

About This Guide

This guide includes a map of coastal waters for Nassau and Duval counties that depicts aquatic grasses, artificial reefs, parks and preserves, fishing piers, marinas, and boat ramps open to the public. Also featured is information on habitats and animals, popular sport fish, boating safety and protocol, and a resource directory.

The Boating and Angling Guide to Nassau and Duval Counties was produced by the Florida Fish and Wildlife Conservation Commission (FWC). Please address any comments to:

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All photographs courtesy of FWC, unless otherwise specified.

NOT FOR RESALE

2014

Native Habitats

The coastal waters of Nassau and Duval counties are a rich mosaic of fish and wildlife habitats that form life-sustaining links in a biologically productive ecosystem. From river grasses to coastal marshes, from the St. Johns, Nassau and St. Marys rivers to the Atlantic Ocean, each independent habitat plays a vital role in this "estuarine machine."

Marshes and aquatic grasses, most notable among these habitats, contribute significantly to a dynamic food chain that draws nutrients from the estuary floor. As aquatic grasses and saltmarsh leaves decay, they provide food for small creatures that are ultimately consumed by fish and larger predators in an endless circle of life.

Marshes and Mud Flats

Marshes provide food and cover for a vast array of small fish and wildlife. These marshes, which periodically become submerged, nourish and protect many fish and birds. Marsh areas also buffer upland areas from storms and help filter pollutants from water that runs off the land.

Mud flats may be completely exposed at low tide. Although these flats are barren of visible vegetation, they are teeming with life. Small crabs, clams, and worms, which burrow in the mud, supply a feast for birds wading at low tide.



Sea Turtles

Florida's waters are home year-round to five species of sea turtles. All are protected by state and federal regulations. Sea turtles surface to breathe and occasionally bask at the surface, which makes them vulnerable to boat strikes. During their nesting season, May to October, sea turtles may be concentrated near beaches. The sea turtle most commonly seen in coastal waters is the loggerhead, followed by the green turtle, Kemp's ridley, and hawksbill. A fifth species, the leatherback, is typically seen in deep offshore waters. Floating sargassum, often found off Florida's east coast, is important for juvenile sea turtles, where they spend their first few years maturing.



YOU CAN HELP:

- Keep a sharp lookout for turtles near the surface, especially on sunny days.
- Maintain a moderate water speed in shallow water and near beaches.
- Keep beaches and waterways clean and free of pollution, such as fishing line, which can entangle sea turtles.
- Protect aquatic grass beds. Avoid creating propeller scars.
- Support efforts to protect sea turtles and their habitats.
- Report injured or dead sea turtles to the FWC's Wildlife Alert Hotline at 888-404-FWCC (3922).

Birds of Duval and Nassau Counties

Despite environmental pressures from growth and development in the region, Nassau and Duval counties attract a remarkable variety and number of birds. Beaches, sand bars, and oyster rakes provide nesting areas for species of conservation concern. Mudflats and salt marshes in shallow waters provide a bountiful feeding ground for resident, migrant, and wintering shorebirds and wading birds. Open waters are habitat for seabirds and ducks. Nesting ospreys and bald eagles can be found all along the Nassau and Duval County coastline.

Maintaining these bird populations close to a growing metropolitan area is challenging. Many species are declining, and some have virtually disappeared due to loss and disruption of habitat.

By being aware and by observing a few simple measures, you can help prevent the decline of these birds and keep them around for our future generations to enjoy.

Especially vulnerable are the many coastal species of birds that nest directly on bare sand and on oyster rakes. The eggs and the chicks are camouflaged, making them difficult for humans to see. If beach visitors come too close, adult birds will fly off their nests, exposing eggs and chicks to sun damage or predation. Birds see dogs as predators and will be disturbed by dogs earlier than by people.



A Boating And Angling Guide To

Nassau and Duval Counties



Amelia Island Lighthouse from Fort Clinch State Park, Fernandina Beach



Downtown Jacksonville and the St. Johns River from the International Space Station, NASA.

