

## Florida's Environment - Central East Region<sup>1</sup>

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### Introduction

The central east region extends from Volusia County in the north to St. Lucie County in the south (Fig. 1). Despite tremendous residential and urban growth, this region has preserved approximately 1/3 of the area in conservation lands (Table 1).



Scrub plant communities rooted on ancient sand dunes or ridges once formed a continuous zone from north to south through this region. Now they rank among the region's most endangered habitat. Among the sand pines, scrubby oaks, and a host of very rare plants, occur many unique native animals that are adapted to scrub habitats and found.

Extensive marshes of the St. Johns River form much of the western portion of the region. The salt and freshwater marshes along the coast provide diverse wildlife habitat and coastal beaches provide important nesting sites for sea turtles, seabirds, and shorebirds.

This document summarizes major rivers, lakes and springs, featured natural areas, and cultural aspects of Florida's central east region. For information on other regions in Florida, refer to "The Florida Environment: An Overview" and the other seven regional profiles available online (<http://edis.ifas.ufl.edu>).

**Figure 1.** Central east Florida region with counties. Credits: UF/IFAS

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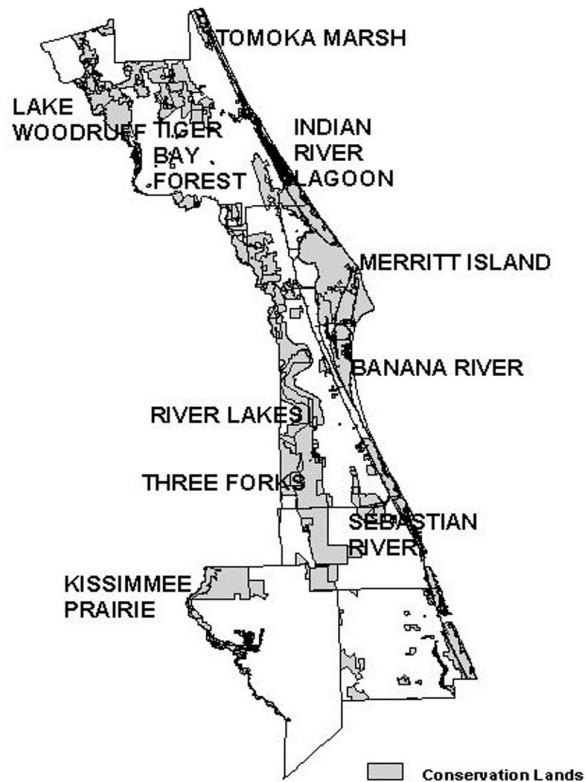
**Table 1.** Conservation land acreage in Florida's central east region

County	Conservation Land	% of Total County
Brevard	252,660	39%
Indian River	74,190	23%
Okeechobee	85,100	17%
St. Lucie	25,750	7%
Volusia	184,500	26%
<b>Region Total</b>	<b>622,200</b>	<b>24%</b>
Based on 2006 Florida Natural Areas Inventory Managed Conservation Lands. Florida State University.		

### Major East Rivers, Lakes and Estuaries

The **Indian River Lagoon (IRL)** is a shallow estuary that is separated from the Atlantic Ocean by a series of protective barrier islands (Fig. 2). The IRL system is actually made up of three distinct water bodies - the Mosquito Lagoon, the Banana River, and the Indian River Lagoon proper. The IRL covers a full 40 percent of Florida's east coast and stretches 156 miles, from Ponce De Leon Inlet at the northern end to Jupiter Inlet at the southern end. The IRL is the nation's most biologically diverse estuary, largely due to the fact that this extensive ecosystem spans both temperate and subtropic zones and includes species typical of each. The Indian River Lagoon is the wintering home to many species of migratory waterfowl.

The **St. Johns River** flows north for approximately 310 miles from its origin in east central Florida to its final destination, the Atlantic Ocean, making it the longest river completely contained within Florida. Only the St. Johns and the St. Marys rivers drain into the Atlantic. The **Tomoka River** also flows north and travels through Volusia County before entering the **Halifax River** just north of Daytona Beach at Tomoka State Park.

