

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: Subalpine Loam (Cranesbill)

SITE NUMBER: 047AY614UT

MLRA: 047A

Original Site Description: Author: DLT, TW

Date: 12/28/1992

Revised Site Description: Author: DLT, TW

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: >60 inches

Surface Textures: Dark Brown Loam

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

Subsurface Textures: Dark Brown Clay Loam or Clay

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

Geologic Parent Materials: Alluvium and Glacial Till from Sedimentary Rocks

Moisture Regime:

Temperature Regime:

Runoff: Rapid

Permeability(min-max): Moderately Slow

Drainage Class(min-max): Well Drained

Water Erosion Hazard: Severe

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): 9-10

Major Soils Associated With This Site:

Soil Survey Area: 613

Faim L, 3-25%

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 grass-forb. The natural plant community is composed of approximately 40 percent perennial grasses, and 60 percent forbs, and negligible amount of 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
Mountain brome	BRCA5		190	285	10	15
Slender wheatgrass	ELTR7		95	190	5	10
Columbia needlegrass	ACNE9		57	95	3	5
Nodding bluegrass	PORE		57	57	3	3
Bulbous onion	MEBU	1	19	57	1	3
Spike trisetum	TRSP2	1	19	57	1	3
King fescue	LEKI2	1	19	57	1	3
Nevada bluegrass	PONE3	1	19	57	1	3
Other perennial grasses	PPGG	1	95	190	5	10
Other annual grasses	AAGG	1	95	190	5	10

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Sticky purple cranesbill	GEVI2		285	380	15	20
Thickleaf peavine	LALA3		190	285	10	15
Louisiana wormwood	ARLU		57	95	3	5
Fall sneezeweed	HEAU		57	95	3	5
Fendler meadowrue	THFE		57	95	3	5
Pale agoseris	AGGL	2	19	57	1	3
Mountain bluebells	MECI3	2	19	57	1	3
Hookspur violet	VIAD	2	19	57	1	3
Tolmie owllover	ORTO	2	19	57	1	3
Common yarrow	ACMI2	2	19	57	1	3
Showy false goldenaster	HEMU3	2	19	57	1	3
Alpine leafyhead aster	ASFO	2	19	57	1	3
Other perennial forbs	PPFF	2	190	285	10	15
Other annual forbs	AAFF	2	190	285	10	15

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:

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	Low	High
Favorable Year	2300	2400
Average Year	1800	1900
Unfavorable Year	1200	1300

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	20
Forbs (perennial)	40	2	30
Shrubs			
Trees			
Cryptogams			

b. Other

Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As this site deteriorates due to grazing pressure mountain brome, slender wheatgrass, sticky geranium, and thistle decrease while yarrow and Louisiana wormwood increase. Under fire the forbs will decrease and some of the grasses 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	0	20	35	30	10	5	0	0	0
Name	PNC											
ID Number	UT6141											
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	UT6142											

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Description	needlegrass, bluegrass and geranium
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7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

047AY630UT
 Subalpine Stony Loam (Subalpine-Big sagebrush)

047AY610UT
 Subalpine Gravelly Loam (Subalpine fir)

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 is grazed by cattle and sheep during the 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 for many species of wildlife. It rates high for rangeland and openland but low for wetland and woodland.

b. List of Potential Species Present

This site is used by coyote, badger, mule deer, elk, and blue grouse.

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 high values for aesthetics and natural beauty. The diversity of forbs blooming gives it a high value.

4. Wood Products

None

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants
2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah County:
 Latitude: Longitude:

Modal Soil: Faim L, 3-25% — fine, montmorillonitic, argic Pachic Cryoborolls

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Type Location: SE ¼; NE ¼; SE ¼; Section 25, Township 2N, Range 8E

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					
UTAH - RANGE - 2					
Permanent Transect Location					

Other References