

Ecological site group DX035X02EESG04

Arizona Strip - Ustic Aridic - Gypsum Hills

Last updated: 10/26/2022

Accessed: 04/19/2024

Key Characteristics

- Arizona Strip (E)
- Site soils are gypsiferous
- Soils are ustic aridic, or precipitation is within the range of 10 to 14 inches.
- Site is and/or located in an upland with slopes >15%.

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 to 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 gypsiferous shale. Soils are loam to clayey. Site consists of gently dipping shallow residuum weathered from sedimentary rocks eroded into steep cliff faces and canyons.

Vegetation dynamics

This site is primarily desert shrubs (blackbrush, cliffrose, ephedra, and rabbitbrush). Scattered pockets of perennial grasses (gyp dropseed, galleta, bottlebrush squirreltail, Indian ricegrass) are present, as are perennial forbs such as globemallow and desert trumpet. Annual can be a significant component if winter-spring moisture is favorable. Typical perennial plant spacing is 1.5 to 2.0 feet.

Major Land Resource Area

MLRA 035X
Colorado Plateau

Subclasses

- R035XC342AZ–Gypsum Hills 10-14" p.z.

Correlated Map Unit Components

22338534, 22338536, 22395242

Stage

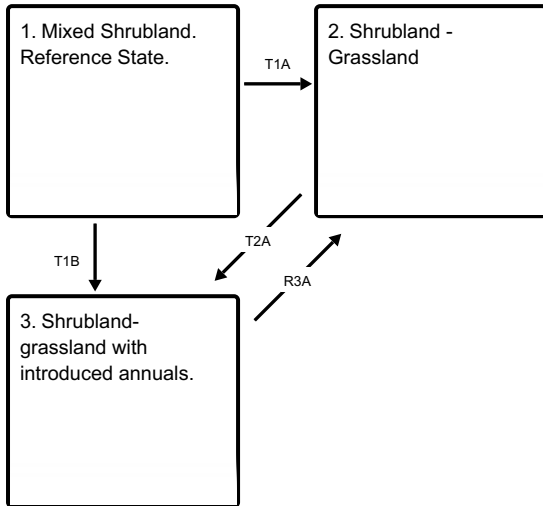
Provisional

Contributors

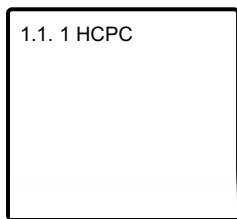
Curtis Talbot

State and transition model

Ecosystem states



State 1 submodel, plant communities



State 1

Mixed Shrubland. Reference State.

This site is primarily desert shrubs (blackbrush, cliffrose, ephedra, and rabbitbrush). Scattered pockets of perennial grasses (gyp dropseed, galleta, bottlebrush squirreltail, Indian ricegrass) are present, as are perennial forbs such as globemallow and desert trumpet. Annual can be a significant component if winter-spring moisture is favorable. Typical perennial plant spacing is 1.5 to 2.0 feet.

Characteristics and indicators. Because of the scattered canopy cover and a 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 an increases of cheatgrass brome, broom snakedweed, 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 difference climatic regime, and once removed will not readily return to the site.

Community 1.1

1 HCPC

blackbrush, cliffrose, rabbitbrush, ephedra

State 2

Shrubland - Grassland

cliffrose, ephedra, rabbitbrush, galleta, gyp dropseed

State 3

Shrubland- grassland with introduced annuals.

cheatgrass, snakeweed, rabbitbrush

Transition T1A

State 1 to 2

some fire

Transition T1B

State 1 to 3

repeated fire

Transition T2A

State 2 to 3

continuous heavy grazing

Restoration pathway R3A

State 3 to 2

prescribed grazing

Citations