

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 Sandy Loam (Winterfat)

SITE NUMBER: 028AY224UT

MLRA: 028A

Original Site Description: Author: DJS

Date: 01/01/1988

Revised Site Description: Author: DJS

Date: 06/21/1993

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: Sandy Loam

Surface Fragments(<=3" % cover, >3" % cover): 25%

Subsurface Textures:

Subsurface Fragments(<=3" % vol, >3" % vol): 15-35%

Geologic Parent Materials: Alluvium from Basic and Intermediate Igneous

Moisture Regime:

Temperature Regime:

Runoff: Slow

Permeability(min-max): Moderate

Drainage Class(min-max):

Water Erosion Hazard: Slight

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: Iron-Wash

Escalante SL

Bannion GR-SL

Deerlodge SL

Manselo L

Wales VFSL

Crestline GR-SL

Biblesprings SL

Armespan GR-I

Garbo L

Taylorsflat SL

Zane SL

1. Potential Plant Community Description and Ecological Factors

The dominant aspect of this plant community is Indian ricegrass. The composition by air-dry weight is approximately 55 percent perennial grasses, 10 percent forbs, and 35 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		150	175	30	35
Needleandthread	HECO26		25	50	5	10
Bottlebrush squirreltail	ELEL5		15	25	3	5
Galleta	HIJA		15	25	3	5
Eightflower sixweeks grass	VUOC	1	5	15	1	3
Blue grama	BOGR2	1	5	15	1	3
Purple threeawn	ARPU9	1	5	15	1	3
Sand dropseed	SPCR	1	5	15	1	3
Western wheatgrass	PASM	1	5	15	1	3
Sandhill muhly	MUPU2	1	5	15	1	3
Other perennial grasses	PPGG	1	15	25	3	5
Other annual grasses	AAGG	1	15	25	3	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Gooseberryleaf globemallow	SPGR2		15	25	3	5
Matted wild buckwheat	ERCA8	2	5	15	1	3
Longleaf phlox	PHLO2	2	5	15	1	3
Pacific aster	ASCH2	2	5	15	1	3
Utah milkvetch	ASUT	2	5	15	1	3
Fendler sandwort	ARFE3	2	5	15	1	3
Thorny wirelettuce	STSP6	2	5	15	1	3
Wooly plantain	PLPA2	2	5	15	1	3
Other perennial forbs	PPFF	2	15	25	3	5
Other annual forbs	AAFF	2	15	25	3	5

Shrubs/Vines, %

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Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Winterfat	KRLA2		50	75	10	15
Fourwing saltbush	ATCA2		50	75	10	15
Low rabbitbrush	CHVI8		15	25	3	5
Nevada jointfir	EPNE		15	25	3	5
Spiny hopsage	GRSP	3	5	15	1	3
Nuttall horsebrush	TENU2	3	5	15	1	3
Central pricklypear	OPPO	3	5	15	1	3
Shadscale	ATCO	3	5	15	1	3
Greenmolly	KOAM	3	5	15	1	3
Wyoming big sagebrush	ARTRW	3	5	15	1	3
Black sagebrush	ARNO4	3	5	15	1	3
Broom snakeweed	GUSA2	3	5	15	1	3
Other shrubs	SSSS	3	15	25	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	650	700
Average Year	450	500
Unfavorable Year	250	300

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

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Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As ecological condition deteriorates due to overgrazing, Indian ricegrass decreases, while low rabbitbrush and snakeweed increase.

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

Annual grasses and annual forbs 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	15	40	30	5	5	0	0	0	0
Name	UT2241											
ID Number	PNC											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

028AY220UT
 Semidesert Loam (Wyoming big sagebrush)

028AY234UT
 Semidesert Shallow Loam (Utah juniper-Salina wildrye)

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 grazing by cattle and sheep 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 limited cover for wildlife.

b. List of Potential Species Present

Wildlife using this site include rabbit, coyote, fox, badger, pronghorn antelope, mule deer, and dove.

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

Resources that have special aesthetic and landscape values are wildflowers. Some recreation uses of this site are hiking and horseback riding.

4. Wood Products

None

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants

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 2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah County:
 Latitude: Longitude:

Modal Soil: Escalante SL – coarse-loamy, mixed, mesic Xerollic Calciorthids

Type Location: Northeast of Cedar City 14 Miles on Luna Highway on Nelson Brothers' Allotment

General Legal Description:

Field Office Site Location

Logan
 Provo
 Cedar City
 Murray
 Richfield

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	13				
Permanent Transect Location					

Other References