

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: 025XY316UT

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: 10-40 inches

Surface Textures:

Surface Fragments(<=3" % cover, >3" % cover): 30-60%

Subsurface Textures:

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

Geologic Parent Materials: Colluvium & Residuum from Chert & Limestone

Moisture Regime:

Temperature Regime:

Runoff:

Permeability(min-max):

Drainage Class(min-max):

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): 1-3

Major Soils Associated With This Site:

Soil Survey Area: 601

Sonlet GRV-L

Rodrof GRX-L

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

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 5 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
Bluebunch wheatgrass	PSSP6		75	100	15	20
Thurber needlegrass	ACTH7		50	75	10	15
Indian ricegrass	ACHY		15	25	3	5
Pine Bluegrass	POSC		15	25	3	5
Nevada Bluegrass	PONE3	1	15	25	3	5
Bottlebrush squirreltail	ELEL5	1	15	25	3	5
Idaho fescue	FEID	1	15	25	3	5
Sandberg bluegrass	POSE	1	15	25	3	5
Western wheatgrass	PASM	1	15	25	3	5
Other perennial grasses	PPGG	1	25	50	5	10
Other annual grasses	AAGG	1	25	50	5	10

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Longleaf hawksbeard	CRAC2	2	15	25	3	5
Carpet phlox	PHHO	2	15	25	3	5
Shortstem wild buckwheat	ERBR5	2	15	25	3	5
Spurred lupine	LUCAC3	2	15	25	3	5
Torrey milkvetch	ASCA9	2	15	25	3	5
Pacific aster	ASCH2	2	15	25	3	5
Stemless mock goldenweed	STACA	2	15	25	3	5
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
Black sagebrush	ARNO4		125	150	25	30
Low rabbitbrush	CHVI8	3	15	25	3	5
Spiny hopsage	GRSP	3	15	25	3	5
Bitterbrush	PUTR2	3	15	25	3	5
Winterfat	KRLA2	3	15	25	3	5
Saskatoon serviceberry	AMAL2	3	15	25	3	5
Mountain snowberry	SYOR2	3	15	25	3	5
Other shrubs	SSSS	3	25	50	5	10

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	600	700
Average Year	400	500
Unfavorable Year	200	300

4. Ground Cover and Structure

a. Vegetative

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

b. Other

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Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As this site deteriorates due to grazing pressure bluebunch wheatgrass and Thurber needlegrass decrease while black sagebrush and low rabbitbrush increase. When the potential natural plant community is burned, black sagebrush and wild buckwheat decrease while low rabbitbrush and lupine increase.

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	20	10	5	5	0	0	0
Name	PNC											
ID Number	UT3161											
Description	Excellent condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

025XY322UT

Upland Juniper Savanna (Utah juniper)

025XY320UT

Upland Stony Clay (Low sagebrush)

10. 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

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VG = Very Good G = Good F = Fair P = Poor

2. Wildlife

a. Site Factors Influencing Management

This site provides food and cover for some species wildlife.

b. List of Potential Species Present

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

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

Hiking and Hunting

4. Wood Products

None

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants

2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah

County: Box Elder

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Latitude: Longitude:

Modal Soil: Sonlet GRV-L – loamy-skeletal, mixed, frigid Lithic Xerollic Calciorthids

Type Location: 2100 ft E 2500 ft S of NW Corner Section 19, Township 9N, Range 16W

General Legal Description: SW slope of Bovine Mountain in western Box Elder county, Utah

Field Office Site Location

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	6				
Permanent Transect Location					

Other References