

## Small Stream Forest

**Rarity Rank:** S3/G3

**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 (beech-magnolia forests) in some locals
- Critical components of the landscape filtering surface and subsurface flows, improving water quality, and storing sediment and nutrients



*Isoetes louisianensis*

### Plant Community Associates

**Common overstory tree species include:**

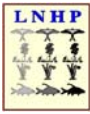
*Magnolia grandiflora* (southern magnolia),  
*Nyssa sylvatica* (blackgum),  
*Q. alba* (white oak),  
*Q. laurifolia* (laurel oak),  
*Liquidambar styraciflua* (sweetgum),  
*Acer rubrum* (red maple),  
*Carya ovata* (shagbark hickory),  
*Fraxinus americana* (white ash),  
*Prunus caroliniana* (cherry laurel),  
*Liriodendron tulipifera* (yellow poplar),  
*Taxodium distichum* (baldcypress),  
*Magnolia virginiana* (sweet bay)

*Fagus grandifolia* (beech),  
*Quercus michauxii* (swamp white oak),  
*Q. nigra* (water oak),  
*Q. pagoda* (cherrybark oak),  
*Platanus occidentalis* (sycamore),  
*Betula nigra* (river birch),  
*Carya cordiformis* (bitternut hickory),  
*F. caroliniana* (water ash),  
*Ulmus alata* (winged elm), and  
*Pinus glabra* (spruce pine-FL Parishes),  
*Pinus taeda* (loblolly pine),

**Common midstory & understory species include:**

*Halesia diptera* (silverbell),  
*Viburnum dentatum* (arrow-wood),  
*Symplocos tinctoria* (sweetleaf),  
*Rhododendron canescens* (wild azalea),

*Carpinus caroliniana* (ironwood),  
*Itea virginica* (Virginia willow),  
*Alnus serrulata* (hazel alder),  
*Styrax grandifolia* (bigleaf snowbell)



# Natural Communities of Louisiana



## Florida Parishes - common midstory & understory species include:

*Illicium floridanum* (starbush, southeast LA),  
*Cyrilla racemiflora* (swamp cyrilla),  
*Leucothoe axillaris* (leucothoe),  
*Ilex verticillata* (winterberry)

*Sebastiania fruticosa* (sebastian bush),  
*Lyonia lucida* (fetterbush),  
*L. racemosa* (leucothoe),

## Federally-listed plant & animal species:

### In East Gulf Coastal Plain occurrences:

*Isoetes louisianensis* (Louisiana quillwort)  
*Alosa alabamae* (Alabama shad)

Endangered; G3; S1  
Candidate; G3; S1

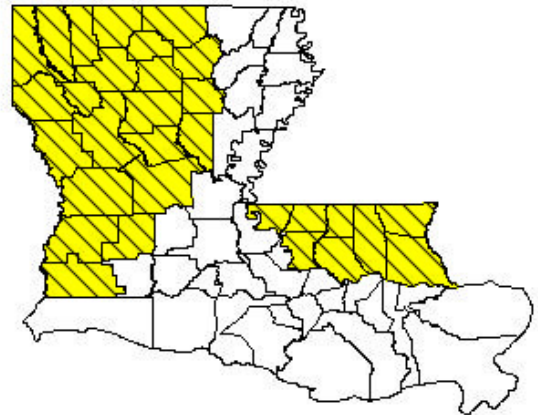
### In Lower West Gulf Coastal Plain occurrences:

*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.



## Threats & Management Considerations:

Riparian forests are extremely susceptible to damage, and only an estimated 25 to 50% of Louisiana’s original small stream forests remain intact. Habitat loss, degradation and fragmentation of these forested wetlands has been primarily caused by conversion to agricultural uses and timber harvesting. With the implementation of Best Management Practices (BMPs) for forestry and agricultural uses, current source for stream habitat destruction has shifted primarily to urbanization, although silvicultural and agricultural activities are still contributing some threat. Invasive and exotic species, construction and maintenance of roads, utilities and pipelines, use of off-road vehicles, and gravel mining also currently threaten long-term viability of these 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 small stream forests. Such management strategies should include:

- Maintain natural species composition by following appropriate hardwood management techniques
- Strictly follow BMP guidelines
- No harvesting on steep slopes and during wet periods to prevent soil damage
- Surveying for and removal of any invasive plant species (exotics or woody) with use of spot herbicides or mechanical means
- Prohibiting off-road vehicle use or restricting use to existing trails
- No soil disturbance or other activities that alter natural waterflow, including from adjacent areas