

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: Upland Shallow Loam (Black sagebrush)

SITE NUMBER: 035XY312UT

MLRA: 035

Original Site Description: Author: GSC

Date: 01/15/1984

Revised Site Description: Author: GSC

Date: 11/04/1993

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: Fine Sandy Loam

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

Geologic Parent Materials: Eolian Deposits from Sandstone

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: 633

Leanto FSL, 2 to 6%

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 black sagebrush and grass. The composition by air-dry weight is approximately 50 percent perennial grasses, 10 percent forbs and 40 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
Nevada bluegrass	PONE3		75	112.5	10	15
Muttongrass	POFE		75	112.5	10	15
Blue grama	BOGR2		37.5	75	5	10
Needleandthread	HECO26		22.5	37.5	3	5
Western wheatgrass	PASM		22.5	37.5	3	5
Bottlebrush squirreltail	ELEL5	1	7.5	22.5	1	3
Galleta	HIJA	1	7.5	22.5	1	3
Indian ricegrass	ACHY	1	7.5	22.5	1	3
Purple threeawn	ARPU9	1	7.5	22.5	1	3
Sandberg bluegrass	POSE	1	7.5	22.5	1	3
Sand dropseed	SPCR	1	7.5	22.5	1	3
Other perennial grasses	PPGG	1	22.5	37.5	3	5
Other annual grasses	AAGG	1	22.5	37.5	3	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Scarlet globemallow	SPCO		22.5	37.5	3	5
Pacific aster	ASCH2	2	7.5	22.5	1	3
Woolly milkvetch	ASMO7	2	7.5	22.5	1	3
Plateau yellow catseye	CRFL5	2	7.5	22.5	1	3
Cushion wild buckwheat	EROV	2	7.5	22.5	1	3
Fendler sandmat	CHFEF	2	7.5	22.5	1	3
Hairy false goldenaster	HEVI8	2	7.5	22.5	1	3
Utah desert parsley	LOPA	2	7.5	22.5	1	3
Tumble mustard	SIAL2	2	7.5	22.5	1	3
Utah firecracker	PEUT	2	7.5	22.5	1	3
Longleaf phlox	PHLO2	2	7.5	22.5	1	3
Stemless fournerve daisy	TEACA2	2	7.5	22.5	1	3
Western sticktight	LAOC3	2	7.5	22.5	1	3
Other perennial forbs	PPFF	2	37.5	75	5	10
Other annual forbs	AAFF	2	37.5	75	5	10

Shrubs/Vines, %

Common Name	National	Group	Pounds per Acre	% by Weight of
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	Symbol				Total Composition	
			Low	High	Low	High
Black sagebrush	ARNO4		112.5	150	15	20
Birchleaf mountainmahogany	CEMO2		37.5	75	5	10
Low rabbitbrush	CHVI8		22.5	37.5	3	5
Mormontea	EPVI		22.5	37.5	3	5
Mexican cliffrose	PUME	3	7.5	22.5	1	3
Broom snakeweed	GUSA2	3	7.5	22.5	1	3
Sulphurflower wild buckwheat	ERUM	3	7.5	22.5	1	3
Fourwing saltbush	ATCA2	3	7.5	22.5	1	3
Gambel oak	QUGA	3	7.5	22.5	1	3
Central pricklypear	OPPO	3	7.5	22.5	1	3
Grassy rockgoldenrod	PEPU7	3	7.5	22.5	1	3
Winterfat	KRLA2	3	7.5	22.5	1	3
Spanish bayonet	YUHA	3	7.5	22.5	1	3
Other shrubs	SSSS	3	22.5	37.5	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	950	1000
Average Year	700	750
Unfavorable Year	450	500

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft.)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	40	2	15
Forbs (perennial)	5	1	2
Shrubs	30	2	10
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 grazing pressure, the grasses decrease while broom snakeweed, low rabbitbrush, Gambel oak, and pricklypear increase. When the potential natural plant community is burned, many grass species and low rabbitbrush increase while most other shrubs decrease.

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	0	10	30	45	5	5	5	0	0	0
Name	PNC											
ID Number	UT3121											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

035XY306UT

Upland Loam (Basin big sagebrush)

035XY315UT

Upland Shallow Loam (Pinyon-Utah juniper)

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 provides fair to good grazing for cattle, sheep, and horses during the spring, summer, and fall.

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 is poor to very poor for openland habitat, fair to poor for woodland habitat, and fair to poor for rangeland habitat.

b. List of Potential Species Present

This site is fair to poor habitat for deer, antelope, rabbits, cottontail, coyote, hawks, owls, songbirds, and small mammals.

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 fair to good aesthetic appeal and natural beauty. It has a relatively large number of forbs and shrubs which bloom from early spring to fall. It has little value for screening because of relatively low growing vegetation. It has poor to fair values for camping and picnicking from a vegetative viewpoint. Hunting is fair for upland game birds and rabbits but poor for deer.

4. Wood Products

None

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5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

- 1. Plants
- 2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah County:
 Latitude: Longitude:

Modal Soil: Leanto FSL, 2 to 6% — loamy, mixed, mesic Lithic Camborthids

Type Location: 1800 ft N 0 ft E of NW Corner of Section 12, Township 29S, Range 22 E; Hart Point, Hatch Point, Dark Canyon Plateau

General Legal Description:

Field Office Site Location

Price
 Cedar City
 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					
Permanent Transect Location					

Other References