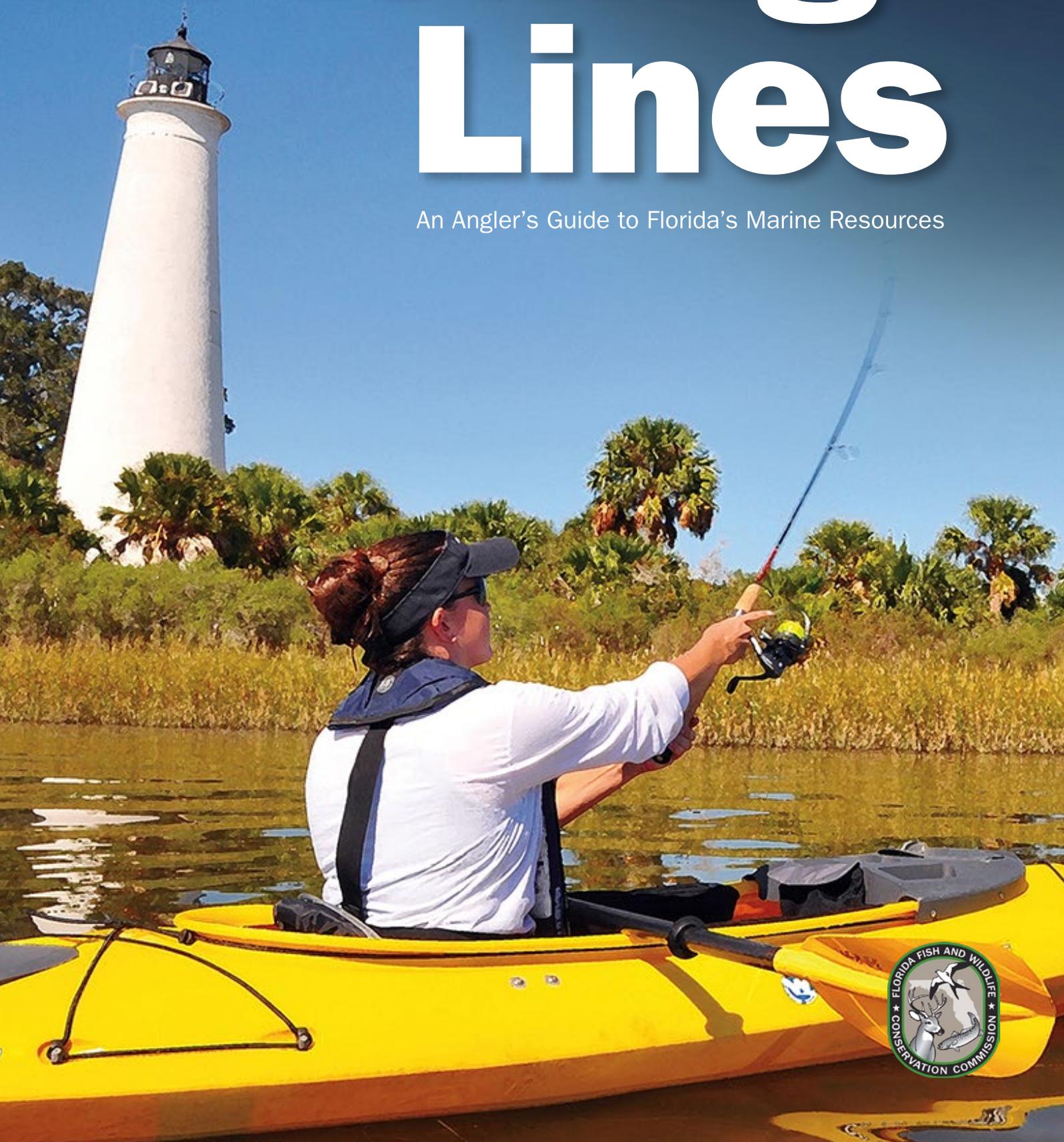


# Fishing Lines

An Angler's Guide to Florida's Marine Resources



This guide is intended as an educational tool.



Information about Florida's marine resources is provided so that you can get the most out of Florida's vast recreational fishing opportunities and learn about the importance of conserving the amazing array of fish and wildlife that call Florida home.

This publication includes articles about saltwater fishing, important habitats, catch-and-release techniques, outreach and education programs, fisheries management and more.

Due to an extensive coastline and rich diversity of species, saltwater fish identification in Florida can sometimes be a daunting task. This identification guide contains important information for 145 commonly encountered saltwater species to facilitate proper identification and a better understanding of Florida's fishes. Information such as distinguishing features, sizes, habitats, similar species and notes are provided for each listing to enhance your Florida saltwater experience.

For a copy of *Fishing Lines*, call (850) 487-0554 or go online to [MyFWC.com/Fishing](http://MyFWC.com/Fishing) and click on "Saltwater Fishing" and "Saltwater Publications."

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Illustrations in the fish identification section are copyrighted by Diane Rome Peebles and Dawn Witherington. This free publication is produced by the Florida Fish and Wildlife Conservation Commission (FWC), Division of Marine Fisheries Management, Outreach and Education Program with funding from Florida recreational saltwater fishing licenses and the Federal Aid in Sport Fish Restoration Program.

FWC strives to ensure information in this field guide is accurate, but assumes no liability for any errors that occur in this publication.

On the cover: Photo by Tim Donovan, FWC. Kayak angler fishes in Apalachee Bay near the St. Marks Lighthouse.

## We want to hear from you!

Please visit [MyFWC.com/FishingLines](http://MyFWC.com/FishingLines) to complete a survey about this publication. Responses gathered will be used to improve future editions of *Fishing Lines*.



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# A Letter From the Director

Greetings Anglers,

I'm so glad you've picked up the newly-remodeled version of the Florida Fish and Wildlife Conservation Commission's *Fishing Lines: An Angler's Guide to Florida's Marine Resources*.

The new *Fishing Lines* has several changes we think you will find useful. This publication includes information on saltwater fishing, catch-and-release techniques, Florida's marine habitats, conservation efforts, marine fisheries programs and an updated saltwater fish identification guide.

We all want Florida's precious marine fisheries to thrive for years to come. FWC is constantly working to improve your fishing experience, but it is ultimately up to you to help ensure that future generations will be able to enjoy the beauty and excitement of fishing in Florida's unique ecosystems. Each one of us can take simple steps to do our part in conserving fisheries for the future.

A basic way to conserve fisheries is to become familiar with the fishing regulations and commonly caught species in your area. You can also learn how to properly handle fish that will be released to give them the best possible chance of survival. Be sure to keep trash out of the water and dispose of any fishing line and other garbage in a proper receptacle ashore. Finally, be sure to follow safe boating practices, become familiar with waterways, proceed carefully through seagrass beds and always abide by the law.

Keep reading to learn more about how you can positively impact our treasured fisheries. By following these simple steps, you can help conserve Florida's marine resources for generations to come.

Have an idea on how to improve our communication with you? Share it by emailing [Marine@MyFWC.com](mailto:Marine@MyFWC.com) or calling (850) 487-0554.

Tight Lines,

*Jessica McCawley*

Director, Division of Marine Fisheries Management  
Florida Fish and Wildlife Conservation Commission

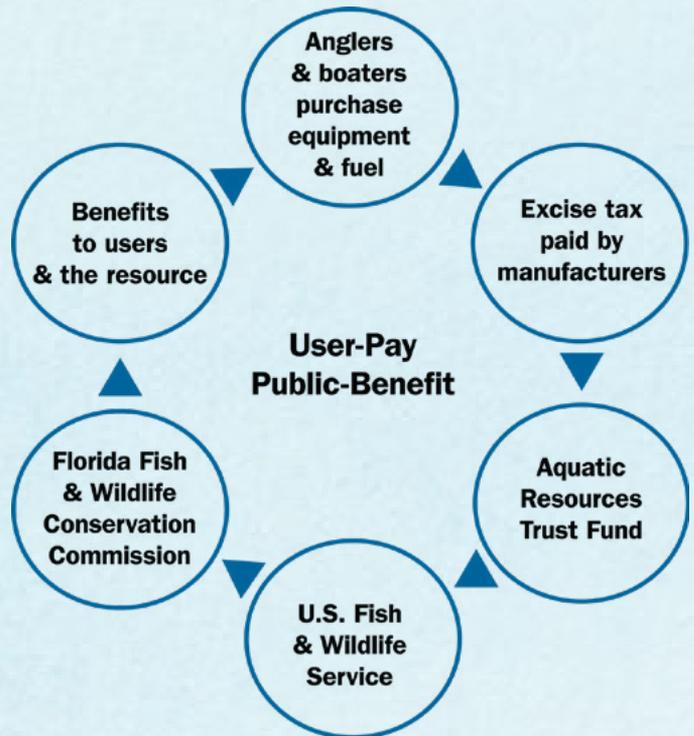


# Wildlife and Sport Fish Restoration Program

## How You Participate

The Wildlife and Sport Fish Restoration Program, managed by the U.S. Fish and Wildlife Service (USFWS), is one of the most successful conservation efforts in our nation's history. This program provides funding used to benefit fish and wildlife resources while enhancing recreational fishing and hunting opportunities across the country. Funding for the program is derived from a portion of the sale of motorboat and small engine fuels as well as equipment purchased by anglers, boaters, hunters, archers and recreational shooters.

Funds collected go to federal accounts used specifically for wildlife and sport fish conservation. The USFWS redistributes the funds to states based on the number of resident licensed recreational anglers and hunters, as well as the land and water area of the state. When states receive funding, they are required to make a 25% matching contribution to grant funds. In Florida, funds are managed by the Florida Fish and Wildlife Conservation Commission (FWC).



*This user-pay, public-benefit cycle of money flow is all part of the Sport Fish Restoration Program*

## Sport Fish Restoration

Every time you purchase fishing equipment or fuel for your boat, you are contributing to fisheries conservation. Even better, the small contribution you make with each purchase translates into millions of dollars toward restoration and management of fisheries each year. In fact, with your help, Florida receives around \$13 million annually to support both freshwater and saltwater fisheries resources.



*These logos indicate that a portion of your purchase was used to fund Wildlife and Sport Fish Restoration projects.*

## How You Benefit

*Increased fishing and boating opportunities provided through:*

### Saltwater Projects – about \$6.5 million annually

- **Angler Outreach:** Interacts with the public to provide information, answer questions, promote fisheries conservation and collect feedback from anglers.
- **Aquatic Education:** Provides hands-on opportunities to learn about responsible angling, basic fishing skills and marine conservation.
- **Marine Fisheries Research:** Researchers gather life history, genetics, health and other biological data used to develop fisheries management strategies.
- **Stock Enhancement Research:** Researchers develop efficient methods of raising fish species to enhance natural populations.
- **Artificial Reefs:** There are over 3,100 artificial reefs in Florida, with about 100 new reefs constructed annually, providing enhanced fishing and diving opportunities as well as tools for fisheries research.

### Boating Access – 15% of annual funds

- Maintains existing public boat ramps and funds construction of new boat ramps, marinas and other public launching facilities throughout Florida.

### Publications

- Boating and angling guide pamphlets, fish identification posters, this field guide and more.
- Available to the public free-of-charge.
- To request publications, call (850) 487-0554 or visit [MyFWC.com/Fishing](http://MyFWC.com/Fishing) and click on “Saltwater Fishing” and “Saltwater Publications.”



For more information on the Sport Fish Restoration Program, visit [MyFWC.com/Fishing](http://MyFWC.com/Fishing) and click on “Sport Fish Restoration.”

# Marine Fisheries Outreach and Education

Using funds from Sport Fish Restoration (SFR) grants and the sale of saltwater fishing licenses, the FWC's Division of Marine Fisheries Management, Outreach and Education Subsection promotes the conservation of Florida's marine resources by educating anglers about catch-and-release, habitat conservation, ethical angling, environmental stewardship, fisheries research and the public's role in fisheries management. This work is achieved through a variety of statewide programs, several of which are listed below.

## Aquatic Education Programs



**Kids' Fishing Clinics:** Statewide events that teach youth the vulnerability of Florida's marine resources, demonstrate basic fishing skills at hands-on stations and provide a positive fishing experience.

**Women's Fishing Clinics:** Statewide events that teach women basic saltwater fishing skills through hands-on skill stations, explain the role of anglers in fisheries management, demonstrate fisheries conservation techniques and offer an on-site fishing opportunity.



**Aquatic Species Collecting Workshops:** Partnership with the Florida Marine Science Educators Association (FMSEA) to conduct workshops for educators that teach best-management practices for collecting and holding aquatic organisms used for educational purposes.

**Marine Field Activities Program:** Program designed to introduce teachers and students to field activities that scientists utilize to collect marine resource information used to manage marine fisheries.



## Angler Outreach Programs

**Angler Interactions:** Staff engage anglers at fishing shows, outdoor events and club meetings; disseminate fisheries information; answer questions; promote habitat conservation, resource stewardship and the Federal Aid in Sport Fish Restoration Program; and explain the role of anglers in fisheries management.



**Hatchery Outreach:** Informs saltwater anglers of the role of stock enhancement in managing Florida's marine resources and how SFR funding contributes. Hatchery fishing events provide the public with an opportunity to catch marine sport fish, give instructions on basic fishing skills and teach participants to be ethical anglers and stewards of natural resources.

**Saltwater Angler Recognition Programs:** Entice anglers to target multiple species and learn more about Florida's marine resources while fishing. Participants provide photos of their catch and receive recognition for their achievements.

**Grand Slams** - Win prizes for catching three specific fish species in a 24-hour period; there are nine Grand Slam categories

**Saltwater Fish Life List** - Challenge to catch as many different fish species as possible

**Reel Big Fish** - Recognizes anglers for extraordinarily-sized catches



**Florida Saltwater Fishing Records:** Partnership with the International Game Fish Association to present awards to anglers for catching record-sized fish, including 76 marine species in both conventional and fly fishing categories.



To learn more about FWC's Saltwater Angler Recognition Programs, visit [MyFWC.com/AnglerRecognition](https://myfwc.com/anglerrecognition). For more information about Marine Fisheries Outreach and Education Programs, please contact the Division of Marine Fisheries Management at (850) 487-0554.

# Where Fish Live

## Florida's Diverse Marine Habitats

Florida's 8,426 miles of tidal shoreline are home to a host of varying marine communities and an assortment of diverse fishing opportunities. From the shores of Fernandina Beach on the Atlantic, south to the warm waters of the Keys and over to the Gulf beaches of Pensacola, there are a number of different habitats creating a network of abundant productivity.

### Beach and Surf

A sandy beach under constant siege from storm-stirred seas may seem unwelcoming at first glance; however, this environment typically boasts good water quality and plenty of nutrients from seaweed washed up on the shore. For hardy sea creatures, this surf habitat can in fact prove quite hospitable. Florida pompano, kingfish, bluefish, Spanish and king mackerel, cobia, jacks, tarpon and other prize marine fish can all be found off Florida's beaches. Beach piers are also a great place to catch a variety of fish species. Fish are often trapped in troughs between sandbars or reefs and the beach. Cast a baited surf rig toward these areas for a chance to catch fish as they swim outward from the troughs.



FWC/Tim Donovan

### Estuaries

Estuaries are where freshwater meets and mixes with the sea. Estuaries are dynamic systems with waters that can range from very salty to almost fresh. They rank as one of the most productive ecosystems in nature. More than 70 percent of Florida's most important recreational and commercial marine species spend a portion of their lives in these sheltered and fertile waters. That's why estuaries are sometimes called "the cradle of the ocean." Estuarine habitats include salt marshes, seagrass beds, mangroves, mud and sandy bottom, oyster bars, exposed rock and algae beds.



FWC/Melissa Crouch

### Salt Marsh

Salt marshes are grassy coastal wetlands, rich in marine life. They are also called tidal marshes since they are heavily influenced by tidal movements. Mullet, red drum, grouper and other fishes are nurtured in salt marshes as juveniles, but move offshore as adults to spawn. As their eggs develop into larvae, they are transported into estuarine communities such as salt marshes by tides and currents.

In addition to providing nursery habitat, salt marsh plants have extensive root systems that enable them to withstand storm surges and limit damage to upland areas. Salt marshes also serve as filters, absorbing or trapping pollutants from upland development and reducing the amount of contaminants that enter estuarine waters.

When fishing salt marshes, look for spots that have bottom structure like shells, oysters or rocks. These areas tend to concentrate fish by providing a place to feed and hide. Look and listen for signs of fish, such as birds diving, bait leaping and fish breaking the surface or creating wakes.



FWC/Melissa Crouch

## Seagrass

Seagrasses are underwater flowering plants that live in Florida's protected bays, lagoons and other shallow coastal waters. Turtle, manatee and shoal seagrass are the three most common seagrasses in Florida.

Seagrass beds are rich with biological diversity and provide many benefits to the wildlife and people of Florida. They provide shelter for a large variety of juvenile fish and shellfish such as gag grouper and bay scallops. They are also a major food source for organisms ranging from manatees and sea turtles to pinfish and sea urchins.

Seagrasses perform many other important ecological functions as well, such as binding sediments to prevent erosion, reducing turbulence on the bottom and absorbing excess nutrients in cloudy water. In the absence of seagrass, water would begin to silt and become cloudy, preventing sunlight from penetrating further into the water column. Seagrasses are key in keeping Florida's saltwater estuaries clear and beautiful.

