

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: Semidesert Shallow Hardpan

SITE NUMBER: 030XY230UT

MLRA: 030X

Original Site Description: Author: TS

Date: 02/01/1990

Revised Site Description: Author: TS

Date: 04/16/1994

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

Date: 07/25/1994

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: 10-20 inches

Surface Textures:

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

Subsurface Textures:

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

Geologic Parent Materials: Lime Cemented Hardpan or Bedrock

Moisture Regime:

Temperature Regime:

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: 641

Cave GRSL, 7-30%

Renbac-Rockland, 2-30%

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

Site Type: Rangeland
 Ecological Site Name: Semidesert Shallow Hardpan (Blackbrush)
 Site Number: 030XY230UT

1. Potential Plant Community Description and Ecological Factors

This site is dominated by blackbrush (CORA). There is little evidence of a grass understory. Joshua tree is very evident in the aspect of the site. Important plants of this site in good condition are blackbrush, Nevada mormontea, big galleta, bush muhly, and globemallow.

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
Big galleta	HIRI				1	3
Bush muhly	MUPO2				1	3
Desert needlegrass	ACSP12				1	3
Indian ricegrass	ACHY				1	3
Red brome	BRRU2	1			0	1
Bottlebrush squirreltail	ELEL5	1			0	1
Sand dropseed	SPCR	1			0	1
Threeawn	ARIST	1			0	1
Cheatgrass	BRTE	1			0	1
Other perennial grasses	PPGG	1			2	5
Other annual grasses	AAGG	1			2	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Globemallow	SPHAE				1	2
Four-o-clock	MIMU	2			0	1
Freckled milkvetch	ASLES6	2			0	1
Purplemat	NADE	2			0	1
Fremont phacelia	PHFR2	2			0	1
Wooly daisy	ERLA6	2			0	1
Longleaf phlox	PHLO2	2			0	1
Other perennial forbs	PPFF	2			1	2
Other annual forbs	AAFF	2			1	2

Shrubs/Vines, %

Common Name	National	Group	Pounds per Acre	% by Weight of
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Site Number: 030XY230UT

	Symbol				Total Composition	
			Low	High	Low	High
Blackbrush	CORA	0			65	80
Nevada jointfir	EPNE	0			2	3
Creosote bush	LATRA	0			1	2
Cholla	OPUNT	0			1	2
Turpentinebush	THMO	0			1	2
Spiny hopsage	GRSP	3			0	2
Yucca	YUCCA	3			0	2
Longspine horsebrush	TEAX	3			0	2
Desert pepperweed	LEFR2	3			0	2
Mohave goldenweed	HALI3	3			0	2
Anderson wolfberry	LYAN	3			0	2
Indigo bush	DAFR	3			0	2
Winterfat	KRLA2	3			0	2
Other shrubs	SSSS	3			2	10

Trees, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Joshua tree	YUBR				0	0

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	550
Average Year	300	400
Unfavorable Year	200	300

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	3	1	
Forbs (perennial)			
Shrubs	25	1.5	
Trees	1	10	
Cryptogams			

b. Other

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Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

This section will be added as information is available.

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												
Name												
ID Number												
Description												

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

030XY140UT
 Desert Shallow Hardpan (Creosotebush)

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 section will be added as information is available.

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

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This section will be added as information is available.

b. List of Potential Species Present

This section will be added as information is available.

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

This section will be added as information is available.

4. Wood Products

None

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants
2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah
 Latitude:

County:
 Longitude:

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Modal Soil: Cave GRSL, 7-30% Slopes – loamy, mixed, thermic, shallow Typic Paleorthid

Type Location: Township 42S, Range 19W, Section 16

General Legal Description:

Field Office Site Location

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	1				
OTHER	4				
Permanent Transect Location					

Other References