat	ERCOA	3	5	15	1	3
Fourwing saltbush	ATCA2	3	5	15	1	3
Bush pepperweed	LEFR2	3	5	15	1	3
Fremont smokebush	PSFR	3	5	15	1	3
Nevada jointfir	EPNE	3	5	15	1	3
Central pricklypear	OPPO	3	5	15	1	3
Winterfat	KRLA2	3	5	15	1	3
Other shrubs	SSSS	3	25	50	5	10

Trees, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Singleleaf ash	FRAN2		0	5	0	1

3. Plant Community Annual Production

At the highest potential similarity index, this site will produce approximately the following amount of air-dry herbage, expressed as pounds/acre:

	Low	High
Favorable Year	550	600
Average Year	450	500
Unfavorable Year	250	300

4. Ground Cover and Structure

a. Vegetative

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Vegetation Type	Percent Canopy Cover	Height Range (ft.)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	20	2	5
Forbs (perennial)	5	1	2
Shrubs	30	2	15
Trees			
Cryptogams			

b. Other

Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As ecological condition deteriorates due to overgrazing, perennial grasses and jointfir decrease while pricklypear, broom snakeweed, and rabbitbrush increase. Fire is not an important factor in this ecosystem. Cheatgrass, Russian thistle, and annual weeds are most likely to invade this site.

Plant Communities & Transitional Pathways

(Show a steady state diagram with influences to move from one steady state to another)

6. Plant Growth Curves

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Percent Growth	0	0	5	25	65	5	0	0	0	0	0	0
Name	PNC											
ID Number	UT1361											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

(Give related range sites in MLRA's above and below)

8. Associated Sites Within MLRA

035XY109UT

Desert Loam (Shadscale)

035XY139UT

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 Site Number: 035XY136UT
 Desert Stony Loam (Blackbrush)

035XY018UT
 Talus Slope (Blackbrush-Shadscale)

035XY243UT
 Semi Desert Stony Loam (Blackbrush)

9. Correlated Sites in Other States

(Give site name and number)

D. MAJOR USES OF THIS SITE

1. Livestock

a. Site Factors Influencing Management

This site provides proper grazing for cattle and sheep during all seasons of the year.

b. Guide to Forage Quality (Plant preference by season)

Species	Oct-Nov	Dec-Feb	Mar-May	Jun-Sep

VG = Very Good G = Good F = Fair P = Poor

2. Wildlife

a. Site Factors Influencing Management

This site provides food and limited cover for wildlife.

b. List of Potential Species Present

Wildlife using this site include jackrabbit, coyote, kangaroo rat, mice, bobcat, snake, and hawk.

This is a short list of the more common species found. Many other species are present as well and migratory birds are present at times.

c. Guide to Forage Preference of Managed Wildlife Species

Wildlife Species →
 Plant Species ↓ Use Season Use Season

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Use - A = preferred or desirable
 B = some use, but less important
 C = little use or used occasionally

Season - F = Fall (Oct-Nov)
 W = Winter (Dec-Feb)
 Sp. = Spring (Mar-May)
 Su. = Summer (Jun-Sep)

3. Recreational Uses

Recreation activities include hiking and hunting.

4. Wood Products

None

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants
2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah County:
 Latitude: Longitude:

Modal Soil: Blackston — loamy-skeletal, mixed, mesic Lithic Calciorthids

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Type Location: Consult the Henry Mountains Soil Survey.

General Legal Description:

Field Office Site Location

Price

Cedar City

Data Collected and References

Sampling Source	Number of Records	Range Similarity Index			
		> 76%	51-75%	26-50%	0-25%
NRCS - ECS - 417					
UTAH - RANGE - 2					
Permanent Transect Location					

Other References