Natural Communities of Louisiana

Small Stream Forest

**Rarity Rank:** S3/G3

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<td>1</td>
<td>imperiled</td>
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**Synonyms:** Riparian Forest, Small Stream Floodplain Forest, Creek Bottom Forest, Sandy Branch Bottom, Upland Stream Forest, Hammock

**Ecological Systems:**
CES203.559 East Gulf Coastal Plain Small Stream and River Forest
CES203.487 West Gulf Coastal Plain Small Stream and River Forest

**General Description:**
- Narrow wetland forests occurring along small rivers and large creeks
- Seasonally flooded for brief periods
- Percentage of sand, silt, calcareous clay, acidic clay, and organic material in the soil is highly variable (depending on local geology) and has a significant effect on plant species composition
- Soils are typically classified as silt-loams
- Quite similar in species composition to hardwood slope forests in some locals
- Critical ecosystem functions include the filtering of surface and subsurface flows, improving water quality, and storing sediment and nutrients

**Plant Community Associates**

*Common overstory tree species include:*
- *Magnolia grandiflora* (southern magnolia)
- *Nyssa sylvatica* (blackgum)
- *Quercus alba* (white oak)
- *Quercus laurifolia* (laurel oak)
- *Liquidambar styraciflua* (sweetgum)
- *Acer rubrum* (red maple)
- *Carya ovata* (shagbark hickory)
- *Fraxinus americana* (white ash)
- *Prunus caroliniana* (cherry laurel)
- *Liriodendron tulipifera* (yellow poplar)
- *Taxodium distichum* (baldcypress)
- *Magnolia virginiana* (sweet bay)
- *Fagus grandifolia* (beech)
- *Quercus michauxii* (swamp white oak)
- *Quercus nigra* (water oak)
- *Quercus pagoda* (cherrybark oak)
- *Platanus occidentalis* (sycamore)
- *Betula nigra* (river birch)
- *Carya cordiformis* (bitternut hickory)
- *Fraxinus caroliniana* (water ash)
- *Ulmus alata* (winged elm)
- *Pinus glabra* (spruce pine-FL Parishes)
- *Pinus taeda* (loblolly pine)
Common midstory & understory species include:

- *Halesia diptera* (silverbell), *Carpinus caroliniana* (ironwood)
- *Viburnum dentatum* (arrow-wood), *Itea virginica* (Virginia willow)
- *Symlocos tinctoria* (sweetleaf), *Alnus serrulata* (hazel alder)
- *Rhododendron canescens* (wild azalea), *Styrax grandifolia* (bigleaf snowbell)

Florida Parishes - common midstory & understory species include:

- *Illicium floridanum* (starbush), *Sebastiana fruticosa* (sebastian bush)
- *Cyrilla racemiflora* (swamp cyrilla), *Lyonia lucida* (fetterbush)
- *Leucothoe axillaris* (leucothoe), *Leucothoe racemosa* (leucothoe)
- *Ilex verticillata* (winterberry)

Federally-listed plant & animal species:

In East Gulf Coastal Plain occurrences:

- *Isoetes louisianensis* (Louisiana quillwort)
  -Endangered; G3; S1
- *Alosa alabamae* (Alabama shad)
  -Candidate; G3; S1

In Lower West Gulf Coastal Plain occurrences:

- *Margaritifera hembeli* (Louisiana pearlshell)
  -Threatened; G1; S1

Range:

Found in the Upper and Lower West Gulf Coastal Plains in west, central and northwest Louisiana. Also known from the Florida Parishes in the East Gulf Coastal Plain and Upper East Gulf Coastal Plain

LA River Basins:

- Pearl, Pontchartrain, Mississippi, Vermilion-Teche, Mermentau, Calcasieu, Sabine, Red, Ouachita

Threats:

- Habitat conversion
- Gravel mining
- Invasive exotic species
- Construction of roads, utilities and pipelines
- Use of off-road vehicles

Beneficial Management Practices:

- Prevent conversion of existing natural forests to other land uses
- Strictly follow Best Management Practices guidelines
- Maintain natural species composition by following appropriate hardwood management techniques
- No harvesting on steep slopes and during wet periods to prevent soil damage
- Remove any invasive exotic plant species with use of spot herbicides or mechanical means
- Prohibit off-road vehicle use or restrict use to existing trails
- No soil disturbance or other activities that alter natural waterflow, including from adjacent areas

Funding provided by the Louisiana Department of Wildlife and Fisheries and the Barataria-Terrebonne National Estuary Program

For more information, please visit our Web pages at

www.wlf.la.gov/wildlife/louisiana-natural-heritage-program or 225-765-2811

www.BTNEP.org or 1-800-259-0869