



Natural Communities of Louisiana

Mixed Hardwood-Loblolly Pine Forest

Rarity Rank: Mixed Hardwood-Loblolly Pine Forest- S4/G4

Synonyms: Mixed Pine Hardwood, Loblolly Pine-Hardwood

Ecological Systems:

CES203.378 West Gulf Coastal Plain Pine-Hardwood Forest



General Description:

- Evenly distributed in a variety of ecological settings statewide on broad ridgetops and gentle side slopes in terrace uplands; on middle and lower slopes between uplands and stream bottoms; and at the heads of drainages along small, intermittent streams
- Soils are acidic sandy loams, silt loams and silty clays
- Hydrology ranges from mesic-wet to dry-mesic
- *Pinus taeda* (loblolly pine) comprises 20 percent or more of the overstory, associated with various hardwood species
- Available pine needle fuel indicates that regular fire was a process essential to maintaining a significant pine component, and without fire, forest succession is toward hardwood dominance

Plant Community Associates

Common overstory tree species include:

Pinus taeda (loblolly pine),
Fagus grandifolia (American beech),
Q. pagoda (cherrybark oak),
Q. alba (white oak),
Ulmus americana (American elm),
Acer rubrum (red maple),

Liquidambar styraciflua (sweetgum),
Quercus nigra (water oak),
Q. michauxii (cow oak),
Liriodendron tulipifera (yellow poplar),
Magnolia grandiflora (Southern magnolia),
Carya glabra (pignut hickory)

Common overstory tree species on drier upland sites include:

Quercus falcata (southern red oak),
Q. nigra (water oak),
Nyssa sylvatica (black gum),

Q. stellata (post oak),
Q. marilandica (blackjack oak),
Carya tomentosa (mockernut hickory)

Common understory & herbaceous species include:

Ilex glabra (gallberry),
Cornus florida (dogwood),
Oxydendrum arboreum (sourwood),
Rhus copallina (winged sumac),
Toxicodendron radicans (poison ivy),
I. decidua (deciduous holly),
Malus angustifolia (crab apple),
Gelsemium sempervirens (yellow jessamine),

Callicarpa americana (french mulberry),
Crataegus spp. (hawthorns),
Vaccinium spp. (huckleberries),
Morella cerifera (wax myrtle),
Ilex vomitoria (yaupon),
Rubus spp. (blackberries),
Mitchella repens (partridge-berry),
Viola spp. (violets)



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Federally-listed plant & animal species:

None

Range:

Occurs in the Upper and Lower West Gulf Coastal Plains, and also in the East and Upper East Gulf Coastal Plains of Louisiana

Threats & Management Considerations:

This habitat is not as imperilled as many others in the state. Mixed hardwood-loblolly pine forest is estimated to have occupied 500,000 to 1,000,000 acres historically with the same amount thought to remain today. However, older, more natural examples of this habitat are threatened by conversion to pine plantations, agriculture or other land uses. Other threats include construction of roads, pipelines and utilities, invasive and exotic species, fire suppression, physical damage from timber harvesting, and contamination by chemicals (herbicides, fertilizers).



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 mixed hardwood-loblolly pine 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)
- 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