**Figure 2.** Central east Florida conservation lands. Credits: UF/IFAS

Historically, the **Kissimmee River** coursed 98 miles between Lake Kissimmee and Lake Okeechobee. In 1970 the river became a 56-mile long canal named C-38 by the US Army Corps of Engineers. The majority of the former river floodplain is used for cattle ranching, although there are some conservation areas. In 1992 the Kissimmee River became the site of the largest river restoration project in the world. The River Restoration Project will restore over 40 square miles of river/floodplain ecosystem including 43 miles of meandering river channel and 27,000 acres of wetlands.

East central Florida contains the two largest lakes in the state, **Lake Okeechobee** and **Lake George**. Lake Okeechobee is the 4<sup>th</sup> largest lake contained entirely within the boundaries of the continental United States and provides vital ecological, commercial, and cultural benefits to the entire south and central Florida region.

## Featured Natural Areas (see Table 2 for detailed list of Natural areas)

**Merritt Island National Wildlife Refuge** (Fig. 2) is regarded as one of Florida's premiere wildlife viewing areas and borders the Canaveral National Seashore. The 140,000-acre refuge encompasses the John F. Kennedy Space Center and administers Archie Carr National Wildlife Refuge (NWR), Lake Wales Ridge NWR, and St. Johns NWR as part of a NWR complex. Although dominated by coastal wetlands, the refuge also supports coastal scrub, pinelands, and palm and oak hammocks. The combination of habitats attracts abundant bird life.

**Pelican Island Wildlife Refuge** was created as the first National Wildlife Refuge by President Theodore Roosevelt in 1903 for the purpose of protecting nesting birds from plume hunters. Encompassing about 5,000 acres in the Indian River Lagoon, Pelican Island NWR provides important bird nesting and marine mammal habitats.

**Kissimmee Prairie Preserve State Park** encompasses nearly 54,000 acres and protects the largest remaining tract of dry prairie habitat in Florida including a breeding population of the endangered Florida grasshopper sparrow. The prairie supports between 100-200 plant species per acre, making it one of the most diverse plant communities in North America.

**Lyonia Preserve** in Volusia County includes pineland habitats and restored scrub where Florida scrub-jays, sand skinks, blue-tailed mole skinks, six-lined race runners, Florida scrub lizards, and gopher tortoises may be found.

**Tomoka Marsh Aquatic Preserve** is an estuarine system comprised of six distinct areas that include portions of the Halifax River, Smith Creek, Bulow Creek, the Tomoka River, and the Tomoka Basin. The Tomoka River and its tributaries Strickland, Thomson and Dodson Creek are designated as a Manatee Sanctuary.

## Cultural History

Prehistoric Indian sites, middens (trash heaps) and mounds (burial sites), are found along many of east central Florida's rivers. For example, the North Fork of the St. Lucie River, Spruce Creek, and the Tomoka River all have early inhabitant evidence.

Reflecting the diverse history of the region, many of Florida's rivers and lakes hold names of Indian or Spanish origin. The word Okeechobee comes from the Seminole Indian language meaning big water. The Tomoka River is a derivation of the Spanish name 'Rio de Tumucuas'.

Daytona Beach was named for pioneer settler Mathias Day and was known as Daytona. Henry Flagler's East Coast Railroad opened the region to winter tourists in large numbers. Daytona Beach, famous for its auto racing, began its long history with the automobile as early as 1902.

## Additional Sources of Information

### Published Material

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**Table 2.** Recreational and cultural opportunities in natural areas in central east Florida. (NWR=National Wildlife Refuge)

