

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 Stony Loam (Black sagebrush)

SITE NUMBER: 048AY449UT

MLRA: 048A

Original Site Description: Author: GSC DJS

Date: 05/15/1981

Revised Site Description: Author: GSC DJS

Date: 01/24/1994

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: 60 inches

Surface Textures: Gravelly Loam Over Very Cobbly Loam

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

Subsurface Textures:

Subsurface Fragments(<=3" % vol, >3" % vol): 50%

Geologic Parent Materials: Mixed Alluvium from Sedimentary Parent Material

Moisture Regime:

Temperature Regime:

Runoff:

Permeability(min-max):

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 CaCl<sub>2</sub>):

pH Range:

Available Water Capacity (inches):

Major Soils Associated With This Site:

Soil Survey Area: 047

Guber GR-L

Beje GRV-FSL

Pathead GR-L

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

#### **2. PHYSIOGRAPHIC FEATURES**



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

The general view of this site is black sagebrush and grass. The composition by air-dry weight is approximately 40 percent perennial grasses, 10 percent forbs, and 50 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		37.5	75	5	10
Muttongrass	POFE		37.5	75	5	10
Salina wildrye	LESAS		22.5	37.5	3	5
Columbia needlegrass	ACNE9		22.5	37.5	3	5
Indian ricegrass	ACHY	1	7.5	22.5	1	3
Letterman needlegrass	ACLE9	1	7.5	22.5	1	3
Needleandthread	HECO26	1	7.5	22.5	1	3
Prairie junegrass	KOMA	1	7.5	22.5	1	3
Western wheatgrass	PASM	1	7.5	22.5	1	3
Bottlebrush squirreltail	ELEL5	1	7.5	22.5	1	3
Blue grama	BOGR2	1	7.5	22.5	1	3
Sandberg bluegrass	POSE	1	7.5	22.5	1	3
Other perennial grasses	PPGG	1	75	112.5	10	15
Other annual grasses	AAGG	1	75	112.5	10	15

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Common stonecrop	SELA	2	7.5	22.5	1	3
Pacific aster	ASCH2	2	7.5	22.5	1	3
Wavyleaf thistle	CIUN	2	7.5	22.5	1	3
Low beardtongue	PEUN	2	7.5	22.5	1	3
Longleaf hawksbeard	CRAC2	2	7.5	22.5	1	3
Carpet phlox	PHHO	2	7.5	22.5	1	3
Grassy rockgoldenrod	PEPU7	2	7.5	22.5	1	3
Wyoming Indian paintbrush	CALI4	2	7.5	22.5	1	3
Other perennial forbs	PPFF	2	37.5	75	5	10
Other annual forbs	AAFF	2	37.5	75	5	10

Shrubs/Vines, %

Common Name	National Symbol	Group	Pounds per Acre	% by Weight of Total Composition
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			Low	High	Low	High
Black sagebrush	ARNO4		225	262.5	30	35
Bitterbrush	PUTR2		22.5	37.5	3	5
Stickyleaf low rabbitbrush	CHVIV4		22.5	37.5	3	5
Stemless mock goldenweed	STACA	3	7.5	22.5	1	3
Spineless horsebrush	TECA2	3	7.5	22.5	1	3
Utah serviceberry	AMUT	3	7.5	22.5	1	3
Birchleaf mountainmahogany	CEMO2	3	7.5	22.5	1	3
Slender wild buckwheat	ERMI4	3	7.5	22.5	1	3
Other shrubs	SSSS	3	37.5	75	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	900	1000
Average Year	650	750
Unfavorable Year	400	500

### **4. Ground Cover and Structure**

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	25	2	10
Forbs (perennial)	5	1	2
Shrubs	35	2	15
Trees			
Cryptogams			

b. Other

Litter	
Coarse Fragments	

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Bare Ground	
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### **5. Ecological Dynamics of the Site**

As this site deteriorates due to grazing pressure, bluegrass and bluebunch wheatgrass decrease while black sagebrush and western wheatgrass increase. Fire does not appear to be a major factor in the ecosystem.

### **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	15	40	30	5	5	0	0	0
Name	PNC											
ID Number	UT4497											
Description	Excellent Condition											

### **7. Aspect Differences Near MLRA Boundaries**

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

### **8. Associated Sites Within MLRA**

048AY448UT  
 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

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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

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

**2. Wildlife**

a. Site Factors Influencing Management

This site produces food and limited cover for wildlife.

b. List of Potential Species Present

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

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

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## **5. Other Uses**

### **E. THREATENED AND ENDANGERED SPECIES**

1. Plants
2. Animals

### **F. MODAL LOCATION AND DOCUMENTATION**

State: Utah                      County:  
 Latitude:                      Longitude:

Modal Soil: Guber GR-L – loamy-skeletal mixed Typic Calcixerolls

Type Location: See Soil Survey Report

General Legal Description:

#### **Field Office Site Location**

Roosevelt  
 Price  
 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**