

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 (Blackbrush)

SITE NUMBER: 035XY139UT

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 and Colluvium from Diorite, 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 GR-FSL

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

Site Type: Rangeland
 Ecological Site Name: Desert Stony Loam (Blackbrush)
 Site Number: 035XY139UT

1. Potential Plant Community Description and Ecological Factors

The dominant aspect of the plant community is blackbrush and galleta. The composition by air-dry weight is approximately 25 percent perennial grasses, 10 percent forbs and 65 percent shrubs.

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		45	60	15	20
Indian ricegrass	ACHY		9	15	3	5
Sand dropseed	SPCR	1	3	9	1	3
Bottlebrush squirreltail	ELEL5	1	3	9	1	3
Purple threeawn	ARPU9	1	3	9	1	3
Eightflower sixweeks grass	VUOC	1	3	9	1	3
Other perennial grasses	PPGG	1	9	15	3	5
Other annual grasses	AAGG	1	9	15	3	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Flatcrown wild buckwheat	ERDE6	2	3	9	1	3
Canaigre	RUHY	2	3	9	1	3
Gooseberryleaf globemallow	SPGR2	2	3	9	1	3
Spreading skyrocket	IPPO2	2	3	9	1	3
Western sticktight	LAOC3	2	3	9	1	3
Tumble mustard	SIAL2	2	3	9	1	3
Broadflower pincushion	CHST	2	3	9	1	3
Other perennial forbs	PPFF	2	15	30	5	10
Other annual forbs	AAFF	2	15	30	5	10

Shrubs/Vines, %

Common Name	National	Group	Pounds per Acre	% by Weight of
-------------	----------	-------	-----------------	----------------

Site Type: Rangeland
 Ecological Site Name: Desert Stony Loam (Blackbrush)
 Site Number: 035XY139UT

	Symbol				Total Composition	
			Low	High	Low	High
Blackbrush	CORA		90	120	30	40
Shadscale	ATCO		9	30	3	10
Fourwing saltbush	ATCA2		6	15	2	5
Broom snakeweed	GUSA2		6	15	2	5
Torrey jointfir	EPTO		6	15	2	5
Fineleaf yucca	YUAN2	3	3	9	1	3
Bigelow sagebrush	ARBI3	3	3	9	1	3
Crispleaf wild buckwheat	ERCOA	3	3	9	1	3
Carpet phlox	PHHO	3	3	9	1	3
Granite pricklygilia	LEPU	3	3	9	1	3
Central pricklypear	OPPO	3	3	9	1	3
Winterfat	KRLA2	3	3	9	1	3
Other shrubs	SSSS	3	9	15	3	5

Trees, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High

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	400	500
Average Year	200	300
Unfavorable Year	100	200

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft.)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	20	1	10
Forbs (perennial)	5	1	2
Shrubs	45	2	20
Trees			
Cryptogams			

b. Other

Site Type: Rangeland
 Ecological Site Name: Desert Stony Loam (Blackbrush)
 Site Number: 035XY139UT

Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As ecological condition deteriorates due to overgrazing, perennial grasses, and Torrey jointfir decrease while blackbrush, snakeweed and pricklypear may increase to dominate the site. When the potential natural plant community is burned, blackbrush decreases while galleta, Indian ricegrass, snakeweed, and pricklypear increase. Cheatgrass, Russian thistle and other annuals 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	UT1391											
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)

035XY018UT
 Talus Slope (Blackbrush-Shadscale)

035XY243UT
 Semidesert 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 fall, winter, and spring.

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, bobcat, kangaroo rat, mice, 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

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 values are hiking and hunting.

Site Type: Rangeland
 Ecological Site Name: Desert Stony Loam (Blackbrush)
 Site Number: 035XY139UT

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 GR-FSL — loamy-skeletal, mixed, mesic Typic Calciorthids

Type Location:

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					

4. Other References