

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: Sandy Bottom (Fourwing saltbush)

SITE NUMBER: 034XY012UT

MLRA: 034

Original Site Description: Author: JLB

Date: 05/15/1981

Revised Site Description: Author: JLB

Date: 11/24/1993

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

Date: 07/25/1994

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: 60-80 inches

Surface Textures:

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

Subsurface Textures:

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

Geologic Parent Materials: Alluvium from Sandstone Parent Materials

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 CaCl<sub>2</sub>):

pH Range:

Available Water Capacity (inches):

Major Soils Associated With This Site:

Soil Survey Area: 047

Glenton SL

**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 this plant community is fourwing saltbush and grass. The composition by air-dry weight is approximately 60 percent perennial grasses, 10 percent forbs, and 30 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		110	165	20	30
Galleta	HIJA		82.5	110	15	20
Needleandthread	HECO26		27.5	55	5	10
Sand dropseed	SPCR	1	5.5	16.5	1	3
Bottlebrush Squirreltail	ELEL5	1	5.5	16.5	1	3
Inland saltgrass	DISP	1	5.5	16.5	1	3
Purple threeawn	ARPU9	1	5.5	16.5	1	3
Other perennial grasses	PPGG	1	16.5	27.5	3	5
Other annual grasses	AAGG	1	16.5	27.5	3	5

#### Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Scarlet globemallow	SPCO		16.5	27.5	3	5
Pacific aster	ASCH2	2	5.5	16.5	1	3
Roughseed catseye	CRFL6	2	5.5	16.5	1	3
Indian pipeweed	ERIN4	2	5.5	16.5	1	3
Shortstem wild buckwheat	ERBR5	2	5.5	16.5	1	3
Woolly milkvetch	ASMO7	2	5.5	16.5	1	3
Annual ragweed	AMAR2	2	5.5	16.5	1	3
Woolly plantain	PLPA2	2	5.5	16.5	1	3
Rusty lupine	LUPUP	2	5.5	16.5	1	3
Skyblue scorpionweed	PHCO	2	5.5	16.5	1	3
Western sticktight	LAOC3	2	5.5	16.5	1	3
Other perennial forbs	PPFF	2	16.5	27.5	3	5
Other annual forbs	AAFF	2	16.5	27.5	3	5

#### Shrubs/Vines, %

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Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Fourwing saltbush	ATCA2		55	82.5	10	15
Torrey jointfir	EPTO		11	27.5	2	5
Winterfat	KRLA2		11	27.5	2	5
Rubber rabbitbrush	ERNA10		11	16.5	2	3
Broom snakeweed	GUSA2		11	16.5	2	3
Central pricklypear	OPPO	3	5.5	11	1	2
Sand sagebrush	ARFI2	3	5.5	11	1	2
Shadscale	ATCO	3	5.5	11	1	2
Other shrubs	SSSS	3	5.5	22	1	4

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	500	550
Unfavorable Year	300	350

### **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	10
Forbs (perennial)	5	1	2
Shrubs	20	4	5
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 over grazing, Indian ricegrass, needlegandthread, and fourwing saltbush decrease, while galleta and annual forbs increase. On severely deteriorated land cheatgrass and annual forbs will dominate the site. Fire is not an important factor on this ecosystem.

## **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	25	65	5	0	0	0	0	0	0
Name	UT0121											
ID Number	PNC											
Description	Excellent Condition											

## **7. Aspect Differences Near MLRA Boundaries**

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

## **8. Associated Sites Within MLRA**

034XY115UT  
 Desert Sandy Loam (Indian ricegrass)

034XY216UT  
 Semidesert Sandy Loam (Fourwing saltbush)

034XY112UT  
 Desert Sand (Fourwing saltbush)

## **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 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, coyote, kangaroo rat, snake, hawk 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 activities are hiking and hunting.

**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: Glenton SL – coarse-loamy, mixed (calcareous), mesic Typic Torrifuvents

Type Location: See the Uintah County Soil Survey

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**