Resource Directory

Florida Fish and Wildlife Conservation Commission FWC Wildlife Alert Hotline Cell Phones FWC Law Enforcement (Lake City) To report oil spills, marine violations, boating accidents, and marine mammal injuries or strandings. Information also available on saltwater fishing and shellfish harvesting.	1-888-404-FWCC (3922) *FWC 386-758-8625
Fish and Wildlife Research Institute (St. Petersburg) For information on Florida's marine resources and marine research	727-896-8626
Marine Fish Kill Hotline To report a fish kill or red tide event in your area	1-800-636-0511
U.S. Coast Guard Rescue Station (24 hr. emergency service) Sector Jacksonville Office National Response Center To report oil spills and maritime emergencies	VHF channel 16 904-564-7500 1-800-424-8802
Boat U.S. Foundation Hotline For information on boating skills and safety courses offered locally	1-800-336-BOAT (336-2628)
NOAA Weather Service Recorded Forecast (Jacksonville) NOAA Weather Radio Jacksonville Palatka	904-741-4370 162.555 Mhz/VHF radio 162.425 Mhz/VHF radio
For 24-hour weather and marine forecasts	
State Parks Fort Clinch State Park Amelia Island State Park, Big Talbot Island State Park, George Crady Bridge Fishing Pier, Pumpkin Hill Creek Preserve State Park, Little Talbot Island State Park For more information about Florida's state parks	904-277-7274 904-291-2320
Aquatic Preserves (Fl. Clinch Aquatic Preserve, Nassau River - St. Johns River Marshes Aquatic Preserve) For more information about Florida's protected coastal waters	850-245-2094
Timucuan Ecological and Historic Preserve Fort Matanzas National Monument For more information about Timucuan Ecological and Historic Preserve, Fort Caroline National Memorial, and Kingsley Plantation	904-641-7155
Florida Sea Grant St. Johns and Flagler counties For information about dune restoration/replanting, marine summer camps, and the Clean Marina Program.	386-437-7464
City of Jacksonville, Dockmaster For more information about boat ramps, canoe and kayak launches, and other waterways and boating issues for Jacksonville/Duval County	904-630-0839
B.E.A.K.S. (Bird Emergency Aid & Kare Sanctuary) Jacksonville Zoo and Gardens For assistance with injured and orphaned wildlife	904-251-2473 904-757-4463, ext. 0

Welcome To Nassau and Duval Counties

The waterways of Nassau and Duval counties include the lower St. Johns River and its tributaries, the Intracoastal Waterway, the Fort George River, and the Nassau River. These waterways, which are popular for sport and recreation, support one of the world's most productive natural systems. Estuaries like these, where salt water from the sea meets and mixes with fresh water from rivers and uplands, are nurseries for young fish, shrimp, and crabs. More than 70 percent of all fish, shellfish, and crustaceans spend some critical stage of their development in these nearshore waters, protected from larger predators that swim in the open sea.

At 310 miles, the St. Johns River is the longest river in Florida and is one of only three rivers in the nation that flows north. The St. Johns River and its tributaries drain about one-sixth of the state of Florida, or about 8,700 square miles. From headwaters to mouth, its elevation drops only 30 feet, about one inch per mile, making it one of the laziest rivers in the world. As the river flows north, salt water from the Atlantic Ocean mixes with the slow-moving freshwater, turning the river into an estuary over its final 120 miles. The St. Johns River is often referred to as a "black water river" because it is naturally brown. The water appears brown because it flows through wetland plants, which release natural tannin

pigments. The process is similar to pouring hot water over tea leaves; as the tea leaves soak in the water, the natural tannins change the color of the water.

The abundant wildlife in the waters and along the shores of Duval's waterways includes bald eagles, herons, and West Indian manatees. The St. Johns River is the region's most significant source for shrimp, menhaden, blue crab, and other commercially important species. It supports regionally significant sport fisheries such as largemouth bass, crappie, and bream. Shallow coastal waters of the region serve as the only known calving grounds for the North Atlantic right whale. The lower basin is a nationally important layover and wintering area for migratory waterfowl. The northeast portion of the basin is also home to some of Florida's most significant cultural and historic resources.

By boating safely and with greater awareness of the natural environment, you can help protect Nassau and Duval county waterways and the wildlife that depends on these waters for survival.

Catch-and-Release Information

Increasingly, anglers are practicing "catch-and-release" to do their part to preserve marine fisheries while they enjoy their outdoor fishing experiences. This information offers tips on how you can properly handle and release saltwater fish.

Know Before You Go

- Make sure you can identify the fish you are targeting.
- Always know (or have access to) the current regulations for the fish you target. This minimizes handling time when determining whether or not you can keep the fish you caught.
- Use tackle heavy enough to bring the fish in quickly, and avoid using multi-hook rigs or lures.
- If you have a treble hook, you can remove some of the hooks and flatten the barbs.
- Make sure you have all the proper tools and gear on your vessel before heading out for the day.

Handling Fish

- Handle fish as little as possible and only with wet hands.
- Match tackle to the targeted fish to land it quickly and minimize stress on the fish.
- Never hold a fish by its jaw, gills or eyes. Hold the fish horizontally and support its weight with both hands.
- Release the fish as quickly as possible and if possible keep the fish in the water at all times.

Removing the Hook

- Using a dehooking tool is safer for the fish and for you.
- Cut the leader as close to the hook as possible if it cannot be quickly removed.
- When using natural bait (live or dead) use circle hooks to reduce internal harm and decrease dehooking time.

