

Ecological site group DX035X02FESG08

Kaibab Plateau - Xeric Udic - Limestone or Loamy Upland

Last updated: 10/31/2022
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Key Characteristics

- Kaibab Plateau (F)
- Site parent material is limestone or loamy.
- Soils are typic ustic, or precipitation is within the range of 17 to 25 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 xeric udic or within a 18-25" precipitation zone. Soil temperatures are frigid. Precipitation comes predominantly from winter storm patterns from November through March.

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 that is dominated by a ponderosa pine tree overstory. Cool season grasses dominate the understory vegetation with shrubs and forbs as minor components throughout the site. Fire suppression, grazing and favorable climatic conditions have increased shrub and/or tree components of this site. This is in conjunction with decreased amounts of grass cover and an increase in pine needle litter and annuals.

Major Land Resource Area

MLRA 035X
Colorado Plateau

Subclasses

- F035XH805AZ–Loamy Hills 17-25" p.z. (PIPO)
- F035XH806AZ–Loamy Terrace 17-25" p.z. (PIPO)
- F035XH808AZ–Loamy Upland 17-25" p.z. (PIPO)
- R035XH801AZ–Clay Loam Upland 17-25" p.z.
- R035XH809AZ–Sedimentary Cliffs 17-25" p.z.

Correlated Map Unit Components

22395194, 22394875

Stage

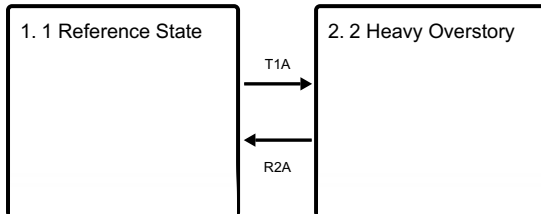
Provisional

Contributors

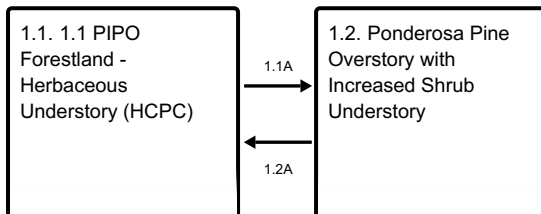
Curtis Talbot

State and transition model

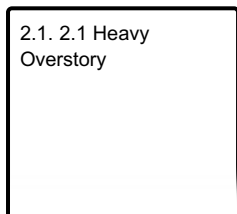
Ecosystem states



State 1 submodel, plant communities



State 2 submodel, plant communities



State 1

1 Reference State

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Community 1.1

1.1 PIPO Forestland - Herbaceous Understory (HCPC)

This site was developed under historic Colorado Plateau climatic conditions and reflects the natural influences of herbivores, climate fluctuations and occasional fire. This community has an overstory layer dominated by mature and widely-spaced ponderosa pine. The shrub layer is intermittent. Grasses are dominantly cool-season perennials and make up a substantial part of the vegetation. Perennial and annual forbs are also well represented.

Community 1.2

Ponderosa Pine Overstory with Increased Shrub Understory

Fire suppression and grazing have decreased the amount of grass understory and various shrubs have increased on the site.

Pathway 1.1A

Community 1.1 to 1.2

Fire suppression and a decrease of palatable grass species.

Pathway 1.2A

Community 1.2 to 1.1

Fire and management of palatable grass species.

State 2

2 Heavy Overstory

This state has a very dense overstory of ponderosa pine trees. Much of the understory vegetation is excluded from this plant community. It takes large amounts of energy to return to the reference plant community.

Community 2.1

2.1 Heavy Overstory

Thick ponderosa pine overstory with a very diminished plant community understory.

Transition T1A

State 1 to 2

Fire suppression and grazing have decreased the amount of grass understory and various shrubs have increased on the site.

Restoration pathway R2A

State 2 to 1

Fire and management of grass species.

Citations