

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 Shallow Clay Loam (Utah juniper-Pinyon)

SITE NUMBER: 034XY315UT

MLRA: 034

Original Site Description: Author: GSC

Date: 02/15/1992

Revised Site Description: Author: GSC

Date: 01/01/1994

Approved by: Title: State Range Cons. Signed: Pat Shaver

Date: 06/25/1994

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: 10-20 inches

Surface Textures:

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

Subsurface Textures:

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

Geologic Parent Materials: Alluvium and Colluvium from Shale and Sandstone

Moisture Regime:

Temperature Regime: Mesic and Frigid

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: 616

Cabba Family CNX-CL 40-60%

Gerst STX-L 15-50%

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 general view of this site is Utah juniper and pinyon with an understory of birchleaf mountainmahogany and Salina wildrye. The composition by air-dry weight is approximately 15 percent trees, 40 percent grasses, 10 percent forbs, and 35 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
Salina wildrye	LESAS		60	80	15	20
Indian ricegrass	ACHY		40	60	10	15
Nevada bluegrass	PONE3	1	4	12	1	3
Galleta	HIJA	1	4	12	1	3
Western wheatgrass	PASM	1	4	12	1	3
Needleandthread	HECO26	1	4	12	1	3
Blue grama	BOGR2	1	4	12	1	3
Sandberg bluegrass	POSE	1	4	12	1	3
Other perennial grasses	PPGG	1	20	40	5	10
Other annual grasses	AAGG	1	20	40	5	10

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Yellow milkvetch	ASFL		12	20	3	5
Utah firecracker	PEUT		12	20	3	5
Pacific aster	ASCH2	2	4	12	1	3
Golden princesplume	STPI	2	4	12	1	3
Plateau yellow catseye	CRFL5	2	4	12	1	3
Lobeleaf groundsel	SEMU3	2	4	12	1	3
Grassy rockgoldenrod	PEPU7	2	4	12	1	3
Louisiana bladderpod	LELU	2	4	12	1	3
Utah desert parsley	LOPA	2	4	12	1	3
Reddome blanketflower	GAPI	2	4	12	1	3
Sprawling skyrocket	IPPO2	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	Group	Pounds per Acre	% by Weight of
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	Symbol				Total Composition	
			Low	High	Low	High
Birchleaf mountainmahogany	CEMO2		20	40	5	10
Utah serviceberry	AMUT		20	40	5	10
Mexican cliffrose	PUME		12	20	3	5
Low rabbitbrush	CHVI8		12	20	3	5
Mormon tea	EPVI		12	20	3	5
Ill scented sumac	RHTRT	3	4	12	1	3
Broom snakeweed	GUSA2	3	4	12	1	3
Central pricklypear	OPPO	3	4	12	1	3
Spiny greasewood	GLSPM	3	4	12	1	3
Other shrubs	SSSS	3	12	20	3	5

Trees, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Utah juniper	JUOS		48	60	12	15
Pinyon	PIED		12	20	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	500	600
Average Year	300	400
Unfavorable Year	100	200

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft.)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	20	2	10
Forbs (perennial)	5	1	5
Shrubs	20	4	10
Trees	15	12	10
Cryptogams			

b. Other

Litter	
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Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As this site deteriorates due to grazing pressure Indian ricegrass, Nevada bluegrass, needleandthread, and palatable forbs and shrubs decrease, while low rabbitbrush, broom snakeweed, Utah juniper, and pinyon increase. When the potential natural plant community is burned, juniper, pinyon, Indian ricegrass, and birchleaf mountainmahogany decrease, while rabbitbrush, snakeweed, and Salina wildrye 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	UT3151											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

034XY322UT

Upland Shallow 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

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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 rabbit, coyote, bobcat, 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

Hunting and hiking

4. Wood Products

Firewood and posts

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants
2. Animals

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F. MODAL LOCATION AND DOCUMENTATION

State: Utah County:
 Latitude: Longitude:

Modal Soil: Cabba Family CNX-CL 40-60% — loamy, mixed (calcareous), mesic, shallow
 Typic Ustorthents

Type Location: SW ¼, SE ¼, NE ¼; Section 16, Township 14S, Range 13E SLMB

General Legal Description:

Field Office Site Location

Roosevelt
 Price

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