

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: 047CY320UT

MLRA: E47C

Original Site Description: Author: GWL, LLR

Date: 03/11/1992

Revised Site Description: Author:

Date:

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

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: Very Channery Silt Loam

Surface Fragments(<=3" % cover, >3" % cover): 40%

Subsurface Textures:

Subsurface Fragments(<=3" % vol, >3" % vol): >50%

Geologic Parent Materials: Colluvium, Residuum, and Alluvium from Limestone

Moisture Regime: Ustic

Temperature Regime: Frigid

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): 0.06-0.12

Major Soils Associated With This Site:

Soil Survey Area: 047

Tyzak CNV-SiL, 8-25%

**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 area is black sagebrush and bluebunch wheatgrass. The composition by air-dry weight of the potential natural plant community is 60 percent perennial grasses, 5 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
Bluebunch wheatgrass	PSSP6		112.5	157.5	25	35
Nevada bluegrass	PONE3		45	67.5	10	15
Prairie junegrass	KOMA		22.5	45	5	10
Needleandthread	HECO26	1	4.5	13.5	1	3
Indian ricegrass	ACHY	1	4.5	13.5	1	3
Sandberg bluegrass	POSE	1	4.5	13.5	1	3
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
Stemless mock goldenweed	STACA		13.5	22.5	3	5
Carpet phlox	PHHO	2	4.5	9	1	2
Longleaf hawksbeard	CRAC2	2	4.5	9	1	2
Western aster	ASOC	2	4.5	9	1	2
Sego lily	CANU3	2	4.5	9	1	2
Common stonecrop	SELA	2	4.5	9	1	2
Little leaf pussytoes	ANMI3	2	4.5	9	1	2
Scarlet globemallow	SPCO	2	4.5	9	1	2
Low beardtongue	PEHU	2	4.5	9	1	2
Grassy rockgoldenrod	PEPU7	2	4.5	9	1	2
Blue flax	LIPE2	2	4.5	9	1	2
Eaton fleabane	EREA	2	4.5	9	1	2
Other perennial forbs	PPFF	2	13.5	22.5	3	5
Other annual forbs	AAFF	2	13.5	22.5	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
Black sagebrush	ARNO4		112.5	157.5	25	35
Slender wild buckwheat	ERMI3	3	4.5	13.5	1	3
Broom snakeweed	GUSA2	3	4.5	13.5	1	3
Central pricklypear	OPPO	3	4.5	13.5	1	3
Mountain low rabbitbrush	CHVIL4	3	4.5	13.5	1	3
Other shrubs	SSSS	3	13.5	22.5	3	5

### **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	400	450
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)	40	2	15
Forbs (perennial)	5	1	5
Shrubs	15	2	10
Trees			
Cryptogams			

#### b. Other

Litter	
Coarse Fragments	
Bare Ground	

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

As this site deteriorates due to livestock grazing pressure perennial grasses and palatable shrubs decrease while unpalatable grasses, forbs, and shrubs increase. Fire will damage black sagebrush and some bunchgrasses allowing low rabbitbrush and other unpalatable plants to increase.

### **Plant Communities & Transitional Pathways**

(Show a steady state diagram with influences to move from one steady state to another)

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**6. Plant Growth Curves**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Percent Growth	0	0	5	15	40	20	10	5	5	0	0	0
Name	PNC											
ID Number	UT3201											
Description	Excellent Condition											

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Percent Growth	0	0	0	10	40	35	5	5	5	0	0	0
Name	Good Condition No. 1											
ID Number	UT3202											
Description	wheatgrass, bluegrass, black sagebrush											

**7. Aspect Differences Near MLRA Boundaries**

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

**8. Associated Sites Within MLRA**

047CY326UT  
 Upland Shallow 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 grazing for cattle and sheep in spring, summer and fall.

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

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The site provides food and habitat for a few species of wildlife.

**b. List of Potential Species Present**

Wildlife species using this site include sage grouse, rabbit, 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 offers color and aesthetic appeal during the growing season of blooming plants.

**4. Wood Products**

None

**5. Other Uses**

**E. THREATENED AND ENDANGERED SPECIES**

1. Plants
2. Animals

**F. MODAL LOCATION AND DOCUMENTATION**

State: Utah  
 Latitude:

County:  
 Longitude:

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Modal Soil: Tysak CNV-SiL, 8-25% — loamy-skeletal, mixed Lithic Calciborolls

Type Location: 2800 ft. South, 2000 ft. West of NE Corner of Section MS6778, Township 2S, Range 22E

General Legal Description:

**Field Office Site Location**

Roosevelt

**Data Collected and References**

Sampling Source	Number of Records	Range Similarity Index			
		> 76%	51-75%	26-50%	0-25%
NRCS - ECS - 417	5				
UTAH - RANGE - 2	5				
Permanent Transect Location					

**Other References**