Ecological site group GX070A01XESG03
Sandy

Last updated: 05/16/2023
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Key Characteristics

- Site does not meet criteria in 1a.
- Soils are > 50 cm to root-restrictive layers.
- Soil texture is FSL or coarser at the surface, and sand percentage is ≥ 50 in all horizons in the upper 100 cm.

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 group occurs on various landforms.

Soil features

Soils are greater than 50 cm to a root-restrictive layer, are well-drained, and have textures dominated by sand in the entire upper 100 cm.

Major Land Resource Area

MLRA 070A
High Plateaus of the Southwestern Great Plains

Subclasses

- R070AY011NM–Cinder
- R070AY012NM–Sandy Plains
- R070AY016NM–Gravelly Upland
- R070AY018NM–Sandstone Savanna

Correlated Map Unit Components

22706391, 22706387, 22706450, 22706396, 22706395, 22706400, 22706399, 22706456, 22706460, 22706463, 22705746, 22706337, 22706341, 22706342, 22706320, 23063077, 23063088, 23063207, 23063194, 23063073, 23063320, 23063269, 23063186, 23005581, 23005689, 22977100, 23192017, 23175019, 23175093, 22974613, 22974612, 22974644, 22974648, 22974663, 22974654, 22974661, 22974673, 22974668, 22974752, 22974737, 22974732, 22974739, 22974819, 22974813, 22974829, 22974828, 22974824, 22974853, 22974884, 22974883, 22974909, 22974915, 22974911, 22974937, 22974938, 22974981, 22974951, 22974955, 22974991, 22975003, 22975008, 22975002, 22975009, 22975013, 22979994, 22980007, 22980010, 22980043, 22968306, 22968302, 22968298, 22968307, 22968344, 22968351, 22968480, 22968483, 23186137, 23186277, 23186686, 23187920, 23185981, 23186712, 23186763, 23187679, 23187898, 23186782, 23187669, 22279942

Stage

Provisional

Contributors

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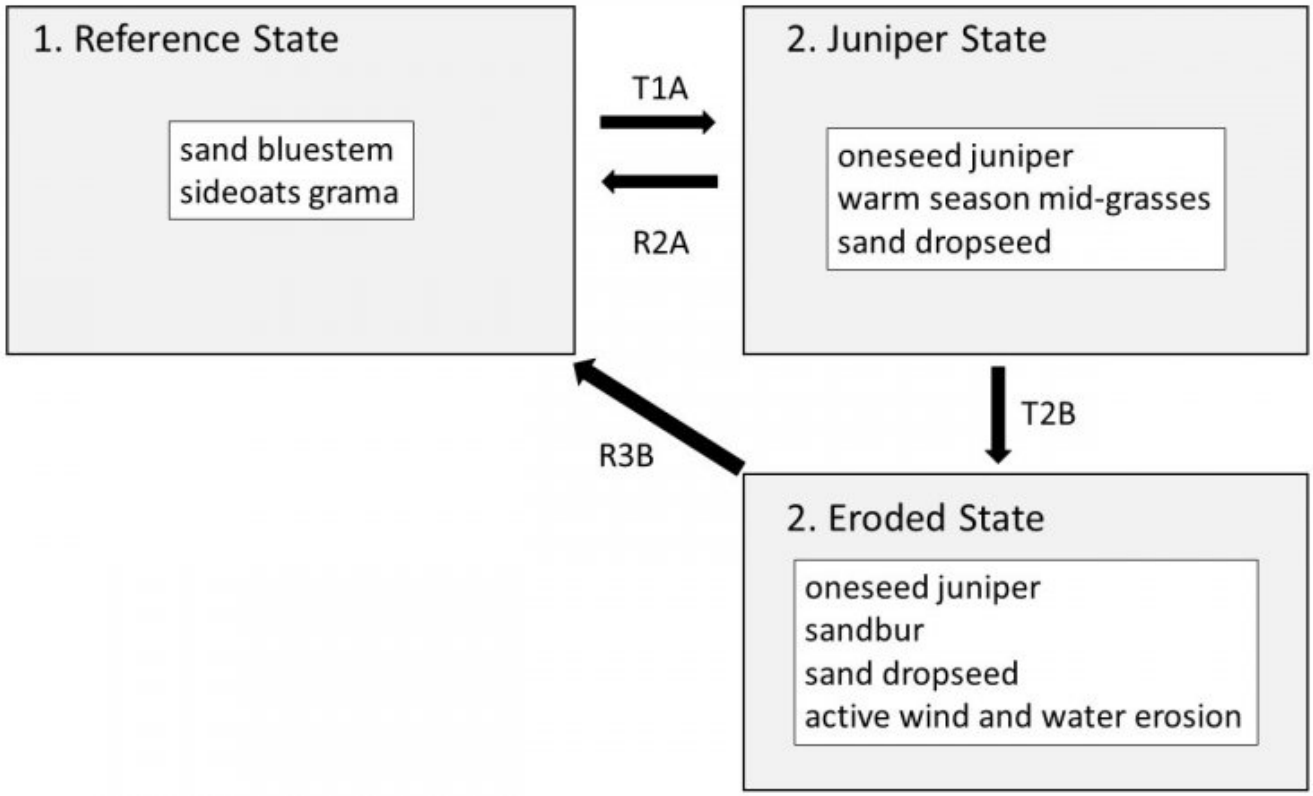
State and transition model



State 1
Reference State

In this state, late-seral grasses such as sand bluestem are well-represented, topsoil remains, and tree species have not encroached.

State 2
Juniper State

In this state, oneseed juniper is abundant.

State 3
Eroded State

This state is characterized by topsoil loss. Wind and water erosion are evident. Oneseed juniper is a major player.

Transition T1A
State 1 to 2

This transition represents the reduction or extirpation of highly palatable species such as sand bluestem, coupled with the establishment of oneseed juniper woodlands. The most likely mechanism is season-long grazing providing little rest and recovery for preferred grazed plants during critical growing periods, coupled with high utilization.

Restoration pathway R2A
State 2 to 1

This pathway represents the elimination of oneseed juniper and a resurgence of highly palatable species such as sand bluestem. This process will likely require a prolonged period of prescribed/deferred grazing, coupled with a

tree-killing mechanism such as fire or chemical/mechanical treatments.

Transition T2B
State 2 to 3

This transition represents the initiation of wind and water erosion. This is the result of soil disturbance and reduced plant cover. Both would be expected under a prolonged, heavy, continuous grazing regime.

Restoration pathway R3B
State 3 to 1

This pathway represents the elimination of oneseed juniper, a resurgence of highly palatable species such as sand bluestem, and a marked reduction in erosion rates. This process will likely require a prolonged period of prescribed/deferred grazing, coupled with a tree-killing mechanism such as fire or chemical/mechanical treatments. In cases where topsoil has been severely truncated or removed, the restoration of topsoil cannot be expected in a human lifetime.

Citations