

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 Dissected Slope (Pinyon-Utah juniper)

SITE NUMBER: 035XY302UT

MLRA: 035

Original Site Description: Author: GSC DJS

Date: 07/15/1983

Revised Site Description: Author: GSC DJS

Date: 11/03/1993

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:

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

Subsurface Textures:

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

Geologic Parent Materials: Alluvium and Eolian Deposits from Weathered
Calcareous Sandstone

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 CaCl₂):

pH Range:

Available Water Capacity (inches):

Major Soils Associated With This Site:

Soil Survey Area: 638

Yarts

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

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2. PHYSIOGRAPHIC FEATURES

Landform and Position: Dissected Alluvial and Eolian Slopes

Aspect: All

	<u>Minimum</u>	<u>Maximum</u>
Slope:	10	30
Elevation:	6000	7000
Flooding:		
Frequency:		
Duration:		
Ponding:		
Depth (inches):		
Frequency:		
Duration:		
Water Table Depth:		

B. CLIMATIC FEATURES

Mean Annual Precipitation (inches): 12-15

Mean Annual Air Temperature: 45-52

Mean Annual Soil Temperature: 47-54

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	25	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

1. Potential Plant Community Description and Ecological Factors

The dominant aspect of the plant community is pinyon, Utah juniper, and roundleaf buffaloberry. The composition by air-dry weight is approximately 15 percent perennial grasses, 10 percent forbs and 75 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
Bottlebrush squirreltail	ELEL5		15	30	5	10
Indian ricegrass	ACHY		9	15	3	5
Needleandthread	HECO26	1	3	9	1	3
Salina wildrye	LESAS	1	3	9	1	3
Sandberg bluegrass	POSE	1	3	9	1	3
Other perennial grasses	PPGG	1	9	15	3	5
Other annual grasses	AAGG	1	9	15	3	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Grassy rockgoldenrod	PEPU7	2	9	15	3	5
Carpet phlox	PHHO	2	9	15	3	5
Mountain pepperweed	LEMO2	2	9	15	3	5
Stemless fournerve daisy	TEACA2	2	9	15	3	5
Utah firecracker	PEUT	2	9	15	3	5
Other perennial forbs	PPFF	2	15	30	5	10
Other annual forbs	A AFF	2	15	30	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
Roundleaf buffaloberry	SHRO		195	225	65	75
Mormon tea	EPVI		9	15	3	5
Utah serviceberry	AMUT	3	3	9	1	3
Birchleaf mountain mahogany	CEMO2	3	3	9	1	3
Mountain snowberry	SYOR2	3	3	9	1	3
Wyoming big sagebrush	ARTRW	3	3	9	1	3
Bitterbrush	PUTR2	3	3	9	1	3
Sulphurflower wild buckwheat	ERUM	3	3	9	1	3
Other shrubs	SSSS	3	15	30	5	10

Trees, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Pinyon	PIED		36	45	12	15
Utah juniper	JUOS		9	15	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	400	450
Average Year	250	300
Unfavorable Year	100	150

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	60	3	20
Trees	35	12	10
Cryptogams			

b. Other

Litter	
Coarse Fragments	

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Bare Ground	
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5. Ecological Dynamics of the Site

As ecological condition deteriorates due to grazing pressure, perennial grasses and forbs decrease while pinyon and Utah juniper increase. Because of the density of trees and scarcity of understory, fire does not carry well through this site. However, when the potential natural plant community is burned, trees will temporarily be eliminated while grasses will increase.

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	UT3021											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

035XY306UT

Upland Loam (Basin big sagebrush)

035XY315UT

Upland Shallow Loam (Pinyon-Utah juniper)

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

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 provides food and cover for wildlife.

b. List of Potential Species Present

Wildlife using this site include coyote, bobcat, jackrabbit, woodrat, pinyon jay, hawk, 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

Recreation values are hiking, hunting, and camping.

4. Wood Products

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Fence posts and firewood. The site index is 60 to 80. Wood production is 8 to 10 cords per acre.

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants

2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah

County:

Latitude:

Longitude:

Modal Soil: Yarts — coarse-loamy, mixed (calcareous), mesic Ustic Torriorthents

Type Location: Dissected Alluvial Fans on Cedar Mesa.

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