

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 Aspen Thicket

SITE NUMBER: 025XY410UT

MLRA: 025

Original Site Description: Author: GBB

Date: 01/15/1985

Revised Site Description: Author: GBB

Date: 02/07/1994

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

Date: 04/25/1994

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: 40-60

Surface Textures:

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

Subsurface Textures: Clay

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

Geologic Parent Materials: Colluvium from Mixed Sedimentary (Sandstone & Quartzite)

Moisture Regime:

Temperature Regime:

Runoff: Medium

Permeability(min-max): Moderate Slow to Slow

Drainage Class(min-max): Well Drained

Water Erosion Hazard: Moderate to High

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): 2-4

Major Soils Associated With This Site:

Soil Survey Area: 601

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 general view of this site is low-growing quaking aspen. The composition by air-dry weight is approximately 45 percent perennial grasses, 20 percent forbs, and 20 percent shrubs and 15 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
Mountain brome	BRCA5		112.5	225	5	10
Slender wheatgrass	ELTR7		112.5	225	5	10
Ross sedge	CARO5		67.5	112.5	3	5
Columbia needlegrass	ACNE9		67.5	112.5	3	5
Nevada bluegrass	PONE3		67.5	112.5	3	5
Letterman needlegrass	ACLE9	1	22.5	67.5	1	3
Bottlebrush squirreltail	ELEL5	1	22.5	67.5	1	3
Bluebunch wheatgrass	PSSP6	1	22.5	67.5	1	3
Blue wildrye	ELGL	1	22.5	67.5	1	3
Bulbous oniongrass	MEBU	1	22.5	67.5	1	3
Idaho fescue	FEID	1	22.5	67.5	1	3
Western needlegrass	ACOC3	1	22.5	67.5	1	3
Other perennial grasses	PPGG	1	112.5	225	5	10
Other annual grasses	AAGG	1	112.5	225	5	10

Forbs, %

Common Name	National	Group	Pounds per Acre	% by Weight of
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	Symbol		Pounds per Acre		Total Composition	
			Low	High	Low	High
Lambstongue groundsel	SEIN2		67.5	112.5	3	5
Fendler meadowrue	THFE		67.5	112.5	3	5
Mountain desert parsley	LOGR		67.5	112.5	3	5
Spurred lupine	LUCA3		67.5	112.5	3	5
White cranesbill	GERI	2	22.5	67.5	1	3
Nettleleaf giant hyssop	AGUR	2	22.5	67.5	1	3
Common yarrow	ACMI2	2	22.5	67.5	1	3
Heartleaf arnica	ARCO9	2	22.5	67.5	1	3
Showy cinquefoil	POGR9	2	22.5	67.5	1	3
Shaggy fleabane	ERPU2	2	22.5	67.5	1	3
Spreading sweetroot	OSCH	2	22.5	67.5	1	3
Hookspur violet	VIAD	2	22.5	67.5	1	3
Northwestern Indian paintbrush	CAAN7	2	22.5	67.5	1	3
Twolobed larkspur	DENU2	2	22.5	67.5	1	3
Languidlady	MEOB	2	22.5	67.5	1	3
Meadow goatsbeard	TRDU	2	22.5	67.5	1	3
Other perennial forbs	PPFF	2	112.5	225	5	10
Other annual forbs	AAFF	2	112.5	225	5	10

Shrubs/Vines, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Mountain snowberry	SYOR2		112.5	225	5	10
Chokecherry	PRVI		67.5	112.5	3	5
Woods rose	ROWO	3	22.5	67.5	1	3
Tobaccobrush	CEVE	3	22.5	67.5	1	3
Mountain big sagebrush	ARTRV	3	22.5	67.5	1	3
Scouler willow	SASC	3	22.5	67.5	1	3
Bitter cherry	PREM	3	22.5	67.5	1	3
Mountain low rabbitbrush	CHVIL4	3	22.5	67.5	1	3
Creeping Oregon grape	MARE11	3	22.5	67.5	1	3
Sticky current	RIVI3	3	22.5	67.5	1	3
Saskatoon serviceberry	AMAL2	3	22.5	67.5	1	3
Other shrubs	SSSS	3	225	337.5	10	15

Trees, %

Common Name	National Symbol	Group	Pounds per Acre		% by Weight of Total Composition	
			Low	High	Low	High
Quaking aspen	POTRT		225	337.5	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:

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	Low	High
Favorable Year	2900	3000
Average Year	2150	2250
Unfavorable Year	1400	1500

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	15
Forbs (perennial)	20	2	10
Shrubs	15	4	10
Trees	70	30	20
Cryptogams			

b. Other

Litter	
Coarse Fragments	
Bare Ground	

5. Ecological Dynamics of the Site

As this site deteriorates due to grazing pressure mountain brome, slender wheatgrass, meadowrue, and horsemint decrease while milkvetch, mountain big sagebrush, and snowberry increase. When the potential natural plant community is burned, mountain brome, slender wheatgrass, and mountain big sagebrush decrease while rabbitbrush, and snowberry increase.

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	20	50	5	10	5	5	0	0
Name	PNC											
ID Number	UT4101											
Description	Excellent Condition											

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

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025XY412UT
 Mountain Gravelly Loam (Mountain big sagebrush)

025XY418UT
 Mountain Windswept Ridge (Low 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 provides food and cover for wildlife.

b. List of Potential Species Present

Wildlife using this site include blacktail jackrabbit, coyote, sage grouse, 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

Hunting and Hiking

4. Wood Products

Poles and Fire Wood

5. Other Uses

E. THREATENED AND ENDANGERED SPECIES

1. Plants
2. Animals

F. MODAL LOCATION AND DOCUMENTATION

State: Utah County: Box Elder
 Latitude: Longitude:

Modal Soil:

Type Location: NE ¼ SW ¼ Section 14, Township 13N, Range 17W – Grouse Creek Mtns

General Legal Description:

Field Office Site Location

Logan
 Box Elder County

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	3				

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Permanent Transect Location					

Other References