Florida's Environment - Northwest Region¹

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Florida's Environment series

Introduction

Northwest Florida (Fig.1), has nearly 30 percent of the region in conservation lands (Table 1), and includes some of the state's most beautiful natural areas.

The region forms a narrow panhandle between the piedmont uplands of Alabama and Georgia and the Gulf of Mexico. The region is crossed by many rivers running north to south, with a series of sandhill ridges between river floodplain valleys. Hardwood forests, particularly in the Apalachicola River basin, include more species of trees and shrubs than found in any forest community in the continental United States.

Florida's northwest region also supports the largest pineland ecoregion east of the Mississippi River and the second largest pineland ecoregion in the continental United States. Mature longleaf pine forests protected on conservation lands provide critical habitat for endangered red-cockaded woodpeckers and other wildlife.

Figure 1. Northwest Florida Region with counties. Credits: UF/IFAS

Barrier islands, beaches and tidal marshes fringe most of the Gulf coast. Panhandle beaches are famous for their white quartz “sugar” sand. The panhandle is one of the least populated areas of Florida.

This document summarizes major rivers, lakes and springs, featured natural areas, and cultural

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aspects of Florida's northwest region. For information on other regions in Florida refer to The Florida Environment: An Overview and the other eight regional profiles available online (<http://edis.ifas.ufl.edu>).

Table 1. Conservation land acreage in Florida's northwest region

County	Conservation Land Acres	% of Total County
Bay	50,560	10%
Calhoun	3,060	1%
Escambia	43,410	10%
Franklin	274,470	80%
Gulf	53,550	15%
Holmes	13,260	4%
Jackson	18,750	3%
Liberty	333,810	62%
Okaloosa	314,760	53%
Santa Rosa	239,700	37%
Walton	228,300	34%
Washington	50,780	14%
Region Total	1,624,410	28%

Based on 2006 Florida Natural Areas Inventory
Managed Conservation Lands. Florida State University.

Major Rivers and Estuaries

The northwest region has several rivers that form important estuaries in the Gulf of Mexico. The **Apalachicola River** is Florida's largest river and one of the state's most significant natural resources. The Apalachicola River is designated a Florida Special Water, an Outstanding Florida Water, an Aquatic Preserve (the estuary), and an International Biosphere Reserve. Originating in Georgia and Alabama as the Chattahoochee and Flint Rivers, the Apalachicola River delineates the division between Eastern and Central time zones as it travels 107 miles through the Florida panhandle en route to **Apalachicola Bay**, one of the most productive estuarine systems in the Northern Hemisphere. The fish and shellfish industry supported by the estuary is vital to the economy of the area. The Apalachicola River is also one of the most ecologically diverse areas in Florida. More than 100 species of unusual plants have been identified in the region, including the Torreya tree, Croomia, Florida yew, and Ogeechee tupelo to name a few. The Apalachicola

River has the highest diversity of reptiles and amphibians in North America north of Mexico. Over 180 species of fish have been documented from the river and bay systems that support important commercial fisheries and also include protected species such as the Gulf Sturgeon and rare invertebrates.

Escambia Bay is fed by the **Escambia River**, which flows 54 miles along the border between Escambia and Santa Rosa Counties. The Escambia River has one of the richest assemblages of freshwater fish of any river in Florida and the 34,000 acre Escambia River Wildlife Management Area borders 25 miles of the river. Numerous boat launches occur along the river.

The **Blackwater River** flows from Alabama through Okaloosa and Santa Rosa Counties into **Blackwater Bay**, which is part of the Escambia Bay estuary system. Blackwater Bay is also fed by the Yellow River. The **Yellow River** flows through the Yellow River Marsh Preserve State Park, which is known for the abundance of carnivorous pitcher plants that occur there. About 20 rare and endangered species of plants and animals make their homes along the bay and its wet prairies, swamps, and flatwoods.