Because of their vast biodiversity, seagrass beds provide extremely productive fishing opportunities. Several species of seatrout, grunt, snapper and grouper spend time in these habitats and can be caught by presenting bait when drifting over seagrass beds. When fishing near seagrass, carefully pole through shallow areas to avoid causing prop scars that can greatly damage these fragile habitats. By protecting, conserving, and restoring seagrasses, we can help preserve our marine fisheries.



FWC/Kyle Miller

## Mangroves

Mangroves are another of Florida's most important coastal habitats. Three types of mangrove trees are found in the state: red, black and white. They are a crucial part of south Florida's coastal ecosystem, providing nesting sites for shore birds and shelter for juvenile fish, crustaceans and shellfish.

Red mangroves are typically found closest to the water and are easily identified by their large arching tangle of roots called "prop roots." Black mangroves usually occur slightly more landward in shallower water and can be identified by numerous pencil-like root protrusions (pneumatophores) around the base of the tree's trunk. White mangroves can be found farthest landward in the intertidal elevations and usually do not have any visible root systems.



Mangroves are an important component of maintaining the health of Florida's coasts. They trap and cycle pollutants, chemical elements and inorganic nutrients and their roots provide attachment surfaces for filter feeders such as barnacles and oysters. In addition, mangroves provide the two most basic requirements for animal survival: food and shelter. The food comes from rich "marine compost" produced when microorganisms consume animal droppings and plant litter that falls from mangrove canopies into the water. Shelter is provided by tangled prop roots and pneumatophores that extend below the water line.

Sight fishing for snook, tarpon and redfish is popular in south Florida's mangrove habitats. Anglers can pole through shallow areas, perfectly placing casts toward fish sighted from tall poling platforms on flats boats. Fish can also be caught by casting bait into areas along mangrove shorelines where birds are feeding or branches are overhanging, creating a hiding place for favorite baitfish.

## Open Ocean

"Bluewater," a term often used to describe the open ocean, can be found off the coast of Florida in both the Gulf of Mexico and Atlantic Ocean, typically near continental shelf edges. In the Gulf of Mexico, these shelf edges come much closer to land near Pensacola and Destin than in the Big Bend and west coast areas. In the Atlantic Ocean off Florida's east coast, the shelf comes within miles of Fort Lauderdale then gradually moves father from shore as it continues northward.



The north-flowing Gulf Stream originates in the southern Gulf of Mexico, moves north through the Florida Straits, brushes near the coast of Palm Beach, follows the U.S. Atlantic coast north and then swings eastward toward Europe. The Gulf Stream has an important influence on continental shelf edge areas and other habitats of Florida's east coast by moderating temperatures and creating conditions under which hundreds of marine species thrive.

Bluewater areas and the Gulf Stream provide a range of temperatures that are comfortable

for virtually all offshore fish, including billfish, tuna, dolphinfish, wahoo, mackerel and amberjack. Look for visible signs of fish, such as birds hovering or diving into the water and surface commotion that might indicate feeding. Fish are attracted to debris and patches of floating sargassum that collect along current edges and in areas where currents mix. Eddies that break off from currents are also worth investigating, as are color changes or edges of currents, where two different bodies of water meet.



## Coral Reefs

The extensive Florida Reef Tract spans more than 330 miles from the Dry Tortugas in Monroe County (west of Key West) to the St. Lucie Inlet in Martin County. More than 6,000 species of marine organisms are found on these coral reefs.



Some people mistake corals for rocks or plants, but they are actually living animals. A coral colony is made up of hundreds of individual animals called polyps that extract minerals from seawater to create a limestone skeleton, similar to our bones. Corals are among the slowest-growing organisms on earth and most grow at a rate of just two millimeters per year. It can take more than 13 years for a coral colony to grow one inch! This slow growth rate is why it is so important to protect these valuable and highly vulnerable resources from threats like anchor damage and water pollution.

A myriad of fish species are found among coral reef structures and crevices, including permit, amberjack, snapper, grouper, mackerel, barracuda and sharks. Extreme care must be taken when fishing near reefs to avoid damaging the slow-growing coral polyps that create these important ecosystems. Never anchor on coral reefs, but instead drift-fish or tie your boat to mooring buoys.

The State of Florida is committed to conserving the Florida Reef Tract. To learn more, visit [DEP.State.FL.US/Coastal/Programs/Coral](http://DEP.State.FL.US/Coastal/Programs/Coral).

## Artificial Reefs

The FWC Artificial Reef Program is one of the most active and diverse programs of its kind in the United States. The more than 3,100 artificial reefs in state and federal waters have been built to provide recreational fishing and diving enhancement, socioeconomic benefits for coastal communities, research opportunities to address reef ecology questions and structural habitat for reef-associated fishes and invertebrates.

Because of Florida's extensive coastline and statewide local involvement in reef activities, the FWC Artificial Reef Program is a cooperative partnership with local coastal governments. Many of the 70-100 public artificial reefs constructed annually are built using a combination of federal, state and private funds.

Artificial reefs primarily consist of concrete and steel materials and can be designed to achieve specific fishery management objectives, including supporting the sustainability of Florida's marine fish communities. Several species can be caught over or near artificial reefs, including grouper, snapper, mackerel, jacks and barracuda.

Drop a weighted rig with a circle hook close to the bottom while drifting over the reef to draw fish up to your bait. Avoid trolling over reefs since gear can become caught, damaging important structure.

More information about Florida's artificial reefs and reef locations can be found online at [MyFWC.com/Conservation](http://MyFWC.com/Conservation) by clicking on "Saltwater" and "Artificial Reefs." Many counties also publish their own directories for local artificial reef sites. For more information, call the Division of Marine Fisheries Management at (850) 487-0554.



Photo by Coral Cox

# Catch and Release

## Releasing Caught Fish Helps Ensure Sustainability

Fishing is a favorite pastime of both Florida residents and visitors. Fishing efforts in Florida have increased dramatically over the past decade, making it more important than ever to practice effective catch-and-release techniques to reduce fishing impacts.

The majority of fishing trips in Florida result in some fish being caught and then released. Regulated species, such as red drum, are released if they are outside the slot limit, either too small or too large. Tarpon and bonefish are examples of fisheries that are strictly catch-and-release only. Some anglers even fish with the intention of releasing everything they catch. Fish are released for a variety of reasons and increasing a fish's chance of survival after it is released will help ensure that fish populations remain sustainable for future generations.

## Causes of Angling Mortality in Fish

The most common causes of post-release mortality are physiological stress on the fish resulting from struggle during capture, injuries caused by the hook and mishandling of the fish by the angler. There are, however, many techniques that anglers can use to increase the chance of survival when a fish is released. If you catch a fish that you do not intend to keep or that cannot be harvested, use the following steps to increase the chances that the fish you release will survive.



*These anglers demonstrate proper fish handling technique.*

**Strive for 100% survival of the fish you release - a fish is too valuable to catch only once!**

## Know Before You Go

- Decide beforehand which species and sizes you intend to keep and immediately release all others.
- Do not engage in a prolonged debate over whether or not to release a fish after it has been landed.
- When in doubt, throw it out
- Make sure you can identify common fish species in your area, specifically the fish you are targeting. Have a resource, such as this guide, to help you identify unfamiliar fish.
- Always have knowledge of current fishing regulations, fish measurement techniques, size limits, bag limits and seasons to help minimize handling time when determining whether a fish can be harvested (visit [MyFWC.com/Fishing](https://www.fwc.com/Fishing) to view updated regulations).



FWC/Tim Donovan

## Tackle

- Use tackle heavy enough to bring the fish in quickly.
- Using tackle that is too light exhausts the fish and depletes its energy reserves, which can put the fish at risk of death by predation and physiological stress.



FWC/Tim Donovan

## Hooks

- Use non-offset circle hooks to reduce the chance of gut-hooking a fish. Circle hooks are designed to catch in the corner of a fish's mouth, reduce internal harm, decrease dehooking time and increase the likelihood of hook removal.



1 - Use circle hooks (left) rather than J-hooks (right) or kahle hooks.

2 - Offset vs Nonoffset: Use non-offset circle hooks (left) when fishing with natural bait to avoid gut-hooking a fish.

- Avoid using multi-hook rigs or lures. If you do use them, remove one or two of the hooks. When using treble hooks, remove one or more of the points and flatten the remaining barbs.



- Using barbless hooks, or hooks with a flattened barb, is one of the most important things an angler can do to minimize internal damage to the fish and make release quicker and easier.



Jig-head with/without barb: Bend the barb down on fishing hooks (right).

- If a hook cannot be removed, cut the line as close to the hook as possible.
- Use non-stainless steel hooks, as they will rust and deteriorate out of the fish over time.



Hook images courtesy of Florida Sea Grant

## Dehooking Tools

- Dehooking tools allow the hook to be secured and the barb shielded without re-engaging when the hook is removed from a fish.
- These tools come in a variety of shapes and sizes; even a pair of needle-nose pliers is considered a dehooking tool.
- Keep these tools in a convenient place so fish may be released quickly.
- If a fish swallows the hook, it is better to cut the line as close as possible to the hook instead of trying to remove it.



## Handling Fish

- Leave fish in the water during release and when taking photos, if possible.
- If a fish must be removed from the water, use wet hands to reduce the amount of protective slime removed from the fish. The slime protects the fish from infection and aids in movement.
- A knotless, rubber-coated landing net is ideal when handling a fish since it supports the fish's body weight and protects the fish's slime layer.
- A landing tool that grips the jaw can also be used to help control fish.
- If you want to take a picture of your catch, hold the fish horizontally and support its weight with both hands to decrease internal damage.
- Always avoid lifting a fish by the gills, eyes or tail if it is to be released.
- Only gaff a fish when you intend to keep it.
- In general, handle the fish as little as possible and release it as quickly as possible.



## Reviving Fish

- If the fish doesn't immediately swim away and is lethargic or erratic, some resuscitation may be needed.
- Revive exhausted but otherwise healthy fish by first placing the fish in the water, one hand under the belly and the other hand holding the bottom lip or tail.
- If the vessel is anchored, point the fish head-first into the current to gently force water through the mouth and over the gills.
- If the vessel is not anchored or there isn't a current, hold the fish in the water alongside the boat and gently nudge the boat into gear, forcing water through the gills of the fish.
- If you are fishing from a non-motorized vessel such as a kayak, place the fish in the water, hold its front lip (use a gripping tool if the fish has teeth) and move the fish in a "figure-eight" motion.
- Never move fish backward in the water, since water will not flow properly through the gills.



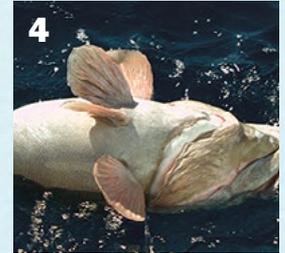
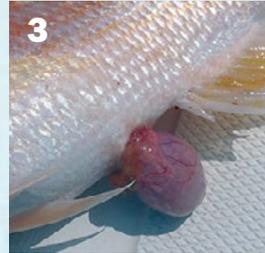
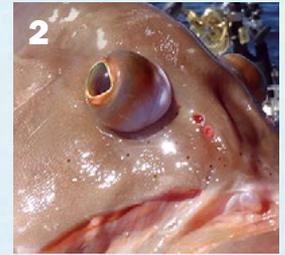
## Deep Water Release

- When fish are pulled up from deep water (typically depths greater than 50 feet), the reduced atmospheric pressure causes gases in the swim bladder to expand, resulting in a condition called barotrauma.
- Fish suffering from barotrauma are less likely to swim properly when released and may not survive due to exposure or predation.

### Signs of barotrauma:

1. Stomach protruding from mouth
2. Bulging eyes
3. Distended intestines
4. Bloated belly

- If a fish needs to be released and shows any or all of these signs, venting tools and descending devices may increase the fish's chance of survival after release.



Images courtesy of Florida Sea Grant



**Venting tools:** Sharpened, hollow instruments (such as a hypodermic syringe with the plunger removed) that help release trapped gases from the swim bladder.

- Insert a hollow-tipped needle into the fish at a 45-degree angle, under a scale approximately 1 to 2 inches from the base of the pectoral fin, just deep enough to release trapped gases. The belly will visibly deflate and you should be able to hear the air escaping.

**Descending devices:** Used as an alternative to venting by reversing the effects of barotrauma without puncturing the body cavity.

- Descends fish back down to a depth where increased pressure from the water will recompress swim bladder gases, allowing the fish to swim away.
- Many different styles of descending devices can be purchased or made at home.



Pressurized release tool  
(courtesy of Florida  
Sea Grant)



Weighted milk crate



Wire hook



Weighted spring release  
tool

## Releasing Large Fish

- Large fish such as billfish, tunas, sharks and tarpon should be brought alongside the boat as quickly as possible.
- Do not bring large fish aboard – they are dangerous to both themselves and the crew.
- To reduce physiological stress and damage to both internal and external organs, do not drag a large fish over the gunwale or side of the boat.



## Ethical Angling

Many of our most popular recreationally targeted species are regulated and sometimes must be returned to the water. Most anglers would agree that anything we can do to minimize harm to fish being released will benefit the resource in the long term. However, we don't want to discourage the fun and excitement of catching fish and documenting the experience, whether for records or the personal satisfaction that comes from sharing the experience with friends and family. That's why FWC wants to inform the public about safe fish handling practices and the harm that can be caused to fish that are handled roughly or held out of the water too long.

As the number of anglers continues to grow, it becomes more important than ever to release, in the best condition possible, those fish that cannot be harvested. The next angler will thank you for it.

To learn more about proper fish handling methods, visit [MyFWC.com/Fishing](https://myfwc.com/fishing) and click on "Saltwater," "Recreational Regulations" and "Fish Handling."



Jerry McBride

# It's in Your Hands

Stewardship of Florida's vast marine resources is important to conserve our fisheries so future generations can continue to enjoy what Florida has to offer. Ethical fishing practices and marine resource management can help maintain healthy fish populations and enhance fishing opportunities.

## How to Contribute to Marine Fisheries Management

- Learn the fish common to your area and carry an identification guide.
  - When in doubt, throw it out.
- Learn regulations for fish you target.
  - View regulations at [MyFWC.com/Fishing](http://MyFWC.com/Fishing).
- Practice effective fish handling and release techniques.
  - Learn more about catch and release on page 10.
- Limit your take, don't take your limit.
- Protect important habitats and wildlife:
  - Properly dispose of trash, chemicals, oils and other hazardous materials.
  - Use charts to learn waterways, tie to mooring buoys and pole through shallow seagrass beds.
  - Set anchors securely so they do not drag.
- Do not feed wild animals or marine life:
  - They may lose their fear of humans and associate humans with food.
- Recycle fishing line and dispose of trash in a proper receptacle ashore:
  - Cut non-monofilament fishing line into small sections before disposal to avoid entangling wildlife.



## Monofilament Recovery and Recycling Program (MRRP)

- Statewide network of fishing line recycling bins and drop-off locations to recycle monofilament.
- Removes harmful monofilament from the environment and allows this material to be recycled.
- For more information and to find a drop-off location, visit [MRRP.MyFWC.com](http://MRRP.MyFWC.com).



## Why are Fishing Regulations Needed?

Regulations are set by fisheries managers based on scientific data and public input to help maintain fish populations for the future. Without law-abiding anglers, highly valued species such as red drum and spotted seatrout would not maintain sustainable populations.

### Common types of fishing regulations:

- **Bag Limit** – Sets a limit on the number of fish harvested at one time.
- **Size Limit** – Protects fish so they can reach a size that allows them to spawn.
- **Slot Limit** – Includes a lower size limit and an upper size limit, which allows fish to reach maturity before being harvested and protects large females that produce massive numbers of viable eggs.
- **Season** – Protects fish during spawning or limits the number of fish taken in heavily fished waters.

## Citizen Science

There are numerous ways anglers can act as “citizen scientists” to help researchers build knowledge about marine resources. Here are just a few ways you can get involved:

- **Report Tagged Fish** – Several research projects release tagged fish into Florida waters. If you catch a tagged fish, be sure to call the Angler Tag Return Hotline at 800-367-4461.
- **Survey Participation** – The FWC may conduct surveys to gain more information on a specific subject area. Angler participation in these questionnaires is extremely beneficial to resource management.
- **Volunteer Programs** – Make a positive impact by assisting with activities such as education and outreach, biological sampling and monitoring, habitat restoration, laboratory work and many others.
- **Wildlife Alert** – If you suspect a fish, wildlife, boating or environmental law violation, report it to the FWC Wildlife Alert Reward Program by calling 888-404-FWCC (3922).
- **Fish Kill Hotline** – Report fish kills by calling 800-636-0511.
- For more information on how you can become a part of FWC’s programs, visit [MyFWC.com/Get-Involved](https://www.myfwc.com/Get-Involved).

## Ethical Angling

Florida’s anglers should be proud of their conservation efforts, which have helped restore or sustain several valuable fisheries including snook, red drum and spotted seatrout. As the number of anglers continues to grow, it becomes more important than ever to be a marine resource steward. By respecting the marine environment and all of its components, we can help ensure good fishing for generations to come. After all, respect for nature and for other anglers is what fishing is all about.

