

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: High Mountain Loam (Canyon maple)

SITE NUMBER: 047AY510UT

MLRA: E47

Original Site Description: Author: DLT GBB

Date: 02/05/1992

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: 20-60 inches

Surface Textures:

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

Subsurface Textures: Medium to Fine

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

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

Moisture Regime:

Temperature Regime:

Runoff: Little with Proper Management

Permeability(min-max): Slow to Moderate

Drainage Class(min-max): Well Drained

Water Erosion Hazard: None to Slight

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): 14-19

Major Soils Associated With This Site:

Soil Survey Area: 609

Maughan SiL, 30-60%

Elzinga SiL, 10-60%

Smarts SiL, 10-30%

Nordic GR-L, 30-60%

Poleline ST-L, 40-70%

Schuster L, 30-60%

Sessions CB-L, 15-25%

Toone L, 40-60%

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

1. Potential Plant Community Description and Ecological Factors

The vegetation on this site is composed of approximately 25 percent perennial grasses, 25 percent forbs, 25 percent shrubs and 25 percent trees.

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
Blue wildrye	ELGL		84	140	3	5
Mountain brome	BRCA5		84	140	3	5
Slender wheatgrass	ELTR7		84	140	3	5
Muttongrass	POFE	1	28	84	1	3
Great basin wildrye	LECI4	1	28	84	1	3
Geyer sedge	CAGE2	1	28	84	1	3
Bulbous oniongrass	MEBU	1	28	84	1	3
Other perennial grasses	PPGG	1	140	280	5	10
Other annual grasses	AAGG	1	140	280	5	10

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Butterweed	SESE2	2	28	84	1	3
Thickleaf peavine	LALA3	2	28	84	1	3
Spurred lupine	LUCAC3	2	28	84	1	3
Western mountain aster	ASOC	2	28	84	1	3
Common yarrow	ACMI2	2	28	84	1	3
Nettleleaf giant hyssop	AGUR	2	28	84	1	3
Western coneflower	RUOC2	2	28	84	1	3
Sweetanice	OSOC	2	28	84	1	3
Mountain bluebells	MECI3	2	28	84	1	3
Cow parsnip	HELA4	2	28	84	1	3
Smallflower valerian	VAOC2	2	28	84	1	3
Northern bedstraw	GABO2	2	28	84	1	3
Monument plant	FRSP	2	28	84	1	3
Feathery false solomonsseal	MARAR	2	28	84	1	3
Other perennial forbs	PPFF	2	700	840	25	30
Other annual forbs	AAFF	2	700	840	25	30

Shrubs/Vines, %

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Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Mallow ninebark	PHMA5		140	280	5	10
Mountain snowberry	SYOR2		140	280	5	10
Canyon maple	ACGR3		140	280	5	10
Quaking aspen	POTR5		140	280	5	10
Woods rose	ROWO	3	28	84	1	3
Creeping Oregon grape	MARE11	3	28	84	1	3
Chokecherry	PRVI	3	28	84	1	3
Mountain lover	PAMY	3	28	84	1	3
Saskatoon serviceberry	AMALS	3	28	84	1	3
Mountain snowberry	SYOR2	3	28	84	1	3
Other shrubs	SSSS	3	140	280	5	10

Trees, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Bigtooth maple	ACGR3		560	700	20	25
Quaking aspen	POTR5	4	28	84	1	3
Rocky mountain juniper	JUSC2	4	28	84	1	3

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	3100	3200
Average Year	2700	2800
Unfavorable Year	2400	2500

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	10	2	10
Forbs (perennial)	5	1	5
Shrubs	20	3	5
Trees	70	15	10
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 blue wildrye, mountain brome, and slender wheatgrass decrease while Kentucky bluegrass, forbs and maple 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	0	20	35	30	10	5	0	0	0
Name	PNC											
ID Number	UT5101											
Description	Excellent Condition											

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Percent Growth	0	0	0	0	10	40	45	5	0	0	0	0
Name	Good Condition											
ID Number	UT5102											
Description	bluegrass, snowberry											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

047AY508UT
 High Mountain Loam (Aspen)

047AY461UT
 Mountain Stony Loam (Mountain big 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

This site has a fair amount of grass, a small amount of forbs, and an exceptionally high amount of shrubs. There is a large variety of species. This site is especially valuable to sheep but can also be used by cattle and horses. This combination of plants provides a balanced nutrition for grazing animals. It should be grazed in 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

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

b. List of Potential Species Present

It provides good to fair habitat for chukars, quail, forest grouse, mule deer, elk, squirrels, snowshoe rabbits, songbirds, and coyotes, especially in those areas where oakbrush is interspersed with grassy openings. It is fair to poor habitat for bobcats, cougars, golden eagles, and bear.

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. It has a combination of grasses,

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forbs, small shrubs and large shrubs which offer some possibilities for screening and value as camping and picnicking areas. Hunting for elk and mule deer is good to excellent on this site. Fishing is opportune on streams through and adjacent to this site. This site has some value for snowmobiling through a fairly long period of the winter season.

4. Wood Products

No values exist for lumber. Some values exist for fuel for campfires and fireplace wood from bigtooth maple. This species also provides fence posts and fence stays.

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants

2. Animals

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

F. MODAL LOCATION AND DOCUMENTATION

State: Utah
Latitude:

County:
Longitude:

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Modal Soil: Nordic GR-L, 30-60% — loamy-skeletal, mixed Cryic Palebotolls

Type Location: SE ¼, SE ¼, NW ¼; Section 32, Township 7N, Range 1E

General Legal Description:

Field Office Site Location

Logan
 Murray
 Provo
 Price
 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