

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 Very Steep Shallow Loam (Pinyon-Utah juniper)

SITE NUMBER: 034XY342UT

MLRA: 034

Original Site Description: Author: GSC

Date: 05/25/1981

Revised Site Description: Author: GSC

Date: 01/13/1994

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

Date: 06/25/1994

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: 0-20 inches

Surface Textures:

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

Subsurface Textures:

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

Geologic Parent Materials: Alluvium and Colluvium from Sandstone

Moisture Regime:

Temperature Regime: Mesic and Frigid

Runoff: Rapid

Permeability(min-max): Moderate to Moderately Rapid

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: 047

Atchee CNV-SiL Moist 50-80%

Reva Family 50-80%

Falcon Family 50-80%

Cabba Family 40-70%

Guben BYX-L Dry 40-75%

Podo BYV-SL 50-70%

Travessilla GRV-FSL 30-70%

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 dominant aspect of the plant community is pinyon Utah juniper. The understory composition by air-dry weight is approximately 35 percent perennial grasses, 15 percent forbs and 50 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 | | 27.5 | 55 | 5 | 10 |
| Bluebunch wheatgrass | PSSP6 | | 27.5 | 55 | 5 | 10 |
| Indian ricegrass | ACHY | | 27.5 | 55 | 5 | 10 |
| Geyer sedge | CAGE2 | 1 | 5.5 | 11 | 1 | 2 |
| Galleta | HIJA | 1 | 5.5 | 11 | 1 | 2 |
| Prairie junegrass | KOMA | 1 | 5.5 | 11 | 1 | 2 |
| Muttongrass | POFE | 1 | 5.5 | 11 | 1 | 2 |
| Bottlebrush squirreltail | ELEL5 | 1 | 5.5 | 11 | 1 | 2 |
| Needleandthread | HECO26 | 1 | 5.5 | 11 | 1 | 2 |
| Other perennial grasses | PPGG | 1 | 27.5 | 55 | 5 | 10 |
| Other annual grasses | AAGG | 1 | 27.5 | 55 | 5 | 10 |

Forbs, %

| Common Name | National | Group | Pounds per Acre | % by Weight of |
|-------------|----------|-------|-----------------|----------------|
|-------------|----------|-------|-----------------|----------------|

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| | Symbol | | | | Total Composition | |
|------------------------|--------|---|------|------|-------------------|------|
| | | | Low | High | Low | High |
| Grassy rockgoldenrod | PEPU7 | | 5.5 | 16.5 | 1 | 3 |
| Carpet phlox | PHHO | | 5.5 | 16.5 | 1 | 3 |
| Thickleaf beardtongue | PEPA6 | | 5.5 | 11 | 1 | 2 |
| Gumweed tansyaster | MAGR2 | | 5.5 | 11 | 1 | 2 |
| Small leaf pussytoes | ANMI3 | 1 | 0 | 5.5 | 0 | 1 |
| Fendler sandwort | ARFE3 | 1 | 0 | 5.5 | 0 | 1 |
| Pacific aster | ASCH2 | 1 | 0 | 5.5 | 0 | 1 |
| Woolly milkvetch | ASMO7 | 1 | 0 | 5.5 | 0 | 1 |
| Holboell rockcress | ARHO2 | 1 | 0 | 5.5 | 0 | 1 |
| Plateau yellow catseye | CRFL5 | 1 | 0 | 5.5 | 0 | 1 |
| Nodding wild buckwheat | ERCE2 | 1 | 0 | 5.5 | 0 | 1 |
| Cushion wild buckwheat | EROV | 1 | 0 | 5.5 | 0 | 1 |
| Sprawling skyrocket | IPPO2 | 1 | 0 | 5.5 | 0 | 1 |
| Fineleaf woollywhite | HYFI | 1 | 0 | 5.5 | 0 | 1 |
| Blue flax | LIPE2 | 1 | 0 | 5.5 | 0 | 1 |
| Juniper desert parsley | LOJU | 1 | 0 | 5.5 | 0 | 1 |
| Spurred lupine | LUCAC3 | 1 | 0 | 5.5 | 0 | 1 |
| Hoary tansyaster | MACA2 | 1 | 0 | 5.5 | 0 | 1 |
| Heartleaf jewelflower | STCO6 | 1 | 0 | 5.5 | 0 | 1 |
| Navajo tea | THSU | 1 | 0 | 5.5 | 0 | 1 |
| | | | | | | |
| Other perennial forbs | PPFF | 1 | 27.5 | 55 | 5 | 10 |
| Other annual forbs | AAFF | 1 | 27.5 | 55 | 5 | 10 |

