



Natural Communities of Louisiana

Sandstone Glade

Rarity Rank: S1S2/G1G2

Synonyms: Catahoula Barren,
Sandstone Outcrop

Ecological Systems:

CES203.364 West Gulf Coastal Plain
Catahoula Barren

General Description:

- A glade is an open area in an otherwise wooded landscape due to the presence of rock at or near the surface
- Primarily associated with the Catahoula Formation which runs east-west across north-central Louisiana
- Typically occurs on upper landscape positions such as on mid to upper slopes and ridge-tops
- Some glades are obvious, i.e. have a “pavement-like” outcrop of sandstone on the surface, and others are not so obvious. These latter glades may not have any sandstone “pavement” but sandstone is near the surface, and can often be viewed on the edges of the glade jutting out of the hillside. Sandstone boulders are usually strewn about in either case.
- Tree cover can vary from nearly zero (few stunted gnarled trees) to 30-40% when sandstone is near the surface rather than at the surface.



Plant Community Associates

Common overstory tree species include:

Pinus palustris (longleaf pine),

P. taeda (loblolly pine),

Q. marilandica (blackjack oak),

P. echinata (shrotleaf pine),

Quercus stellata (post oak),

Q. incana (bluejack oak)

Common midstory & understory shrub species include:

Vaccinium arboreum (tree huckleberry),

Crataegus spp. (hawthorns),

Ilex vomitoria (yaupon),

Bumelia lanuginosa (chittum-wood)

Common herbaceous species include:

Bigelovia nuttallii (rayless goldenrod, often dominant),

Schizachyrium scoparium (little bluestem),

Talinum parviflorum (rock pink)

Andropogon spp. (broomsedges),

S. tenerum (slender bluestem),

Federally-listed plant & animal species:

None

Range:

Lower West Gulf Coastal Plain ecoregion, primarily in central and west-central Louisiana.



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Threats & Management Considerations:

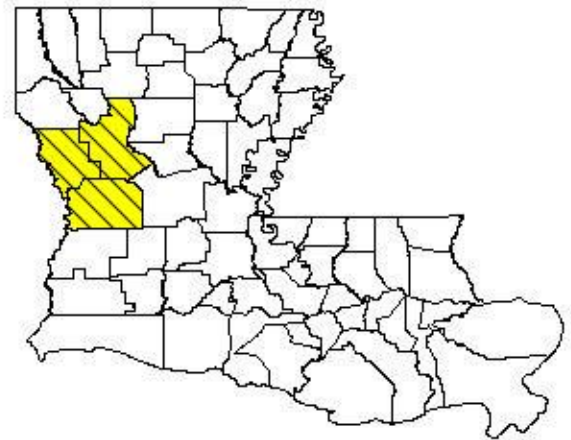
Sandstone glades are estimated to have historically covered less than 2000 acres in Louisiana. Today 50-75% is thought to remain. Threats include fire suppression, attempting to plant trees, vehicular traffic, and cattle grazing. Lack of fire allows shrubs and trees (though stunted) to become thicker and brushy. Off-road vehicles damage sandstone glades causing soil erosion and leaving a “moonscape”.

Use of appropriate management activities and developing a compatible management plan prevents destruction or degradation of this habitat type and promotes long-term maintenance of healthy sandstone glades. Such management strategies should include:

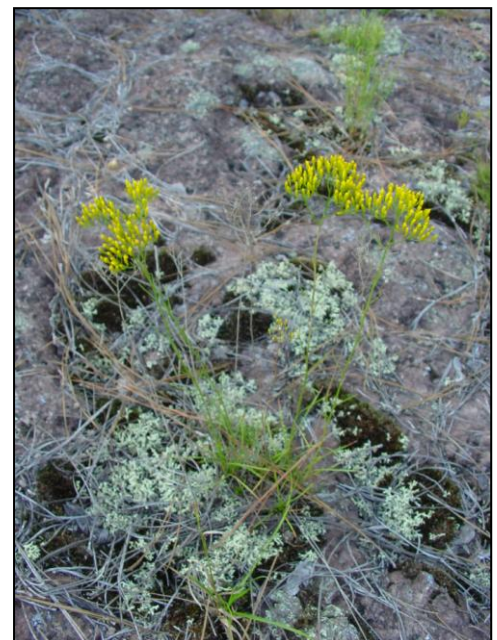
- Burning on a frequency of every 1-3 years during the growing season (April-June)
- Identify sandstone glades and do not attempt to site prep and plant trees
- Excluding vehicles of all kinds
- Protect glades from cattle



Ca 14 year old slash pine planted on a sandstone glade in Vernon Parish. Trees are spindly and weak. Planting trees in sandstone glades is a waste of time and money



Severe erosion on a sandstone glade



Rayless goldenrod, a characteristic plant of sandstone glades, flowers in the fall

For more information, please visit our web pages at

www.wlf.la.gov/wildlife/louisiana-natural-heritage-program or call 225-765-2821