



Western Upland Longleaf Pine Forest

Rarity Rank: S2S3/G2G3

Synonyms: Sandhill Pine Forest, Clayhill Pine Forest

Ecological Systems: CES203.293 West Gulf Coastal Plain Upland Longleaf Pine Forest and Woodland

General Description:

- Occurs in the hilly uplands, dissected by small to large branch or creek bottoms which may contain bayheads or seeps
- Soils are acidic loamy sands to acid clays associated with Pleistocene or Tertiary formations
- Bogs may be found on mid- to low slopes within these forests
- Highly diverse herbaceous flora
- *Pinus palustris* (longleaf pine) is the dominant overstory species, and with frequent fire it is often the only canopy species
- Fire maintained natural community (frequent fires maintain herbaceous layer and prevent establishment of fire sensitive, weedy species, such as loblolly pine)



Plant Community Associates

Common woody species include:

Pinus palustris (longleaf pine),
Pinus taeda (loblolly pine),
Quercus falcata (southern red oak),
Q. marilandica (blackjack oak),
C. texana (black hickory, central Louisiana),
Sassafras albidum (sassafras),
Q. hemisperica (upland laurel oak, sandy soils)

Pinus echinata (shortleaf pine),
Nyssa sylvatica (black gum),
Q. stellata (post oak),
Carya tomentosa (mockernut hickory),
Diospyros virginiana (persimmon),
Q. incana (bluejack oak, sandy soils),

Common midstory & understory species include:

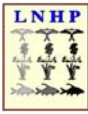
Cornus florida (flowering dogwood),
V. elliotii (elliott's blueberry),
V. darrowii (dwarf blueberry, southeast Louisiana),
Callicarpa americana (French mulberry),
Bumelia lanuginosa (chittum-wood),
Rubus spp. (blackberries),
Vitis spp. (grapes),
Gelsemium sempervirens (yellow jessamine),

Vaccinium arboreum (winter honeysuckle),
V. stamineum (deer berry),
Gaylussacia dumosa (huckleberry, se LA),
Morella cerifera (wax myrtle),
Ilex vomitoria (yaupon),
Rhus copallina (winged sumac),
Smilax spp. (greenbriers),
Parthenocissus quinquefolia (VA creeper)

Common herbaceous species include:

Andropogon spp. (broomsedges),
Aristida (three-awn grasses),
Panicum (panic grasses),

Schizachyrium spp. (bluestems),
Sporobolus (dropseeds),
Anthaenantia (silky scales),



Natural Communities of Louisiana



Common herbaceous species continued:

Paspalum (paspy grasses),
Eragrostis (love grasses),
Gymnopogon (skeleton grasses),

Digitaria (crab grasses),
Erianthus (plume grasses),
Muhlenbergia (muhly grasses),

Common forb (wildflower) species include:

Eurybia spp. & *Symphotrichum* spp. (asters),
Chrysopsis spp. (golden asters),
Elaphantopus spp. (elephant-foot),
Euthamia spp. (flat-topped goldenrods),
Helenium spp. (sneeze-weeds),
Liatris spp. (blazing-stars),
Solidago spp. (goldenrods),
Baptisia spp. (indigos),
Crotolaria spp. (rattle pods),
Lespedeza spp. (bush clovers),
Rhynchosia spp. (snout beans),
Oenothera spp. (evening primroses),
Lobelia spp. (lobelias),
Ruellia spp. (wild petunias),
Asclepias spp. (mildweeds),
Euphorbia spp. (spurges),
Agalinis spp. (false foxgloves),

Carphephorus odoratissimus (vanilla plant),
Heterotheca spp. (golden asters),
Eupatorium spp. (thoroughworts),
Gnaphalium spp. (rabbit tobaccos),
Helianthus spp. (sunflowers),
Rudbeckia spp. (brown-eyed susans),
Vernonia spp. (ironweeds),
Rhexia spp. (meadow beauties),
Desmodium spp. (beggar's ticks),
Stylsanthes biflora (pencil-flower),
Tephrosia spp. (hoary peas),
Polygala spp. (milkworts),
Callirhoe papaver (poppy-mallow),
Hypoxis spp. (yellow-eyed grasses),
Lechea spp. (pinweeds),
Sabatia spp. (rose-gentians),
Pteridium aquilinum (bracken fern)

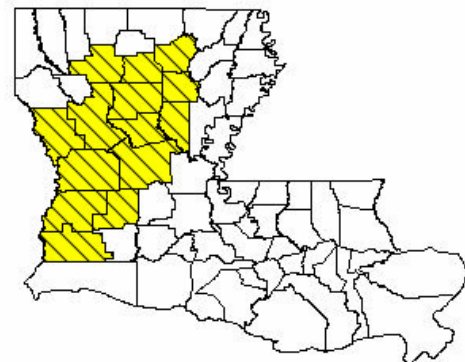
Federally-listed plant & animal species:

Picoides borealis (red-cockaded woodpecker)

Endangered; G2; S2

Range:

Western and central Louisiana in portions of the Lower and Upper West Gulf Coastal Plains



Threats & Management Considerations:

Western upland longleaf pine forests historically dominated large areas with estimated presettlement acreage at 2,000,000 to 4,000,000 with only 10 to 25 % remaining. Much of this forest was converted to other forest types or lost to agriculture and development. Other threats include construction of roads, pipelines or utilities, fire suppression, use of chemical herbicides or fertilizers, and introduction of invasive or exotic species.

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 longleaf forests. Such management strategies should include:

- Preventing conversion of existing natural forests to other land uses
- Use of growing season prescribed fire (April-June) at a frequency of every 1 to 3 years
- Replanting with longleaf seedlings only
- Thinning targeting loblolly and slash pines for removal and favoring longleaf pine as “leave” trees
- Surveying for and removal of any invasive plant species (exotics or woody) with prescribed fire or use of spot herbicides or mechanical means