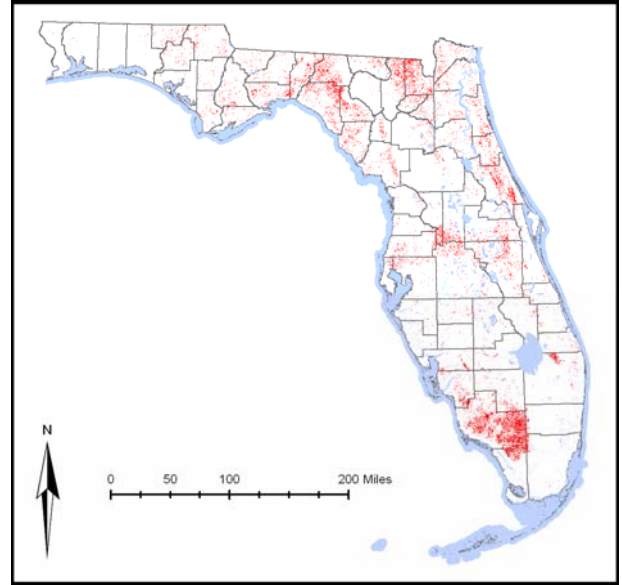


Cypress Swamp



Status

Current Condition: Poor and declining. According to the best available GIS information at this time (see Appendix D. GIS Data Tables), 1,586,941 acres (642,212 ha) of Cypress Swamp habitat exist, of which 44% (689,955 ac; 279,215 ha) are in existing conservation or managed areas. Another 11% (173,971 ac; 70,404 ha) are in Florida Forever projects and 10% (163,702 ac; 66,248 ha) are in SHCA-designated lands. The remaining 35% (559,313 ac; 226,346 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: Strand Swamp, Dome Swamp

These regularly inundated wetlands form a forested border along large rivers, creeks, and lakes, or occur in depressions as circular domes or linear strands. These communities are strongly dominated by either bald cypress or pond cypress, with very low numbers of scattered black gum, red maple, and sweetbay. Understory and ground cover are usually sparse due to frequent flooding but sometimes include such species as buttonbush, lizard's-tail, and various ferns.

Associated Species of Greatest Conservation Need

Mammals

- | | |
|---|----------------------------|
| • <i>Eumops floridanus</i> | Florida Bonneted Bat |
| • <i>Corynorhinus rafinesquii</i> | Rafinesque's Big-eared Bat |
| • <i>Pipistrellus subflavus</i> | Eastern Pipistrelle |
| • <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 halilimnetes</i> | Gulf Salt Marsh Mink |
| • <i>Mustela vison lutensis</i> | Atlantic Salt Marsh Mink |
| • <i>Puma concolor coryi</i> | Florida Panther |
| • <i>Trichechus manatus latirostris</i> | Florida Manatee |

Birds

- | | |
|---------------------------------------|------------------------------------|
| • <i>Egretta thula</i> | Snowy Egret |
| • <i>Eudocimus albus</i> | White Ibis |
| • <i>Egretta caerulea</i> | Little Blue Heron |
| • <i>Nycticorax nycticorax</i> | Black-crowned Night-Heron |
| • <i>Nyctanassa violacea</i> | Yellow-crowned Night-Heron |
| • <i>Plegadis falcinellus</i> | Glossy Ibis |
| • <i>Mycteria americana</i> | Wood Stork |
| • <i>Elanoides forficatus</i> | Swallow-tailed Kite |
| • <i>Haliaeetus leucocephalus</i> | Bald Eagle |
| • <i>Buteo brachyurus</i> | Short-tailed Hawk |
| • <i>Aramus guaranauna</i> | Limpkin |
| • <i>Campephilus principalis</i> | Ivory-billed Woodpecker |
| • <i>Dendroica dominica stoddardi</i> | Stoddard's Yellow-throated Warbler |
| • <i>Protonotaria citrea</i> | Prothonotary Warbler |