Shrubs/Vines, %

| Common Name | National Symbol | Group | Pounds per Acre | | % by Weight of Total Composition | |
|----------------------------|-----------------|-------|-----------------|------|----------------------------------|------|
| | | | Low | High | Low | High |
| Birchleaf mountainmahogany | CEMO2 | | 55 | 82.5 | 10 | 15 |
| Mexican cliffrose | PUME | | 27.5 | 55 | 5 | 10 |
| Utah serviceberry | AMUT | | 27.5 | 55 | 5 | 10 |
| Wyoming big sagebrush | ARTRW | 3 | 5.5 | 11 | 1 | 2 |
| Curlleaf mountainmahogany | CELE3 | 3 | 5.5 | 11 | 1 | 2 |
| Low rabbitbrush | CHVI8 | 3 | 5.5 | 11 | 1 | 2 |
| Torrey jointfir | EPTO | 3 | 5.5 | 11 | 1 | 2 |
| Mormontea | EPVI | 3 | 5.5 | 11 | 1 | 2 |
| Slender wild buckwheat | ERMI4 | 3 | 5.5 | 11 | 1 | 2 |
| Singleleaf ash | FRAN2 | 3 | 5.5 | 11 | 1 | 2 |
| Broom snakeweed | GUSA2 | 3 | 5.5 | 11 | 1 | 2 |
| Granite pricklygilia | LEPU | 3 | 5.5 | 11 | 1 | 2 |
| Bitterbrush | PUTR2 | 3 | 5.5 | 11 | 1 | 2 |
| Mountain snowberry | SYOR2 | 3 | 5.5 | 11 | 1 | 2 |
| Thrift mock goldenweed | STATA | 3 | 5.5 | 11 | 1 | 2 |
| | | | | | | |
| Other shrubs | SSSS | 3 | 55 | 82.5 | 10 | 15 |

Trees, %

| Common Name | National | Group | Pounds per Acre | % by Weight of |
|-------------|----------|-------|-----------------|----------------|
|-------------|----------|-------|-----------------|----------------|

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| | Symbol | | | Total Composition | |
|------------------------|--------|------|------|-------------------|------|
| | | Low | High | Low | High |
| Pinyon | PIED | 66 | 82.5 | 12 | 15 |
| Utah juniper | JUOS | 16.5 | 27.5 | 3 | 5 |
| Rocky Mountain juniper | JUSC2 | 0 | 5.5 | 0 | 1 |

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 | 600 | 700 |
| Average Year | 450 | 550 |
| Unfavorable Year | 300 | 400 |

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 | 30 | 4 | 15 |
| Trees | 60 | 12 | 30 |
| Cryptogams | | | |

b. Other

| | |
|------------------|--|
| Litter | |
| Coarse Fragments | |
| Bare Ground | |

5. Ecological Dynamics of the Site

This site is only slightly grazed by livestock.

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 |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

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| | | | | | | | | | | | | |
|----------------|---------------------|---|---|----|----|----|---|---|---|---|---|---|
| Percent Growth | 0 | 0 | 0 | 10 | 30 | 45 | 5 | 5 | 5 | 0 | 0 | 0 |
| Name | PNC | | | | | | | | | | | |
| ID Number | UT3421 | | | | | | | | | | | |
| Description | Excellent Condition | | | | | | | | | | | |

7. Aspect Differences Near MLRA Boundaries

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

8. Associated Sites Within MLRA

034XY230UT

Semidesert Shallow Loam (Salina wildrye)

034XY338UT

Upland Very Steep Loam (Pinyon-Utah juniper)

034XY322UT

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

Because of steep slopes, this site is grazed very little by livestock.

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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This site produces food and cover for wildlife.

b. List of Potential Species Present

Wildlife using this site include jackrabbit, wood rat, pinyon jay, 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 has aesthetic appeal but limited recreational value.

4. Wood Products

There are approximately 8 to 10 cords of firewood per acre in the potential plant community when the average tree diameter is 5 inches at 1 foot. About 20 posts and 12 Christmas trees are produced per acre.

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: Atchee CNV-Sil Moist 50-80% — loamy-skeletal, mixed (calcareous), mesic Lithic Ustic Torriorthents

Type Location: SE ¼, NE ¼, NW ¼; Section 28, Township 15S, Range 21E SLBM

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