To learn more about how you can conserve Florida’s important fisheries, visit [MyFWC.com/Conservation](https://www.myfwc.com/Conservation) and click on “Saltwater.”



# Saltwater Fishing Basics

## Things to Know Before You Go

Anglers should be prepared for each fishing trip with important details such as the fishing location, supplies needed for the trip, methods for rigging tackle, common species caught, regulations for targeted species and proper catch-and-release techniques. The following pages include resources you can use to help prepare for any fishing trip. Be sure to pack this guide in your tackle box to use as a reference during your time on the water.



## Saltwater Fishing Checklist

### Preparation:

- Fishing license and appropriate permits
- Float plan (*left with a reliable person*)
- Check weather
- Tide chart
- Fish identification guide
- Regulations
- Update electronics (*charts/maps/locators*)
- Check all batteries
- Check motor and pumps
- Check trailer and safety chains
- Gas up boat
- Prepare tackle and fishing equipment
- Check fishing line and replace if worn

### Boat Equipment:

- Anchor rope and anchor
- Bailer or bilge pump
- Drain plug and a spare plug
- Fender rope and fenders
- Gas and oil
- Navigation lights and bulbs
- Pole or paddle
- Spotlight
- Trolling motor
- Deck lines
- Drift anchor

### Health/Safety:

- Bug spray
- Sunscreen
- Cooler and ice
- Food
- Water

### Clothing:

- Hat (*wide-brimmed*)
- Buff or bandanna
- Polarized sunglasses
- Appropriate clothing and footwear
- Rain gear

### Electronics:

- 2-way radio (VHF Radio)
- GPS
- Fish finder
- Cell phone
- Camera

### Fishing Equipment:

- Buckets
- Cast net
- Bait and livewell
- Rods and reels
- Fishing line and leader line
- Rubber-coated knotless landing net
- Tackle box
- Circle hooks (*if fishing w/natural bait*)
- Pliers or line cutters

- Lures
- Sinkers
- Swivels
- Lip grip
- Dehooking tools
- Venting or descending devices (*if fishing for deep-water species*)

- Measuring device
- Towel
- Fish sling
- Scale
- Fillet knife

### Safety Gear:

- First-aid kit
- Flares
- Flashlight
- Personal flotation devices (*for each person*)
- Audible signaling device
- Fire extinguisher, if required
- Throw cushion or ring, if required
- Dive flag (*if diving or snorkeling*)
- EPIRB (*Emergency Position Indicating Radio Beacon*)

## Rods and Reels

**Spinning:** Designed for use in either freshwater or saltwater. Available in a wide range of sizes, depending on where you want to use them. These rods and reels have a bail that winds the fishing line onto the reel. To cast, lift the bail, hold the fishing line between your finger and the rod and cast while letting go of the fishing line. The spinning reel is also known as the open face or flip-bail reel.



**Bait-Casting:** These rods and reels can be used in either freshwater or saltwater. They are designed so the spool that holds the line rotates when letting line out or retrieving line. These rods and reels are available in a wide variety of sizes and styles for use in many situations. Some have a device to wind the line neatly onto the spool. Bait-casters have a high potential for tangles and take practice to fish properly.

**Conventional:** These rods and reels are generally used to catch large fish from offshore. Most conventional rods and used for trolling or bottom-fishing, but not casting. Like bait-casting reels, conventional reels are designed so the spool holding the line rotates when releasing and retrieving line. But, they have a high potential for tangles and take practice to fish properly.



**Fly:** A fly rod and reel uses the weight of the line to carry the lure to the fish. Lures for fly-fishing are very light and made from feathers, fur and fiber. Fly-fishing requires training and lots of practice to fish properly.

## Fishing Line

The type of fishing line to use depends on your situation and personal preference.

**Monofilament:** Single strand of nylon. It typically holds knots better, is easy to cast, has low visibility, shows some abrasion resistance and is less expensive than other fishing lines. But, it can stretch out over time and deteriorate from ultraviolet light exposure.

**Suggested uses:** A good all-around fishing line to use in many different situations

**Fluorocarbon:** Single strand of polyvinylidene fluoride. It has very low visibility and stretch, resistance to abrasion and ultraviolet light, good knot strength and it sinks to the bottom. However, it can be very stiff to tie and is more expensive than monofilament.

**Suggested uses:** As leader material or in clear water

**Braid:** Fused or braided strands of polyethylene. It has a smaller diameter, further casting distance, low stretch and exhibits resistance to ultraviolet light and abrasions. But, only certain knots (such as the uni knot) should be used with braid, it is highly visible in the water and it costs more than monofilament.

**Suggested uses:** Fishing near structure or on the bottom and while using lures that spin

**Leader:** Material attached between the fishing line and the hook. Leaders can be made of low-visibility fluorocarbon, hard monofilament, steel, titanium or other materials depending on the target species. They provide increased protection from sharp edges and can be less visible than most fishing line.

**Suggested uses:** When targeting large or toothy fish and when fishing near sharp structure

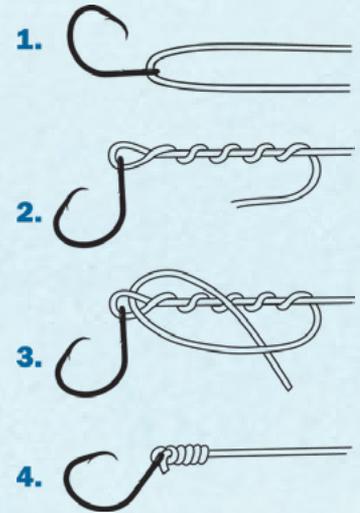


## Fishing Knots

Things to Remember: Match the knot to a function, tie the knot correctly, wet the knot prior to fully tightening it and trim the tag end to 1/8 inch after the knot is completely tightened. The tag end is the active end of the line used to tie a knot. The standing line is the longer end of the line that is not used to tie a knot.

**Improved Clinch Knot** – Used to tie line to hook, swivel or some artificial lures.

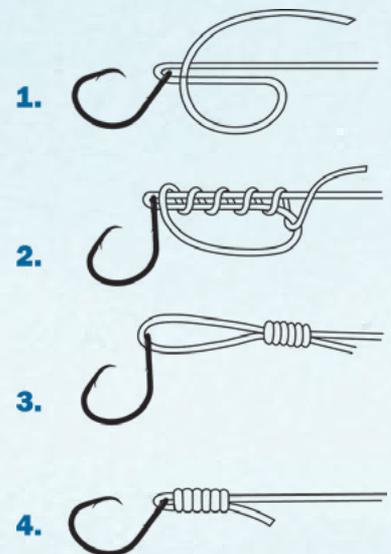
1. Thread line through the eye of the hook and double-back parallel to the standing line.
2. Using the tag end, make five or more twists around standing line.
3. Take the tag end back toward the hook and push it through the first loop nearest the eye. Then, bring the tag end through the big loop that was just created.
4. Holding the hook and line, moisten the knot and pull it tight against the hook eye.



*Improved Clinch Knot*

**Uni-Knot** – Used to tie line to hook, light line to heavy line and in many other applications.

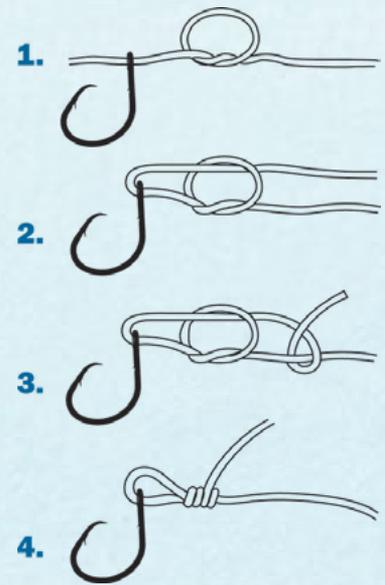
1. Run line through the eye of the hook and double-back parallel to the standing line. Make a loop by laying the tag end over the doubled line.
2. Make six turns with the tag end around the doubled line and through the loop.
3. Moisten the lines and pull the tag end to snug up the turns.
4. Slide the knot down to the eye or leave a small loop, if desired.



*Uni-Knot*

**End-Loop Knot** – Used to tie leader to lures that require freedom of movement, like jigs and plugs, by leaving a loop near the lure eye.

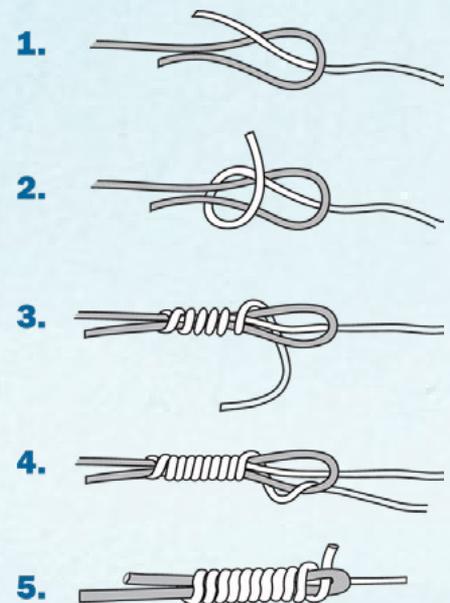
1. Tie a simple overhand knot in the line several inches from the tag end; do not tighten the knot at this point.
2. Insert the tag end through the lure eye, then insert the tag end through the wide portion of the overhand knot while keeping the knot loose.
3. Loop size is determined by moving the overhand knot a desired distance from the lure eye. Make a simple half-hitch with the tag end around the standing part of the line **ABOVE** the overhand knot.
4. Moisten the knot and pull tight on the line and lure to cinch the knot.



*End-Loop Knot*

**Albright Special** – Used to tie light line to heavier line, such as a leader.

1. Make a loop with the heavier line. Run about 10 inches of the lighter line through the loop.
2. Hold the three lines between your thumb and index finger. Wrap the light line back over itself and both strands of the loop.
3. Make 10-15 tightly wrapped turns with the light line.
4. Feed the tag end back through the loop, exiting the loop from the same side as it entered.
5. Hold the light line and pull on both ends of the heavy line to slide the wraps to the end of the loop. Moisten and pull knot tight.



*Albright Special*

## Terminal Tackle

**Circle Hook:** Fishing hook with the point sharply curved back to the shank to form a circular shape. The curved shape causes the hook to catch in the corner of a fish's mouth. These hooks should not be set; instead, anglers simply reel and maintain tension on the line.

**Jig Head:** Fishing hook molded into a heavy sinker and can be covered with a soft artificial lure.



Circle Hook



Jig Head

**Swivel:** Piece of metal that attaches the leader to a line and spins or rotates at the leader, which keeps kinks and twists out of the main line.

**Snap:** Piece of metal that can attach to a swivel (**Snap-Swivel**); it helps an angler switch tackle quickly.



Swivel



Snap



Snap-Swivel

**Split Shot:** Weight that can be pinched onto monofilament; adds weight to a lure quickly.

**Egg Sinker:** Weight that is shaped like an egg with a hole in the center.

**Pyramid Sinker:** Weight with three or four sides that comes in different sizes and is used to keep bait on the bottom in waves and currents.



Egg Sinker



Split Shot



Pyramid Sinker

**Float or Bobber:** Float that bobs at the surface and indicates a fish is biting the hook when pulled underwater. They may have weights that make a popping sound to attract fish.

**Popping Cork:** Float that has weights and beads. When the float is jerked, it makes a popping sound that attracts fish.



Float or Bobber



Popping Cork

## Fishing Lures and Bait

Several bait options are available when saltwater fishing, including artificial and natural baits. The type of bait to choose depends on your targeted species, bait availability and personal preference. Remember, fish find food by detecting scent, sound and movement.

**Artificial Lures** – Imitate the colors, shapes, sounds or scents of baitfish.

**Spoon:** A dished-out or elongated spoon shape causes them to have a wobbling or darting motion in the water. The metallic finish provides a flashing effect to attract fish.



**Plug:** Constructed from hollow plastic or wood to resemble baitfish or other prey. They have one to three treble hooks. One or two sets of treble hooks may be removed to make it easier to unhook fish. These lures can be fished at almost any depth and some are made to float, dive or both. Includes: crankbaits, jerkbaits, surface plugs, floating or diving plugs, rattling plugs and poppers.



**Soft Body Lure:** Molded from soft plastic and made to imitate natural bait. They come in countless shapes, colors and lengths and may be fitted onto a jig head. Some soft body lures come pre-rigged with a jig head.



**Natural Baits** – Usually preferred by fish, but can be difficult to catch and maintain. Natural bait can also be purchased. REMINDER: Circle hooks are recommended when fishing with natural baits.

### Live Bait

**Shrimp:** Insert a circle hook through the head and avoid dark spots in order to keep the shrimp alive; effective near the bottom or midwater using a float rig.

**Crabs:** Insert a circle hook up through back corner of shell, near swimmerets, or cut the body into halves or quarters; work well for bottom fishing.



**Baitfish:** Insert a circle hook across the “nose” of the fish, upward through the top of the mouth, or through the back of the fish, just in front of the dorsal fin. Common baitfish include ballyhoo, bonito, pinfish, pigfish, mullet and killifish.

Florida Sea Grant



### Cut Bait

**Squid:** Sold frozen and can be cut into pieces; works well for bottom fishing.



**Fish:** Cut fish into strips or chunks and attach to hook, using the smallest pieces possible to avoid losing the bait.



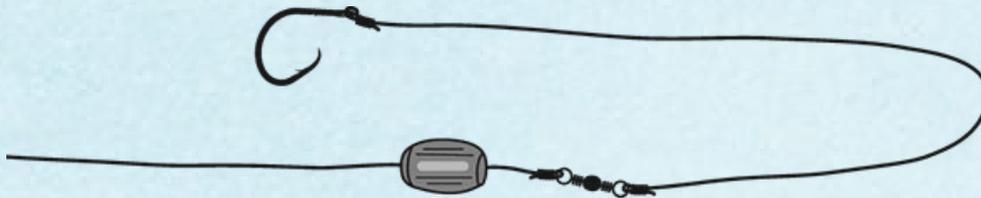
## Fishing Rigs

There are several different fishing rigs that you can learn to make yourself, or you can opt to purchase rigs that have been manufactured and are ready to use. Here are a few important rigs that can be used in a variety of settings.

**Slip-Sinker or Fish-Finder Rig:** Designed to hold your bait right where you place it on the bottom, whether by casting or dropping. Once the egg sinker reaches bottom, your bait is able to move around. This rig can successfully catch all kinds of fish, freshwater and saltwater alike.

**Supplies Needed:** Fishing line, leader, egg sinker, swivel, hook and bait

**Directions:** First, slide an egg sinker onto the fishing line, then attach a swivel using an improved clinch or uni-knot. Next, tie the leader to the other eye on the swivel. Finally, tie the desired hook at the end of the leader.

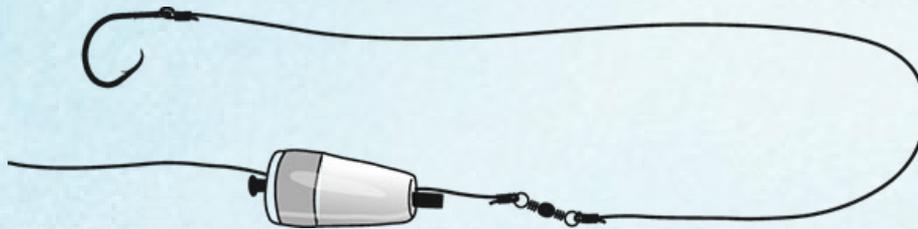


*Slip-Sinker or Fish-Finder Rig*

**Float Rig:** Used when targeting fish that feed away from the bottom. It has a float added to the main line above the swivel; this helps hold the line up and also helps reduce the erratic action of the rig.

**Supplies Needed:** Fishing line, float, leader, swivel, hook, bait and split shot

**Directions:** If the float does not have a quick-attachment mechanism, slide the fishing line through the float, then slide the plastic securing pin into the float. Tie a swivel on the end of the line, then attach a leader with hook to the other eye on the swivel. Adjust the float to the desired height above the bait. Split shot may be added to weigh-down the bait.

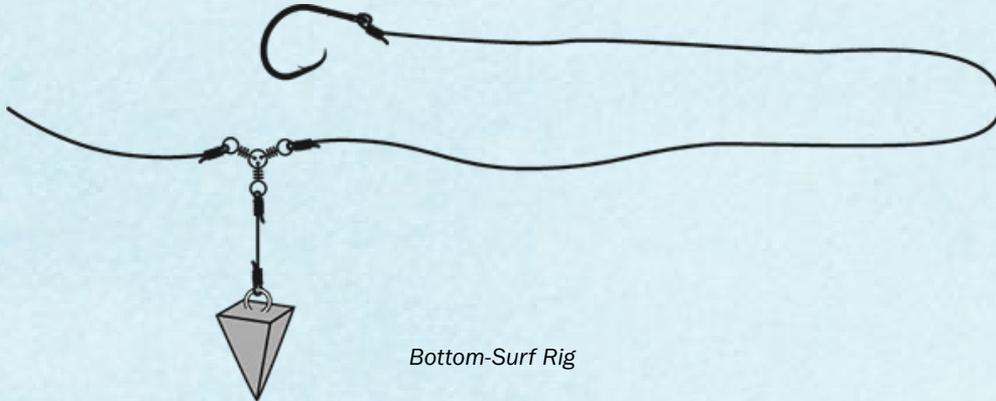


*Float Rig*

**Bottom-Surf Rig:** Designed to hold your bait right where you place it on the bottom. The pyramid sinker maintains the rig's position, while the bait is suspended just over the bottom. This rig works well with both live and cut bait.