Amphibians

- | | |
|------------------------------------|---------------------------|
| • <i>Amphiuma pholeter</i> | One-toed Amphiuma |
| • <i>Ambystoma cingulatum</i> | Flatwoods Salamander |
| • <i>Ambystoma tigrinum</i> | Tiger Salamander |
| • <i>Notophthalmus perstriatus</i> | Striped Newt |
| • <i>Desmognathus auriculatus</i> | Southern Dusky Salamander |
| • <i>Stereochilus marginatus</i> | Many-lined Salamander |
| • <i>Pseudacris ornata</i> | Ornate Chorus Frog |
| • <i>Rana virgatipes</i> | Carpenter Frog |
| • <i>Rana capito</i> | Gopher Frog |

Reptiles

- | | |
|--|-------------------------------|
| • <i>Kinosternon subrubrum steindachneri</i> | Florida Mud Turtle |
| • <i>Clemmys guttata</i> | Spotted Turtle |
| • <i>Terrapene carolina major</i> | Gulf Coast Box Turtle |
| • <i>Terrapene carolina bauri</i> | Florida Box Turtle |
| • <i>Deirochelys reticularia</i> | Chicken Turtle |
| • <i>Eumeces anthracinus</i> | Coal Skink |
| • <i>Nerodia cyclopion</i> | Mississippi Green Water Snake |
| • <i>Drymarchon couperi</i> | Eastern Indigo Snake |

- *Lampropeltis getula* Common Kingsnake
- *Crotalus horridus* Timber Rattlesnake

Fish

- *Atractosteus spatula* Alligator Gar
- *Hybognathus hayi* Cypress Minnow
- *Umbra pygmaea* Eastern Mudminnow
- *Acantharchus pomotis* Mud Sunfish
- *Etheostoma proeliare* Cypress Darter

Invertebrates

- *Cambarellus blacki* Cypress Crayfish
- *Procambarus apalachicola* A Crayfish
- *Procambarus econfinae* Panama City Crayfish
- *Procambarus latipleurum* A Crayfish

Conservation Threats

Threats to the Cypress 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
- Conversion to housing and urban development
- Groundwater withdrawal
- Incompatible fire
- Incompatible forestry practices
- Incompatible resource extraction—mining/drilling
- Invasive animals
- Invasive plants
- Nutrient loads—agriculture
- Nutrient loads—urban
- Roads
- Surface water withdrawal and diversion

Widespread ditching and diking of this habitat and hydrologic fragmentation due to construction of roads through and adjacent to this habitat are large sources of altered hydrologic regime. Groundwater withdrawal for municipal and agricultural purposes has impacted cypress wetlands in localized areas throughout Florida, but this threat is most severe in portions of central Florida. Incompatible forestry practices threaten this habitat due to physical and hydrological disturbance and the slow regeneration time of cypress trees. Currently, most cypress harvest is of young, small-diameter trees for landscape mulch. Nearly all cypress wetlands in unprotected lands have suffered from altered landscape context as the surrounding uplands and wet prairies have been converted to other land uses, primarily agriculture and urban/suburban development. In many parts of Florida, cypress wetlands are particularly vulnerable to and have been seriously impacted by a variety of invasive plants. Many cypress wetlands in both agricultural and urban settings receive nutrient-laden discharges from stormwater management systems, often leading to drastic changes in understory plant community composition and associated faunal changes. Additional threats specific to this habitat include the numerous water control structures affecting Cypress Swamps, particularly smaller dome swamps, statewide.

The following stresses and sources of stress threaten this habitat:

Stresses		Habitat Stress Rank
A	Altered hydrologic regime	High
B	Altered landscape mosaic or context	High
C	Altered soil structure and chemistry	High
D	Altered community structure	High
E	Altered species composition/dominance	High
F	Habitat destruction or conversion	Medium
G	Altered water quality of surface water or aquifer: nutrients	Medium
H	Missing key communities, functional guilds, or seral stages	Medium
I	Altered fire regime	Medium
J	Fragmentation of habitats, communities, ecosystems	Medium
K	Altered water and/or soil temperature	Low
L	Habitat degradation/disturbance	Low

