

Ecological site group DX035X02EESG12

Arizona Strip - Ustic Aridic - Basalt or Clay Loam Slopes- Blackbrush

Last updated: 10/26/2022
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Key Characteristics

- Arizona Strip (E)
- Blackbrush (*coleogyne ramosissima*) is present on site
- Parent material is basalt.

Provisional. A provisional ecological site description has undergone quality control and quality assurance review. It contains a working state and transition model and enough information to identify the ecological site.

Physiography

Site is and/or located in an upland with slopes >15%. Aspects tend northeast except along escarpments.

Climate

Site soils are ustic aridic or within a 10-14" precipitation zone. Precipitation comes monsoonal patterns during months of July, August, and September, and is supplemented by winter storm patterns from November through March.

Soil features

Parent material is basalt. Soils are clay loam or clayey. Site consists of gently dipping shallow residuum weathered from sedimentary rocks eroded into hills, steep cliff faces and canyons.

Vegetation dynamics

This site has an aspect of fairly dense desert shrubs with scattered trees, Blackbrush dominates the site with minor amounts of ephedra, cliffrose and banana yucca interspersed. Trees are generally present and increase with elevation and cool aspect. Perennial grasses are a minor component, but are usually present in small amounts - galleta is most common. Forbs are also infrequent. Typical perennial plant spacing is 1.0-1.25 feet.

Major Land Resource Area

MLRA 035X
Colorado Plateau

Subclasses

- R035XC340AZ–Basalt Slopes 10-14" p.z. Calcareous

Correlated Map Unit Components

22338610, 22338612

Stage

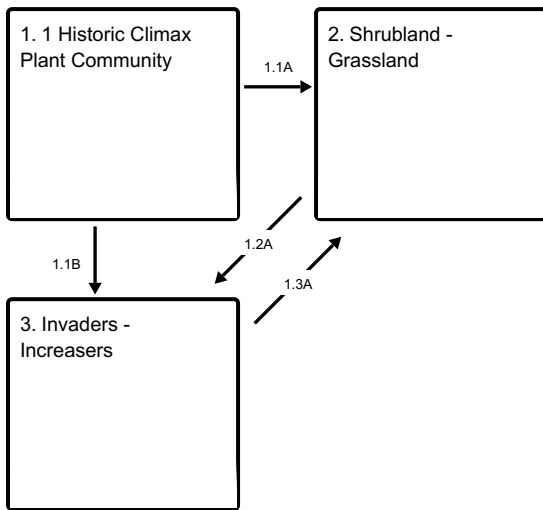
Provisional

Contributors

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State and transition model

Ecosystem states



State 1

1 Historic Climax Plant Community

Blackbrush, cliffrose, ephedra, yucca, juniper. This site has an aspect of fairly dense desert shrubs with scattered trees, Blackbrush dominates the site with minor amounts of ephedra, cliffrose and banana yucca interspersed. Trees are generally present and increase with elevation and cool aspect. Perennial grasses are a minor component, but are usually present in small amounts - galleta is most common. Forbs are also infrequent. Typical perennial plant spacing is 1.0-1.25 feet.

Characteristics and indicators. Because of the scattered canopy cover and sparse understory, this site does not have a history of regular fire disturbance. Blackbrush plant communities are often quite old and tend to be stable. If it is severely disturbed this site will revert to an early seral stage of mostly annuals, including a large increase of cheatgrass brome, broom snakeweed, and rabbitbrush. A more advanced plant community will contain scattered desert shrubs and a small increase in perennial grasses, with little regeneration of blackbrush. It is speculated that blackbrush communities evolved under a different climatic regime, and once removed will not readily return to a site. Because of the scattered canopy and sparse understory, this site does not have a history of regular fire disturbance. Blackbrush communities are often quite old and tend to be stable. If removed, blackbrush will not readily return to the site - there will be an increase in the other major shrubs of the site, and a significant increase in the grass and forb component. On hotter south and west slopes near the lower elevation limit this site will more closely resemble the thermic site D30-2 Basalt Slopes 9-12" p.z. Creosotebush, bush encelia, Fremont dalea and other low-desert shrubs may be present, along with big galleta and bush muhly. At the upper elevation limit this site may more closely resemble d39-3 Basalt Slopes 13-17" p.z. Big sagebrush will increase and turbinella oak may be present; trees will increase and canopy cover may approach 25% on cool aspects and in drainages. The blackbrush component will be much less. There may be transition areas with chaparral species such as manzanita and desert ceanthus. This site is usually located immediately below the basalt cap rock and above flatter sites. It is generally interspersed with basalt talus slopes.

State 2

Shrubland - Grassland

cliffrose, ephedra, yucca, galleta, needlegrass, Indian ricegrass

State 3

Invaders - Increasers

cheatgrass, snakeweed, rabbitbrush

Transition 1.1A
State 1 to 2

some fire

Transition 1.1B
State 1 to 3

repeated fire

Transition 1.2A
State 2 to 3

continuous heavy grazing

Restoration pathway 1.3A
State 3 to 2

prescribed grazing

Citations