

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 Loam (Black sagebrush)

SITE NUMBER: 034XY320UT

MLRA: 034

Original Site Description: Author: JLB GWL

Date: 05/26/1981

Revised Site Description: Author: JLB GWL

Date: 01/11/1994

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: Mixed Alluvium and Residuum from Sandstone

Moisture Regime:

Temperature Regime:

Runoff: Slow to Moderate

Permeability(min-max): Moderate

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

Winona CN-FSL Moist 3-8%

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 and grass. The composition by air-dry weight is approximately 50 percent perennial grasses, 5 percent forbs and 45 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
Needleandthread	HECO26		80	120	10	15
Bluebunch wheatgrass	PSSP6		40	80	5	10
Indian ricegrass	ACHY		40	80	5	10
Muttongrass	POFE		40	80	5	10
Prairie junegrass	KOMA	1	8	24	1	3
Bottlebrush squirreltail	ELEL5	1	8	24	1	3
Blue grama	BOGR2	1	8	24	1	3
Salina wildrye	LESAS	1	8	24	1	3
Other perennial grasses	PPGG	1	24	40	3	5
Other annual grasses	AAGG	1	24	40	3	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Grassy rockgoldenrod	PEPU7	2	8	24	1	3
Carpet phlox	PHHO	2	8	24	1	3
Northwestern Indian paintbrush	CAAN7	2	8	24	1	3
Gumweed tansyaster	MAGR2	2	8	24	1	3
Penstemon	PENST	2	8	24	1	3
Longleaf phlox	PHLO2	2	8	24	1	3
Other perennial forbs	PPFF	2	40	80	5	10
Other annual forbs	AAFF	2	40	80	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
Black sagebrush	ARNO4		200	280	25	35
Birchleaf mountainmahogany	CEMO2		24	40	3	5
Bitterbrush	PUTR2		24	40	3	5
Mormontea	EPVI		24	40	3	5
Slender wild buckwheat	ERMI4		8	24	1	3
Bateman wild buckwheat	ERBA5	3	16	24	2	3
Broom snakeweed	GUSA2	3	16	24	2	3
Crispleaf wild buckwheat	ERCO14	3	16	24	2	3
Low rabbitbrush	CHVI8	3	16	24	2	3
Granite pricklygilia	LEPU	3	16	24	2	3
Central pricklypear	OPPO	3	16	24	2	3
Stemless mock goldenweed	STACA	3	16	24	2	3
Other shrubs	SSSS	3	24	40	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	850	900
Average Year	750	800
Unfavorable Year	650	700

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft.)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	30	2.5	15
Forbs (perennial)	5	1	2
Shrubs	30	2	15
Trees			
Cryptogams			

b. Other

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Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As ecological condition deteriorates due to overgrazing, perennial grasses decrease while broom snakeweed, low rabbitbrush and pricklygilia increase.

Fire is not an important factor in this ecosystem but when the potential natural plant community is burned, black sagebrush and needleandthread decrease while broom snakeweed and low rabbitbrush increase.

Annual forbs are most likely to invade this site. Of note, cheatgrass, not a part of the original vegetation, has occupied a natural niche and is treated in this description as part of the potential natural plant community.

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	UT3201											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

034XY330UT

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

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VG = Very Good G = Good F = Fair P = Poor

2. Wildlife

a. Site Factors Influencing Management

This site produces food and limited cover for wildlife.

b. List of Potential Species Present

Wildlife using this site include jackrabbit, coyote, 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

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: Winona CN-FSL Moist 3-8% — loamy-skeletal, mixed (calc.), frigid Lithic Ustortherents

Type Location: SW ¼, SW ¼, NW ¼; Section 2, Township 14S, Range 22E 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