

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 Shaley Shallow Loam (Spiny greasebush)

SITE NUMBER: 034XY131UT

MLRA: 034

Original Site Description: Author: JLB GWL

Date: 05/15/1981

Revised Site Description: Author: JLB GWL

Date: 12/13/1993

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

(description narrative of this particular site)

1. SOILS

Depth: 6-16 inches

Surface Textures: Extremely Flaggy or Channery Loam

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

Subsurface Textures: Extremely Channery Clay Loam

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

Geologic Parent Materials: Residuum and Colluvium from Shale of the Green River Formation

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: 047

Walknolls FLX-L Dry 4-25%, 25-50% Eroded

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

1. Potential Plant Community Description and Ecological Factors

The dominant aspect of the plant community is shrubs. The composition by air-dry weight is approximately 25 percent perennial grasses, 10 percent forbs and 65 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		9	13.5	10	15
Indian ricegrass	ACHY		4.5	9	5	10
Bottlebrush squirreltail	ELEL5		0.9	1.8	1	2
Blue grama	BOGR2	1	0.9	1.8	1	2
Salina wildrye	LESAS	1	0.9	1.8	1	2
Muttongrass	POFE	1	0.9	1.8	1	2
Purple threeawn	ARPU9	1	0.9	1.8	1	2
Other perennial grasses	PPGG	1	0.9	4.5	1	5
Other annual grasses	AAGG	1	0.9	4.5	1	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Roughseed catseye	CRFL6		0.9	4.5	1	5
Gumweed tansyaster	MAGR2		0.9	2.7	1	3
Scarlet globemallow	SPCO		0.9	1.8	1	2
Mountain pepperweed	LEMO2	2	0.9	1.8	1	2
Hedge mustard	SIOF	2	0.9	1.8	1	2
Stemless fournerve daisy	TEACA2	2	0.9	1.8	1	2
Uinta mountain flax	LIKI2	2	0.9	1.8	1	2
Holboell rockcress	ARHO2	2	0.9	1.8	1	2
Barneby catseye	CRBA6	2	0.9	1.8	1	2
Shrubby waxfruit	GLSU	2	0.9	1.8	1	2
Uinta Basin beardtongue	PEGR6	2	0.9	1.8	1	2
Arrowhead thelypody	THSA2	2	0.9	1.8	1	2
Gates Canyon wild buckwheat	ERHY3	2	0.9	1.8	1	2
Whiteriver Beardtongue	PESC5	2	0.9	1.8	1	2
Other perennial forbs	PPFF	2	0.9	4.5	1	5
Other annual forbs	AAFF	2	0.9	4.5	1	5

Shrubs/Vines, %

Common Name	National	Group	Pounds per Acre	% by Weight of
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	Symbol				Total Composition	
			Low	High	Low	High
Spiny greasebush	GLSPM		13.5	18	15	20
Ephedra wild buckwheat	EREP		4.5	9	5	10
Shadscale	ATCO		4.5	9	5	10
Crispleaf wild buckwheat	ERCO14		4.5	9	5	10
Torrey jointfir	EPTO	3	0.9	4.5	1	5
Nuttall horsebrush	TENU2	3	0.9	4.5	1	5
Low rabbitbrush	CHVI8	3	0.9	4.5	1	5
Broom snakeweed	GUSA2	3	0.9	4.5	1	5
Central pricklypear	OPPO	3	0.9	4.5	1	5
Winterfat	KRLA2	3	0.9	4.5	1	5
Birchleaf mountainmahogany	CEMO2	3	0.9	4.5	1	5
Wyoming big sagebrush	ARTRW	3	0.9	4.5	1	5
Black sagebrush	ARNO4	3	0.9	4.5	1	5
Pygmy sagebrush	ARPY2	3	0.9	4.5	1	5
Spanish bayonet	YUHA	3	0.9	4.5	1	5
Other shrubs	SSSS	3	9	13.5	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	100	130
Average Year	45	90
Unfavorable Year	0	40

4. Ground Cover and Structure

a. Vegetative

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Vegetation Type	Percent Canopy Cover	Height Range (ft.)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	15	2	5
Forbs (perennial)	5	1	2
Shrubs	30	3	10
Trees			
Cryptogams			

b. Other

Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As ecological condition deteriorates due to overgrazing, spiny greasebush and jointfir will decrease. Fire is not an important factor in this ecosystem.

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	UT1311											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

034XY119UT
 Desert Shallow Loam (Pygmy sagebrush)

034XY118UT
 Desert Shallow Loam (Black sagebrush)

034XY133UT
 Desert Very Steep Shallow Loam (Shadscale)

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 is not commonly used by livestock because of its low forage production.

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, 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

This site provides scenic desert vistas and limited recreational opportunities.

4. Wood Products

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None

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants

This site may have some species present.

2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah County:
 Latitude: Longitude:

Modal Soil: Walknolls FLX-L (Dry, Eroded) 4-25%, 25-50% — loamy-skeletal, mixed (calcareous), mesic Lithic Torriorthents

Type Location: NW ¼, SW ¼, NE ¼; Section 35, Township 12S, Range 21E 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