

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 Shallow Loam (Black sagebrush)

SITE NUMBER: 034XY227UT

MLRA: 034

Original Site Description: Author: JLB GWL

Date: 05/12/1981

Revised Site Description: Author: JLB GWL

Date: 12/30/1993

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: Loamy-skeletal

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

Subsurface Textures:

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

Geologic Parent Materials: Colluvium from Sedimentary and Metamorphic

Moisture Regime:

Temperature Regime: Mesic

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: 047

Atchee CNV-SL 25-50%

Gerst CN-L 4-25%

Travessilla SL 2-8%

Winona CNV-L 25-50%

Gerst CB-L Dry 30-60%

Atchee CNV-SL 2-25%

Gerst CN-L 25-40% Severely Eroded

Winona CBV-L 8-25%

Winona CN-FSL 3-8%

Travessilla Family CN-SL Dry 30-50%

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 dominant aspect of the plant community is black sagebrush. The composition by air-dry weight is approximately 35 percent perennial grasses, 10 percent forbs and 55 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
Blue grama	BOGR2		20	40	5	10
Galleta	HIJA		20	40	5	10
Salina wildrye	LESAS	1	4	12	1	3
Needleandthread	HECO26	1	4	12	1	3
Purple threeawn	ARPU5	1	4	12	1	3
Bottlebrush squirreltail	ELEL5	1	4	12	1	3
Sandberg bluegrass	POSE	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
Scarlet globemallow	SPCO		8	20	2	5
Plateau yellow catseye	CRFL5	2	4	8	1	2
Yellow milkvetch	ASFL	2	4	8	1	2
Cushion wild buckwheat	EROV	2	4	8	1	2
Sprawling skyrocket	IPPO2	2	4	8	1	2
Longleaf phlox	PHLO2	2	4	8	1	2
Hedge mustard	SIOF	2	4	8	1	2
Notchleaf scorpionweed	PHCRC	2	4	8	1	2
Other perennial forbs	PPFF	2	12	20	3	5
Other annual forbs	AAFF	2	12	20	3	5

Shrubs/Vines, %

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Ecological Site Name: Semidesert Shallow Loam (Black sagebrush)

Site Number: 034XY227UT

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Black sagebrush	ARNO4		100	140	25	35
Bud sagebrush	ARSP5		8	20	2	5
Shadscale	ATCO		8	20	2	5
Winterfat	KRLA2		8	20	2	5
Spiny greasbrush	GLSPM		4	12	1	3
Torrey jointfir	EPTO		4	8	1	2
Fringed sagebrush	ARFR4	3	4	12	1	3
Narrowleaf low rabbitbrush	CHVIS5	3	4	12	1	3
Crispleaf wild buckwheat	ERCO14	3	4	12	1	3
Broom snakeweed	GUSA2	3	4	12	1	3
Greenmolly	KOAM	3	4	12	1	3
Central pricklypear	OPPO	3	4	12	1	3
Shortspine horsebrush	TESP2	3	4	12	1	3
Slender wild buckwheat	ERMI4	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

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	450	500
Average Year	350	400
Unfavorable Year	250	300

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	2
Shrubs	35	2	20
Trees			
Cryptogams			

b. Other

Site Type: Rangeland

Ecological Site Name: Semidesert Shallow Loam (Black sagebrush)

Site Number: 034XY227UT

Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As ecological condition deteriorates due to grazing pressure and drought, Indian ricegrass, needleandthread and black sagebrush decrease while galleta and broom snakeweed increase. Fire does not appear to be an important factor in this ecosystem. Utah juniper and cheatgrass 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)

6. Plant Growth Curves

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Percent Growth	0	0	5	15	45	35	0	0	0	0	0	0
Name	PNC											
ID Number	UT2271											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

034XY233UT

Semidesert Shallow Loam (Utah juniper-Pinyon)

034XY225UT

Semidesert Shallow Loam (Wyoming big 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 provides proper grazing for sheep and cattle during fall, winter, and spring.

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 limited cover for wildlife.

b. List of Potential Species Present

Wildlife using this site include jackrabbit, snake, lizard, hawk, coyote, and mule deer.

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

This site has moderate recreational opportunities and often has scenic vistas.

4. Wood Products

None

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants

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 2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah County:
 Latitude: Longitude:

Modal Soil: Atchee CNV-SL 25-50%, 2-25% — loamy-skeletal, mixed (calc.), mesic Lithic Ustic Torriorthents

Type Location: SW ¼, SW ¼, NE ¼; Section 32, Township 11S, Range 21E SLBM

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