

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 Sandy Loam (Blackbrush)

SITE NUMBER: 035XY121UT

MLRA: 035

Original Site Description: Author: GSC

Date: 04/08/1983

Revised Site Description: Author: GSC

Date: 09/14/1993

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: 20-40 inches

Surface Textures:

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

Subsurface Textures:

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

Geologic Parent Materials: Residuum and Eolian from Sandstone

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 639

Moffat FSL, LFS

Bluechief FSL

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

2. PHYSIOGRAPHIC FEATURES

Site Type: Rangeland

Ecological Site Name: Desert Sandy Loam (Blackbrush)

Site Number: 035XY121UT

1. Potential Plant Community Description and Ecological Factors

The dominant aspect of the plant community is Indian ricegrass with an open stand of blackbrush. The composition by air-dry weight is approximately 45 percent perennial grasses, 10 percent forbs and 45 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
Indian ricegrass	ACHY		67.5	90	15	20
Galleta	HIJA		45	67.5	10	15
Spike dropseed	SPCO		13.5	22.5	3	5
Sand dropseed	SPCR		13.5	22.5	3	5
Purple threeawn	ARPU9	1	4.5	13.5	1	3
Sandhill muhly	MUPU2	1	4.5	13.5	1	3
Eightflower sixweeks grass	VUOC	1	4.5	13.5	1	3
Other perennial grasses	PPGG	1	13.5	22.5	3	5
Other annual grasses	AAGG	1	13.5	22.5	3	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Painted milkvetch	ASCE		13.5	22.5	3	5
Gooseberryleaf globemallow	SPGR2	2	4.5	13.5	1	3
Indian pipeweed	ERIN4	2	4.5	13.5	1	3
Sprawling skyrocket	IPPO2	2	4.5	13.5	1	3
Mountain pepperweed	LEMO2	2	4.5	13.5	1	3
Other perennial forbs	PPFF	2	13.5	22.5	3	5
Other annual forbs	AAFF	2	13.5	22.5	3	5

Shrubs/Vines, %

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

Site Type: Rangeland
 Ecological Site Name: Desert Sandy Loam (Blackbrush)
 Site Number: 035XY121UT

			Low	High	Low	High
Blackbrush	CORA		90	112.5	20	25
Mormon tea	EPVIV2		45	67.5	10	15
Broom snakeweed	GUSA2		13.5	22.5	3	5
Torrey jointfir	EPTO	3	4.5	13.5	1	3
Shadscale	ATCO	3	4.5	13.5	1	3
Sand sagebrush	ARFI2	3	4.5	13.5	1	3
Central pricklypear	OPPO	3	4.5	13.5	1	3
Fourwing saltbush	ATCA2	3	4.5	13.5	1	3
Crispleaf wild sagebrush	ERCO14	3	4.5	13.5	1	3
Fineleaf yucca	YUAN2	3	4.5	13.5	1	3
Winterfat	KRLA2	3	4.5	13.5	1	3
Other shrubs	SSSS	3	13.5	22.5	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	450	500
Average Year	400	450
Unfavorable Year	300	350

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft.)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	30	2	10
Forbs (perennial)	5	1	2
Shrubs	30	2	15
Trees			
Cryptogams			

b. Other

Litter	
--------	--

Site Type: Rangeland
 Ecological Site Name: Desert Sandy Loam (Blackbrush)
 Site Number: 035XY121UT

Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As ecological condition deteriorates due to overgrazing, Indian ricegrass and galleta decrease while blackbrush, broom snakeweed, and sometimes cutler mormon tea increase. When the potential natural community is burned, blackbrush will decrease while Indian ricegrass and broom snakeweed increase. Cheatgrass, halogeton, and Russian thistle 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	UT1211											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

035XY118UT
 Desert Sandy Loam (Fourwing saltbush)

035XY133UT
 Desert Shallow Sandy Loam (Blackbrush)

035XY130UT
 Desert Shallow Sandy Loam (Shadscale)

035XY115UT
 Desert Sand (Sand sagebrush)

9. Correlated Sites in Other States

(Give site name and number)

D. MAJOR USES OF THIS SITE

1. Livestock

Site Type: Rangeland
 Ecological Site Name: Desert Sandy Loam (Blackbrush)
 Site Number: 035XY121UT

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, sparrow, hawk, kangaroo rat, mice, and snake.

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.

4. Wood Products

Site Type: Rangeland
 Ecological Site Name: Desert Sandy Loam (Blackbrush)
 Site Number: 035XY121UT

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: Moffat FSL, LFS — coarse-loamy, mixed, mesic Typic Calciorthids

Type Location: Gooseneck Park

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