

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 Very Steep Stony Loam (Browse)

SITE NUMBER: 048AY473UT

MLRA: 048A

Original Site Description: Author: GWL, DJS

Date: 05/16/1981

Revised Site Description: Author: GWL, DJS

Date: 02/01/1994

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

Date: 05/27/1994

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: 40-60 inches

Surface Textures:

Surface Fragments(<=3" % cover, >3" % cover): 10-30%

Subsurface Textures:

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

Geologic Parent Materials: Colluvium and Residuum from Sandstone and Shale of the Green River Formation

Moisture Regime:

Temperature Regime:

Runoff: Rapid

Permeability(min-max): Moderate to Moderately Rapid

Drainage Class(min-max): Well Drained

Water Erosion Hazard: Moderate to High

Wind Erosion Hazard: Moderate

Electrical Conductivity (EC in mmhos/cm):

Sodium Adsorption Ration (SAR):

Soil Reaction (1:1 water):

Soil Reaction (0.1 M CaCl<sub>2</sub>):

pH Range:

Available Water Capacity (inches): 3-6

Major Soils Associated With This Site:

Soil Survey Area: 047

Tosca GR-SL 40-80%

Perma Family STV-SL 60-80%

Podo STV-L 40-70%

Datino Variant L 40-60%

Rottulee Family L 30-60%

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



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**1. Potential Plant Community Description and Ecological Factors**

The general aspect of this site is shrub. The potential natural plant community by air-dry weight is composed of approximately 20 percent perennial grasses, 10 percent forbs, and 70 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
Salina wildrye	LESAS		50	100	5	10
Bluebunch wheatgrass	PSSP6		50	100	5	10
Muttongrass	POFE	1	30	50	3	5
Western wheatgrass	PASM	1	30	50	3	5
Geyer sedge	CAGE2	1	30	50	3	5
Indian ricegrass	ACHY	1	30	50	3	5
Prairie junegrass	KOMA	1	30	50	3	5
Needleandthread	HECO26	1	30	50	3	5
Slender wheatgrass	ELTR7	1	30	50	3	5
Other perennial grasses	PPGG	1	50	100	5	10
Other annual grasses	AAGG	1	50	100	5	10

Forbs, %

Common Name	National	Group	Pounds per Acre	% by Weight of
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	Symbol				Total Composition	
			Low	High	Low	High
Bastard toadflax	COUM	2	10	30	1	3
Small leaf pussytoes	ANMI3	2	10	30	1	3
Blue flax	LIPE2	2	10	30	1	3
Arrowleaf balsamroot	BASA3	2	10	30	1	3
Thickleaf peavine	LALA3	2	10	30	1	3
Longleaf phlox	PHLO2	2	10	30	1	3
Hoary tansyaster	MACA2	2	10	30	1	3
Scarlet globemallow	SPCO	2	10	30	1	3
Rocky mountain beardtongue	PEST2	2	10	30	1	3
Shaggy fleabane	ERPU2	2	10	30	1	3
Spurred lupine	LUCAC3	2	10	30	1	3
Lobeleaf groundsel	SEMU3	2	10	30	1	3
Parry goldenrod	SOPA4	2	10	30	1	3
Looseflower milkvetch	ASTE5	2	10	30	1	3
Tufted evening primrose	OECE2	2	10	30	1	3
Common yarrow	ACMI2	2	10	30	1	3
Wyoming Indian paintbrush	CALI4	2	10	30	1	3
Trumpet stoneseed	LIIN2	2	10	30	1	3
Twolobe larkspur	DENU2	2	10	30	1	3
Sulphurflower wild buckwheat	ERUM	2	10	30	1	3
Other perennial forbs	PPFF	2	100	150	10	15
Other annual forbs	A AFF	2	100	150	10	15

## Shrubs/Vines, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Birchleaf mountainmahogany	CEMO2		150	200	15	20
Utah serviceberry	AMUT		150	200	15	20
Mountain big sagebrush	ARTRV		50	100	5	10
Bitterbrush	PUTR2		30	50	3	5
Gambel oak	QUGA		30	50	3	5
Mountain snowberry	SYOR2	3	10	30	1	3
Squaw apple	PERA4	3	10	30	1	3
Creeping Oregon grape	MARE11	3	10	30	1	3
Mountain low rabbitbrush	CHVIL4	3	10	30	1	3
Rubber rabbitbrush	ERNA10	3	10	30	1	3
Other shrubs	SSSS	3	50	100	5	10

## Trees, %

Common Name	National	Group	Pounds per Acre	% by Weight of
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	Symbol			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	1200	1300
Average Year	900	1000
Unfavorable Year	700	800

**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	5
Forbs (perennial)	5	1	2
Shrubs	40	4	25
Trees			
Cryptogams			

b. Other

Litter	
Coarse Fragments	
Bare Ground	

**5. Ecological Dynamics of the Site**

As this site deteriorates due to grazing pressure, perennial grasses and palatable shrubs may decrease while less palatable shrubs and forbs may increase. This ecosystem appears to be a fire dependent community. In the absence of fire, it may at least in higher elevations, progress to a climatic climax of Douglas fir. Further study may, in fact, show that this site is a fire disclimax of mountain very steep stony loam (Douglas fir).

**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
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Percent Growth	0	0	0	5	15	40	30	5	5	0	0	0
Name	PNC											
ID Number	UT4731											
Description	Excellent Condition											

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Percent Growth	0	0	0	0	10	50	30	5	5	0	0	0
Name	Good Condition No. 1											
ID Number	UT4732											
Description	wheatgrass, bluegrass, shrub											

**7. Aspect Differences Near MLRA Boundaries**

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

**8. Associated Sites Within MLRA**

048AY475UT

Mountain Very Steep Stony Loam (Douglas fir)

048AY452UT

Mountain Stony Loam (Douglas 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

Because of steep slopes, grazing is not a major factor in altering plant composition.

## 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

Site Type: Rangeland  
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This site produces food and cover for many species of wildlife.

**b. List of Potential Species Present**

Wildlife using this site include sage grouse, rabbit, coyote, 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**

This site offers color and aesthetic appeal while blossoms are blooming and again in the fall as the leaves change colors. Recreation values are limited because of the steep slopes.

**4. Wood Products**

None

**5. Other Uses**

**E. THREATENED AND ENDANGERED SPECIES**

1. Plants
2. Animals

**F. MODAL LOCATION AND DOCUMENTATION**

State: Utah  
 Latitude:

County:  
 Longitude:

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Modal Soil: Tosca GR-SL, 40-80% — loamy-skeletal, mixed Typic Calciboralls

Type Location: NW ¼; NE ¼; SW ¼; Section 34, Township 15S, Range 24E

General Legal Description:

**Field Office Site Location**

Price

Roosevelt

**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					
BLM FORM	15				
Permanent Transect Location					

**Other References**