

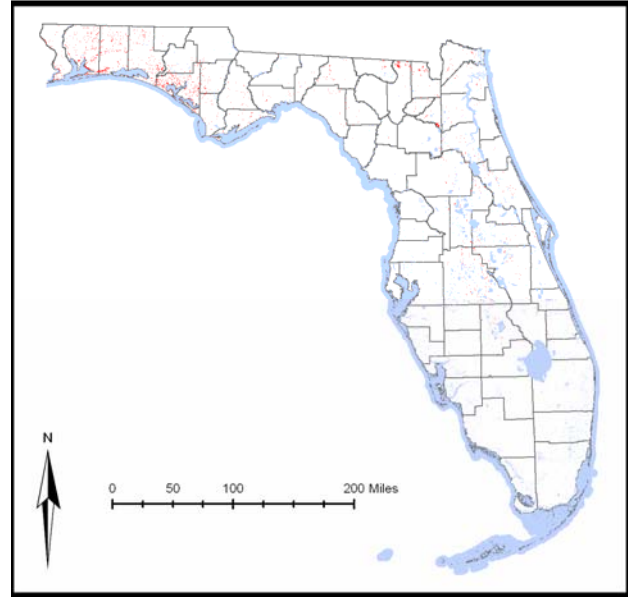
Bay Swamp



Status

Current condition: Unknown.

According to the best available GIS information at this time (see Appendix D. GIS Data Tables), 201,765 acres (81,651 ha) of Bay Swamp habitat exist, of which 32% (65,570 ac; 26,535 ha) are in existing conservation or managed areas. Another 14% (27,471 ac; 11,117 ha) are Florida Forever projects and 7% (13,486 ac; 5,458 ha) are SHCA-identified lands. The remaining 47% (95,238 ac; 38,541 ha) are other private lands.



Some habitat distributions or locations may be misrepresented on this map due to size, resolution and insufficient data sources.

Habitat Description

FNAI type: Baygall, Bog

These hardwood swamps contain broadleaf evergreen trees that occur in shallow, stagnant drainages or depressions often found within pine flatwoods, or at the base of sandy ridges where seepage maintains constantly wet soils. Where Bay Swamp occurs in seepage areas it is often associated with or grades into Seepage/Steephead Stream habitat. The soils, which are usually covered by an abundant layer of leaf litter, are mostly acidic peat or muck that remains saturated for long periods but over which little water level fluctuation occurs.

The overstory within bayheads primarily is composed of evergreen hardwood trees, but bay trees, especially sweetbay, red bay, and loblolly bay, dominate the canopy and characterize the community. Depending on the location within the state, other species including pond pine, slash

pine, blackgum, cypress, and Atlantic white cedar can occur as scattered individuals. Understory and ground cover species may include dahoon holly, wax myrtle, fetterbush, greenbriar, royal fern, cinnamon fern, and sphagnum moss.

Associated Species of Greatest Conservation Need

Mammals

- | | |
|--------------------------------------|--------------------|
| • <i>Ursus americanus floridanus</i> | Florida Black Bear |
| • <i>Lutra canadensis lataxina</i> | River Otter |
| • <i>Mustela vison evergladensis</i> | Everglades Mink |
| • <i>Mustela vison mink</i> | Common Mink |
| • <i>Puma concolor coryi</i> | Florida Panther |

Birds

- | | |
|-----------------------------------|-------------------|
| • <i>Mycteria americana</i> | Wood Stork |
| • <i>Haliaeetus leucocephalus</i> | Bald Eagle |
| • <i>Buteo brachyurus</i> | Short-tailed Hawk |
| • <i>Falco peregrinus</i> | Peregrine Falcon |

Amphibians

- | | |
|---|--------------------------|
| • <i>Amphimua pholeter</i> | One-toed Amphiuma |
| • <i>Pseudobranchius striatus lustricolus</i> | Gulf Hammock Dwarf Siren |
| • <i>Rana capito</i> | Gopher Frog |

Reptiles

- | | |
|--|-----------------------|
| • <i>Kinosternon subrubrum steindachneri</i> | Florida Mud Turtle |
| • <i>Terrapene carolina major</i> | Gulf Coast Box Turtle |
| • <i>Terrapene carolina bauri</i> | Florida Box Turtle |
| • <i>Farancia erytrogramma</i> | Rainbow Snake |

Conservation Threats

Threats to Bay Swamp habitat that were also identified for multiple other habitats are addressed in the Chapter Multiple Habitat Threats and Conservation Actions. These threats include:

- | | |
|---|--|
| • Conversion to agriculture | • Invasive animals |
| • Conversion to housing and urban development | • Invasive plants |
| • Groundwater withdrawal | • Surface water withdrawal and diversion |
| • Incompatible fire | • Roads |

Threats specific to Bay Swamp included loss and degradation that occurs when this habitat is surrounded by development, eutrophication impacts when water from agricultural or developed landscapes is drained into these swamps, and insufficient fire. These impacts have allowed Bay

Swamp to expand into areas that were once herbaceous seepage communities, replacing herbaceous wetlands with closed-canopy forested wetlands.

The following stresses and sources of stress threaten this habitat:

Stresses		Habitat Stress Rank
A	Altered landscape mosaic or context	High
B	Altered species composition/dominance	High
C	Fragmentation of habitats, communities, ecosystems	High
D	Altered hydrologic regime	Medium
E	Altered soil structure and chemistry	Medium
F	Altered fire regime	Medium
G	Altered community structure	Medium
H	Altered water quality of surface water or aquifer: nutrients	Medium

The sources of stress, or threats, were used to generate conservation actions.

Sources of Stress		Habitat Source Rank	Related Stresses (see above)
1	Invasive plants	High	B
2	Conversion to agriculture	High	A, C
3	Conversion to housing and urban development	High	A, C
4	Groundwater withdrawal	Medium	D
5	Surface water withdrawal	Medium	B, C, D
6	Incompatible grazing and ranching	Low	B, E
7	Invasive animals	Low	E
8	Incompatible fire	Low	A, F, G
Statewide Threat Rank of Habitat		High	

Conservation Actions

Actions to abate the threats to Bay Swamp habitat that were also identified as statewide threats are in the Chapter Multiple Habitat Threats and Conservation Actions.

Actions to abate specific threats that were identified for Bay Swamp and other freshwater habitats are below, though none were ranked of high priority for implementation. These actions were designed to reduce the degrading impacts of agriculture and development, and increase fire management of this habitat.

Conversion to Agriculture

Overall Rank	Economic and Other Incentives	Feasibility	Benefits	Cost
M	Create voluntary incentives for maintenance and conversion of lands to agricultural uses that use less water and result in lower nutrient outputs into Florida's waters and wetlands and create market-based incentives to compensate private landowners for the environmental services they provide to the state through management that increases water storage and nutrient reduction.	M	M	H

Conversion to Housing and Urban Development

Overall Rank	Economic and Other Incentives	Feasibility	Benefits	Cost
L	Provide voluntary tax or other incentives, such as density transfers, for environmentally friendly comprehensive development plans for projects that front on rivers, and floodplains that would commit river frontage and riparian habitats to permanent conservation zones.	M	L	VH