Ecological site group DX035X01JESG14
Paria and Kaibito Plateaus Shallow Sandstone, MAST > 54 degrees F

Last updated: 10/25/2022
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Key Characteristics

- Paria and Kaibito Plateaus
- Sandstone or sandy loam
- Shallow
- MAST > 54 degrees F

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

This site is located on dissected pediments, escarpments, ledges, hillslopes on structural benches, benches, rolling ridges, dissected cuestas, structural benches, top mesas, south facing hillslopes, and canyons. Runoff is high to very high. Slopes typically range from 1-20%, but in some areas, slopes are as steep as 60%. Elevations are generally 3700-6000 ft, but this site has been found on elevations as high as 7100 ft.

Climate

The climate is characterized by hot summers and cool to warm winters. Large fluctuations in daily temperatures are common. The mean annual air temperature ranges from 40 to 57 degrees Fahrenheit. Approximately 65–70% of precipitation occurs as rain from March through October. On the average, April, May, and June are the driest months and August, September, and October are the wettest months. Precipitation is extremely variable from month to month and from year to year. Much of the precipitation occurs as convection thunderstorms.

Soil features

Soils on this site are shallow. Surface textures are loamy sand to sand. They formed from eolian materials and residuum from sandstone and limestone. Subsurface textures are fine sandy loam, gravelly sandy loam, gravelly loam, gravelly loamy fine sand, extremely gravelly fine sandy loam.

Vegetation dynamics

community 1.1: This site is a blackbrush dominated community mixed with cool and warm season grasses like Indian ricegrass and galleta and a few forbs.
Plant species most likely to invade or increase on this site when it deteriorates are blackbrush, cacti, and annuals. Unmanaged gazing during the winter and spring periods will decrease the cool season grasses, which are replaced by lower forage value grasses and shrubs.

community 2.1: Blackbrush/Annuals. This plant community is dominated by blackbrush with a understory of sparse perennial grasses and annuals. Native and non-native annuals have increased and are co-dominate with perennial grasses. Common annuals are Russian thistle cheatgrass and/or red brome.

Major Land Resource Area

MLRA 035X
Colorado Plateau

Subclasses

- R035XB234AZ–Sandstone Upland 6-10" p.z. Warm
- R035XC333AZ–Sandstone Upland 10-14" p.z. Warm
- R035XY133UT–Desert Shallow Sandy Loam (Blackbrush)
- R035XY233UT–Semidesert Shallow Sandy Loam (Blackbrush)

Correlated Map Unit Components

22340865, 22397492, 22397375, 22397539

Stage

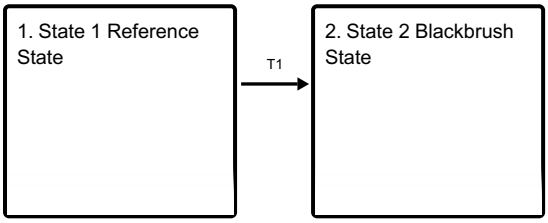
Provisional

Contributors

Curtis Talbot

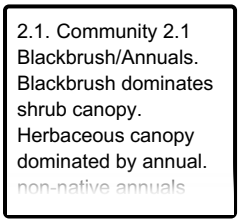
State and transition model

Ecosystem states



State 1 submodel, plant communities

State 2 submodel, plant communities



State 1
State 1 Reference State

State 1 Reference State This state includes the Historic Climax Plant Community which is a shrubland community dominated by blackbrush mixed with warm and cool season grasses.

Community 1.1
Community 1.1 Blackbrush/Indian ricegrass - Galleta. Blackbrush, indian ricegrass, galleta, broom snakeweed, sand dropseed, Mormon tea

Community 1.1 Blackbrush/ Indian ricegrass - Galleta This site is a blackbrush dominated community mixed with cool and warm season grasses like Indian ricegrass and galleta and a few forbs. Plant species most likely to invade

or increase on this site when it deteriorates are blackbrush, cacti, and annuals. Unmanaged gazing during the winter and spring periods will decrease the cool season grasses, which are replaced by lower forage value grasses and shrubs.

State 2
State 2 Blackbrush State

State 2 Blackbrush State This plant community is dominated by blackbrush with an understory of native and non-native annuals and sparse perennial grasses.

Community 2.1
Community 2.1 Blackbrush/Annuals. Blackbrush dominates shrub canopy. Herbaceous canopy dominated by annual. non-native annuals present.

Community 2.1 Blackbrush/Annuals This plant community is dominated by blackbrush with a understory of sparse perennial grasses and annuals. Native and non-native annuals have increased and are co-dominate with perennial grasses. Common annuals are Russian thistle cheatgrass and/or red brome.

Transition T1
State 1 to 2

Introduction of non-native annuals, unmanaged grazing, drought, lack of fire. Unmanaged grazing can be described here as: Season-long grazing providing little rest and recovery for preferred grazed plants during critical growing periods, coupled with high utilization. Once introduced species have invaded it is unlikely the site will be restored to reference.

Citations