The Release

- Gently place the fish head first in the water, supporting its body until it swims away.
- A fish that has been stressed by the fight or handling should be revived by moving it forward in the water to promote water flow over the gills.
- If a released fish does not swim away, recover it and try again.

Popular Sport Fish

(Fish images © Diane Rome Peebles, Striped Bass image © Duane Ravers)



GULF FLOUNDER: Inshore within bays near or within grass flats during spring and summer



RED DRUM (Redfish): Inshore near grass beds, oyster bars, and docks and pilings; deeper channels during the warmest and coolest months.



SHEEPSHEAD: Inshore around oyster beds, bridges and pilings; nearshore in winter; and early spring over bottom structure and artificial reefs.



SPOTTED SEATROUT (Speckled seatrout): Inshore over grass beds, sand, and sandy/mud bottoms; deeper water during warmest and coolest months.



ATLANTIC CROAKER: Young fish found in estuaries; older fish (2 to 3 years) inhabit deep offshore waters during the winter months and move into bays and estuaries during the spring, summer and fall.



WEAKFISH: Adults-move inshore north during warm months inhabiting the surf, inlets, bays channels and estuaries; move offshore and south during cold months. Juveniles-inhabit estuaries which serve as nurseries.



RED SNAPPER: Juveniles inshore in tidal creeks, mangroves, and grass beds; adults generally nearshore or offshore on coral or rocky reefs.



FLORIDA POMPAÑO: Inshore and nearshore waters, especially along sandy beaches, along oyster bars, and over grassbeds, often in turbid water; may be found in water as deep as 130 feet.



SOUTHERN KINGFISH (Whiting): Shallow Coastal waters; common along beaches.



SPANISH MACKEREL: Inshore, nearshore, and offshore over grass beds and reefs.



STRIPED BASS: Found primarily in the St. Johns River and its tributaries, and a few panhandle rivers; does not tolerate water temperatures over 75° F for long periods of time.

Log on to MyFWC.com/fishing for up-to-date information about license requirements, size and bag limits and seasonal closures.

North Atlantic Right Whales

North Atlantic right whales migrate during winter months (November 15 - April 15) to the coastal waters of Georgia and Florida, which is the only known calving area for these critically endangered whales. Adult right whales can be 55 feet long and calves are 15-20 feet. They have black skin; broad, paddle-shaped flippers; no dorsal fin on their back; and produce a V-shaped blow. Adults have light colored patches of wart-like raised skin on their heads.



If you see a right whale(s), slow your vessel and do not attempt to approach. Cautiously move 500 yards or more away from the whale(s). Call FWC's Wildlife Alert Hotline, 1-888-404-FWCC (3922) as soon as possible to report the location or GPS position of your sighting. If you sight an entangled or injured right whale, contact the U.S. Coast Guard on VHF channel 16 to report the sighting time, GPS position or physical location of the whale, direction of the whale's movement, and a description of the animal's entanglement or injury. If possible, maintain visual contact with the entangled or injured whale until help arrives.



Eagles And Other Raptors: Bald eagles, ospreys, as well as hawks and falcons are found in this region. Nests of eagles and ospreys are usually near water, built high in trees.



Some important bird sites of Nassau/Duval counties:

Nassau Sound: On its north and south side, the beaches of Amelia Island and Little Talbot Island state parks offer nesting habitat for least terns, Wilson's plovers, black skimmers, gull-billed terns and American oystercatchers. Please respect posted nesting areas and encourage others to do so. Dogs are not allowed on the state parks' beaches. Some small islands in Nassau Sound are designated Critical Wildlife Areas and landing is discouraged during nesting season, April through August.

Intracoastal Waterway, Tidal Creeks And Marsh Sloughs: American oystercatchers nest on low sandbars and oyster rakes. Avoid high wakes and stay at a distance from marked nesting areas and from vocal birds. Trees along the water can harbor heron and egret rookeries. Admire the spectacle of these showy birds from a distance: if a young bird is scared and falls off the nest, the parents will not feed it and it will die.

Fort George Inlet: On its south side, the dunes of Huguenot Memorial Park harbor the largest colony of nesting royal terns and laughing gulls on Florida's Atlantic coast. The flats and bars in the inlet are a known stopover site for migrating red knots, where they feed on coquina clams. You can help these birds achieve a successful migration by staying at a distance from flocks of birds.

For more information about birds of Nassau and Duval Counties, visit duvalaudubon.org. The Great Florida Birding Trail (floridabirdingtrail.com) has an extensive list of location to view birds in Nassau and Duval Counties, as well as the rest of Florida.

Bird art appears with gracious permission of the artist, Diane Pierce-Huxtable, "Edge of the Wild," Lake Wales, Florida.