County	Natural area	Phone	Web site
Brevard	River Lakes Conservation Area	(407) 676-6614	<a href="http://sjr.state.fl.us/programs/outreach/pubs/recguide/s05_river_lakes_CA.html">http://sjr.state.fl.us/programs/outreach/pubs/recguide/s05_river_lakes_CA.html</a>
Brevard	Buck Lake Conservation Area	(407) 893-3127	<a href="http://www.cfbw.com/bucklake.shtml">http://www.cfbw.com/bucklake.shtml</a>
Brevard	Banana River Aquatic Preserve	(321) 953-5004	<a href="http://www.dep.state.fl.us/coastal/sites/banana/">http://www.dep.state.fl.us/coastal/sites/banana/</a>
Brevard	Archie Carr NWR	(407) 861-0667	<a href="http://www.fws.gov/archiecarr/">http://www.fws.gov/archiecarr/</a>
Brevard	Sebastian Inlet State Park	(321) 984-4852	<a href="http://www.floridastateparks.org/sebastianinlet/">http://www.floridastateparks.org/sebastianinlet/</a>
Brevard	St. Johns NWR	(407) 861-0667	<a href="http://www.fws.gov/merrittisland/subrefuges/SJ.html">http://www.fws.gov/merrittisland/subrefuges/SJ.html</a>
Brevard	Canaveral Marshes Conservation Area	(407) 568-5893	<a href="http://sjr.state.fl.us/programs/outreach/pubs/recguide/sc02_canaveral_marshes_CA.html">http://sjr.state.fl.us/programs/outreach/pubs/recguide/sc02_canaveral_marshes_CA.html</a>
Brevard	Merritt Island NWR	(321) 861-0667	<a href="http://merrittisland.fws.gov/index.html">http://merrittisland.fws.gov/index.html</a>
Brevard	Brevard Museum of History and Natural Science	(321) 632-1830	<a href="http://www.brevardmuseum.com/">http://www.brevardmuseum.com/</a>
Brevard	Enchanted Forest Nature Sanctuary	(321) 633-2016	<a href="http://www.nbbd.com/godo/ef/scrub/index.html">http://www.nbbd.com/godo/ef/scrub/index.html</a>
Brevard	Turkey Creek Sanctuary	(321) 952-3442	<a href="http://myfwc.com/viewing/sites/site-ec07.html">http://myfwc.com/viewing/sites/site-ec07.html</a>
Indian River	Fort Drum Marsh Conservation Area	(407) 676-6614	<a href="http://sjr.state.fl.us/programs/outreach/pubs/recguide/s03_fort_drum_marsh_CA.html">http://sjr.state.fl.us/programs/outreach/pubs/recguide/s03_fort_drum_marsh_CA.html</a>
Indian River	Lake Blue Cypress	(561) 778-0150	<a href="http://myfwc.com/fishing/forecast/ner.html#blue_cyp">http://myfwc.com/fishing/forecast/ner.html#blue_cyp</a>
Indian River	Environmental Learning Center	(561) 589-5050	<a href="http://www.elcweb.org/about/default.htm">http://www.elcweb.org/about/default.htm</a>
Indian River	Pelican Island NWR	(561) 589-2089	<a href="http://pelicanisland.fws.gov/index.html">http://pelicanisland.fws.gov/index.html</a>
Indian River	Julian W. Lowenstein Florida History &	(561) 770-5060	<a href="http://www.rootsweb.com/~flindian/ircl/">http://www.rootsweb.com/~flindian/ircl/</a>
Okeechobee	Lake Okeechobee Scenic Trail	(800) 871-4403	<a href="http://www.dep.state.fl.us/gwt/guide/regions/south/trails/6_lake_okeechobee_scenictra.htm">http://www.dep.state.fl.us/gwt/guide/regions/south/trails/6_lake_okeechobee_scenictra.htm</a>
Okeechobee	Kissimmee River Paradise Run	(850) 250-4250	<a href="https://my.sfwmd.gov/portal/page?_pageid=2236,4736545&amp;_dad=portal&amp;_schema=PORTAL">https://my.sfwmd.gov/portal/page?_pageid=2236,4736545&amp;_dad=portal&amp;_schema=PORTAL</a>
Okeechobee	Kissimmee Prairie Preserve State Park	863-467-8497	<a href="http://www.floridastateparks.org/kissimmeeprairie/">http://www.floridastateparks.org/kissimmeeprairie/</a>
Okeechobee	Ordway- Whittell Kissimmee Prairie	863-467-8497	<a href="http://www.audubonofflorida.org/conservation/kp.htm">http://www.audubonofflorida.org/conservation/kp.htm</a>
St. Lucie	Adams Ranch	(772) 461-6321	<a href="http://www.adamsranch.com/pages.cfm?ID=1">http://www.adamsranch.com/pages.cfm?ID=1</a>
St. Lucie	North Fork St. Lucie Aquatic Preserve	(561) 873- 6590	<a href="http://www.dep.state.fl.us/coastal/sites/northfork/">http://www.dep.state.fl.us/coastal/sites/northfork/</a>
St. Lucie	Fort Pierce Inlet State Park	(561) 468-3985	<a href="http://www.floridastateparks.org/fortpierceinlet/default.cfm">http://www.floridastateparks.org/fortpierceinlet/default.cfm</a>
Volusia	Tomoka River Canoe Trail	(386) 676-4050	<a href="http://www.dep.state.fl.us/gwt/guide/regions/eastcentral/trails/tomoka.htm">http://www.dep.state.fl.us/gwt/guide/regions/eastcentral/trails/tomoka.htm</a>