**Supplies Needed:** Fishing line, leader, pyramid sinker, three-way swivel, hook and bait

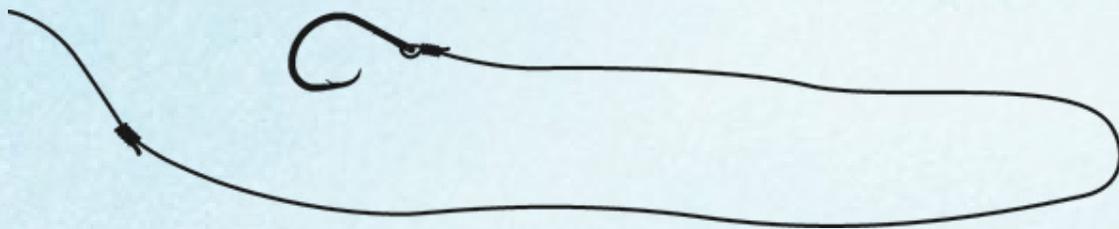
**Directions:** First, tie a short piece of leader to one of the eyes on the three-way swivel, then attach a pyramid sinker to the other end of the leader. Next, tie a long piece of leader to another eye on the three-way swivel, then tie a circle hook to the end of the leader. Finally, tie your fishing line to the last open spot on the three-way swivel.



**Live-Lining or Live Bait Rig:** Used when targeting species such as tarpon, snook, sailfish and dolphinfish. The rig allows live bait to be suspended in the water column without any weight.

**Supplies Needed:** Fishing line, leader, circle hook and live bait

**Directions:** Tie a piece of leader to a piece of fishing line using an albright special knot. Then, tie a circle hook to the end of the leader. Finally, attach your choice of live bait to the hook.



## How to Fillet a Fish

**Items needed:** Sharp fillet knife, plastic cutting board or fish cleaning table, container for fillets and knife sharpener

**Note:** Filleting techniques may differ for fish of various shapes.

### Directions:

1. Place the fish on the cutting board. Grasp the fish's mouth, then take the knife and position it just behind the pectoral fin. Slice downward about a half inch, keeping the rear of the knife blade up (watch your fingers!) until you feel the knife hit the spine. Be careful not to cut into the fish's backbone.
2. Turn the knife blade toward the tail and continue cutting, staying on top of the spine. You will feel resistance as you cut through the rib cage, but be careful not to cut into the backbone. It's better to cut too shallow than too deep. Continue your cut toward the tail, almost cutting the scaly fillet off, but not quite.
3. With the fillet barely attached to the tail, flip it away from the fish. Position your knife onto the narrow portion of the fillet closest to the tail. While holding the fish, slice the meat from the fish's skin. To obtain the maximum meat, cut very close to the skin; but if you want a less "fishy" taste, cut only the upper white meat from the skin, leaving the red meat attached.
4. Flip the fish over and fillet the other side, repeating steps 1 through 3.
5. With the tip of your fillet knife, carefully cut out the rib cage of each fillet. To retrieve the most meat, angle your knife and slice close to the ribs.
6. Carefully rinse and dry the fillets and eat them the same day, if possible. Avoid freezing fish for long durations and always check with the Department of Health for consumption advisories and fish handling tips.



## Safety First

**Sunscreen:** Buy sunscreen that blocks UVA and UVB rays. You need more sun protection during the middle of the day. If you plan on getting in the water, you may want to use a waterproof sunscreen. Sunscreen doesn't last all day so remember to reapply product liberally to all parts of your body that will be exposed to sunlight.



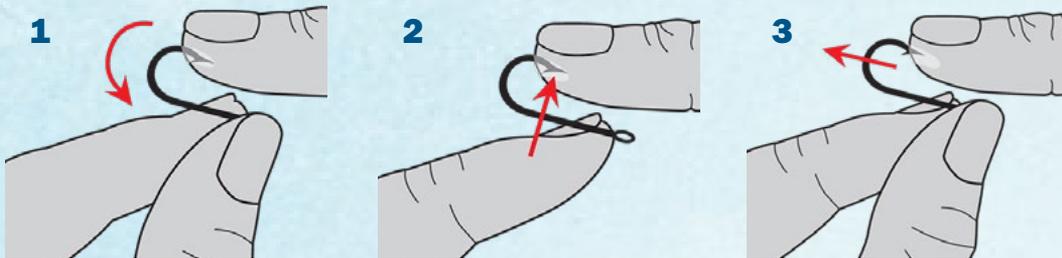
**Polarized Sunglasses:** They protect your eyes from UVA and UVB rays, help reduce glare and stop unwanted reflections that might hinder vision. They also provide better contrast, which enables visual clarity while fishing.



**Hook Removal:** Always seek medical attention after being wounded by a hook, especially for hooks embedded in the eye, face, ear, neck and any tissue other than skin; special care or anesthesia may be needed. Below are common suggestions for removing hooks.

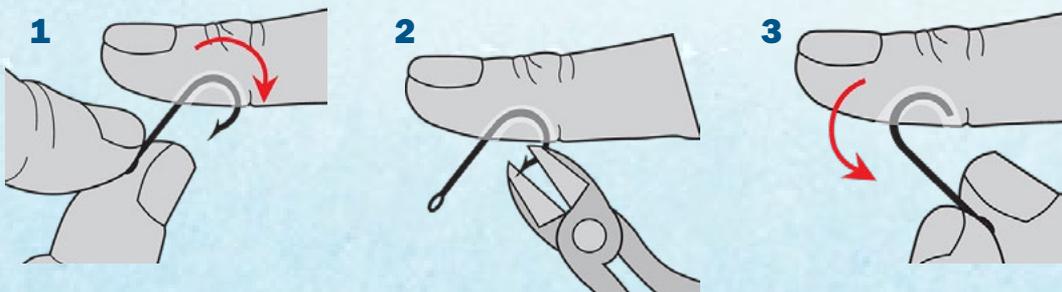
### *Hook impaled in shallow skin (retrograde technique):*

1. Turn the hook so the shaft is parallel to the skin.
2. Hold the shaft and push up to disengage the barb.
3. Continue pushing up on the shaft as you back the hook out of the wound.
4. Apply pressure to the wound and seek immediate medical attention.



### *Hook impaled past the barb deeply into skin (advance and cut technique):*

1. Carefully push the hook the rest of the way through your skin until the barb is visible.
2. Use a pair of pliers with wire cutters to cut the barb off the hook.
3. Pull the remaining piece of the hook out from where it entered the skin.
4. Apply pressure to both sides of the wound and seek immediate medical attention.



## Marine Animal Injuries:

Below are common injuries that may occur while fishing in saltwater areas. There are several ways to avoid injury while on the water, but here are methods to ease pain if these issues are encountered.

### Always seek medical attention after any sting or injury!

**Jellyfish:** Stings come from cells called nematocysts found on long tentacles that trail the jellyfish, and even on the body itself in some species.

- 1. Get out of the water** - Jellyfish tentacles may still be on your skin and the tentacles are capable of stinging anyone if bare skin comes in contact with them. The tentacles even sting after they've been ripped from the body of the jellyfish.
- 2. Rinse the tentacles off** - Rinse away the tentacles using hot water if possible. If heated water is not available, use saltwater rather than freshwater, as freshwater may worsen the stinging pain. Keep sand out of the wound.
- 3. Peel off the tentacles** - Remove any remaining tentacles with a gloved hand, edge of an ID card, stick, shell or tweezers. Applying vinegar or a paste of baking soda and water may also help remove the tentacles. Avoid rubbing the area with a towel.
- 4. Relieve discomfort** - Ice packs, over-the-counter pain relievers, anti-histamines or medicated creams may help relieve discomfort.

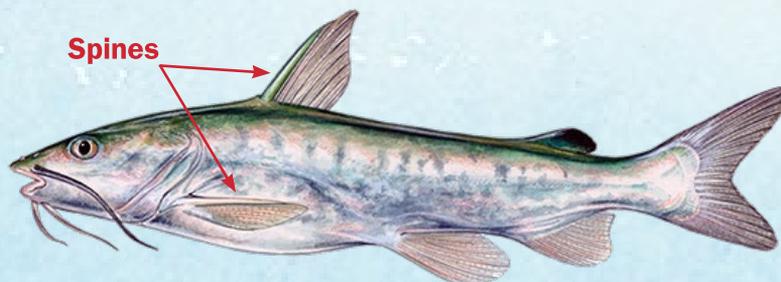


**Catfish:** Injuries come from three spines found on the front of the dorsal and pectoral fins (NOT from the whiskers or barbels found near the mouth of catfish). The tips of these spines are very sharp and injuries occur when they puncture the skin. Be especially careful with little catfish that have smaller, sharper spines.

- 1. Clean the wound** - Use tweezers to remove any spines, then clean and rinse the wound.
- 2. Submerge wound in hot water** - Use the hottest water you can stand to help alleviate pain; over-the-counter medications may also help.
- 3. Monitor the wound** - Keep the area clean and be sure to keep the wound dry and uncovered. Seek medical attention as soon as you are able.

### Avoid catfish injuries:

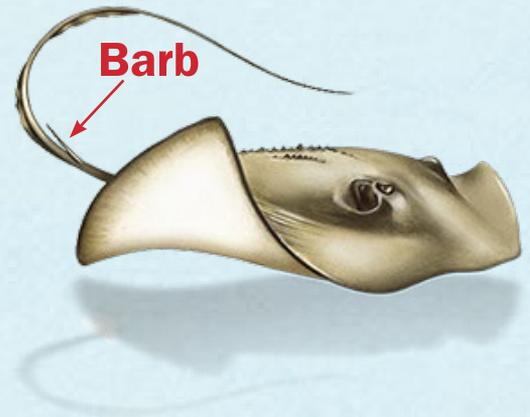
- When using dehooking tools, be sure to use a downward pop over the water instead of flipping the fish; flipping the fish can cause it to fly back toward you.
- You can also use a lip grip device to handle catfish safely.



Location of spines on a catfish

**Stingrays:** Painful stings come from one or more barbs found near the middle of the whip-like tail. Stingrays are not usually aggressive, but will sting in self-defense when accidentally stepped on or frightened. Shuffle your feet through sand, rather than taking steps, to help scare the stingray away.

- 1. Bathe wound in seawater** - While still in the water, irrigate the wound to remove debris and fragments of spine and tissue; use tweezers if necessary.
- 2. Get out of the water** - Then dry area carefully with a clean towel.
- 3. Stop the bleeding** - Apply direct pressure at or slightly above the wound if it is bleeding.
- 4. Immerse wound in hot water** - Heat inactivates any remaining venom and may help relieve pain. Even a hot boat deck can help reduce pain.
- 5. Monitor the wound** - Keep the area clean using soap and water, and be sure to keep the wound dry and uncovered. Seek medical attention as soon as you are able.



**Seek immediate medical attention** if your injury causes hives, itching, shortness of breath, wheezing, tightening of the throat, flushed skin, weakness, dizziness, lightheadedness, fainting, loss of consciousness, sweating, elevated heart rate, decreased blood pressure, excess blood loss, rapid breathing, headache, palpitations, muscle cramps or seizures.

**Remedies to AVOID:** Urine, meat tenderizer, solvents and pressure bandages

**Always seek medical attention after any sting or injury!  
For more information, contact the National Poison Control Center  
at 800-222-1222.**

# Boating Basics

Carelessness and inattention are the leading causes of boating accidents in Florida. Pay close attention to your surroundings while on the water and you will be on your way to a safe and enjoyable outing.

## Lifejackets

Did you know that Florida has the unfortunate distinction of being the national leader in annual boating fatalities? A majority of fatalities are boaters who said they knew how to swim. Drownings can be caused by strong undertows and rip currents, becoming tangled in gear, being knocked unconscious or getting hit by moving water craft. These deaths can easily be prevented by wearing a lifejacket. A variety of light-weight inflatable lifejackets are available, allowing you to stay cool and comfortable. Make yourself a good example by practicing safe boating habits – WEAR IT!

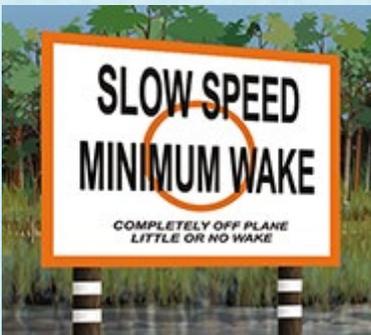
Visit [MyFWC.com/Boating](http://MyFWC.com/Boating) to learn more.



## Follow Boating Regulations

**Equipment and Lighting:** The owner and/or operator of a vessel is responsible to carry, store, maintain and use the safety equipment required by the U.S. Coast Guard (USCG).

**Vessel Registration:** All vessels must be registered through your local Tax Collector’s Office, with the exception of non-motorized vessels less than 16 feet in length and non-motorized canoes, kayaks, racing shells or rowing sculls, regardless of length.



**Vessel Speed:** The vessel’s wake must not be excessive or create a hazard to other vessels. Vessel operators must adhere to requirements of “Idle Speed - No Wake” and “Slow Down - Minimum Wake” zones.

**Boating Under the Influence:** It is a violation of Florida law to operate a vessel while impaired by alcohol or other drugs.

**Mooring to Markers or Buoys:** Except in the event of an emergency, it is unlawful to moor or fasten to any lawfully placed navigation aid or regulatory marker.

Visit [MyFWC.com/Boating](http://MyFWC.com/Boating) and click on “Regulations” for a complete list of boating regulations and requirements.

## Boating Safety Education

Anyone born on or after Jan. 1, 1988, who operates a vessel powered by 10 horsepower or more must pass an approved Boater Safety Course and have in their possession photographic identification and a Boating Safety Education Identification Card issued by the FWC.

Exemptions apply. Visit [MyFWC.com/Boating](http://MyFWC.com/Boating) and click on “Safety-Education” for more information.

## Boating Access

**Sport Fish Restoration Program:** Provides funds used to create and improve over 200 public boat ramp sites throughout Florida. The program also funds the projects below.

**Boating and Angling Guide Pamphlets:** Offer information about marine resources and boating access sites for more than 25 coastal regions of Florida. Guides are available free-of-charge to anglers, boaters and resource managers at a variety of locations. They can also be ordered on [MyFWC.com/Fishing](http://MyFWC.com/Fishing) by clicking on “Saltwater Fishing” and “Saltwater Publications.”

**Florida Public Boat Ramp Finder:** Gives descriptive information, maps and photographs for over 1,800 public boat ramps throughout Florida. Visit [MyFWC.com/BoatRamps](http://MyFWC.com/BoatRamps) to locate one today.

## Marine Life Awareness

**Manatees:** Boaters must observe all manatee protection zone requirements. Boaters who accidentally strike a manatee are urged to report the strike to the FWC and may not be subject to prosecution, provided they were operating in accordance with any applicable vessel speed restrictions at the time of the strike.

**Seagrass Beds:** To help protect seagrass beds, boaters should stay within channels when in an unfamiliar waterway and avoid running through seagrass beds to help prevent propeller scars. It is a violation of Florida law to damage seagrass beds in some areas within state waters.

**Also be aware of sea turtles, corals and other marine life while boating.**



# Identification Guide

## What Is It?

Learning to identify fish is a fascinating study in itself and is important to anglers. Misidentification can lead to fisheries violations. Fish and invertebrates commonly caught by anglers in Florida are included in the following listing.

## How to Use This Section

The foundation of learning fish identification is to become familiar with anatomical features that are shared by most species. The following diagrams show several aspects of fish anatomy and can help you identify a fish by focusing on distinguishing characteristics. A glossary of fish anatomy terms is also provided so you'll know what features to focus on when identifying a fish.

## Provided for each species listed in this guide:

**Description:** The details most easily observed have been given top priority, since the angler has only moments to decide if a fish is a legal catch.

**Similar Species:** Many fish have “look-alikes,” other fish that resemble them closely; in such instances, the most readily seen differences are given.

**Habitat:** Many fish are associated with particular habitats; this information can help anglers know where to drop the hook.

**Size:** Anglers usually judge the size of the fish by its weight; scientists use length, since age/length relationships are more reliable than age/weight.

**Notes:** This includes the fish's life history, behavior, and feeding habits.

It is the angler's responsibility to know current fishing regulations, including bag limits, size limits and closed seasons. To stay updated on fishing regulations, visit [MyFWC.com/Fishing](https://www.myfwc.com/fishing).

