

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 Very Steep Stony Loam (Pinyon-Utah juniper)

SITE NUMBER: 035XY328UT

MLRA: 035

Original Site Description: Author: GSC

Date: 01/15/1984

Revised Site Description: Author: GSC

Date: 11/15/1993

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: Colluvium from Sandstone and Limestone

Moisture Regime:

Temperature Regime:

Runoff:

Permeability(min-max):

Drainage Class(min-max): Excessively 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 CaCl₂):

pH Range:

Available Water Capacity (inches):

Major Soils Associated With This Site:

Soil Survey Area: 624

Strych Family

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

2. PHYSIOGRAPHIC FEATURES

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Landform and Position: Steep Scarps and Slopes
 Aspect: N/SW

	<u>Minimum</u>	<u>Maximum</u>
Slope:	50	70
Elevation:	4600	8900
Flooding:		
Frequency:		
Duration:		
Ponding:		
Depth (inches):		
Frequency:		
Duration:		
Water Table Depth:		

B. CLIMATIC FEATURES

Mean Annual Precipitation (inches): 12-15
 Mean Annual Air Temperature: 44-46
 Mean Annual Soil Temperature: 46-52
 Frost Free Period (days): 0-0
 Freeze Free Period (days): 100-130

Temperature and Moisture Distribution:

Temp	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
High	47	51	56	64	74	85	90	88	81	71	57	48
Mean	31	36	40	48	58	66	73	71	63	53	41	33
Low	16	21	35	31	39	47	55	53	46	35	25	18

ppt	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
High												
Mean	1.70	1.60	1.83	0.96	0.81	0.54	1.27	1.80	1.13	1.04	1.39	1.41
Low												

Climate Stations: St. ID.: _____ Location: _____ Period: _____
 From: _____ To: _____
 (Includes factors such as storm intensity, precipitation dependability, origin and pattern of storms, driest and wettest months, orographic effects, etc.)

Influencing Water Features (if any):

Wetland Description(Cowardin System) System Subsystem Class
Stream Types(Rosgen System) System

C. PLANT COMMUNITY CHARACTERISTICS

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1. Potential Plant Community Description and Ecological Factors

The dominant aspect of the plant community is pinyon-Utah juniper and Salina wildrye. The composition by air-dry weight is approximately 45 percent perennial grasses, 5 percent forbs, 30 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		110	137.5	20	25
Indian ricegrass	ACHY		27.5	55	5	10
Nevada bluegrass	PONE3	1	5.5	16.5	1	3
Galleta	HIJA	1	5.5	16.5	1	3
Needleandthread	HECO26	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
Longleaf phlox	PHLO2	2	5.5	16.5	1	3
Utah fleabane	ERUT	2	5.5	16.5	1	3
Tumble mustard	SIAL2	2	5.5	16.5	1	3
Plateau yellow catseye	CRFL5	2	5.5	16.5	1	3
Stemless fournerve daisy	TEACA2	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
Other perennial forbs	PPFF	2	27.5	55	5	10
Other annual forbs	AAFF	2	27.5	55	5	10

Shrubs/Vines, %

Common Name	National	Group	Pounds per Acre	% by Weight of
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	Symbol				Total Composition	
			Low	High	Low	High
Utah serviceberry	AMUT		55	82.5	10	15
Birchleaf mountainmahogany	CEMO2		27.5	55	5	10
Roundleaf buffaloberry	SHRO		27.5	55	5	10
Mountain snowberry	SYOR2	3	5.5	16.5	1	3
Mormon tea	EPVI	3	5.5	16.5	1	3
Slender wild buckwheat	ERMI4	3	5.5	16.5	1	3
Low rabbitbrush	CHVI8	3	5.5	16.5	1	3
Ill scented sumac	RHTRT	3	5.5	16.5	1	3
Golden princeplume	STPI	3	5.5	16.5	1	3
Littleleaf brickellbush	BRMI	3	5.5	16.5	1	3
Broom snakeweed	GUSA2	3	5.5	16.5	1	3
Desert Oregon grape	MAFR3	3	5.5	16.5	1	3
Bigelow sagebrush	ARBI3	3	5.5	16.5	1	3
Other shrubs	SSSS	3	16.5	27.5	3	5

Trees, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Pinyon pine	PIED		66	82.5	12	15
Utah juniper	JUOS		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	300	350

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)	20	2	10
Forbs (perennial)	5	1	1
Shrubs	20	4	10
Trees	20	15	10
Cryptogams			

b. Other

Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

Because slopes are very steep, grazing, is not an important factor in altering the plant community. When the potential natural plant community is burned, pinyon pine and Utah juniper decrease while salina wildrye increases. Cheatgrass is 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)

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	UT3281											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

035XY317UT

Upland Steep Stony Loam (Utah juniper-Pinyon)

035XY321UT

Upland Stony Loam (Pinyon-Utah juniper)

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 in altering 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

This site provides food and cover for a few species of wildlife.

b. List of Potential Species Present

Wildlife using this site include coyote, bobcat,

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

Use of this site is limited because of steep slopes.

4. Wood Products

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 Posts and Firewood

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants
2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah County:
 Latitude: Longitude:

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

Type Location: Arch Canyon and the Scarps Near Blue Notch

General Legal Description:

Field Office Site Location

Price
 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					
Permanent Transect Location					

Other References