The **Econfina River** is a small coastal river that flows 35 miles from its headwaters in Madison and Taylor counties to the Apalachee Bay in the Gulf of Mexico where it forms an estuarine marsh at western extent of Florida's Big Bend coastline. Other freshwater inputs into the estuary include the Ochlockonee, Sopchoppy, Wakulla, Wacissa, Aucilla, and Fenholloway Rivers.

Swamps in the Florida panhandle that are associated with river floodplains such as the Apalachicola River are known as bottomland hardwood swamps. These are highly productive habitats because spring floods deposit large amounts of nutrient rich sediments that support diverse plant communities, particularly trees that produce nuts and fruits (mast) that provide important food resources for wildlife. In addition to their habitat value for resident wildlife, river swamps in this region are critical for migratory wildlife such as songbirds and waterfowl and as corridors for species that travel over large areas, such as the Florida black bear.

One of Northwest Florida's more unusual ecosystems is **Tate's Hell Swamp**, a large mixed wetland, technically known as a shrub bog. Tate's Hell is located in Franklin County between the Apalachicola and Ochlockonee Rivers (Fig. 2).

There are relatively few large lakes in the Northwest Florida region. Types of lakes that occur in the region include oxbow lakes that are created when rivers change course and sections of river become disconnected and isolated from the main channel, sandhill lakes that occur on upland ridges, and shallow and marshy seasonal lakes.

Figure 2. Northwest Florida major conservation lands.
Credits: UF/IFAS

Featured Natural Areas

(see Table 2 for detailed list of natural areas)

St. Vincents National Wildlife Reserve is a 12,358-acre barrier island located just offshore of the Apalachicola River estuary and includes pine dominated uplands. Once privately owned as a hunting preserve, nonnative sambar deer still roam the island.

Eglin Air Force Base Wildlife Management Area encompasses 460,000 acres and contains some of the most biologically significant public land in the United States. More than 90 rare or imperiled species, including at least nine federally listed species, are found on the base. The base manages a 320,000-acre longleaf pine sandhills ecosystem, the largest known tract of this habitat under single ownership.

Blackwater River State Park includes one of the purest sand bottom rivers in the world. Various pine and upland habitats occur in the park. In the

river floodplain, the forest is dominated by various hardwoods, species composition varying in response to hydrology.

Tyndall Air Force Base covers 29,000 acres and abuts the Gulf of Mexico. The base features many wetland habitats but also pine flatwoods and sand pine scrub. Tyndall AFB operates the longest ongoing loggerhead sea turtle monitoring program in the northern Gulf of Mexico. Tyndall's management efforts have maintained hatching rates above 70 percent, significantly enhancing the population of this endangered species.

Apalachicola National Forest encompasses 564,961 acres and supports slash pine flatwoods, longleaf pine sandhills, and various other upland and wetland habitats. Mature pine forests provide habitat for many species including red-cockaded woodpeckers.

Cultural History

Prehistoric Indian sites, middens (trash heaps), and burial mounds are found along many of northwest Florida's lakes, rivers, and springs. Known sites occur along the Escambia River, with evidence of Pensacola, American, Ft. Walton, Archaic and Weeden Island Indian cultures. Archeological sites and more than 200 historical structures occur along the Blackwater River, and a few sites have been found along the Choctawhatchee River, Holmes Creek, Chipola River and Apalachicola River.

Evidence found in this region indicates the central panhandle was inhabited by nomadic hunters 14,000 years ago. Native tribes included the Apalachee, who resided in the area from about 1000 years ago to the mid 1700s when they declined due to diseases brought in by Spanish missionaries. Creeks, who later came to be known as Seminoles, moved into the area from Georgia and Alabama about this time. Most of the Seminoles in the panhandle were killed, forcibly relocated, or fled to the south Florida Everglades where many still live today. Many of Florida's rivers hold names of Indian or Spanish origin, Perdido and Ecofina are two examples.

