

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 (Utah juniper)

SITE NUMBER: 028AY223UT

MLRA: 028A

Original Site Description: Author: DJS

Date: 04/27/1988

Revised Site Description: Author: DJS

Date: 07/06/1993

Approved by: Title: State Range Cons.

Signed: Pat Shaver

Date: 08/30/1993

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 inches

Surface Textures: Loamy Fine Sand

Surface Fragments(<=3" % cover, >3" % cover): None

Subsurface Textures:

Subsurface Fragments(<=3" % vol, >3" % vol): None

Geologic Parent Materials: Eolian & Lacustrine Sands from Mixed Materials

Moisture Regime:

Temperature Regime:

Runoff:

Permeability(min-max):

Drainage Class(min-max): Somewhat Excessively 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: 611

Goldrun LFS

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



### **1. Potential Plant Community Description and Ecological Factors**

The general view of this site is Utah juniper. The understory composition by air-dry weight is approximately 40 percent perennial grasses, 20 percent forbs, 35 percent shrubs, and 10 percent trees.

### **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		112.5	120	15	20
Indian ricegrass	ACHY		75	112.5	10	15
Sand dropseed	SPCR	1	22.5	37.5	3	5
Bottlebrush squirreltail	ELEL5	1	22.5	37.5	3	5
Western wheatgrass	PASM	1	22.5	37.5	3	5
Nevada bluegrass	PONE3	1	22.5	37.5	3	5
Sandberg bluegrass	POSE	1	22.5	37.5	3	5
Other perennial grasses	PPGG	1	37.5	75	5	10
Other annual grasses	AAGG	1	37.5	75	5	10

#### Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Wild lemmonweed	PSLA3		37.5	75	5	10
Scarlet globemallow	SPCO		22.5	37.5	3	5
Cushion wild buckwheat	EROV	2	7.5	22.5	1	3
Geyer milkvetch	ASGE	2	7.5	22.5	1	3
Low beardtongue	PEHU	2	7.5	22.5	1	3
Roundspike catseye	CRHU2	2	7.5	22.5	1	3
Longleaf Phlox	PHLO2	2	7.5	22.5	1	3
Shaggy fleabane	ERPU2	2	7.5	22.5	1	3
Other perennial forbs	PPFF	2	37.5	75	5	10
Other annual forbs	AAFF	2	37.5	75	5	10

#### Shrubs/Vines, %

Site Type: Rangeland  
 Ecological Site Name: Semidesert Sand (Utah juniper)  
 Site Number: 028AY223UT

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Fourwing saltbush	ATCA2		37.5	75	5	10
Spiny hopsage	GRSP		22.5	37.5	3	5
Bud sagebrush	ARSP5		22.5	37.5	3	5
Basin big sagebrush	ARTRT		22.5	37.5	3	5
Ill scented sumac	RUTRT		22.5	37.5	3	5
Shadscale	ATCO		22.5	37.5	3	5
Rubber rabbitbrush	CHNA2	3	7.5	22.5	1	3
Narrowleaf low rabbitbrush	CHVIS5	3	7.5	22.5	1	3
Other shrubs	SSSS	3	22.5	37.5	3	5

### Trees, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Utah juniper	JUOC		75	112.5	10	15

### **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	820	920
Average Year	650	750
Unfavorable Year	470	570

### **4. Ground Cover and Structure**

#### a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	5	2	2
Forbs (perennial)	5	1	2
Shrubs	5	3.5	2
Trees	5	7	5
Cryptogams			

#### b. Other

Site Type: Rangeland  
 Ecological Site Name: Semidesert Sand (Utah juniper)  
 Site Number: 028AY223UT

Litter	
Coarse Fragments	
Bare Ground	

## **5. Ecological Dynamics of the Site**

As this deteriorates due to grazing pressure, needleandthread and Indian ricegrass decrease, while rabbitbrush, big sagebrush, and sand dropseed increase.

When the potential natural plant community is burned, juniper, big sagebrush and wild buckwheat decrease while rabbitbrush increases.

## **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	40	30	5	5	0	0	0	0
Name	UT2231											
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**

028AY215UT  
 Semidesert Gravelly Loam (Wyoming big sagebrush) North

## **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 may be properly grazed by cattle and sheep during any season of the year.

#### b. Guide to Forage Quality(Plant preference by season)

Species	Oct-Nov	Dec-Feb	Mar-May	Jun-Sep

Site Type: Rangeland  
 Ecological Site Name: Semidesert Sand (Utah juniper)  
 Site Number: 028AY223UT


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, fox, 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**

Hunting, hiking, and camping

**4. Wood Products**

Posts and firewood

**5. Other Uses**

**E. THREATENED AND ENDANGERED SPECIES**

1. Plants

Site Type: Rangeland  
 Ecological Site Name: Semidesert Sand (Utah juniper)  
 Site Number: 028AY223UT  
 2. Animals

### **F. MODAL LOCATION AND DOCUMENTATION**

State: Utah                      County:  
 Latitude:                      Longitude:

Modal Soil: Goldrun LFS – mixed, mesic, Xeric Torripsamments

Type Location: Section 20, Township 2S, Range 10W

General Legal Description: 7.5 Miles South of Aragonite (East of Wendover, Utah)  
 Exact Location: 220 Feet South and 500 Feet West of the Northeast Corner of Section 20 in Township 2S, Range 10W.

#### **Field Office Site Location**

Logan  
 Murray  
 Provo  
 Richfield  
 Cedar City

#### **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	10				
Permanent Transect Location					

#### **Other References**