

11. Coastal Live Oak-Hackberry Forest

Rarity Rank: S1S2/G2

Synonyms: Cheniere, Maritime Forest, Chenier Maritime Forest

Ecological Systems: CES203.466 West Gulf Coastal Plain Chenier and Upper Texas Coastal Fringe Forest and Woodland

General Description:

Coastal Live Oak-Hackberry Forest or Cheniere (French for "place of oaks") is the natural community which formed on abandoned beach ridges primarily in southwest Louisiana. These ancient beaches were stranded via deltaic sedimentation by the constantly shifting Mississippi River. Composed primarily of fine sandy loams with sand and shell layers or deposits, these ridges are mostly 4 to 5 feet above sea level. *Quercus virginiana* (live oak) and *Celtis laevigata*



(hackberry) are the dominant canopy species. Other characteristic species are *Gleditsia triacanthos* (honeylocust), *Acer rubrum* var. *drummondii* (swamp red maple), *Zanthoxylum clava-herculis* (toothache tree), *Quercus nigra* (water oak), *Fraxinus pennsylvanica* (green ash), and *Ulmus americana* (American elm). Subcanopy species include *Crataegus viridis* (green hawthorn), *Dispyros virginiana* (persimmon), and *Ilex decidua* (deciduous holly). *Sabal minor* (palmetto) and *Opuntia* spp. (prickly pear cactus) are also common in the understory (LNHP 1986-2004, NatureServe 2005, Neyland and Meyer 1997). *Triadica sebifera* (= *Sapium sebiferum*; Chinese tallowtree) has become a serious invader of chenier forests, and can have major impacts on community structure and composition (Neyland and Meyer 1997). The chenieres are important storm barriers limiting saltwater intrusion into marshes. Typically, marshes north of chenieres are fresher than those gulfward. This community also functions as important wildlife habitat and serves as vital resting habitat for trans-gulf-migrating birds (Mueller 1990). Hundreds of thousands of birds (hundreds of different species) use chenieres as a stop-over point during migration.

Current Extent and Status:

Louisiana's coastal chenier forests occur in the Chenier Plain from Iberia Parish westward across Vermilion and Cameron parishes. Since this forest type is found only on remnant beach ridges which are higher and drier than the surrounding marshes, they were the first areas to be cleared and developed. Of the original 100,000 to 500,000 acres in Louisiana, only 2,000 to 10,000 acres remain, 2-10 % of presettlement extent. The majority of these remnant forests are altered and fragmented, and threats continue from residential development, roads and utility construction, and overgrazing. Currently there

are few cheniers supporting high-quality examples of this natural community, and very few are afforded any degree of protection. The Audubon Society maintains the 40 acre Peveto Woods Bird and Butterfly Sanctuary in Cameron Parish, and one 146 acre tract owned by the Vermilion Parish School Board is registered with the Louisiana Natural Areas Registry Program.



Importance to Neotropical Migrant Songbirds:

It must be noted that the chenier plain-coastal live oak-hackberry forest habitat is extremely important as stopover sites for neotropical songbirds during spring and fall migration. The majority of migrants fly nonstop for more than 1,000 kilometers to cross the Gulf of Mexico each spring. At least 82 species of migratory birds regularly use these wooded habitats to replenish energy reserves necessary to successfully complete their migration immediately after crossing the Gulf of Mexico. During fall migration these chenier plain habitats provide important habitat corridors and staging areas as birds move along the coast through Texas and around the Gulf of Mexico on their journey to Central and South America.

COASTAL LIVE OAK - HACKBERRY FOREST SPECIES OF CONSERVATION CONCERN (13)		
BIRDS	BUTTERFLIES	REPTILES
American Woodcock	Celia's Roadside Skipper	Ornate Box Turtle
Yellow-billed Cuckoo	Falcate Orangetip	Western Slender Glass Lizard
Northern Parula		Timber Rattlesnake
Prothonotary Warbler	MAMMALS	
Painted Bunting	Southeastern Myotis	
Field Sparrow		
Orchard Oriole		

Priority Species Research and Survey Needs:

Celia's Roadside Skipper, Falcate Orangetip: Conduct surveys to determine their current distribution and abundance for inclusion in the LNHP database.

Ornate Box Turtle: Initiate surveys in areas identified by SWG project T20 (Lorenz and Hemmerling 2004) to update occurrence and abundance data for inclusion in the LNHP database.

Neotropical Migrant Birds: Continue to monitor neotropical bird use of chenier habitats.

Species Conservation Strategies:

1. Promote the benefits of bat colonies and roost sites and develop partnerships with landowners to encourage protection of valuable sites.

2. Work with landowners to initiate or continue the implementation of PIF bird conservation plans, conservation plans developed for amphibians and reptiles, and USFWS endangered and threatened species recovery plans over the next 10 years.
3. Determine the microhabitat preferences and requirements of species utilizing Coastal Live Oak-Hackberry Forest to understand how these species are utilizing the habitat and to determine management needs.

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
Development/maintenance of pipelines, roads or utilities				XXX
Grazing practices	XXX		XXX	
Invasive/alien species	XXX			
Mining practices		XXX		
Residential development		XXX	XXX	XXX
Shoreline erosion		XXX		

Habitat Conservation Strategies:

1. Work with the legislature to provide incentives (tax breaks, etc.) to landowners to retain the natural state of areas where this habitat occurs.
2. Partner with state and federal agencies, NGOs, private landowners, etc. to increase conservation efforts of cheniers.
3. Work with COE and NRCS to develop better strategies for the placement of dredge materials as a restoration method for this habitat type.
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. Review Texas tax exemption policies regarding livestock. Determine which of these policies may apply to conservation of cheniers in Louisiana, and work with the legislature to incorporate these policies into the tax code.
6. Support NRCS and LDNR efforts for shoreline stabilization and habitat restoration.
7. Support public acquisition/protection of high quality cheniers that have the potential for longterm sustainability.

8. Develop methods to encourage landowners to remove cattle from cheniers and manage the land for wildlife conservation.
9. Work with LCA, CWPPRA to broaden the coastal restoration projects to include cheniers.
10. Work with appropriate planning commissions to provide LNHP data that illustrates locations of this habitat type.
11. Provide information to landowners about incentive programs/cost share opportunities to control invasives.

References:

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