

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 Stony Loam (Black sagebrush)

SITE NUMBER: 025XY318UT

MLRA: 025

Original Site Description: Author: GBB

Date: 01/15/1985

Revised Site Description: Author: GBB

Date: 02/09/1994

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

Date: 04/25/1994

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: >40 inches

Surface Textures: Medium & Moderately Coarse

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

Subsurface Textures:

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

Geologic Parent Materials: Collivium & Alluvium from Mixed Parent Materials

Moisture Regime:

Temperature Regime:

Runoff: Rapid

Permeability(min-max): Moderate

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): 3-6

Major Soils Associated With This Site:

Soil Survey Area: 601

Kapod CB-L

Fontreen

Ranshorn Family

Ridd

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

2. PHYSIOGRAPHIC FEATURES

Site Type: Rangeland

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1. Potential Plant Community Description and Ecological Factors

The general view of this site is black sagebrush and bluebunch wheatgrass. The composition by air-dry weight is approximately 45 percent perennial grasses, 10 percent forbs, and 45 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
Bluebunch wheatgrass	PSSP6		180	210	30	35
Nevada bluegrass	PONE3		90	60	15	10
Indian ricegrass	ACHY	1	66	18	11	3
Needleandthread	HECO26	1	6	18	1	3
Other perennial grasses	PPGG	1	18	30	3	5
Other perennial 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
Carpet phlox	PHHO		18	30	3	5
Hairy balsamroot	BAHO	2	6	18	1	3
Stemless mock goldenweed	STACA	2	6	18	1	3
Torrey milkvetch	ASCA9	2	6	18	1	3
Cushion pussytoes	ANDI2	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 Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Black sagebrush	ARNO4		210	240	35	40
Low rabbitbrush	CHVI8		18	30	3	5
Slender wild buckwheat	ERMI4	3	6	18	1	3
Bitterbrush	PUTR2	3	6	18	1	3
Nevada jointfir	EPNE	3	18	30	3	5
Other shrubs	SSSS	3	18	30	3	5

Trees, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
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			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)	30	2	10
Forbs (perennial)	5	1	5
Shrubs	30	2	10
Trees			
Cryptogams			

b. Other

Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As this site deteriorates due to grazing pressure bluebunch wheatgrass and bluegrass decrease while low rabbitbrush, stemless mock goldenweed, and black sagebrush increase. When the potential natural plant community is burned, black sagebrush, Indian ricegrass, and pussytoes decrease while low rabbitbrush and stemless mock goldenweed increase.

Plant Communities & Transitional Pathways

(Show a steady state diagram with influences to move from one steady state to another)

6. Plant Growth Curves

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	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Percent Growth	0	0	5	15	40	20	10	5	5	0	0	0
Name	UT3181											
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

025XY324UT
 Upland Shallow Loam (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 proper grazing for cattle and sheep during 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 provides food and limited cover for wildlife.

b. List of Potential Species Present

Wildlife using this site include blacktail jackrabbit, coyote, sage grouse, and mule deer.

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Modal Soil: Kapod CB-L – loamy-skeletal, mixed, mesic Calcic Argixerolls

Type location: Meadow Creek NW ¼ SE ¼ Section 10, Township 13N, Range 19W;
 Junction Valley SW ¼ NE ¼ Section 32, Township 15N, Range 17W

General Legal Description:

Field Office Site Location

Logan
 Box Elder County

Legal Description:

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	8				
Permanent Transect Location					

Other References