

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: Semidesert Very Shallow Loam (Littleleaf-mountainmahogany)

SITE NUMBER: 028AY258UT

MLRA: 028A

Original Site Description: Author: DJS

Date: 03/01/1988

Revised Site Description: Author: DJS

Date: 06/24/1993

Approved by: Title: State Range Cons.

Signed: Pat Shaver

Date: 08/30/1993

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: 6-14 inches

Surface Textures: Loam

Surface Fragments(<=3" % cover, >3" % cover): 40%

Subsurface Textures:

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

Geologic Parent Materials: Colluvium from Limestone

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: Warmspring

Amtoft Family, Very Shallow

**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 dominant aspect of this plant community is littleleaf mountain mahogany. The composition by air-dry weight is approximately 25 percent perennial grasses, 10 percent forbs, and 65 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
Indian ricegrass	ACHY		40	60	10	15
Bluebunch wheatgrass	PSSP6		20	40	5	10
Sandberg bluegrass	POSE		4	12	1	3
Needleandthread	HECO26	1	4	12	1	3
Pineforest needlegrass	ACPI2	1	4	12	1	3
Bottlebrush squirreltail	ELEL5	1	4	12	1	3
Other perennial grasses	PPGG	1	12	20	3	5
Other annual grasses	AAGG	1	12	20	3	5

#### Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Grassy rockgoldenrod	PEPU7	2	4	12	1	3
Cushion wild buckwheat	EROV	2	4	12	1	3
Holboell rockcress	ARHO2	2	4	12	1	3
Carpet phlox	PHHO	2	4	12	1	3
Other perennial forbs	PPFF	2	20	40	5	10
Other annual forbs	AAFF	2	20	40	5	10

#### Shrubs/Vines, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Littleleaf mountain mahogany	CEIN7		120	180	30	45
Black sagebrush	ARNO4		40	60	10	15
Shadscale	ATCO		12	20	3	5
Low rabbitbrush	CHVI8		12	20	3	5
Other shrubs	SSSS	3	12	20	3	5

#### Trees, %

Common Name	National Symbol	Group	Pounds per Acre	% by Weight of
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	Symbol			Total Composition	
		Low	High	Low	High
Utah juniper	JUOS	4	12	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	550	600
Average Year	350	400
Unfavorable Year	150	200

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

#### a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	15	2	5
Forbs (perennial)	5	1	3
Shrubs	40	3	20
Trees	5	4	2
Cryptogams			

#### b. Other

Litter	
Coarse Fragments	
Bare Ground	

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

As ecological condition deteriorates due to overgrazing, Indian ricegrass and bluebunch wheatgrass, decrease, while snakeweed and low rabbitbrush increase.

Fire is not an important ecological factor in this ecosystem.

Cheatgrass and annual weeds are most likely to invade this site.

### **Plant Communities & Transitional Pathways**

(Show a steady state diagram with influences to move from one steady state to another)

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## **6. Plant Growth Curves**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Percent Growth	0	0	5	15	40	30	5	5	0	0	0	0
Name	UT2581											
ID Number	PNC											
Description	Excellent Condition											

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

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

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

028AY234UT

Semidesert Shallow Loam (Utah juniper-Salina wildrye)

028AY252UT

Semidesert Stony Loam (Black 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 is suited for grazing by cattle and sheep during fall, winter, and spring.

#### 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

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This site provides food and cover for wildlife.

#### b. List of Potential Species Present

Wildlife using this site include rabbit, coyote, fox, badger, pronghorn antelope, mule deer, and dove.

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

Resources that have special aesthetic and landscape values are the geologic slick rock with scattered shrubs and trees. Some recreation uses of this site are hiking and hunting.

### 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: Millard  
 Longitude:

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Modal Soil: Amtoft Family, Very Shallow – loamy-skeletal, carbonatic, mesic, Lithic Xerollic Calciorthid

Type Location: 2 Miles South of Cedar Pass Reservoir in Western Millard County, Utah

General Legal Description:

**Field Office Site Location**

Logan

Provo

Murray

Cedar City

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	3				
Permanent Transect Location					

**Other References**