*Fish illustrations are copyrighted by Diane Rome Peebles. Stone crab, blue crab, spiny lobster, horseshoe crab, mole crab and clearnose skate illustrations are copyrighted by Dawn Witherington. Scallop, oyster, hard clam and shrimp illustrations are courtesy of the Florida Department of Agriculture and Consumer Services.*

## Glossary of Terms

**Snout** – Portion of the head in front of the eyes and above the mouth

**Maxilla** – Upper jaw

**Mandible** – Lower jaw

**Vomerine Tooth Patch** – Found on the roof of the mouth in snappers and other fishes

**Barbel** – Fleshy sensory projection on the head; usually near the mouth, chin or snout

**Preopercle** – Bone between cheek and gill cover

**Interopercle** – Bone between preopercle and operculum (gill cover)

**Operculum (gill cover)** – Bony flap that protects the gills; opens and closes at the rear during respiration

**Gill Rakers** – Structures that project forward from the gill arches, like the teeth of a comb

**Nape** – Upper surface of body behind the head and before the dorsal fin

**Bar** – A short, straight color mark, oriented vertically unless otherwise stated

**Stripe** – A straight color mark, usually oriented horizontally

**Ray** – One of the supporting elements in a fin; may be soft or spiny

**Spinous Fin Rays** – Sharp bony spines that support a fin

**Soft Fin Rays** – Jointed soft rods that support a fin

**Dorsal Fin** – Fin located on the back; may be separated into first dorsal fin and second dorsal fin

**Spinous Dorsal Fin** – Fin supported by bony spines, usually in front

**Soft Dorsal Fin** – Fin supported by soft rays, usually in back

**Adipose Fin** – A small fleshy fin that lacks fin rays

**Pectoral Fins** – Pair of fins generally located in the shoulder region of the fish

**Pelvic Fins** – Pair of fins located below or behind the pectoral fins; placement of these fins varies between species

**Anal Fin** – Unpaired fin on underside, behind the anus and just before the tail

**Finlets** – Small fins positioned behind the dorsal and anal fins

**Caudal Peduncle** – Slender area where the body attaches to the tail

**Keel** – Horizontal ridge on the caudal peduncle that provides stability

**Caudal Fin** – Tail fin; portion of the body behind the anus

**Lateral Line** – Line on side of body filled with sensory organs that detect pressure changes

**Ocellus** – An eyespot in which the central color is bordered by a ring of another color, which is also different from the adjacent body color or fin

**Scutes** – Bone-like projections

**Carapace** – Bony or horned covering encasing the body

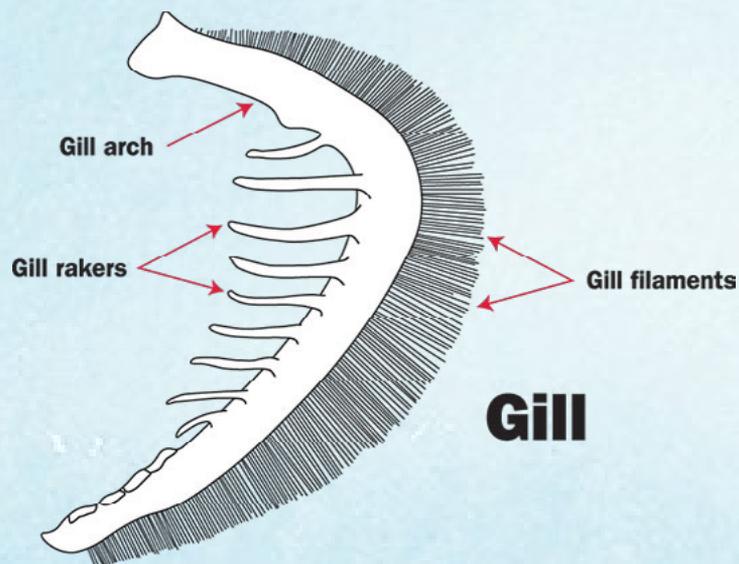
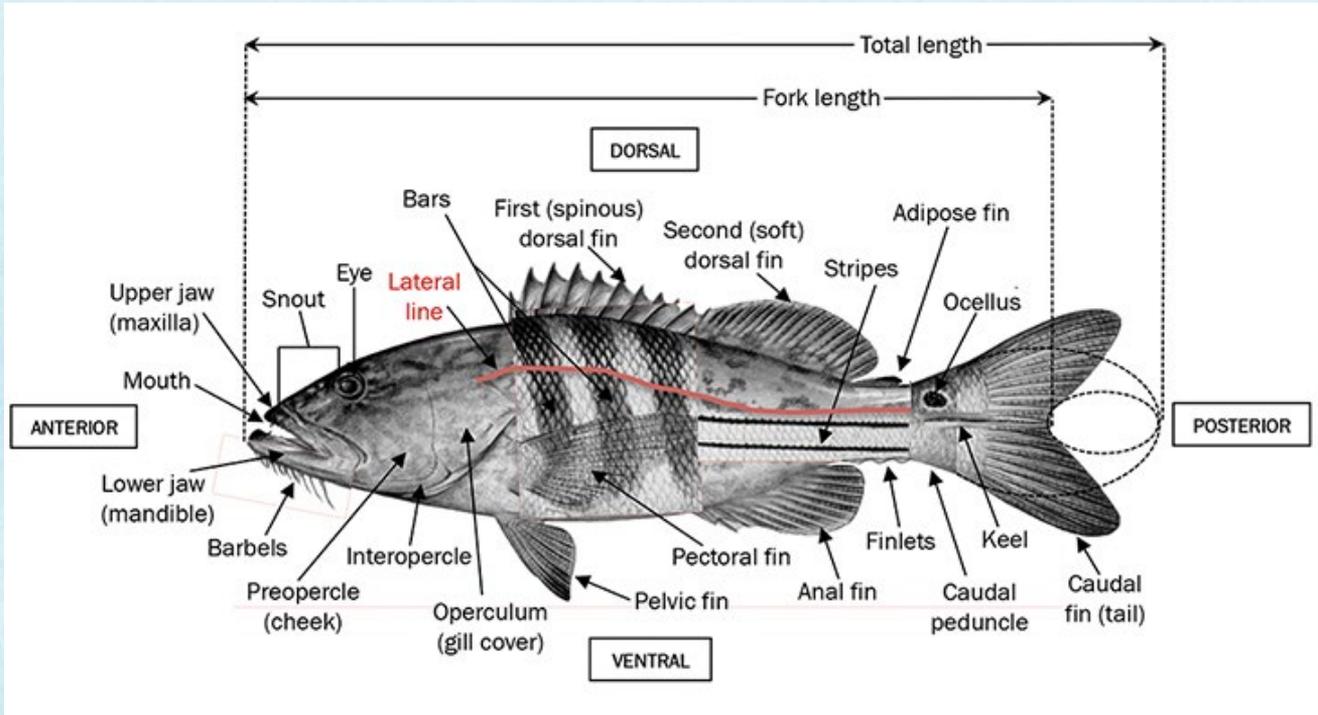
**Snout Length** – Measured from tip of snout to front of eye

**Fork Length** – Measured from tip of snout to tail fork

**Total Length** – Measured from tip of snout to tip of pinched tail

# Fish Anatomy

These diagrams show important anatomical characteristics of fishes.



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# Identification Guide

## Mollusks

### Bay Scallops

*Argopecten irradians*

**Family** Pectinidae, Scallops

**Description:**

- Mottled gray and black bivalve with two shells
- Lower shell is white
- Have one adductor muscle, often sought after for food
- Rows of blue eyespots along edge of mantle

**Similar Species:** Calico scallops, *A. gibbus* (have a patchwork of red and pink color on the upper shell)

**Habitat:** Seagrass meadows in shallow waters

**Size:** Up to 3 inches

**Notes:** Capable of swimming by clapping valves together; rarely live longer than one year



### Oysters

*Crassostrea virginica*

**Family** Ostreidae, True Oysters

**Description:**

- Oval shaped bivalve with two bumpy, wrinkled shells
- Inside of shell is white with a purple muscle scar
- Feed by filtering food from the water
- Form reef structures that create important habitat

**Habitat:** Oysters flourish in estuaries where nutrient-rich fresh water meets saltwater

**Size:** Common to 6 inches; may reach a maximum size of 11 inches

**Notes:** Oysters require a hard substrate to grow and often grow on the top of other oyster shells; when feeding, oysters can pump and filter over 9 gallons of water in 1 hour



### Hard Clams

**Southern Quahog** (*Mercenaria campechiensis*)

**Northern Quahog** (*Mercenaria mercenaria*)

**Family** Veneridae, Venus Clams

**Description:**

- Clams are bivalve, or two-shelled
- Two adductor muscles are used to close the shell
- Two siphons are used to draw in or expel sea water
- Hatchet-shaped foot used to burrow into sand or mud

**Habitat:** Found in sediments located from the high-tide line to under 50 feet of water; common on sand or sand-mud bottoms and tolerate a variety of salinities

**Size:** 1 inch thick across hinge

**Notes:** May live at least 22 years; growth is more rapid during winter and spring; typically, growth is greater in deeper areas with submerged aquatic vegetation



## Queen Conch

*Strombus gigas*

**Family** Strombidae, True Conchs

### Description:

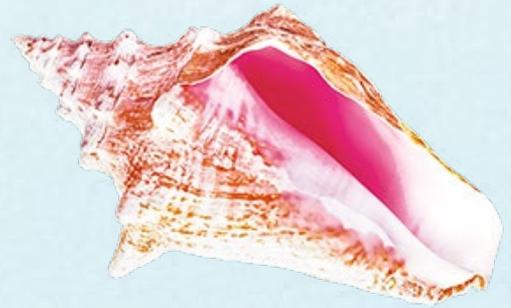
- Slow-moving, long-lived marine snail
- Large, pink-lipped shell
- Soft body with black-speckled foot, two tentacles and a snout-like mouth
- Bright yellow eyes perched on the end of two stalks
- Excellent eyesight

Similar Species: Other marine snails

**Habitat:** Sandy and hard bottoms and coral rubble; occasionally in seagrass beds; found in Caribbean and western Atlantic Ocean waters, including those around the Florida Keys north to the St. Lucie Inlet on the east coast

**Size:** Up to 12 inches (5 pounds)

**Notes:** The meat is a dietary staple for many Caribbean cultures; protected from harvest in federal and state waters



## Crustaceans

### Blue Crab

*Callinectes sapidus*

**Family** Portunidae, Swimming Crabs

### Description:

- Brilliant blue color on front claws (tips are red in females) with an olive or blueish-green carapace (shell)
- Pair of paddle shaped legs that are excellent for swimming
- Nine marginal teeth behind each eye, with the last pair of teeth ending in a sharp spine

**Habitat:** Seagrass beds and other submerged aquatic vegetation areas are important nursery habitats for juvenile blue crabs, while adults utilize grassy and shallow sandy areas

**Size:** Up to 9 inches in carapace width (from tip-to-tip across carapace)

**Notes:** In Florida, they spawn from March through November; feed on a variety of plant and animal material and prefer live or fresh prey



### Stone Crab

*Menippe mercenaria*

**Family** Menippidae, Stone Crabs

### Description:

- Carapace (shell) is smooth, heavy and thick
- Claws are enlarged, stout and dark tipped
- Four blunt teeth along front of each side of carapace
- Usually one claw is larger, can be removed from the crab if legal-size and the crab is returned to the water.
- Adults are reddish brown, juveniles are dark blue to purple

**Habitat:** Reefs and rocky areas; oyster bars in shallow to moderate deep areas

**Size:** Up to 4 inches in carapace width, with claws reaching 5 inches in length

**Notes:** Burrow in mud, seagrass or oyster beds



## Spiny Lobster

*Panulirus argus*

**Family** Palinuridae, Spiny Lobsters

### Description:

- Vary in color from almost white to dark red-orange
- Two large, cream-colored spots on the top of the second segment of the tail
- Long antennae over the eyes
- Small antennae-like structures, called antennules, near larger antennae
- Forward-pointing spines cover their bodies for protection from predators

**Similar Species:** Spotted lobster, *P. guttatus*

**Habitat:** Hard bottom, seagrass and coral reefs of South Florida and the Caribbean

**Size:** Up to 15 pounds (18 inches in body length)

**Notes:** Wave their long antennae to scare off predators, while the smaller antennules are used to sense movement and detect chemicals in the water



## Spotted Lobster (Spanish Lobster)

*Panulirus guttatus*

**Family** Palinuridae, Spiny Lobsters

### Description:

- Lightly colored spots cover body, legs and tail
- Background color is dark purplish-black
- Typically darker background color than that of spiny lobster
- Longitudinal stripes on the three front pairs of walking legs
- Forward-pointing spines cover their bodies for protection from predators

**Similar Species:** Spiny lobster, *P. argus*

**Habitat:** Found mainly in crevices in shallow, hard bottom areas of South Florida and the Caribbean

**Size:** Up to 8 inches in body length

**Notes:** Wave their long antennae to scare off predators, while the smaller antennules are used to sense movement and detect chemicals in the water



## Slipper Lobster (Shovel-Nosed Lobster)

*Scyllarides nodifer*

**Family** Scyllaridae, Slipper Lobsters

### Description:

- Antennae modified into short, flattened, wide plates
- Ridge along midline of abdomen
- Brown color on body
- Reddish-orange on antennules, legs and scattered on body

**Similar Species:** Other lobsters

**Habitat:** Found on rock, coral and sand bottoms in the western Atlantic and Gulf of Mexico

**Size:** Up to 14 inches in body length

**Notes:** Consume a variety of mollusks, crustaceans and other bottom-dwelling marine life



## Shrimp

**Brown shrimp** (*Farfantepenaeus aztecus*)

**Pink shrimp** (*Farfantepenaeus duorarum*)

**White shrimp** (*Litopenaeus setiferus*)

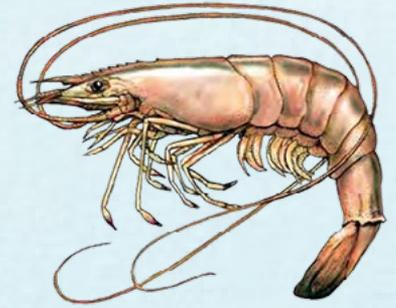
### Description:

- Decapod crustaceans with five pairs of legs, often with small pincers
- Large, well-developed eyes, large swimmerets, long antennae and a smooth carapace (shell)
- Brown shrimp: brown in color, with some orange or yellow mixed in; grooves on back at end of abdomen
- Pink shrimp: along the Atlantic coast are usually brown, along the northern Gulf coast are often lemon-yellow, and those in the Florida Tortugas are pink; narrow grooves on back at end of abdomen
- White shrimp: grayish-white with a green, red or blue tinge on the tail and legs; no grooves on back at end of abdomen; longer antennae than pink or brown shrimp

**Habitat:** Found in a variety of inshore and offshore habitats

**Size:** Maximum size about 7 to 8 inches in body length

**Notes:** Most shrimp spawn offshore in deep water from early spring through early fall; young shrimp are carried by currents into coastal estuaries to mature



## Horseshoe Crab

*Limulus polyphemus*

**Family** *Limulidae*, Horseshoe Crabs

### Description:

- Body covered with protective carapace (shell)
- Nine eyes scattered all over the body
- Two of the eyes are large compound eyes on top of carapace
- Several other light receptors near the tail
- Seven pairs of legs and no antennae
- Spines on rear abdomen for protection from predators
- Harmless telson, or tail, used to right them when overturned

**Similar Species:** More closely-related to spiders and scorpions than to true crabs

**Habitat:** Atlantic Ocean and Gulf of Mexico; nest on sandy beaches with low wave action

**Size:** Up to 2 feet in carapace width; males are typically one-third the size of females

**Notes:** Their eggs are an essential source of food for migratory shorebirds and some fish; considered as “living fossils” since they haven’t changed much in the past 450 million years



## Mole Crab (Sand Flea, Sand Crab)

*Emerita talpoida*

**Family** *Hippidae*, Mole Crabs

### Description:

- Small, oval-shaped crabs that are light brownish-grey in color
- Lack claws
- Two long antennae present
- Filter-feeders

**Habitat:** Found buried just under the surface of the sand in wave-swept beach areas known as swash zones

**Size:** Up to about 2 inches in length

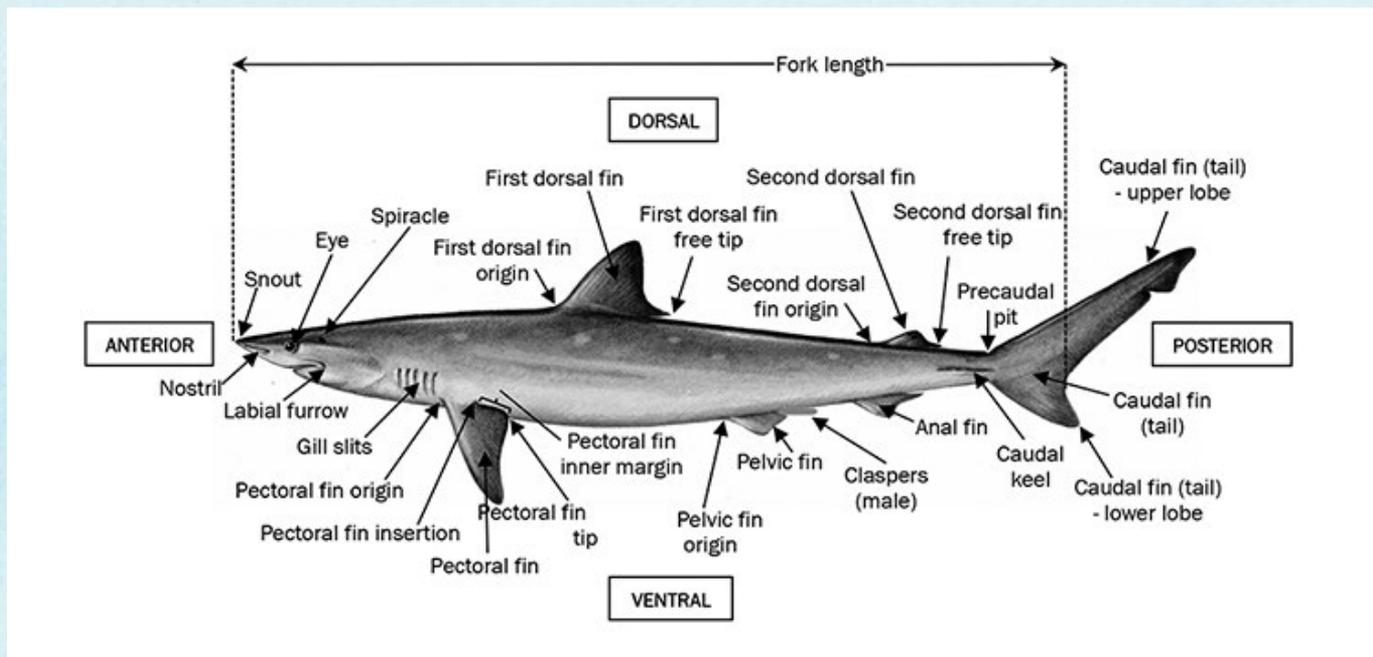
**Notes:** Commonly sought after by surf fishermen who use them to catch pompano and other fish



# Sharks, Rays and Skates

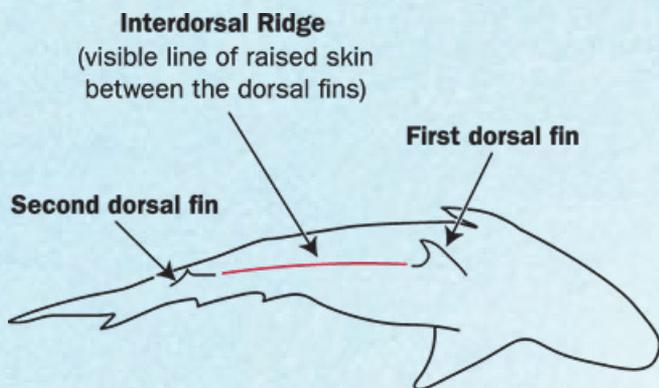
## Shark Anatomy

These diagrams show important anatomical characteristics of sharks.



