

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 Shallow Loam (Pigmy sagebrush)

SITE NUMBER: 034XY119UT

MLRA: 034

Original Site Description: Author: JLB GWL

Date: 05/15/1981

Revised Site Description: Author: JLB GWL

Date: 12/09/1993

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

Date: 06/25/1994

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

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: Alluvium and Residuum from Shale

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: 013

Pariette GR-SL 2-4% Eroded

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

2. PHYSIOGRAPHIC FEATURES

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1. Potential Plant Community Description and Ecological Factors

The dominant aspect of the plant community is pigmy sagebrush and spiny greasebush. The composition by air-dry weight is approximately 15 percent perennial grasses, 5 percent forbs and 80 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		10	20	5	10
Indian ricegrass	ACHY		6	10	3	5
Bottlebrush squirreltail	ELEL5	1	2	6	1	3
Nevada bluegrass	PONE3	1	2	6	1	3
Other perennial grasses	PPGG	1	6	10	3	5
Other annual grasses	AAGG	1	6	10	3	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Scarlet globemallow	SPCO		2	10	1	5
Basin daisy	PLINO	2	2	4	1	2
Mountain pepperweed	LEMO2	2	2	4	1	2
Nodding rockcress	ARDE	2	2	4	1	2
Barneby catseye	CRBA6	2	2	4	1	2
Woodside wild buckwheat	ERTU2	2	2	4	1	2
Shrubby waxfruit	GLSU	2	2	4	1	2
Other perennial forbs	PPFF	2	10	20	5	10
Other annual forbs	AAFF	2	10	20	5	10

Shrubs/Vines, %

Common Name	National Symbol	Group	Pounds per Acre	% by Weight of Total Composition
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			Low	High	Low	High
Pigmy sagebrush	ARPY2		90	110	45	55
Spiny greasewood	GLSPM		20	30	10	15
Black sagebrush	ARNO4	3	2	6	1	3
Winterfat	KRLA2	3	2	6	1	3
Torrey jointfir	EPTO	3	2	6	1	3
Ephedra wild buckwheat	EREP	3	2	6	1	3
Slender wild buckwheat	ERMI4	3	2	6	1	3
Shadscale	ATCO	3	2	6	1	3
Central pricklypear	OPPO	3	2	6	1	3
Uinta Basin hookless cactus	SCGL3	3	2	6	1	3
Other shrubs	SSSS	3	20	30	10	15

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	250	300
Average Year	150	200
Unfavorable Year	100	150

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)	3	1	1
Shrubs	60	1	20
Trees			
Cryptogams			

b. Other

Litter	
Coarse Fragments	

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Bare Ground	
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5. Ecological Dynamics of the Site

This site is not used significantly by livestock. When it is used, spiny greasebush is used most heavily. The disclimax is difficult to determine.

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	UT1191											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

034XY106UT
 Desert Loam (Shadscale)

034XY118UT
 Desert Shallow Loam (Black sagebrush)

034XY233UT
 Semidesert Shallow Loam (Utah juniper-Pinyon)

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 site may be slightly used by sheep in the winter.

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 lizard, mice, kangaroo rat, snake, jackrabbit, coyote, and hawk.

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

Aesthetic values are a desert landscape.

4. Wood Products

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 None

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants

The Uinta Basin hookless cactus is found on this site and possibly other species inhabit the area.

2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah County:
 Latitude: Longitude:

Modal Soil: Pariette GR-SL 2-4% Eroded — fine-loamy, mixed, mesic Typic Calciorthids

Type Location: SE ¼, SW ¼, SW ¼; Section 21, Township 11S, Range 17E SLBM

General Legal Description:

Field Office Site Location

Roosevelt
 Price

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