

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: Mountain Shallow Loam (Low sagebrush)

SITE NUMBER: 047AY442UT

MLRA: E47

Original Site Description: Author: DLT TW

Date: 12/02/1992

Revised Site Description: Author:

Date:

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

Date:

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: Stony or Cobbly Moderately Fine to Fine

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

Geologic Parent Materials: Sandstone, Shale, Limestone, Quartzite and Igneous Rock

Moisture Regime:

Temperature Regime:

Runoff:

Permeability(min-max): Slow to 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): 1.5-3.0

Major Soils Associated With This Site:

Soil Survey Area: 603

Foxol GR-L, 30-60%

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

2. PHYSIOGRAPHIC FEATURES

Site Type: Rangeland

Ecological Site Name: Mountain Shallow Loam (Low sagebrush)

Site Number: 047AY442UT

1. Potential Plant Community Description and Ecological Factors

The dominant aspect of this site is that of shrubs. The composition by annual air-dry weight is approximately 35 percent grasses, 5 percent forbs, and 60 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		60	90	10	15
Muttongrass	POFE		18	30	3	5
Needleandthread	HECO26		18	30	3	5
Bottlebrush squirreltail	ELEL5		18	30	3	5
Letterman needlegrass	ACLE9	1	6	12	1	2
Sandberg bluegrass	POSE	1	6	12	1	2
Indian ricegrass	ACHY	1	6	12	1	2
Western wheatgrass	PASM	1	6	12	1	2
Prairie junegrass	KOMA	1	6	12	1	2
Other perennial grasses	PPGG	1	18	30	3	5
Other annual 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
Spurred lupine	LUCAC3	2	6	18	1	3
Torrey catseye	CRTO4	2	6	18	1	3
Western mountain aster	ASOC	2	6	18	1	3
Shortstem wild buckwheat	ERBR5	2	6	18	1	3
Wasatch beardtongue	PECY2	2	6	18	1	3
Stemless mock goldenweed	STACA	2	6	18	1	3
Carpet phlox	PHHO	2	6	18	1	3
Common yarrow	ACMI2	2	6	18	1	3
Grassy rockgoldenrod	PEPU7	2	6	18	1	3
Other perennial forbs	PPFF	2	30	60	5	10
Other annual forbs	AAFF	2	30	60	5	10

Shrubs/Vines, %

Common Name	National	Group	Pounds per Acre	% by Weight of
-------------	----------	-------	-----------------	----------------

Site Type: Rangeland

Ecological Site Name: Mountain Shallow Loam (Low sagebrush)

Site Number: 047AY442UT

	Symbol				Total Composition	
			Low	High	Low	High
Low sagebrush	ARAR8		240	270	40	45
Mountain snowberry	SYOR2	3	6	30	1	5
Slender wild buckwheat	ERMI4	3	6	30	1	5
Mountain big sagebrush	ARTRV	3	6	30	1	5
Saskatoon serviceberry	AMAL2	3	6	30	1	5
Other shrubs	SSSS	3	90	120	15	20

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	900	800
Average Year	700	600
Unfavorable Year	500	400

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	20	2	5
Forbs (perennial)	5	1	2
Shrubs	30	3	8
Trees			
Cryptogams			

b. Other

Litter	
Coarse Fragments	

Site Type: Rangeland
 Ecological Site Name: Mountain Shallow Loam (Low sagebrush)
 Site Number: 047AY442UT

Bare Ground	
-------------	--

5. Ecological Dynamics of the Site

As this site deteriorates due to overgrazing, perennial grasses decrease and low sagebrush and low rabbitbrush increase. Fire will reduce low sagebrush density but low rabbitbrush will 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	0	5	20	50	5	10	5	5	0	0
Name	PNC											
ID Number	UT4421											
Description	Excellent Condition											

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Percent Growth	0	0	0	10	40	35	5	5	5	0	0	0
Name	Good Condition No. 1											
ID Number	UT4422											
Description	needlegrass, bluegrass, and sagebrush											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

047AY403UT
 Mountain Loam (Mountain big sagebrush)

047AY476UT
 Mountain Windswept Ridge (Low sagebrush)

9. Correlated Sites in Other States

(Give site name and number)

D. MAJOR USES OF THIS SITE

1. Livestock

- a. Site Factors Influencing Management

Cattle, sheep, goats, and horses graze this site in spring, summer, and fall to good advantage.

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 rates good for openland habitat, poor for woodland habitat, very poor potential for wetland habitat and good potential for rangeland habitat.

b. List of Potential Species Present

This site produces good forage for 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

This site has good values for aesthetics and natural beauty. It has a large number of forbs and shrubs, which have flowers in bloom from early spring throughout the summer and into the fall.

4. Wood Products

No values exist for lumber. Some of the shrub species produce enough wood for campfires. Production of wood products for other uses are not of a quantity or quality to be of value.

5. Other Uses

Site Type: Rangeland
 Ecological Site Name: Mountain Shallow Loam (Low sagebrush)
 Site Number: 047AY442UT

E. THREATENED AND ENDANGERED SPECIES

1. Plants
2. Animals

Both the American peregrine falcon and prairie falcon may occasionally seek their prey on this site.

F. MODAL LOCATION AND DOCUMENTATION

State: Utah County:
 Latitude: Longitude:

Modal Soil: Foxol GR-L, 30-60% — loamy-skeletal, mixed, frigid Lithic Haploxerolls

Type Location: NW ¼, SW ¼, NW ¼; Section 30, Township 9N, Range 3E

General Legal Description:

Field Office Site Location

Logan
 Murray
 Provo
 Price
 Richfield
 Cedar City

Data Collected and References

Sampling Source	Number of Records	Range Similarity Index			
		> 76%	51-75%	26-50%	0-25%
NRCS - ECS - 417	1				
UTAH - RANGE - 2					
BLM FORM	11				
Permanent Transect Location					

Other References