Top view of shark

Bottom view of shark

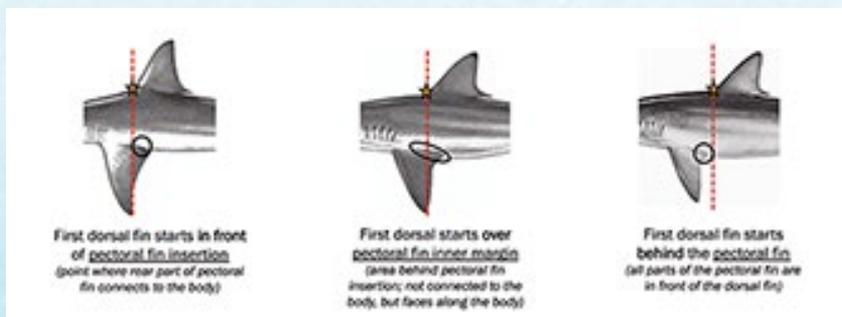


### Snout Shapes

Bluntly rounded    Moderately rounded    Sharply rounded



**Spiracle:** Opening behind each eye that draws in water to aid in breathing while lying on the bottom.



## Blacknose Shark

*Carcharhinus acronotus*

**Family** *Carcharhinidae*, Requiem Sharks

### Description:

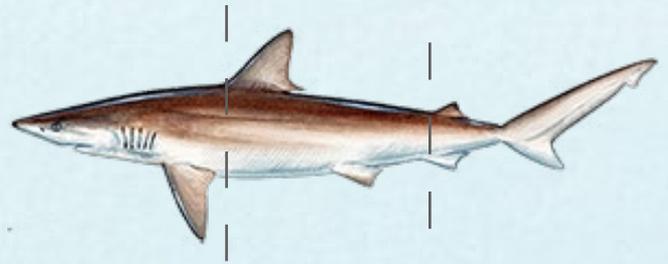
- Black or dusky blotch on snout tip
- Back is pale olive-gray, fading to a whitish belly
- First dorsal fin starts immediately behind the pectoral fin
- Second dorsal fin starts before middle of anal fin
- No interdorsal ridge

**Similar Species:** Atlantic sharpnose shark, *R. terraenovae* (lacks dark snout tip)

**Size:** Up to 5 feet

**Habitat:** Coastal waters; common in bays and lagoons

**Notes:** Feed mostly on small fishes and invertebrates



## Atlantic Sharpnose Shark

*Rhizoprionodon terraenovae*

**Family** *Carcharhinidae*, Requiem Sharks

### Description:

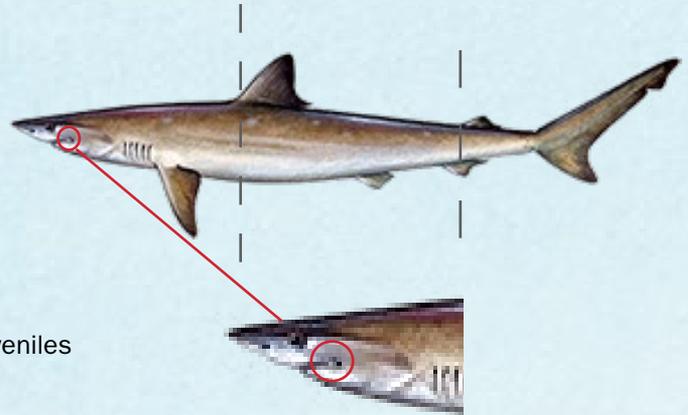
- Body is slender, brown to olive-gray on back, fading to a whitish belly
- Snout is long and sharply rounded
- Very long upper labial furrow (groove around the lips)
- Dorsal and caudal fins with black edges, especially in juveniles
- First dorsal fin starts well behind pectoral fin
- Second dorsal fin starts over the middle of the anal fin
- Adults may have small white spots on sides
- No interdorsal ridge

**Similar Species:** Blacknose shark, *C. acronotus* (has dark snout tip)

**Habitat:** Coastal waters; can be found near the surf zone; common in bays and estuaries; Adults also found offshore

**Size:** Up to 4 feet

**Notes:** Feed on small fishes and invertebrates



## Blacktip Shark

*Carcharhinus limbatus*

**Family** *Carcharhinidae*, Requiem Sharks

### Description:

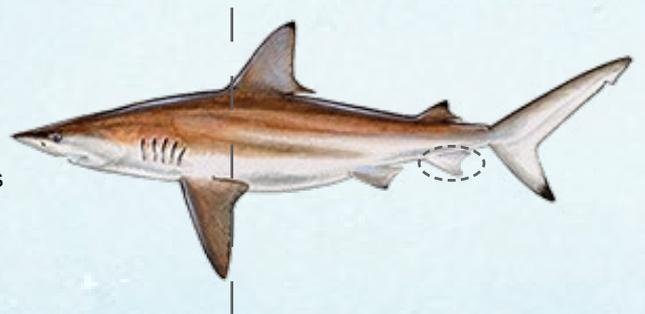
- Back is dark bluish-gray (juveniles more pale) fading to a whitish belly
- Anal fin lacks black tip (in adults); dorsal fins, pectoral fins, anal fin and caudal fin lower lobe are black-tipped in juveniles (fades with growth)
- First dorsal fin starts above pectoral fin inner margin
- Long snout that appears nearly V-shaped from below
- No interdorsal ridge

**Similar Species:** Spinner shark, *C. brevipinna* (first dorsal fin starts behind the pectoral fin; anal fin is black-tipped)

**Habitat:** Coastal to offshore waters

**Size:** Up to 6.5 feet

**Notes:** One of the most common shark species in Florida coastal waters



## Spinner Shark

*Carcharhinus brevipinna*

**Family** Carcharhinidae, Requiem Sharks

### Description:

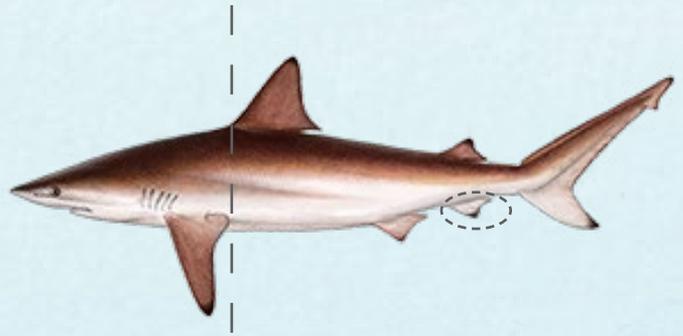
- Back is gray-bronze, fading to a white belly
- Snout pointed with a length equal to or longer than mouth width
- Anal fin with black tip
- Dorsal fins, pectoral fins and caudal fin lower lobe also black-tipped
- First dorsal fin starts behind pectoral fin
- No interdorsal ridge

**Similar Species:** Blacktip shark, *C. limbatus* (first dorsal fin begins over the pectoral fin inner margin; anal fin does not have a black tip)

**Habitat:** Coastal to offshore waters

**Size:** Up to 8 or 9 feet

**Notes:** The spinner shark's name is derived from its habit of leaping out of the water and spinning while in the air (other shark species are known to leap as well)



## Finetooth Shark

*Carcharhinus isodon*

**Family** Carcharhinidae, Requiem Sharks

### Description:

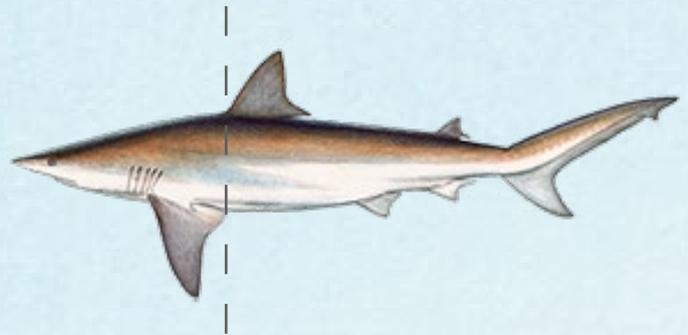
- Body slender with long gill slits
- Back is gray-blue, fading to a white belly
- Teeth are finely pointed and smooth, similar in both jaws
- Fins are unmarked (no spots, blotches or black edges or tips)
- No interdorsal ridge

**Similar Species:** Blacktip shark, *C. limbatus* (has black tips on fins); spinner shark, *C. brevipinna* (has black tips on fins); and Atlantic sharpnose shark, *R. terraenovae* (spots on side and long upper labial furrows)

**Habitat:** Coastal waters

**Size:** Up to 4 or 5 feet

**Notes:** Feed on small fishes and squid



## Lemon Shark

*Negaprion brevirostris*

**Family** Carcharhinidae, Requiem Sharks

### Description:

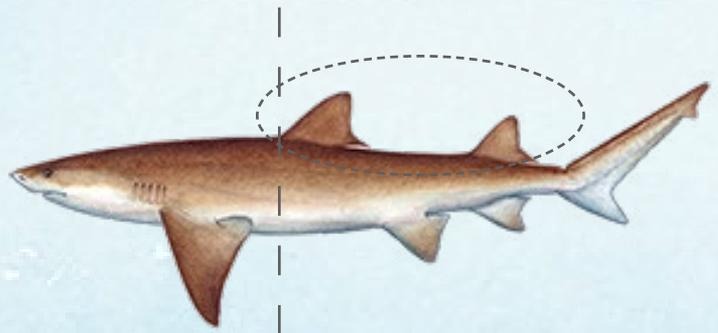
- Snout bluntly rounded, shorter than width of mouth
- Back is yellowish-green, brown or olive-gray, fading to a white belly
- First and second dorsal fins are nearly equal in size
- No interdorsal ridge

**Similar Species:** Bull shark, *C. leucas* (first and second dorsal fins are unequal in size); nurse shark, *G. cirratum* (has nasal barbels)

**Habitat:** Coastal waters, including nearshore and in estuaries

**Size:** Up to 10.5 feet

**Notes:** Feeds on fishes, invertebrates, small sharks, rays and occasionally on sea birds; may enter freshwater



## Bull Shark

*Carcharhinus leucas*

**Family** *Carcharhinidae*, Requiem Sharks

### Description:

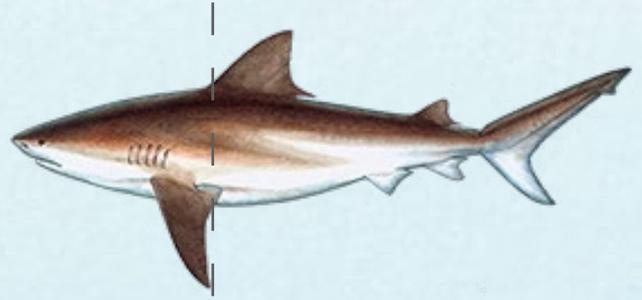
- Back is pale to dark gray, fading to a white belly
- Snout bluntly rounded, much shorter than width of mouth
- Large triangular first dorsal fin; begins over or just behind pectoral fin insertion
- No interdorsal ridge

**Similar Species:** Lemon shark, *N. brevirostris* (first and second dorsal fins nearly equal in size); Caribbean reef shark, *C. perezii* (has interdorsal ridge); and sandbar shark, *C. plumbeus* (first dorsal fin starts before pectoral fin insertion)

**Habitat:** Estuarine, nearshore and offshore waters

**Size:** Up to 9 or 10 feet

**Notes:** One of the few shark species that may inhabit freshwater, sometimes venturing hundreds of miles inland via coastal river systems; more aggressive than most shark species



## Blue Shark

*Prionace glauca*

**Family** *Carcharhinidae*, Requiem Sharks

### Description:

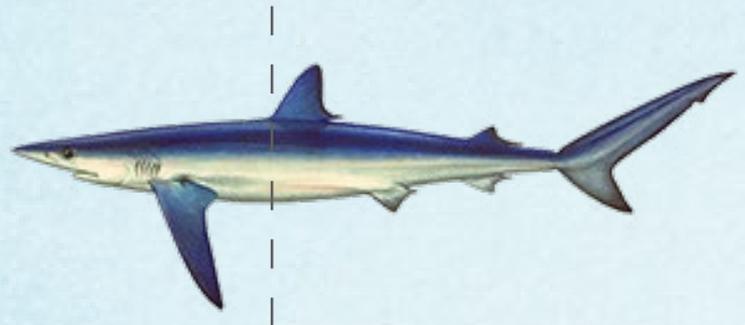
- Body slender with long narrow pectoral fins
- Long sharply rounded snout, longer than width of mouth
- Body color is blue, fading to a white belly
- First dorsal fin starts well behind the pectoral fin
- No interdorsal ridge

**Similar Species:** Shortfin mako, *I. oxyrinchus* (tail in shape of crescent moon)

**Habitat:** Found mostly in offshore oceanic waters

**Size:** Up to 12.5 feet

**Notes:** Feed on a variety of fishes, small sharks and squid



## Caribbean Reef Shark

*Carcharhinus perezii*

**Family** *Carcharhinidae*, Requiem Sharks

### Description:

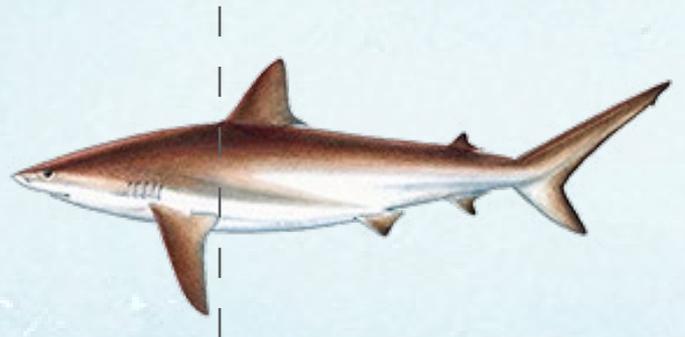
- Back dark gray to gray-brown, fading to a white belly
- Snout short and bluntly rounded
- First dorsal fin starts over pectoral fin free tip
- Fins dusky-colored, with very short free tip on second dorsal fin
- Interdorsal ridge present

**Similar Species:** Dusky shark, *C. obscurus* (longer free tip on second dorsal fin); bull shark, *C. leucas* (no interdorsal ridge); and sandbar shark, *C. plumbeus* (first dorsal fin starts in front of pectoral fin insertion)

