

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: Mountain Loam (Oak)

SITE NUMBER: 048AY415UT

MLRA: 048A

Original Site Description: Author: GSC DJS

Date: 01/18/1994

Revised Site Description: Author:

Date:

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

Date: 05/27/1994

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 inches

Surface Textures:

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

Subsurface Textures: Loam, Fine Sandy Loam, or Clay Loam and May be Very Stony or Cobbly

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

Geologic Parent Materials: Eolian Deposits and Alluvium, Colluvium, and Residuum from Sandstone, Shale, and Diorite

Moisture Regime:

Temperature Regime:

Runoff: Medium

Permeability(min-max):

Drainage Class(min-max):

Water Erosion Hazard: Moderate

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): 3.5-10.5

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Major Soils Associated With This Site:

Soil Survey Area: 616

Datino Variant

Hangdo L 3-15%

Herm CL 8-20%

Toone L 4-10%

Plite Family 1-8% Grand SS

Bookcliff Variant 2-15%

Harpole CBV-L 25-60%

Kilfoil Variant 8-25%

Delson 30-50%

Skylick SL 8-30% Grand SS

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

2. PHYSIOGRAPHIC FEATURES

Landform and Position: Mountain Slopes and Outwash Fans

Aspect: All

	<u>Minimum</u>	<u>Maximum</u>
Slope:	2	30
Elevation:	7000	8600
Flooding:		
Frequency:		
Duration:		
Ponding:		
Depth (inches):		
Frequency:		
Duration:		
Water Table Depth:		

B. CLIMATIC FEATURES

Mean Annual Precipitation (inches): 16-22

Mean Annual Air Temperature: 39-44

Mean Annual Soil Temperature: 41-46

Frost Free Period (days): 0-0

Freeze Free Period (days): 70-100

Temperature and Moisture Distribution:

Temp	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
High												
Mean												
Low												

ppt	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
High												
Mean	1.67	1.67	1.74	1.67	1.59	1.17	1.66	2.00	1.60	1.63	1.35	1.45
Low												

Climate Stations: St. ID.:

Location:

Period:

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From: To:

(Includes factors such as storm intensity, precipitation dependability, origin and pattern of storms, driest and wettest months, orographic effects, etc.)

Influencing Water Features (if any):

Wetland Description(Cowardin System) System Subsystem Class

Stream Types(Rosgen System) System

C. PLANT COMMUNITY CHARACTERISTICS

1. Potential Plant Community Description and Ecological Factors

The dominant aspect of this site is Gambel oak and serviceberry. The composition by air-dry weight is 35 percent perennial grasses, 10 percent forbs, and 55 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
Salina wildrye	LESAS		120	180	10	15
Muttongrass	POFE		60	120	5	10
Bluebunch wheatgrass	PSSP6		60	120	5	10
Letterman needlegrass	ACLE9	1	12	36	1	3
Needleandthread	HECO26	1	12	36	1	3
Columbia needlegrass	ACNE9	1	12	36	1	3
Mountain brome	BRCA5	1	12	36	1	3
Western wheatgrass	PASM	1	12	36	1	3
Slender wheatgrass	ELTR7	1	12	36	1	3
Ross sedge	CARO5	1	12	36	1	3
King fescue	LEKI2	1	12	36	1	3
Bottlebrush squirreltail	ELEL5	1	12	36	1	3
Other perennial grasses	PPGG	1	36	60	3	5
Other annual grasses	AAGG	1	36	60	3	5

Forbs, %

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Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Dusty beardtongue	PECO5	2	12	24	1	2
Pacific aster	ASCH2	2	12	24	1	2
Thickleaf peavine	LALA3	2	12	24	1	2
Twolobe larkspur	DENU2	2	12	24	1	2
Creeping Oregon grape	MARE11	2	12	24	1	2
Purple cluster cranesbill	GECA3	2	12	24	1	2
Spurred lupine	LUCAC3	2	12	24	1	2
American purple vetch	VIAM	2	12	24	1	2
Common yarrow	ACMI2	2	12	24	1	2
Plateau yellow catseye	CRFL5	2	12	24	1	2
Shockley wild buckwheat	ERSH	2	12	24	1	2
Louisiana wormwood	ARLU	2	12	24	1	2
Coast goldenrod	SOSP	2	12	24	1	2
Wyoming Indian paintbrush	CALI4	2	12	24	1	2
Other perennial forbs	PPFF	2	180	240	15	20
Other annual forbs	AAFF	2	180	240	15	20

Shrubs/Vines, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Gambel oak	QUGA		300	420	25	35
Mountain snowberry	SYOR2		60	120	5	10
Birchleaf mountainmahogany	CEMO2		36	60	3	5
Utah serviceberry	AMUT		36	60	3	5
Mountain big sagebrush	ARTRV	3	12	36	1	3
Bitterbrush	PUTR2	3	12	36	1	3
Low rabbitbrush	CHVI8	3	12	36	1	3
Woods rose	ROWO	3	12	36	1	3
Squaw apple	PERA4	3	12	36	1	3
Chokecherry	PRVI	3	12	36	1	3
Longleaf brickellbush	BRLO	3	12	36	1	3
Mountain lover	PAMY	3	12	36	1	3
Curleaf mountainmahogany	CELE3	3	12	36	1	3
Rubber rabbitbrush	ERNA10	3	12	36	1	3
Other shrubs	SSSS	3	60	120	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

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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	1650	1750
Average Year	1100	1200
Unfavorable Year	550	650

4. Ground Cover and Structure

a. Vegetative

Vegetation Type	Percent Canopy Cover	Height Range (ft)	Percent Basal Area Cover
Grasses & Grass-like (perennial)	20	2	10
Forbs (perennial)	10	1	5
Shrubs	40	10	20
Trees			
Cryptogams			

b. Other

Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As this site deteriorates due to grazing pressure, palatable grasses, forbs, and shrubs decrease while rabbitbrush, snowberry, and Salina wildrye increase. Fire will reduce the density of some perennial grasses, forbs, and shrubs. Gambel oak, snowberry, and rabbitbrush will increase after a burn.

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	0	5	15	40	30	5	5	0	0	0
Name	PNC											
ID Number	UT4151											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

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8. Associated Sites Within MLRA

048AY436UT
 Mountain Shallow Loam (Mountain 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 and sheep during 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

This site produces food and cover for wildlife.

b. List of Potential Species Present

Wildlife using this site include jackrabbit, 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

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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 has aesthetic appeal and many recreation opportunities.

4. Wood Products

Firewood

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: Datino Variant – loamy-skeletal, mixed Typic Haploxerolls

Type Location: See the appropriate soil survey report.

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