

Ecological site group DX035X02FESG06

Kaibab Plateau - Aridic Ustic - Limestone or Loamy Upland

Last updated: 09/02/2021
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Key Characteristics

- Kaibab Plateau (F)
- Site parent material is limestone or loamy.
- Soils are aridic ustic, or precipitation is within the range of 13 to 17 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 toward the perimeter of the LRU subset.

Climate

Site soils are aridic ustic or within a 14-18" precipitation zone. Precipitation comes predominantly from winter storm patterns from November through March at upper elevations. Monsoonal patterns and xeric patterns occur more equally at lower elevations.

Soil features

Parent material is limestone. Soils are loamy. Site consists of limited amounts of gently sloping sheet alluvial or eolian deposits over residuum of plateaus and structural benches.

Vegetation dynamics

This is a forest site with an overstory comprised of juniper and pinyon with approximately 45% to 50% canopy cover. The understory is comprised of shrubs, grasses and minor amounts of forbs and small trees.

Major Land Resource Area

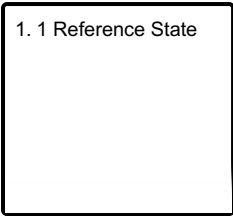
MLRA 035X
Colorado Plateau

Stage

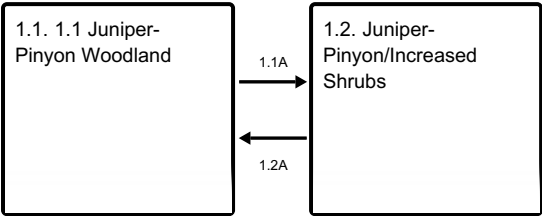
Provisional

State and transition model

Ecosystem states



State 1 submodel, plant communities



State 1
1 Reference State

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Community 1.1
1.1 Juniper-Pinyon Woodland

This site has an overstory comprised of pinyon pine (30%) and juniper (70%). The tree canopy cover is generally 40-55%, but can be higher. The understory is comprised of approximately 60% shrubs, 30% grasses and 5% each small trees and forbs. Understory species include sideoats grama, muttongrass, blue grama, penstemon, Stansbury cliffrose, turbinella oak and desert ceanothus. Non-native plant species may be present in minor amounts. Once non-native plants are introduced into the plant community, it is very difficult to eliminate these plants from the site. Forest understory. The understory responds to the density of the overstory canopy. The relationship of sparse, Representative Value and dense canopy cover versus the understory composition and production is shown in the third table below.

Community 1.2
Juniper-Pinyon/Increased Shrubs

In this community the understory is affected by disturbance that reduces the grass component and shrubs increase and become more dominant. Shrub species that can increase are broom snakeweed, mormon tea, big sage and banana yucca. Non-native plant species may be present in minor amounts. Once non-native plants are introduced into the plant community, it is very difficult to eliminate these plants from the site.

Pathway 1.1A
Community 1.1 to 1.2

Repetitive, high utilization of palatable grass species have given shrubs a competitive advantage.

Pathway 1.2A
Community 1.2 to 1.1

A set back to shrubs whether by fire, drought, or disease and improved management of palatable grass species.

Citations