



## Salt Dome Hardwood Forest

**Rarity Rank:** S1/G1

**Synonyms:** None

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

### General Description:

- Restricted to salt domes in coastal Louisiana called the “Five Islands”
- Developed on fertile, circum-neutral to slightly alkaline loessial deposits over salt dome cap rock
- Upland hardwood dominated forest similar to hardwood slope or Southern mesophytic forests
- Highly erodible loess soils that have worn over thousands of years to form a characteristic well-dissected landscape of high, narrow ridges, steep slopes, and deep ravines
- Topographic characteristics of the region create a relatively cool, moist micro-climate on the slopes and in the ravines



### Plant Community Associates

#### Common overstory tree species include:

*Quercus virginiana* (live oak),  
*Q. pagoda* (cherrybark oak),  
*Celtis laevigata* (hackberry),  
*Tilia americana* var. *caroliniana* (basswood),  
*Carya glabra* (pignut hickory)

*Magnolia grandiflora* (Southern magnolia),  
*Ulmus americana* (American elm),  
*Liquidambar styraciflua* (sweetgum),  
*Q. nigra* (water oak),

#### Common midstory & understory species include:

*Prunus caroliniana* (cherry laurel),  
*Sabal minor* (dwarf palmetto),  
*Aesculus pavia* (red buckeye),  
*Parthenocissus quinquefolia* (Virginia creeper),  
*Vitis rotundifolia* (muscadine grape),  
*Ampelopsis arborea* (peppervine),

*Ilex vomitoria* (yaupon),  
*Callicarpa americana* (french mulberry),  
*Asimina triloba* (pawpaw),  
*Smilax rotundifolia* (common greenbriar),  
*Toxicodendron radicans* (poison ivy),  
*Smilax bona-nox* (saw greenbriar)

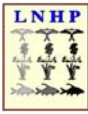
#### Common herbaceous layer species include:

*Oplismenus hirtellus* ssp. *setarius* (bristle basketgrass), *Sanicula canadensis* (black snakeroot),  
*Malvaviscus arboreus* var. *drummondii* (wax mallow), *Rubus* spp. (blackberry),  
*Elephantopus carolinianus* (Carolina elephant’s foot)

#### Common epiphytes include:

*Tillandsia usneoides* (Spanish moss),  
*Polypodium polypodioides* (resurrection fern)

*Phoradendron tomentosum* (mistle-toe),



# Natural Communities of Louisiana



## Federally-listed plant & animal species:

*Ursus americanus luteolus* (Louisiana black bear)      Threatened; G5T2; S2

### Range:

Gulf Coast Prairies and Marshes ecoregion in the southwest portions of Louisiana; specifically restricted to the five salt domes, or “islands” of south central Louisiana: Avery, Belle Isle, Cote Blanche, Jefferson, and Weeks Islands.



### Threats & Management Considerations:

Salt dome hardwood forests still occur on all five salt dome “islands” in the Louisiana coastal zone, however, size and quality of these forests needs to be assessed. Much of the forest has been converted to other land uses, and the remainder is disturbed, overrun with exotic plant species, and affected by severe erosion. Since this forest type is found only on salt domes which are higher and drier than the surrounding marshes, they were some of the first areas to be impacted. Threats continue from industrial and residential activities, roads and utility construction, invasive and exotic species, and overgrazing.

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 salt dome hardwood forests. Such management strategies should include:

- Preventing conversion of existing natural forests to other land uses
- Maintain natural species composition by following appropriate hardwood management techniques
- 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
- Prohibiting livestock grazing