Practice Safe Boating

- Plan your route in advance. Use the appropriate nautical charts to reference depth, bridge clearance, and other natural and man-made features before you leave.
- File a float plan and leave it with a reliable person at a marina or elsewhere. Include a description of the vessel, radio and safety equipment on board, planned stops, names of passengers, and an estimated time of returning from voyage. Ask that person to notify the Coast Guard or other local authority if you do not return as scheduled.
- Wear a personal flotation device (PFD). Per the United States Coast Guard boating safety guidelines, a boat must have a U.S. Coast Guard-approved Type I, II, III, or V life jacket for each person aboard. Boats 16 feet and over must have at least one Type IV throwable device as well. Children under the age of six must wear a USCG-approved Type I, II or III personal flotation device while onboard a vessel under 26 feet in length while the vessel is underway. Adult-sized life jackets will not work for children.
- Observe and obey posted speed limits. When in doubt, slow down.
- Watch your wake. Remember, you are responsible for damage caused by your vessel's wake. Large wakes can overturn smaller vessels and damage boats which are moored at a dock.
- Know your navigation rules. Use the boating rules of the road to avoid accidents.
- Don't drink alcohol and operate a boat.
- Be sure your navigation lights are working and your boat is visible at night and in poor weather conditions.
- Make sure your craft has the required safety equipment on board. Visit MyFWC.com for more information.
- VHF marine radios are recommended and should monitor channel 16 at all times (when not in use) to summon help in the event of an emergency. Marine weather can also be monitored and checked on a VHF marine radio.

Show Your Care About the Marine Environment

Residents and visitors alike share the waters of coastal Nassau and Duval counties with a magnificent array of birds and marine animals, including species that are threatened or endangered. Boaters should be on the lookout for these creatures and take special care to protect them and to preserve their habitats.

Always stop trash carefully for disposal on shore, and make it a policy to pick up plastics and other marine debris encountered while underway. Carelessly discarded trash can trap and kill birds, fish, and other marine animals.

When fueling boats, be especially careful not to "top off" the tank, allowing gas to spill. Small toxic spills add up quickly. Sewage from holding tanks should be discarded only at approved pump-out stations and marinas.



The Monofilament Recovery and Recycling Program (MRRP) is a statewide effort to educate the public on the problems caused by monofilament line left in the environment, to encourage recycling through a network of line-recycling bins and drop-off locations, and to conduct volunteer monofilament line cleanup events.

Outdoor recycling bins constructed of PVC are mounted at many piers, boat ramps, and marinas throughout the state. Indoor recycling bins are hosted by tackle shops and department stores. To locate fishing line recycling bins in your area, please visit www.fishinglinerecycling.org.



Share the Nautical Road

Pleasure boats share river waters with modern ships that haul cargo from all over the world. While quite large in terms of the square miles it covers, the St. Johns River is also very shallow, which restricts navigation for larger vessels. The average ship that calls on Jacksonville is longer than two football fields. A ship this size has limited ability to maneuver and stop in the narrow confines of Jacksonville's shipping channels. Most require a mile or more to come to a complete stop. The St. Johns Bar Pilot Association needs your cooperation to keep everyone safe:

- Stay clear of the main ship channel when large ships are approaching. Views from large ships may be obstructed up to three-fourths of a mile away.
- In case of emergency, use VHF Channel 13 for bridge-to-bridge communication with commercial ships. Keep transmissions short and simple, and never tie up the frequency.
- Exercise caution when boating around ships or tugs involved in docking. Their prop-wash can easily capsize small vessels or send them into the path of oncoming traffic.
- Be sure that your boat is visible at night and poor weather conditions.



Security and Safety Zones

The U. S. Coast Guard has established moving and fixed security and safety zones around commercial vessels and facilities along the St. Johns River. This includes all tank vessels that handle or transport hazardous cargo, passenger vessels and terminals, Naval and Coast Guard vessels and bases, and Naval Air Station Jacksonville.

Stop the Release and Spread of Nonnative Species

Many nonnative aquatic species are finding their way into Florida's coastal waters. When new animals and plants are introduced into an area, they often cannot survive there and die. However, if they can survive in the new area, they can begin to compete with native species and may end up displacing native plants and animals. This can result in major changes to the environment.

If you have unwanted aquarium plants or animals, try to find them a new home. Some pet stores may accept them, or they can be turned in at FWC Nonnative Pet Amnesty Day events. Unwanted aquarium plants can also be placed in plastic bags and disposed of into garbage bins.

For more information about nonnative species, please visit MyFWC.com/nonnatives/ or visit <http://nas.er.usgs.gov/>.



Plecostomus (top) and brown hoplo (bottom). Fish images © Diane Rome Peebles