Table 2. Table 2. Recreational and cultural opportunities in natural areas in northwest Florida. (WMA=Water Management Area, NWR=National Wildlife Refuge)

County	Natural area	Phone	Web site
Bay	St. Andrews State Park	(850) 233-5140	http://www.floridastateparks.org
Bay	St. Andrews Aquatic Preserve	(850) 983-5359	http://www.dep.state.fl.us/coastal/sites/standrews/
Bay	Junior Museum of Bay County	(850) 769-6128	http://www.jrmuseum.org
Bay	Tyndall Air Force Base	(850) 283-2641	http://floridaconservation.org/viewing/sites/site-nw05.html
Escambia	Tarklin Bayou Preserve State Park		http://www.floridastateparks.org
Escambia	Perdido River WMA	(850) 265-3676	http://www.floridastateparks.org/perdidokey/
Escambia	Escambia River WMA	(850) 539-5999	http://myfwc.com/recreation/cooperative/escambia_river.asp
Escambia	Perdido Key State Park	(850) 492-1595	http://www.floridastateparks.org
Escambia	Big Lagoon State Park	(850) 492-1595	http://www.floridastateparks.org
Escambia	Gulf Islands National Seashore	(850) 934-2600	http://www.nps.gov/guis
Escambia	Ft. Pickens Aquatic Preserve	(850) 983- 5359	http://www.dep.state.fl.us/COASTAL/sites/ftpickens/info.htm
Franklin	Tate's Hell State Forest	(850) 265-3676	http://www.fl-dof.com/state_forests/tates_hell.html
Franklin	St. George Island St. Park	(850) 927-2111	http://www.floridastateparks.org/stgeorgeisland/
Franklin	Alligator Harbor Aquatic Preserve	(850) 670-4783	http://www.dep.state.fl.us/coastal/sites/alligator/
Franklin/Gulf	St. Vincent NWR	(850) 653-8808	http://www.fws.gov/refuges/profiles/index.cfm
Franklin/Wakulla/Liberty	Apalachicola National Forest	(850) 523-8500	http://www.fs.fed.us/r8/florida/recreation/index_apa.shtml
Gulf	Tyndall Air Force Base	(850) 283-2641	http://www.tyndall.af.mil/
Gulf	St. Joseph Peninsula Park	(850) 227-1327	http://www.floridastateparks.org/stjoseph/default.cfm
Gulf	St. Joseph Bay Aquatic Preserve	(850) 670-4783	http://www.dep.state.fl.us/coastal/sites/stjoseph/
Holmes/Washington	Choctawhatchee & Holmes Creek	(850) 539-5999	http://myfwc.com/Fishing/forecast/nwr.html#choctawh
Jackson	Florida Caverns State Park	(850) 482-9598	http://www.floridastateparks.org/floridacaverns/default.cfm
Jackson	Upper Chipola River WMA	(850) 539-5999	http://myfwc.com/recreation/cooperative/upper_chipola_river.asp
Jackson	Dead Lakes State Recreation Area (Chipola)	(850) 639-2702	http://www.funandsun.com/parks/DeadLakes/deadlakes.html
Jackson	Three Rivers State Park	(850) 482-9006	http://www.funandsun.com/parks/ThreeRivers/threerivers.html