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County	Natural area	Phone	Web site
Volusia	Tomoka State Park	(386) 676-4050	<a href="http://www.floridastateparks.org/tomoka/default.cfm">http://www.floridastateparks.org/tomoka/default.cfm</a>
Volusia	Spruce Creek Canoe Trail	(386) 255-0415	<a href="http://www.dep.state.fl.us/gwt/guide/regions/eastcentral/trails/spruce.htm">http://www.dep.state.fl.us/gwt/guide/regions/eastcentral/trails/spruce.htm</a>
Volusia	Haw Creek Conservation Area	(386) 446-6786	<a href="http://www.flaglerparks.com/hawcreek/preserve.htm">http://www.flaglerparks.com/hawcreek/preserve.htm</a>
Volusia	Lake George State Forest	(386) 329-4404	<a href="http://www.fl-dof.com/state_forests/lake_george.html">http://www.fl-dof.com/state_forests/lake_george.html</a>
Volusia	Lake Monroe Conservation Area	(407) 668-6522	<a href="http://sjr.state.fl.us/programs/outreach/pubs/recguide/sc05_lake_monroe_CA.html">http://sjr.state.fl.us/programs/outreach/pubs/recguide/sc05_lake_monroe_CA.html</a>
Volusia	Lake Woodruff NWR	(386) 985-4673	<a href="http://www.fws.gov/lakewoodruff/">http://www.fws.gov/lakewoodruff/</a>
Volusia	Hontoon Island State Park	386) 736-5309	<a href="http://www.floridastateparks.org/hontoonisland/">http://www.floridastateparks.org/hontoonisland/</a>
Volusia	Lyonia Preserve	(386) 736-5927	<a href="http://myfwc.com/viewing/sites/site-ec03.html">http://myfwc.com/viewing/sites/site-ec03.html</a>
Volusia	De Leon Springs State Park	(386) 985-4212	<a href="http://www.floridastateparks.org/deleonsprings/default.cfm">http://www.floridastateparks.org/deleonsprings/default.cfm</a>
Volusia	Blue Springs State Park	(904) 775-3663	<a href="http://www.floridastateparks.org/bluespring/default.cfm">http://www.floridastateparks.org/bluespring/default.cfm</a>
Volusia	Bulow Creek State Park	(386) 676-4050	<a href="http://www.floridastateparks.org/bulowcreek/">http://www.floridastateparks.org/bulowcreek/</a>
Volusia	Dunlawton Plantation Sugar Mills Ruins	(386) 255-0415	<a href="http://www.volusiahistory.com/plantation.htm">http://www.volusiahistory.com/plantation.htm</a>
Volusia	Turtle Mound State Archaeological Site	(904) 255-0415	<a href="http://volusiahistory.com/turtle.htm">http://volusiahistory.com/turtle.htm</a>
Volusia	Henry A. Deland Historical Museum	(386) 740-6813	<a href="http://www.deland.org/Parks/henrydeland.htm">http://www.deland.org/Parks/henrydeland.htm</a>
Volusia	Green Mound Archaeological Site	(386) 255-0415	<a href="http://volusiahistory.com/green.htm">http://volusiahistory.com/green.htm</a>

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### Online Resources

Adams Ranch, <http://www.adamsranch.com>

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>

Historical Contexts, east central Florida  
[http://dhr.dos.state.fl.us/bar/hist\\_contexts/](http://dhr.dos.state.fl.us/bar/hist_contexts/)  
[www.ecfl.doc](http://www.ecfl.doc)

History of Indian River County,  
<http://www.rootsweb.com/~flindian/history.htm>

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

U.S. Fish and Wildlife Service,  
<http://www.fws.gov/>

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