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

Sources of Stress		Habitat Source Rank	Related Stresses (see above)
1	Incompatible forestry practices	High	A, B, C, D, E, F, H
2	Surface water withdrawal	High	A, B, C, D, E, F
3	Nutrient loads–agriculture	High	E, G
4	Invasive plants	High	D, E
5	Conversion to housing and urban development	High	A, B
6	Invasive animals	Medium	C, D, E
7	Groundwater withdrawal	Medium	A, C, E
8	Roads	Medium	A, B, E
9	Conversion to agriculture	Medium	A, B
10	Incompatible vegetation harvest	Low	E
11	Nutrient loads–urban	Low	E, G
12	Incompatible fire	Low	B, E
13	Incompatible resource extraction: mining/drilling	Low	A, F
14	Incompatible grazing and ranching	Low	D, E, G
15	Incompatible agricultural practices	Low	A
16	Management of nature–water control structures	Low	A, B
Statewide Threat Rank of Habitat		High	

Conservation Actions

Actions to abate the threats to Cypress Swamp that were also identified as statewide threats (Incompatible forestry practices, Surface water withdrawal and diversion, Nutrient loads–agriculture, Invasive plants, Conversion to housing and urban development, Invasive animals, Groundwater withdrawal, Roads, Conversion to agriculture, Nutrient loads–urban, Incompatible fire, and Incompatible resource extraction–mining/drilling) are in the Chapter Multiple Habitat Threats and Conservation Actions.

Several of the actions developed for a statewide threat that were only applicable to Cypress Swamp and a few other habitats (i.e., Aquatic Cave, Calcareous Stream, Freshwater Marsh and Wet Prairie, Natural Lake, Reservoir/Managed Lake, Seepage/Steephead Stream, Softwater Stream, Spring and Spring Run, Terrestrial Cave, and Coastal Tidal River or Stream) and are listed below. Additional actions were developed to address threats specific to this habitat. These actions are intended to increase the spatial extent of Cypress Swamps in the landscape and improve the functionality of existing cypress wetlands through both regional and small-scale hydrologic restoration projects.

Incompatible Forestry Practices

Overall Rank	Education and Awareness	Feasibility	Benefits	Cost
L	Encourage labeling on cypress mulch alternatives that promotes their ecological value to consumers.	M	L	L
L	Through garden clubs, landscapers, and other avenues, promote acceptable alternatives to cypress mulch and make them readily available.	M	L	M
Overall Rank	Research	Feasibility	Benefits	Cost
L	Investigate various sources of possible funding for cypress regeneration studies	M	L	L
L	Recognizing that species move between wetland and upland habitats, assess the effectiveness of current BMP's regarding bedding near isolated wetlands.	M	L	L

Conversion to Housing and Urban Development

Overall Rank	Economic and Other Incentives	Feasibility	Benefits	Cost
L	Encourage tax or other incentives, such as density transfers, for environmentally friendly comprehensive development plans for projects that front on rivers and floodplains.	M	L	VH

Conversion to Agriculture

Overall Rank	Economic and Other Incentives	Feasibility	Benefits	Cost
M	Create 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

Management of Nature – Water Control Structures

Overall Rank	Economic and Other Incentives	<i>Feasibility</i>	<i>Benefits</i>	Cost
M	Review existing Farm Bill programs and explore options for enhancing economic benefits to landowners that improve or remove water control structures.	VH	L	L
Overall Rank	Education and Awareness	<i>Feasibility</i>	<i>Benefits</i>	Cost
L	Develop an awareness program for Drainage Districts created by Chapter 298 of the Florida Administrative Code ("298 Districts") to educate them about opportunities to improve fish and wildlife habitat conditions through operational and/or structural changes in their drainage systems.	H	L	M
Overall Rank	Land/Water/Species Management	<i>Feasibility</i>	<i>Benefits</i>	Cost
L	Create a grant program (or utilize existing Farm Bill and other federal programs) to replace or retrofit existing stop log or manually controlled structures with V-notch weirs in agricultural drainage systems. Give priority to those control structures that are identified as acting as barriers to wildlife movement or sheet flow.	H	L	H
Overall Rank	Policy	<i>Feasibility</i>	<i>Benefits</i>	Cost
H	Form an interagency task force to streamline the permitting process for wetland restoration projects that restore hydrology.	VH	M	M