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County	Natural area	Phone	Web site
Jackson/ Washington/	Econfina Creek WMA (Sandhill lakes)	(850) 539-5999	http://myfwc.com/recreation/cooperative/ econfina_creek.asp
Liberty	Torreya State Park/ Gregory House	(850) 643-2674	http://www.floridastateparks.org/torreya/
Liberty	Mud Swamp - New River: Apalachicola	(850) 643-2359	http://www.fs.fed.us/r8/florida/
Liberty	Apalachicola Bluffs Preserve	(850)-643-2756	<a href="http://www.nature.org/wherewework/northamerica/
states/florida/preserves/art5521.html">http://www.nature.org/wherewework/northamerica/ states/florida/preserves/art5521.html
Okaloosa/ Santa Rosa	Yellow River WMA	(850) 539-5999	<a href="http://www.nwfwmd.state.fl.us/recreation/
yellowriver.html">http://www.nwfwmd.state.fl.us/recreation/ yellowriver.html
Okaloosa	Rocky Bayou	(850) 833-9144	http://www.floridastateparks.org/rockybayou/default.cfm
Okaloosa	Indian Temple Mound	(850) 833-9595	
Okaloosa	Henderson Beach State Park	(850) 837-7550	<a href="http://www.floridastateparks.org/hendersonbeach/
default.cfm">http://www.floridastateparks.org/hendersonbeach/ default.cfm
Santa Rosa	Navarre Beach Park	(850) 410-1666	http://www.floridastateparks.org/ soon to be county park...
Santa Rosa	Yellow River Marsh Aquatic Preserve	(850) 983- 5359	http://www.floridastateparks.org/yellowriver/default.cfm
Santa Rosa	Blackwater River State Forest	(850) 957-6140	<a href="http://www.fl-dof.com/state_forests/
blackwater_river.html">http://www.fl-dof.com/state_forests/ blackwater_river.html
Santa Rosa/ Okaloosa	Blackwater River WMA	(850) 923-5363	http://myfwc.com/recreation/cooperative/blackwater.asp
Santa Rosa	Blackwater River State Park	(850) 923-5363	<a href="http://www.floridastateparks.org/blackwaterriver/
default.cfm">http://www.floridastateparks.org/blackwaterriver/ default.cfm
Santa Rosa/ Okaloosa	Eglin Air Force Base WMA	(850) 983-5363	<a href="http://myfwc.com/redreation/View_Destinations_site-
nw04.htm">http://myfwc.com/redreation/View_Destinations_site- nw04.htm
Walton / Washington	Pine Log State Forest	(850) 547-7084	http://www.fl-dof.com/state_forests/pine_log.html
Walton	Eden Gardens State Park		http://www.floridastateparks.org
Walton	Ponce De Leon Springs State Park	(850) 836-4281	<a href="http://www.floridastateparks.org/poncedeleonsprings/
default.cfm">http://www.floridastateparks.org/poncedeleonsprings/ default.cfm
Walton	Grayton Beach State Park	(850) 231-4210	<a href="http://www.floridastateparks.org/graytonbeach/
default.cfm">http://www.floridastateparks.org/graytonbeach/ default.cfm
Walton	Topsail Hill Preserve State Park	(877) 232-3521	http://www.floridastateparks.org/topsailhill/default.cfm
Washington	Falling Waters State Park	(850) 638-6130	<a href="http://www.floridastateparks.org/fallingwaters/
default.cfm">http://www.floridastateparks.org/fallingwaters/ default.cfm

Florida's rivers provided important avenues of transportation during the settlement of the state. The Apalachicola River, in particular, served as a main transportation route for goods and people between the

Gulf of Mexico and the interiors of Florida, Georgia, and Alabama. In 1828, when Florida became a U.S. Territory, the first government road across north Florida crossed the Apalachicola River at what is

now Torreya State Park, and a six cannon battery was located at this location during the Civil War. Throughout the 1800s, it is estimated that more than 200 steamboats traveled the river during the great trading era of 1840-1910. Today, the Apalachicola River still is an important port.

Additional Information

Published Resources

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Online Resources

Florida Division of Historical Resources,
<http://www.flheritage.com/>

Florida Fish & Wildlife Commission Wildlife Viewing Sites, <http://www.myfwc.com/viewing/>

Florida's Historic Places,
<http://fcit.coedu.usf.edu/florida/lessons/places.htm>

Florida's Museum of Natural History,
<http://www.flmnh.ufl.edu/>

Florida Natural Areas Inventory,
<http://www.fnai.org/>

Florida's Scenic Highways,
<http://www.dot.state.fl.us/emo/scenichwy/default.htm>

Florida State Parks,
<http://www.floridastateparks.org/>

Florida Water Management Districts,
<http://dlis.dos.state.fl.us/fgils/wmd.html>

P.K. Yonge Library of Florida History,
<http://web.uflib.ufl.edu/spec/pkyonge/index.html>

Touring the Georgia-Florida Coast,
<http://www.cr.nps.gov/nr/travel/geo-flor/g-fintro.htm>

Visit Florida, <http://www.visitflorida.com>