

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: Upland Steep Stony Loam (Utah juniper-Pinyon)

SITE NUMBER: 035XY317UT

MLRA: 035

Original Site Description: Author: GSC

Date: 01/15/1985

Revised Site Description: Author: GSC

Date: 06/04/1992

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: Stony and Bouldery

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

Subsurface Textures: Loamy-skeletal

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

Geologic Parent Materials: Mixed Alluvium and Colluvium from Sandstone, Shale, and Conglomerates

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: 624

Strych

**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 the plant community is Utah juniper-pinyon pine and Salina wildrye. The composition by air-dry weight is approximately 40 percent perennial grasses, 5 percent forbs, 35 percent shrubs, and 20 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
Salina wildrye	LESAS		82.5	110	15	20
Indian ricegrass	ACHY		27.5	55	5	10
Galleta	HIJA		16.5	27.5	3	5
Nevada bluegrass	PONE3	1	5.5	16.5	1	3
Bluebunch wheatgrass	PSSP6	1	5.5	16.5	1	3
Needleandthread	HECO26	1	5.5	16.5	1	3
Geyer sedge	CAGE2	1	5.5	16.5	1	3
Sandberg bluegrass	POSE	1	5.5	16.5	1	3
Other perennial grasses	PPGG	1	16.5	27.5	3	5
Other annual grasses	AAGG	1	16.5	27.5	3	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Grassy rockgoldenrod	PEPU7		16.5	27.5	3	5
Stemless fournerve daisy	TEACA2	2	5.5	16.5	1	3
Plateau yellow catseye	CRFL5	2	5.5	16.5	1	3
Lobeleaf groundsel	SEMU3	2	5.5	16.5	1	3
Utah firecracker	PEUT	2	5.5	16.5	1	3
Fineleaf woollywhite	HYFI	2	5.5	16.5	1	3
Stemless mock goldenweed	STACA	2	5.5	16.5	1	3
Other perennial forbs	PPFF	2	16.5	27.5	3	5
Other annual forbs	AAFF	2	16.5	27.5	3	5

Shrubs/Vines, %

Common Name	National	Group	Pounds per Acre	% by Weight of
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	Symbol				Total Composition	
			Low	High	Low	High
Roundleaf buffaloberry	SHRO		27.5	55	5	10
Mormon tea	EPVI		16.5	27.5	3	5
Mountain snowberry	SYOR2	3	16.5	27.5	3	5
Utah serviceberry	AMUT	3	16.5	27.5	3	5
Birchleaf mountainmahogany	CEMO2	3	16.5	27.5	3	5
Desert Oregon grape	MAFR3	3	16.5	27.5	3	5
Broom snakeweed	GUSA2	3	16.5	27.5	3	5
Rubber rabbitbrush	CHNA2	3	16.5	27.5	3	5
Low rabbitbrush	CHVI8	3	16.5	27.5	3	5
Black sagebrush	ARNO4	3	16.5	27.5	3	5
Bigelow sagebrush	ARBI3	3	16.5	27.5	3	5
Golden princesplume	STPI3	3	16.5	27.5	3	5
Ill scented sumac	PHTRT	3	16.5	27.5	3	5
Gambel oak	QUGA	3	16.5	27.5	3	5
Other shrubs	SSSS	3	27.5	55	5	10

Trees, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Utah juniper	JUOS		66	82.5	12	15
Pinyon	PIED		16.5	27.5	3	5

### **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	600	650
Average Year	500	550
Unfavorable Year	350	400

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

a. Vegetative

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Vegetation Type	Percent Canopy Cover	Height Range (ft.)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	35	2	10
Forbs (perennial)	5	1	2
Shrubs	20	4	10
Trees	40	14	30
Cryptogams			

b. Other

Litter	
Coarse Fragments	
Bare Ground	

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

As ecological condition deteriorates due to overgrazing, understory plants will decrease while pinyon and Utah juniper increase. However, because of steep slopes and bouldery surface, grazing is not generally an important factor. When the potential natural plant community is burned, pinyon and Utah juniper decrease while salina wildrye increases.

### **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	10	30	45	5	5	5	0	0	0
Name	PNC											
ID Number	UT3171											
Description	Excellent Condition											

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

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

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

035XY328UT  
 Upland Very Steep Stony Loam (Pinyon-Juniper)

Site Type: Rangeland  
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 Site Number: 035XY317UT  
 035XY302UT  
 Upland Dissected Slopes (Pinyon-Juniper)

035XY018UT  
 Talus Slopes (Blackbrush-Shadscale)

## **9. Correlated Sites in Other States**

(Give site name and number)

### **D. MAJOR USES OF THIS SITE**

#### **1. Livestock**

##### a. Site Factors Influencing Management

Grazing is not an important factor affecting this site because of steep slopes.

##### 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

Excellent cover and fair feed is provided for wildlife.

##### b. List of Potential Species Present

Species which are found at least part of the year are deer, antelope, rabbits, cottontail, coyote, wildcat, badger, snakes, hawks, owls, quail, mourning dove, songbirds, and small mammals.

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

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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 a few plant species blooming throughout spring, summer, and fall.

### 4. Wood Products

Posts and firewood

### 5. Other Uses

## E. THREATENED AND ENDANGERED SPECIES

1. Plants

2. Animals

## F. MODAL LOCATION AND DOCUMENTATION

State: Utah

County: Grand County

Latitude:

Longitude:

Modal Soil: Strych — loamy-skeletal, mixed, mesic Ustollic Calciorthids

Type Location: Grand County, Utah, two miles NE of the mouth of Nash Wash Canyon in the Book Cliffs. 500 ft South and 2,500 ft West of the NE corner of Section 11, Township 20S, Range 21E.

General Legal Description:

### Field Office Site Location

Price

Cedar City

Richfield

### Data Collected and References

Sampling	Number	Range Similarity Index
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Source	of Records	> 76%	51-75%	26-50%	0-25%
NRCS - ECS - 417					
UTAH - RANGE - 2					
Permanent Transect Location					

**Other References**