

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: Desert Sand (Indian ricegrass)

SITE NUMBER: 030XY120UT

MLRA: 030X

Original Site Description: Author: TS

Date: 05/05/1990

Revised Site Description: Author: TS

Date: 01/10/1994

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: 16-60 inches

Surface Textures: Loamy Fine Sand to Find Sand

Surface Fragments(<=3" % cover, >3" % cover): 1%

Subsurface Textures:

Subsurface Fragments(<=3" % vol, >3" % vol): 0-3%

Geologic Parent Materials: Weathered Sandstone

Moisture Regime:

Temperature Regime:

Runoff: Slow

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: 641

Ivins Fine Loamy Sand, 1-5%

Ivans Loamy Fine Sand, Hummock

Pintura Loamy Fine Sand, 1-5%

Pintura LFS, 1-10% SL, Hummock

Toquerville Fine Sand, 2-20%

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

1. Potential Plant Community Description and Ecological Factors

The dominant vegetative aspect in this site is grass. The plant composition by air-dry weight is approximately 65 percent grasses, 5 percent forbs, and 30 percent shrubs in excellent condition. Important plants include big galleta, Indian ricegrass, mesa dropseed, annual forbs and Nevada mormontea. Red brome is always present.

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
Big galleta	HIRI		67.5	90	15	20
Indian ricegrass	ACHY		67.5	90	15	20
Mesa dropseed	SPFL2		22.5	45	5	10
Sand dropseed	SPCR		22.5	45	5	10
Spike dropseed	SPCO4		9	13.5	2	3
Bush muhly	MUPO2	1	13.5	22.5	3	5
Sixweeks fescue	VUOC	1	13.5	22.5	3	5
Black grama	BOER4	1	13.5	22.5	3	5
Red brome	BRRU2	1	13.5	22.5	3	5
Other perennial grasses	PPGG	1	13.5	22.5	3	5
Other annual grasses	AAGG	1	13.5	22.5	3	5

Forbs, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Filaree	ERCI6		0	9	0	2
Globemallow	SPHAE		0	9	0	2
Desert marigold	BAMU		0	9	0	2
Skeleton locoweed	ASTRA	1	9	22.5	2	5
Sand verbena	ABRON	1	9	22.5	2	5
Other perennial forbs	PPFF	1	9	22.5	2	5
Other annual forbs	AAFF	1	9	22.5	2	5

Shrubs/Vines, %

Site Type: Rangeland
 Ecological Site Name: Desert Sand (Indian ricegrass)
 Site Number: 030XY120UT

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Nevada jointfir	EPNE		22.5	45	5	10
Sand sagebrush	ARFI2		13.5	22.5	3	5
Threadleaf snakeweed	GUMI		13.5	22.5	3	5
White bursage	FRDU		9	13.5	2	3
Winterfat	KRLA2		9	13.5	2	3
Gray krameria	KRAMA		9	22.5	2	5
Creosotebush	LADI2	1	22.5	45	5	10
Range ratany	KRPAG	1	22.5	45	5	10
White bitterbrush	ENFA	1	22.5	45	5	10
Anderson wolfberry	LYAN	1	22.5	45	5	10
Other shrubs	SSSS	1	22.5	45	5	10

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	500	600
Average Year	350	450
Unfavorable Year	200	300

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	2	0.5	1
Forbs (perennial)	0	0	0
Shrubs	3	3	1
Trees			
Cryptogams			

b. Other

Site Type: Rangeland
 Ecological Site Name: Desert Sand (Indian ricegrass)
 Site Number: 030XY120UT

Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

Natural disturbances such as fire do not appear to be a part of this ecosystem. However, Russian thistle and other annuals would likely invade the site if such disturbances were to occur. Since drought is a natural occurrence on this site, most plants are well adapted to severe drought conditions and respond by going into dormancy. Being an extremely arid climate, this plant community is extremely fragile and sensitive to impacts such as overgrazing.

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												
Name												
ID Number												
Description												

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

030XY110UT
 Desert Loam (Creosotebush)

030XY140UT
 Desert Shallow Hardpan (Creosotebush)

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 section will be added as information is available.

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

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

Site Type: Rangeland
 Ecological Site Name: Desert Sand (Indian ricegrass)
 Site Number: 030XY120UT

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

2. Wildlife

a. Site Factors Influencing Management

This site provides food and cover for a few species of wildlife.

b. List of Potential Species Present

Wildlife species commonly found on this site include, cottontail rabbits, kit fox, coyote, hawks, and desert tortoise.

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 section will be added as information is available.

4. Wood Products

None

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants

Site Type: Rangeland
 Ecological Site Name: Desert Sand (Indian ricegrass)
 Site Number: 030XY120UT

2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah County: Washington
 Latitude: Longitude:

Modal Soil: Pintura Loamy Fine Sand, 1-5% Slopes – mixed, thermic Typic Torripsamments

Type Location: Warner Valley and Snow Canyon

General Legal Description:

Field Office Site Location

Cedar City

Data Collected and References

Sampling Source	Number of Records	Range Similarity Index			
		> 76%	51-75%	26-50%	0-25%
NRCS - ECS - 417	8				
UTAH - RANGE - 2	1				
Permanent Transect Location					

Other References