

2. Barrier Island Live Oak Forest

Rarity Rank: S1/G1

Synonyms: Maritime Forest

Ecological Systems: CES203.513 Mississippi Delta Maritime Forest

General Description:

This barrier island community is currently restricted to Grand Isle, Jefferson Parish, Louisiana, where it occupies a small area (less than 1,000 acres). All known occurrences are impacted by development, exotic species, clearing of understory vegetation, and habitat fragmentation. This community appears to be distinct from other *Quercus virginiana* (live oak) communities occurring to the east and west, but little is known about this habitat type. It is



dominated by *Quercus virginiana*, with a minor component of *Celtis laevigata* (hackberry). *Zanthoxylum clava-herculis* (toothache tree), *Diospyros virginiana* (persimmon), *Gleditsia triacanthos* (honeylocust), and *Morella cerifera* (waxmyrtle) are typical associates (LNHP 1986-2004, West 1938, Brown 1930). Trees in this habitat type can exhibit the effects of saltwater spray and wind, having a stunted appearance and leaning away from the prevailing wind (West 1938, Brown 1930).

Current Extent and Status:

There is no complete information regarding the presettlement extent of this natural community type on Louisiana's barrier islands. The last remaining barrier island live oak forest in Louisiana occurs on Grand Isle. TNC's Lafitte Woods Preserve protects 13 acres of this forest and TNC helped restore 30 acres by planting live oak and hackberry trees on property owned by ExxonMobil. The Orleans Chapter of the Audubon Society (OAS) has proposed a bird sanctuary on an additional 17 acres (the Sureway Woods) and is currently raising funds to purchase this property.



BARRIER ISLAND LIVE OAK FOREST SPECIES OF CONSERVATION CONCERN (4)	
BIRDS Yellow-billed Cuckoo Painted Bunting Orchard Oriole	REPTILES Eastern Glass Lizard

Priority Species Research and Survey Needs:

Eastern Glass Lizard: Not observed at outlying Grand Isle population in nearly 30 years, despite adequate habitat. Conduct surveys to determine if Grand Isle population is extant.

Species Conservation Strategies:

1. Migratory Birds: Continue efforts to support conservation of remaining habitat.

Threats Affecting Habitat:

The following table illustrates the threats identified for this habitat type and the sources of these threats. This represents all threats and sources of threats identified across all ecoregions of the state where this habitat occurs.

Source of Threat	Threat			
	Altered Composition/ Structure	Habitat Destruction or Conversion	Habitat Disturbance	Habitat Fragmentation
Commercial/ industrial development		XXX		XXX
Development/maintenance of pipelines, roads or utilities		XXX	XXX	
Invasive/alien species	XXX			
Recreational use/vehicles		XXX	XXX	
Residential development		XXX	XXX	
Shoreline erosion				XXX

Habitat Conservation Strategies:

1. Partner with NGOs (TNC, Louisiana Ornithological Society (LOS), National Audubon Society (NAS)), state and federal agencies, industry, and private landowners to promote conservation of remaining barrier island live oak forests.
2. Work with the legislature to develop tax incentives and conservation servitudes or leases for landowners to encourage conservation of this habitat type.
3. Promote planting of live oak and other native tree species.

4. Provide educational information on this habitat type and its importance to species of conservation concern to landowners/land managers through technical pamphlets and the LDWF website.
5. Support NRCS and Louisiana Department of Natural Resources (LDNR) efforts for shoreline stabilization and habitat restoration.
6. Work with LCA, Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) to broaden the extent of coastal restoration projects.
7. Work with local governing boards to recommend limits on All Terrain Vehicles (ATVs) in this habitat.
8. Work with appropriate planning commissions to provide LNHP data that illustrates locations of this habitat type.
9. Work with NRCS Plant Materials Center, Barataria-Terrebonne National Estuary Program (BTNEP), and Office of State Parks (OSP) to develop restoration program for this habitat.

References:

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