

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 Sand (Fourwing saltbush)

SITE NUMBER: 034XY214UT

MLRA: 034

Original Site Description: Author: JLB GWL

Date: 05/15/1981

Revised Site Description: Author: JLB GWL

Date: 12/28/1993

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: 40-60 inches

Surface Textures:

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

Subsurface Textures:

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

Geologic Parent Materials: Eolian and Alluvium from Navajo Sandstone

Moisture Regime: Ustic

Temperature Regime: Mesic

Runoff: Very Slow

Permeability(min-max): Rapid to Very Rapid

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

Mespun FS 4-25%

Reepo FS Hummocky 4-25%

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

2. PHYSIOGRAPHIC FEATURES

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1. Potential Plant Community Description and Ecological Factors

The dominant aspect of the plant community is fourwing saltbush and Indian ricegrass. The composition by air-dry weight is approximately 55 percent perennial 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
Indian ricegrass	ACHY		100	150	20	30
Needleandthread	HECO26		25	50	5	10
Sandhill muhly	MUPU2		15	25	3	5
Galleta	HIJA		12	25	2	5
Purple threeawn	ARPU9	1	5	15	1	3
Sand dropseed	SPCR	1	5	15	1	3
Other perennial grasses	PPGG	1	15	25	3	5
Other annual grasses	AAGG	1	15	25	3	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Scarlet globemallow	SPCO		10	25	2	5
Woolly milkvetch	ASMO7		5	15	1	3
Pale evening primrose	OEPA		5	10	1	2
Hearts delight	ABFR2	2	0	5	0	1
Annual ragweed	AMAR2	2	0	5	0	1
Green river milkvetch	ASPU6	2	0	5	0	1
Narrowleaf goosefoot	CHLE4	2	0	5	0	1
Plateau yellow catseye	CRFL5	2	0	5	0	1
Cushion wild buckwheat	EROV	2	0	5	0	1
Reddome blanketflower	GAPI	2	0	5	0	1
Sprawling skyrocket	IPPO2	2	0	5	0	1
Common sunflower	HEAN3	2	0	5	0	1
Stemless fournerve daisy	TEACA2	2	0	5	0	1
Mountain pepperweed	LEMO2	2	0	5	0	1
Rush skeletonweed	LYJU	2	0	5	0	1
Wild lemonweed	PSLA3	2	0	5	0	1
Lobeleaf groundsel	SEMU3	2	0	5	0	1
Badland mulesears	WYSC	2	0	5	0	1
Grass milkvetch	ASCH7	2	0	5	0	1
Lapoint beardtongue	PEGO2	2	0	5	0	1
Other perennial forbs	PPFF	2	15	25	3	5
Other annual forbs	AAFF	2	15	25	3	5

Shrubs/Vines, %

Common Name	National	Group	Pounds per Acre	% by Weight of
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	Symbol				Total Composition	
			Low	High	Low	High
Fourwing saltbush	ATCA2		50	75	10	15
Wyoming big sagebrush	ARTRW		15	15	3	5
Sand sagebrush	ARFI2		15	15	3	5
Nevada jointfir	EPNE		15	15	3	5
Torrey jointfir	EPTO		15	15	3	5
Mormontea	EPVI	3	5	15	1	3
Crispleaf wild buckwheat	ERCO14	3	5	15	1	3
Slender wild buckwheat	ERMI4	3	5	15	1	3
Broom snakeweed	GUSA2	3	5	15	1	3
Rubber rabbitbrush	ERNA10	3	5	15	1	3
Low rabbitbrush	CHVI8	3	5	15	1	3
Winterfat	KRLA2	3	5	15	1	3
Central pricklypear	OPPO	3	5	15	1	3
Hoary rosemarymint	POIN3	3	5	15	1	3
Spanish bayonet	YUHA	3	5	15	1	3
Bush pepperweed	LEFR2	3	5	15	1	3
Other shrubs	SSSS	3	15	25	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	650	700
Average Year	450	500
Unfavorable Year	200	250

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)	40	2	15
Forbs (perennial)	5	1	2
Shrubs	20	4	10
Trees			
Cryptogams			

b. Other

Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As ecological condition deteriorates due to overgrazing, Indian ricegrass, needleandthread and fourwing saltbush decrease while galleta, sandhill muhly, threeawn, broom snakeweed and rabbitbrush increase. Fire is not an important factor in this ecosystem. Cheatgrass and annual weeds 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	UT2141											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

034XY216UT
 Semidesert Sandy Loam (Fourwing saltbush)

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 cattle, sheep and horses during fall, winter, and spring.

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 jackrabbit, snake, 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

Recreation values are hiking and hunting.

4. Wood Products

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None

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants
2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah County:
 Latitude: Longitude:

Modal Soil: Mespun FS 4-25% — mixed, mesic Ustic Torripsamments

Type Location: NW ¼, SW ¼, NW ¼; Section 12, Township 3S, Range 24E 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