



Natural Communities of Louisiana

Shortleaf Pine/Oak-Hickory Forest

Rarity Rank: S2S3/G2G3

Synonyms: Shortleaf Pine-Oak, Oak-Hickory Forest

Ecological Systems:

CES203.378 West Gulf Coastal Plain Pine-Hardwood Forest

CES203.506 East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest



General Description:

- Occurs on dry hills, principally in central and northern Louisiana, although it may occur sporadically in the Florida Parishes
- Historically this forest type was the matrix (most prevalent) natural community of the Upper West Gulf Coastal Plain
- Found in uplands along slopes and ridges
- Soils are acidic, silt loams or sandy loams underlain by clay and silty clays
- Fire is an important process in this community, and frequency is thought to have occurred every 5 to 15 years
- *Pinus echinata* (shortleaf pine) is historically the dominant pine, however, in current times *P. taeda* (loblolly pine) may be more prevalent
- Species composition tends to vary according to soil moisture conditions; in general hardwoods compose 50% or more of the canopy with *P. echinata* attaining a somewhat greater importance on drier sites

Plant Community Associates

Common woody species include:

Pinus echinata (shortleaf pine),
Quercus falcata (southern red oak),
Q. marilandica (blackjack oak),
Q. alba (white oak),
Q. shumardii (shumard oak),
C. texana (black hickory),
Ulmus alata (winged elm),
Nyssa sylvatica (black gum),
Acer rubrum (red maple)

Pinus taeda (loblolly pine),
Q. stellata (post oak),
Q. velutina (black oak),
Q. pagoda (cherrybark oak),
Carya tomentosa (mockernut hickory),
C. cordiformis (bitternut hickory),
Fraxinus americana (white ash),
Liquidambar styraciflua (sweetgum),

Common shrub species include:

Vaccinium arboreum (winter huckleberry),
Bumelia lanuginosa (chittum-wood),
Viburnum rufidulum (rusty blackhaw),
Crataegus spp. (hawthorns),

Vaccinium virgatum (bunch blueberry),
Callicarpa americana (french mulberry),
Ilex decidua (deciduous holly),
Prunus mexicana (Mexican plum)



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Common herbaceous species include:

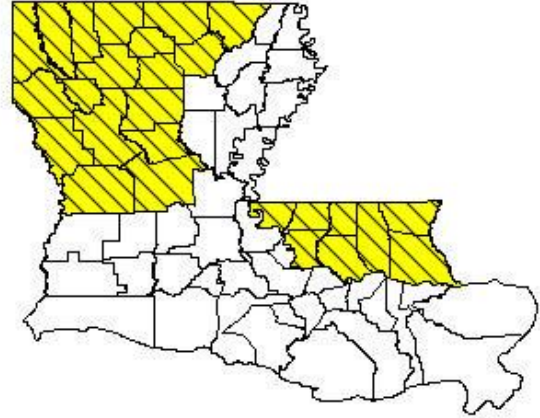
Eurybia spp. & *Symphyotrichum* spp. (asters),
Silphium spp. (rosin-weeds),
Desmodium spp. (beggar-ticks),
Viola spp. (violets),
Liatris spp. (blazing-stars),
Solidago spp. (goldenrods),
Antennaria plantaginifolia (plantain-leaf pussy-toes),
Chasmanthium spp. (spangle-grasses),
Helianthus spp. (sunflowers),
Panicum spp. (panic grasses)

Range:

Primarily found in the Upper West Gulf Coastal Plain, and extending into the Lower West Gulf Coastal Plain. Also occurs infrequently in the East Gulf Coastal Plain.

Threats & Management Considerations:

Historically there was an estimated 4 to 6 million acres of SLPOH in Louisiana, however, only 5 to 10 percent of this original extent is thought to remain today. Land use changes have brought about habitat destruction. Conversion to agriculture or pine plantations represent the initial losses, while construction of roads, pipelines and utilities, invasive and exotic species, fire suppression, physical damage from timber harvesting, contamination by chemicals (herbicides, fertilizers), and off-road vehicle use all threaten remaining shortleaf pine/oak-hickory forests.



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 shortleaf pine/oak-hickory forests. Such management strategies should include:

- Preventing conversion of existing natural forests to other land uses
- Use of periodic prescribed fire (every 5 to 10 years)
- Thinning targeting loblolly pine for removal and favoring shortleaf pine as “leave” trees
- Maintain natural species composition by following appropriate hardwood management techniques
- Surveying for and removal of any invasive plant species (exotics or woody) with use of spot herbicides or mechanical means