**Habitat:** Found near coral reefs in the Caribbean and off South America; rarely found north of the Florida Keys

**Size:** Up to 8 feet

**Notes:** Feed mainly on a variety of fishes



## Dusky Shark

*Carcharhinus obscurus*

**Family** *Carcharhinidae*, Requiem Sharks

### Description:

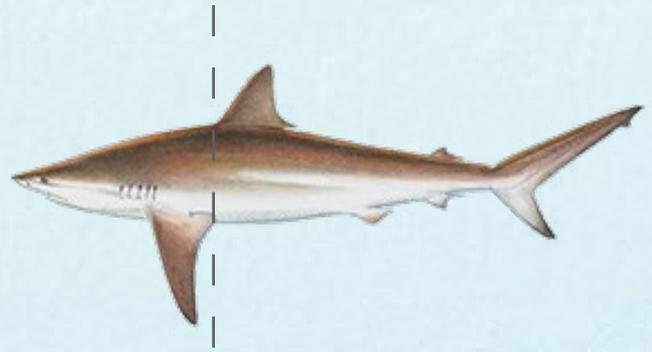
- Back is bronze-gray to blue-gray, fading to a white belly
- Snout moderately rounded, shorter than or equal to mouth width
- Second dorsal fin free tip less than twice as long as fin height
- First dorsal fin starts over the pectoral fin free tip
- Interdorsal ridge present

**Similar Species:** Sandbar shark, *C. plumbeus* (first dorsal fin starts in front of pectoral fin insertion); silky shark, *C. falciformis* (first dorsal fin starts behind pectoral fin free tip; longer second dorsal fin free tip)

**Habitat:** Nearshore and offshore waters; avoid estuaries with low salinities

**Size:** Up to 12 feet

**Notes:** May live up to 40 years; feed on other sharks, fishes and squid



## Sandbar Shark

*Carcharhinus plumbeus*

**Family** *Carcharhinidae*, Requiem Sharks

### Description:

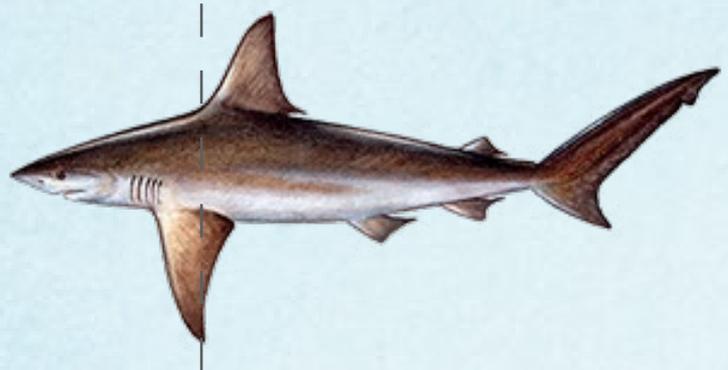
- Snout broadly rounded and short
- First dorsal fin is large and triangular, begins over or in front of pectoral fin insertion
- Back is brown or gray, fading to a white belly
- Interdorsal ridge present

**Similar Species:** Dusky shark, *C. obscurus* (first dorsal fin starts over pectoral fin free tip); bull shark, *C. leucas* (no interdorsal ridge)

**Habitat:** Coastal and offshore waters; may enter estuaries

**Size:** Up to 8 feet

**Notes:** Mature at about 6 feet in length; feed on fishes and invertebrates



## Tiger Shark

*Galeocerdo cuvier*

**Family** *Carcharhinidae*, Requiem Sharks

### Description:

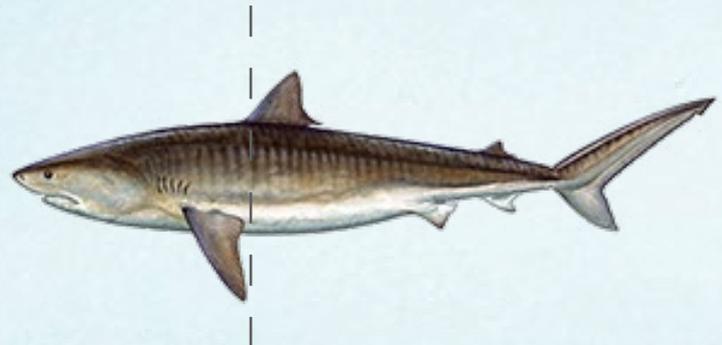
- Snout bluntly rounded, much shorter than mouth width
- Serrated teeth with deep notch on outer margins
- Spiracles present, small
- Adults have tiger-like vertical bars that fade with age
- Juveniles have bluish or green-gray to black backs with dark blotches
- Low interdorsal ridge present

**Similar Species:** Teeth, short snout and markings distinguish this species from all other *Carcharhinids*

**Habitat:** Coastal and offshore waters

**Size:** Up to 15.5 feet

**Notes:** Voracious feeders that will eat just about anything; second only to the great white shark in the number of attacks on humans worldwide



## Sand Tiger Shark

*Carcharias taurus*

**Family** *Odontaspidae*, Sand Tiger Sharks

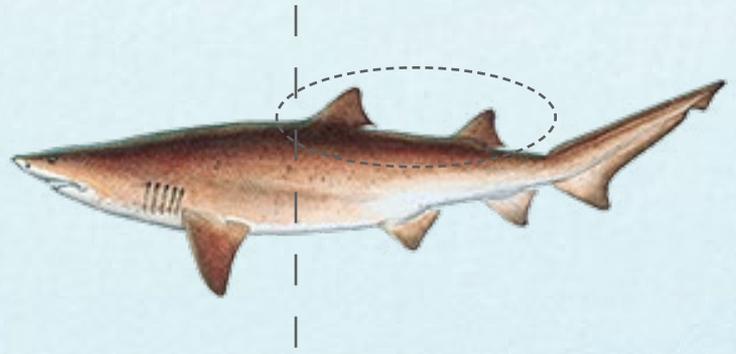
### Description:

- Snout flattened and sharply rounded
- Light brown with irregular dark spots on body
- First dorsal fin starts well behind pectoral fin
- First and second dorsal fins of equal size
- All 5 gill slits are in front of the pectoral fin
- Small eyes and a long mouth that extends behind the eyes
- No interdorsal ridge

**Habitat:** Coastal waters near bays and in deeper waters around reef areas

**Size:** Up to 10 feet

**Notes:** Juveniles are cannibalistic and will feed on siblings while in the womb



## Shortfin Mako Shark

*Isurus oxyrinchus*

**Family** *Lamnidae*, Mackerel Sharks

### Description:

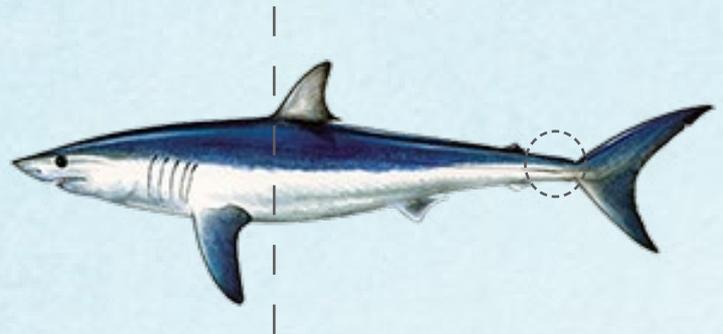
- Lunate tail (shaped like a crescent moon) with lobes of similar size
- Single lateral keel at base of tail
- Back is a deep blue color, fading to a white belly
- Snout is sharply pointed with a white underside
- First dorsal fin starts behind free tip of pectoral fin
- Teeth are long, narrow and recurved with smooth edges
- No interdorsal ridge

**Similar Species:** White shark, *C. carcharias* (teeth are serrated and triangular); and longfin mako, *I. paucus* (area under snout is dusky or blue-black)

**Habitat:** Offshore fish often seen near the surface

**Size:** Up to 12 feet

**Notes:** A strong swimmer that may leap out of the water when hooked; feed on many large fish species



## Common Thresher Shark

*Alopias vulpinus*

**Family** *Alopiidae*, Thresher Sharks

### Description:

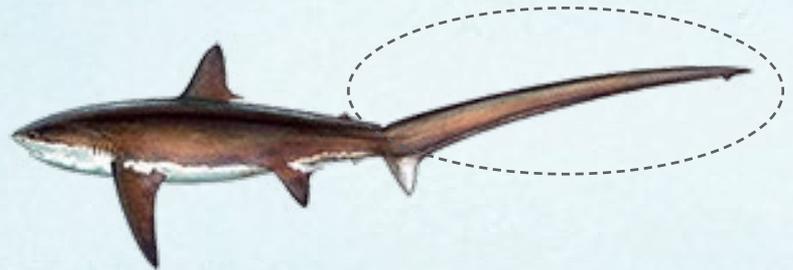
- Huge caudal fin upper lobe, nearly equal to length of body
- White patches extending from abdomen above pectoral fin bases
- No interdorsal ridge

**Similar Species:** Bigeye thresher shark, *A. superciliosus* (has larger eyes and V-groove on top of head)

**Habitat:** Coastal and offshore waters; juveniles found more inshore

**Size:** Up to 20 feet

**Notes:** Long caudal fin is used to herd and stun schools of fish, which make up most of its diet



## Nurse Shark

*Ginglymostoma cirratum*

**Family** *Ginglymostomatidae*, Nurse Sharks

### Description:

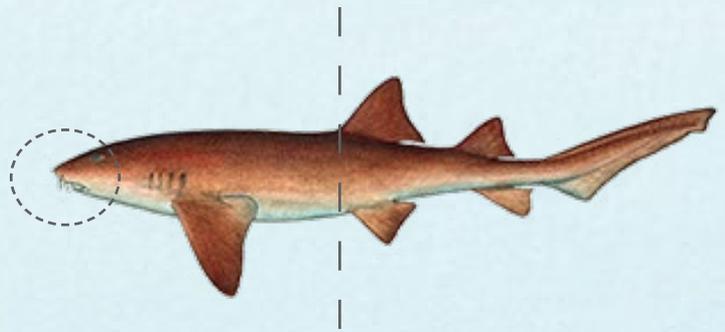
- Very blunt mouth with nasal barbels on each side
- Eyes very small
- Brown to yellow-brown above, lighter below (juveniles often have black spots)
- Broadly rounded dorsal and anal fins
- First and second dorsal fins are similar in size
- First dorsal fin begins well behind pectoral fins
- No distinct lower lobe of caudal fin
- No interdorsal ridge

**Similar Species:** Lemon shark, *N. brevirostris* (lacks nasal barbels)

**Habitat:** Coastal and nearshore waters; often seen lying motionless on the bottom

**Size:** Up to 9 feet

**Notes:** Feed on fishes and bottom-dwelling invertebrates



## Smooth Dogfish (*Dusky Smooth-hound*)

*Mustelus canis*

**Family** *Triakidae*, Smooth-hound Sharks

### Description:

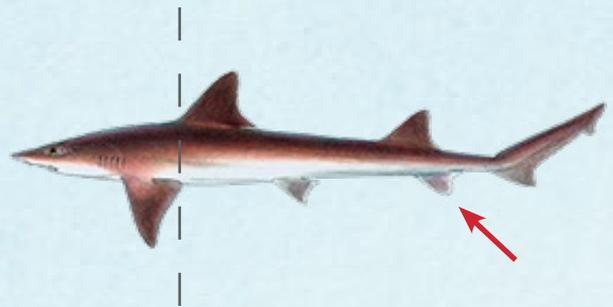
- Grayish-brown color on top, fading to lighter below
- Small, slender shark with two spineless dorsal fins, the second slightly smaller than the first
- Spiracles present
- Caudal fin lower lobe rounded and much shorter than upper lobe
- Upper lobe of caudal fin with deep notch at end
- Interdorsal ridge present

**Similar Species:** Spiny dogfish, *S. acanthias* (lacks anal fin and has one spine in front of each dorsal fin)

**Habitat:** Found inshore in bays, nearshore and offshore near reefs and banks

**Size:** Up to 5 feet

**Notes:** Feed on the bottom, scavenging and preying upon large crustaceans



## Spiny Dogfish

*Squalus acanthias*

**Family** *Squalidae*, Dogfish Sharks

### Description:

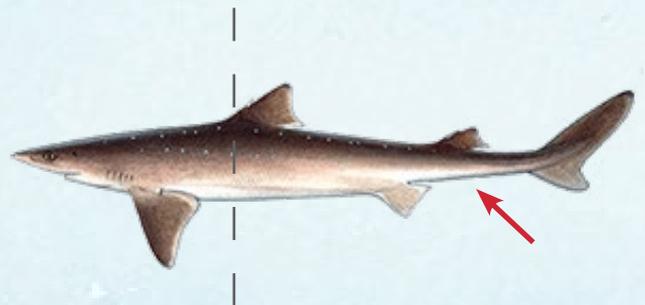
- Blueish-gray back, white spots on sides and a white belly
- Slender body with a long, narrow and pointed snout
- One spine in front of each of the two dorsal fins
- First dorsal fin starts just behind pectoral fin
- Spiracles present
- No anal fin present
- Pale caudal fin with white edge and black blotch on upper lobe
- No interdorsal ridge

**Similar Species:** Smooth dogfish, *M. canis* (has anal fin and lacks dorsal spines)

**Habitat:** Coastal waters on the east coast, usually near the bottom; tolerate brackish water

**Size:** Up to 5 feet

**Notes:** Forage in large schools; feed on fishes and invertebrates



## Scalloped Hammerhead Shark

*Sphyrna lewini*

**Family** Sphyrnidae, Hammerhead Sharks

### Description:

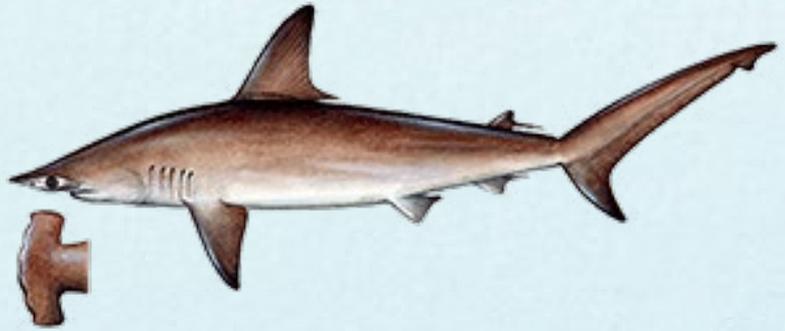
- Head is flattened and extends to hammer-like lobes on each side
- Indentation on front of head at its midpoint
- Teeth have smooth edges
- Back is gray-brown to olive, fading to a white belly
- Underside of pectoral fins tipped with black
- Pelvic fin rear edge nearly straight

**Similar Species:** Smooth hammerhead, *S. zygaena* (no indentation on front of head at midpoint); great hammerhead, *S. mokarran* (sides of head not pointed)

**Habitat:** Coastal to offshore waters

**Size:** Up to 12 feet

**Notes:** Feed on fishes, stringrays and squid; males mature at about 6 feet



## Bonnethead Shark

*Sphyrna tiburo*

**Family** Sphyrnidae, Hammerhead Sharks

### Description:

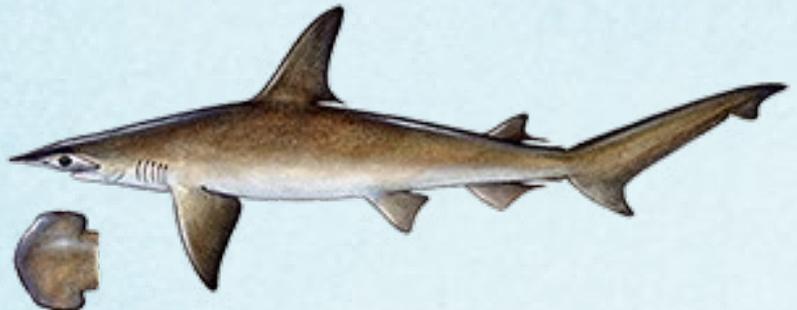
- Head is broadly widened into the shape of a shovel
- Front of head NOT notched at midline
- Back is gray or grayish-brown in color

**Similar Species:** Other hammerhead sharks obtain larger size and have hammer-shaped heads

**Habitat:** Coastal waters, including bays and estuaries

**Size:** Up to 4.5 feet

**Notes:** Mature at about 3 feet in length and produce 6 to 12 young at a time; feed mainly on crabs and other crustaceans



## Southern Stingray

*Dasyatis americana*

**Family** Dasyatidae, Stingrays

### Description:

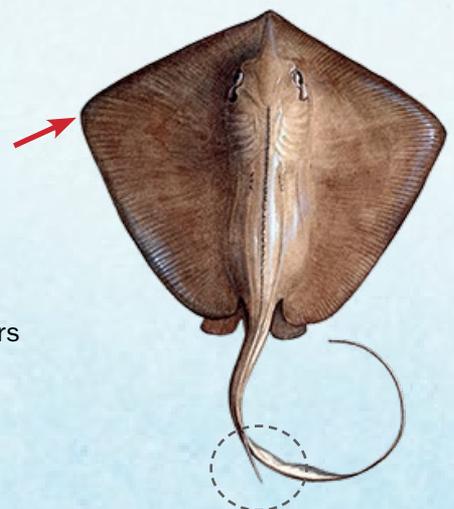
- Disk almost a perfect rhombus, with pointed corners
- Fin-fold on underside of tail is long and high, usually dusky or black in color
- Fin-fold on back is very low or absent
- Back is dark brown (more gray in juveniles)
- Defensive venomous barb near base of long whip-like tail

**Similar Species:** Atlantic stingray, *D. sabina* (snout sharply pointed); other stingrays; whip-like tail with venomous barb differentiates them from skates

