

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 (Fourwing saltbush)

SITE NUMBER: 028AY136UT

MLRA: 028A

Original Site Description: Author: DJS

Date: 09/01/1987

Revised Site Description: Author: DJS

Date: 06/02/1993

Approved by: Title: State Range Cons.

Signed: Pat Shaver

Date: 08/30/1993

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: Loamy Sand or Fine Sandy Loam

Surface Fragments(<=3" % cover, >3" % cover): None

Subsurface Textures: Sandy Loams or Loams

Subsurface Fragments(<=3" % vol, >3" % vol): None

Geologic Parent Materials: Alluvium from Mixed Material

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): 4-6

Major Soils Associated With This Site:

Soil Survey Area: 617

Moepitz SL

Mazuma GR-SL

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

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1. Potential Plant Community Description and Ecological Factors

The dominant aspect of the plant community is fourwing saltbush and Indian ricegrass. The composition by air-dry weight is approximately 35 percent perennial grasses, 10 percent forbs, and 55 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		120	150	20	25
Sand dropseed	SPCR		18	30	3	5
Needleandthread	HECO26	1	6	18	1	3
Galleta	HIJA	1	6	18	1	3
Bottlebrush squirreltail	ELEL5	1	6	18	1	3
Blue grama	BOGR2	1	6	18	1	3
Other perennial grasses	PPGG	1	18	30	3	5
Other annual grasses	AAGG	1	18	30	3	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Gooseberryleaf globemallow	SPGR2		18	30	3	5
Mojave woodyaster	XYTO2	2	6	18	1	3
Shockley wild buckwheat	ERSH	2	6	18	1	3
Utah milkvetch	ASUT	2	6	18	1	3
Roundspike catseye	CRHU2	2	6	18	1	3
Tufted evening primrose	DECE2	2	6	18	1	3
Slenderflower lemonweed	PSTE5	2	6	18	1	3
Other perennial forbs	PPFF	2	18	30	3	5
Other annual forbs	AAFF	2	18	30	3	5

Shrubs/Vines, %

Common Name	National	Group	Pounds per Acre	% by Weight of
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	Symbol				Total Composition	
			Low	High	Low	High
Fourwing saltbush	ATCA2		120	180	20	30
Nevada jointfir	EPNE		60	90	10	15
Winterfat	KRLA2		30	60	5	10
Bud sagebrush	ARSP5	3	6	18	1	3
Narrowleaf low rabbitbrush	CHVIS5	3	6	18	1	3
Granite pricklygilia	LEPU	3	6	18	1	3
Other shrubs	SSSS	3	18	30	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	700	800
Average Year	500	600
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)	10	2	5
Forbs (perennial)	5	1	5
Shrubs	30	4	15
Trees			
Cryptogams			

b. Other

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Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As ecological condition deteriorates due to overgrazing, Indian ricegrass, needleandthread, and fourwing saltbush decrease while rabbitbrush and threeawn increase.

When the potential natural plant community is burned, Indian ricegrass and needleandthread decrease while rabbitbrush and annuals increase.

Annual forbs and annual grasses 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	50	10	0	0	5	5	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

028AY226UT
 Semidesert Sandy Loam (Wyoming big sagebrush)

028AY119UT
 Desert Flat (Shadscale)

028AY134UT
 Desert Sand (Fourwing saltbush)

9. Correlated Sites in Other States

(Give site name and number)

D. MAJOR USES OF THIS SITE

1. Livestock

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a. Site Factors Influencing Management

This site is suited for sheep and cattle grazing during 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 cover for wildlife.

b. List of Potential Species Present

Wildlife using this site include rabbit, coyote, fox, pronghorn antelope, and mule deer (seasonal).

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

Some recreation uses of this site are hiking and hunting.

4. Wood Products

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None

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants
2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah County:
 Latitude: Longitude:

Modal Soils: Moepitz SL – coarse-loamy, mixed (calcareous), mesic Typic Torriorthents

Type Location: Smithson Allotment SWA G163; SWA A257 Photo 1B-1-42

General Legal Description:

Field Office Site Location

Logan
 Murray
 Provo
 Richfield
 Cedar City

Data Collected and References

Sampling Source	Number of Records	Range Similarity Index			
		> 76%	51-75%	26-50%	0-25%
NRCS - ECS - 417	3				
UTAH - RANGE - 2	4				
Permanent Transect Location					

Other References