

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 Clay (Mat saltbush)

SITE NUMBER: 035XY223UT

MLRA: 035

Original Site Description: Author: TLJ

Date: 12/13/1988

Revised Site Description: Author: TLJ

Date: 09/30/1993

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: 10-20 inches

Surface Textures:

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

Subsurface Textures: Silty Clay Loam to Silty Clay

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

Geologic Parent Materials: Shale

Moisture Regime: Aridic and Aridic-Torrict

Temperature Regime: Mesic

Runoff: Medium to Rapid

Permeability(min-max): Very Slow to Slow

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:

Ustic Torriorthents

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

2. PHYSIOGRAPHIC FEATURES

Site Type: Rangeland

Ecological Site Name: Semidesert Shallow Clay (Mat saltbush)

Site Number: 035XY223UT

1. Potential Plant Community Description and Ecological Factors

The dominant aspect of the plant community is mat saltbush. The composition by air-dry weight is approximately 15 percent perennial grasses, 10 percent forbs and 75 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		15	30	5	10
Bottlebrush	ELEL5		9	15	3	5
Indian ricegrass	ACHY		3	9	1	3
Other perennial grasses	PPGG	1	0	9	0	3
Other annual grasses	AAGG	1	0	9	0	3

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Indian pipeweed	ERIN4		6	15	2	5
Pacific aster	ASCH2	2	3	9	1	3
Gooseberryleaf globemallow	SPGR2	2	3	9	1	3
Woolly milkvetch	ASMO7	2	3	9	1	3
Pale evening primrose	OEPA	2	3	9	1	3
Woolly plantain	PLPA2	2	3	9	1	3
Sego lily	CANU3	2	3	9	1	3
Shaggy fleabane	ERPU2	2	3	9	1	3
Cushion wild buckwheat	EROV	2	3	9	1	3
Spreading skyrocket	IPPO2	2	3	9	1	3
Common sunflower	HEAN3	2	3	9	1	3
Utah desert parsley	LOPA	2	3	9	1	3
Prairie sunflower	HEPE	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: Semidesert Shallow Clay (Mat saltbush)

Site Number: 035XY223UT

	Symbol				Total Composition	
			Low	High	Low	High
Mat saltbush	ATCO4		150	180	50	60
Bud sagebrush	ARSP5		9	15	3	5
Shadscale	ATCO		6	15	2	5
Castlevalley saltbush	ATCU	3	3	6	1	2
Winterfat	KRLA2	3	3	6	1	2
Broom snakeweed	GUSA2	3	3	6	1	2
Central pricklypear	OPPO	3	3	6	1	2
Shortspine horsebrush	TESP2	3	3	6	1	2
Black sagebrush	ARNO4	3	3	6	1	2
Other shrubs	SSSS	3	15	30	5	10

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	350	400
Average Year	250	300
Unfavorable Year	50	100

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft.)	Percent Basal Area Cover
Grasses & Grass-like (perennial)			
Forbs (perennial)			
Shrubs			
Trees			
Cryptogams			

b. Other

Litter	
--------	--

Site Type: Rangeland
 Ecological Site Name: Semidesert Shallow Clay (Mat saltbush)
 Site Number: 035XY223UT

Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As ecological condition deteriorates due to overgrazing, galleta, Indian ricegrass, and bottlebrush squirreltail decrease while annuals and bare ground will increase. Fire is not an important factor on this site. Halogeton and Russian thistle are most likely to invade this site. Of note, this site has sparse vegetation dominated by mat saltbush and galleta. This site occurs on tropic shale and is in the early seral stages of soil formation.

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	15	45	35	0	0	0	0	0	0
Name	PNC											
ID Number	UT2231											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

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: Semidesert Shallow Clay (Mat saltbush)
 Site Number: 035XY223UT

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 jackrabbits, mice, kangaroo rats, coyotes, bobcats, hawks, and snakes.

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 site has good potential for recreation in hiking and sightseeing. There is good aesthetic value with the natural landscape.

Site Type: Rangeland

Ecological Site Name: Semidesert Shallow Clay (Mat saltbush)

Site Number: 035XY223UT

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: Ustic Torriorthents — clayey, montmorillonitic (calc), mesic, shallow Ustic Torriorthents

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					

Other References