**Habitat:** Bottom-dwelling species common in bays, estuaries and coastal waters

**Size:** Up to 5 feet in disk width

**Notes:** Feed on invertebrates and small fishes



## Atlantic Stingray

*Dasyatis sabina*

**Family** *Dasyatidae*, Stingrays

### Description:

- Brownish to yellow-brown on back and white underneath
- Corners of disk are rounded
- Snout pointed and projecting
- Defensive venomous barb near base of long whip-like tail
- Low dorsal and ventral fin folds on tail which are light-brown or dusky in color

**Similar Species:** Other stingrays are typically larger and lack a pointed snout; whip-like tail with venomous barb differentiates them from skates

**Habitat:** Bottom-dwelling species that inhabits coastal waters, including estuaries, lagoons and sometimes rivers

**Size:** Up to 2 feet in disk width

**Notes:** Feed on benthic invertebrates, polychaete worms, small crustaceans, shrimp, crabs, mollusks and sometimes small fishes



## Clearnose Skate

*Raja eglanteria*

**Family** *Rajidae*, Skates

### Description:

- Brown or gray in color and white underneath
- Small, dark spots and bars on back, but they are not ocellated
- Snout is pointed and translucent on either side
- Single row of spines located on disc behind spiracles, continuing to tail
- Dorsal fins similar in size and located near end of caudal fin (tail)
- Lack venomous barb

**Similar Species:** Other skate species; stingrays have a similar body shape, but possess a long whip-like tail equipped with a venomous spine

**Habitat:** Coastal and offshore species, found in brackish and salt waters over soft, sandy bottoms to depths up to 390 feet

**Size:** Up to 1.5 feet in disk width

**Notes:** Feed on crustaceans, mollusks and other small invertebrates



## Saltwater Fishes

### Ladyfish (Skipjack, Ten-Pounder)

*Elops saurus*

**Family** *Elopidae*, Ladyfishes

### Description:

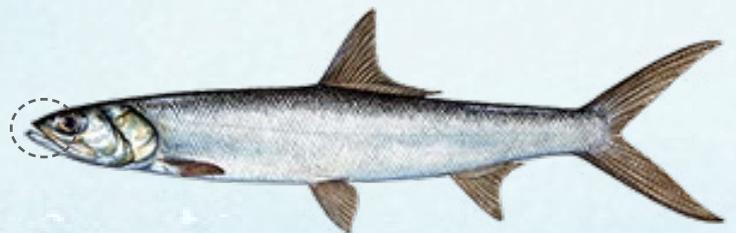
- Silver color on body, with a blueish back
- Head small and pointed
- Mouth terminal (at the very front of head)
- Slender body with small scales
- Last dorsal ray not extended into long filament

**Similar Species:** Juvenile tarpon, *M. atlanticus*; and bonefish, *A. vulpes*

**Habitat:** Inshore fish, found in bays and estuaries; occasionally enter freshwater

**Size:** 36 inches (2 to 3 pounds)

**Notes:** Spawn offshore, peaking in the fall; adults feed on fish and crustaceans; often form large schools; leap when hooked



## Tarpon

*Megalops atlanticus*

**Family** *Megalopidae*, Tarpons

### Description:

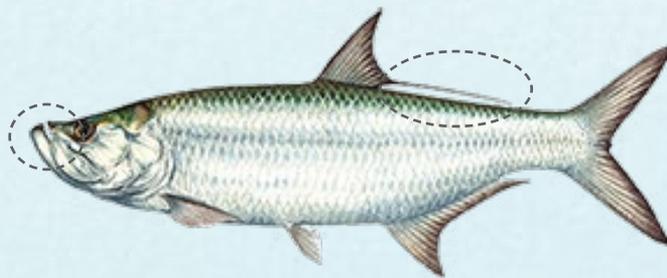
- Back is dark blue-green or greenish-black, becoming bright silver on the sides
- One dorsal fin; last ray of dorsal fin extended into a long filament
- Very large scales
- Mouth large and points upward

**Similar Species:** As juveniles, tarpon resemble ladyfish, *E. saurus*

**Habitat:** Primarily inshore fish; adults spawn offshore

**Size:** Up to 8 feet (300 pounds)

**Notes:** Slow-growing, matures at 7 to 13 years of age; spawn between May and September; females may lay more than 12 million eggs; develop into a ribbon-like larval stage; tolerate a wide range of salinity; juveniles commonly found in freshwater; gulp air at the surface; feed on fish and large crustaceans



## Bonefish

*Albula vulpes*

**Family** *Albulidae*, Bonefishes

### Description:

- Silvery color with a bluish or greenish back
- Slender, round body
- Snout long and overhanging lower jaw
- Dark streaks on upper half of body and faint cross-bands extending down to lateral line
- Extremities of dorsal and caudal fins are shaded with black

**Similar Species:** Ladyfish, *E. saurus* (mouth terminal, at the very front of head)

**Habitat:** Inshore fish inhabiting shallow waters often less than one foot deep, usually over lush seagrass flats, but occasionally over white sand

**Size:** Up to 18 pounds; rarely more than 10 pounds

**Notes:** Travels in loose schools; roots out shrimp, shellfish, crabs and fish from the bottom; spawns offshore



## Great Barracuda

*Sphyraena barracuda*

**Family** *Sphyraenidae*, Barracudas

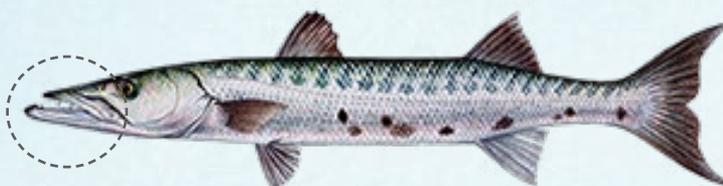
### Description:

- Gray with a greenish color on the back, shading to a lighter belly
- Mouth with prominent, sharp teeth; lower jaw protrudes past upper jaw
- Black blotches on lower sides
- Diagonal dark bars on upper sides (not always evident)
- Tail color is dark with white tips
- Young have dark stripe on side that breaks into dark blotches with age

**Habitat:** Range inshore to offshore; young found inshore in seagrass beds

**Size:** Up to 106 pounds

**Notes:** Top predator in reef areas, consuming fishes, squid and shrimp; consuming larger barracuda may cause ciguatera poisoning



## Bluefish

*Pomatomus saltatrix*

**Family** Pomatomidae, Bluefishes

### Description:

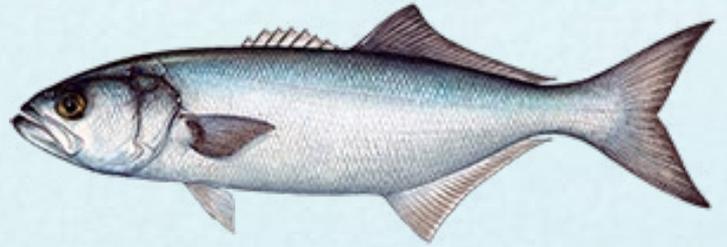
- Color blue or greenish-blue on back, sides silvery
- Mouth large with prominent teeth
- Dorsal and anal fins nearly the same size
- Black blotch at base of pectoral fins
- Scales small; lateral line almost straight

**Similar Species:** Blue runner, *C. crysos* (has scutes and pectoral fin extends to anal fin)

**Habitat:** Young usually found inshore during spring and summer, moving offshore to join adults in fall and winter; strong migration of northeast Atlantic stock to Florida east coast in winter

**Size:** Most Gulf coast catches under 3 pounds; much larger on Atlantic coast, up to 27 pounds

**Notes:** Travels in large schools of similar-sized fish, following schools of baitfish; sometimes cannibalistic; spawning occurs offshore in spring and summer



## Cobia (Ling, Lemonfish)

*Rachycentron canadum*

**Family** Rachycentridae, Cobia

### Description:

- Long, slim fish with a broad, depressed head
- Brown in color, fading to a whitish belly
- Dark lateral stripe extending through eye to tail
- Lower jaw projects past upper jaw
- Young have alternating black and white horizontal stripes

**Similar Species:** Remora, *E. naucrates* (sucker disk present on top of head)

**Habitat:** Inshore and nearshore inhabiting inlets, bays and among mangroves; frequently seen around buoys, pilings and wrecks

**Size:** Up to 6 feet (150 pounds); common from 10 to 50 pounds

**Notes:** Spawns in spring and early summer; feeds on crabs, squid and small fishes



## Tripletail

*Lobotes surinamensis*

**Family** Lobotidae, Tripletails

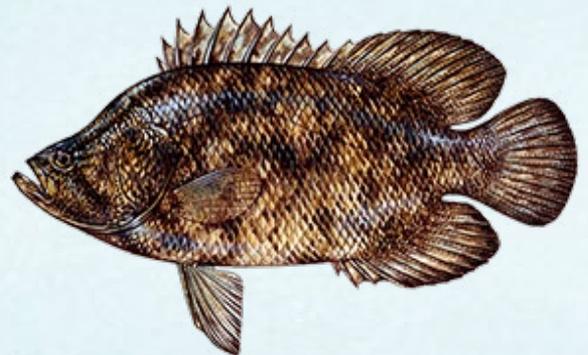
### Description:

- Upper profile concave at nape
- Elongated dorsal and anal fins give the illusion of three tails
- Head and body typically has blotches of tan to yellow or dark brown
- Edge of preopercle (cheek) very serrated

**Habitat:** Found in bays and estuaries to offshore waters

**Size:** Up to 42 inches

**Notes:** Associate strongly with floating objects such as buoys or channel markers



## Hogfish (Hog Snapper)

*Lachnolaimus maximus*

**Family** Labridae, Wrasses

### Description:

- First 3 spines of dorsal fin greatly elongated
- Black blotch near end of dorsal fin
- Body deep, strongly compressed
- Snout elongated in adults
- Tail with elongated upper and lower lobes
- Young mottled with various colors, fading with age

**Habitat:** Rocky bottoms, ledges and reefs offshore; young associated with seagrass beds

**Size:** Up to 36 inches

**Notes:** Popular food fish



## Gray Triggerfish

*Balistes capriscus*

**Family** Balistidae, Triggerfishes

### Description:

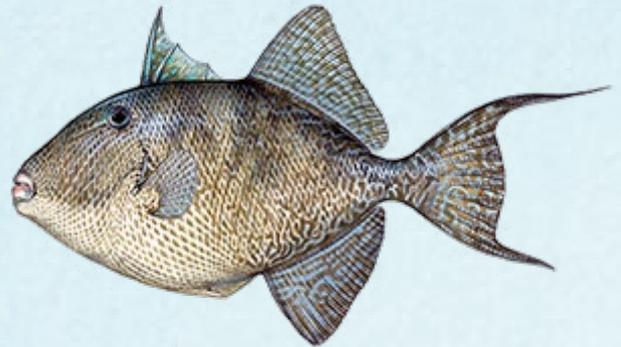
- Olive-gray in color with plate-like scales
- Small mouth with chisel-like teeth used for crushing
- Dorsal and anal fins marbled
- Upper and lower lobes of tail elongated in large adults
- Young have large dark spots on the back (sometimes persist in adults)

**Similar Species:** Other triggerfish

**Habitat:** Hard-bottoms, reefs and ledges

**Size:** Up to 17 inches

**Notes:** Triggerfish can raise and lock their first dorsal spine; pressing down on the second dorsal spine acts as a trigger, unlocking the first spine



## Dolphinfish (Mahi-Mahi, Dorado)

*Coryphaena hippurus*

**Family** Coryphaenidae, Dolphinfishes

### Description:

- Bright greenish blue back with yellow on sides
- Single dark dorsal fin extends from above the eye to the tail
- Capable of flashing purple, chartreuse and a wide range of other colors
- Body tapers sharply from head to tail
- Irregular blue or golden blotches scattered over sides
- Profile of head on adult males is nearly vertical
- Profile of head on females is more sloping

**Similar Species:** Pompano dolphinfish, *C. equiselis* (has square-shaped tooth patch on tongue; dolphinfish have an oval-shaped tooth patch on tongue)

**Habitat:** Offshore in warm waters

**Size:** Up to 63 inches (88 pounds); common to 30 pounds

**Notes:** One of the fastest-growing fish, thought to live no more than 5 years; spawns in warm oceanic currents throughout much of the year; young associate with sargassum; diet includes flying fish and squid



## Ballyhoo

*Hemiramphus brasiliensis*

**Family** Hemiramphidae, Halfbeaks

### Description:

- Elongated lower jaw and long, cylindrical body
- Pectoral fin is short
- Pelvic fin extends past beginning of dorsal fin
- Tip of lower jaw and upper lobe of caudal fin orange-red
- Dorsal and anal fins lack scales

**Similar Species:** Other halfbeaks

**Habitat:** Young are found in open waters; adults found in bays and nearshore waters close to reefs

**Size:** Up to 16 inches

**Notes:** Popular bait species



## American Shad

*Alosa sapidissima*

**Family** Clupeidae, Herrings

### Description:

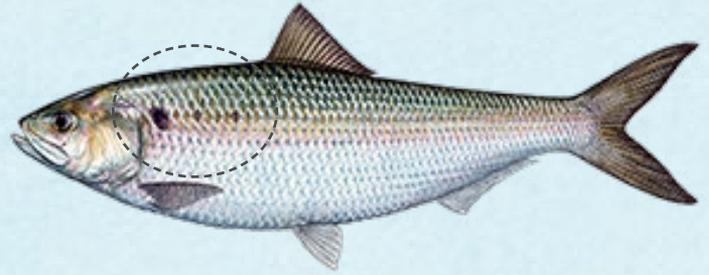
- Green or greenish-blue back with a metallic luster
- Silvery sides and white belly (colors darken when fish enters freshwater)
- Belly with scutes (bone-like projections)
- One or more dark spots in a row behind operculum
- Lower jaw with pointed tip that fits into v-shaped notch in upper jaw

**Similar Species:** Other herrings (menhaden, which are often referred to as “shad,” have a rounded lower jaw tip; American shad is an east coast species)

**Habitat:** Occur from rivers to offshore waters

**Size:** Up to 20 inches (12 pounds)

**Notes:** Enter freshwater to spawn; young remain in freshwater, then move out to sea with age; feed on plankton; important baitfish



## Atlantic Thread Herring

*Opisthonema oglinum*

**Family** Clupeidae, Herrings

### Description:

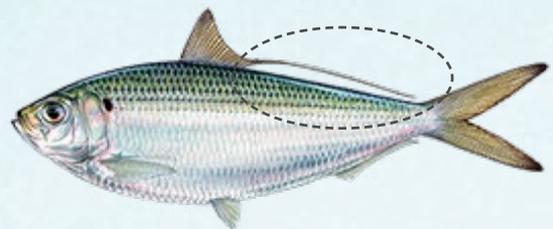
- Dark blue-gray back, silvery sides and a white belly
- Last dorsal fin ray is elongated

**Similar Species:** American shad, *A. sapidissima*; and threadfin shad, *D. petenense*

**Habitat:** Coastal waters

**Size:** Up to 12 inches

**Notes:** Filter-feed on plankton and eat small fishes, crabs and shrimp



## Scaled Sardine (Pilchard, Greenback)

*Harengula jaguana*

**Family** Clupeidae, Herrings

### Description:

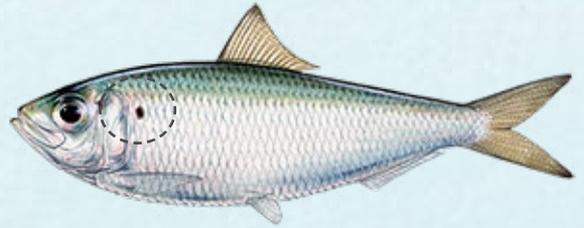
- Solid-color on back with dark streaks
- Usually has a single small, dark spot at upper edge of gill cover
- Sometimes one spot present on shoulder

**Similar Species:** Spanish sardine, *S. aurita*

**Habitat:** Coastal waters

**Size:** Up to 7 inches

**Notes:** Popular baitfish that forms schools; spawns offshore



## Spanish Sardine

*Sardinella aurita*

**Family** Clupeidae, Herrings

### Description:

- Slender body
- Bluish-gray back, sometimes greenish
- Sides are silvery or brassy in color

**Similar Species:** Scaled sardine, *H. jaguana*

**Habitat:** Coastal waters

**Size:** Up to 10 inches

**Notes:** An abundant fish that forms schools



## Gulf Menhaden (Pogie)

*Brevoortia patronus*

**Family** Clupeidae, Herrings

### Description:

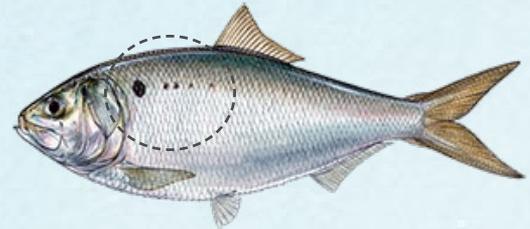
- Oval-shaped body that is deep and compressed
- Spot near top of gill cover, often followed by several rows of smaller spots
- Blue-green or blue-brown color on back, sides and belly silver, fins yellowish
- Notch in the middle of upper jaw

**Similar Species:** Yellowfin menhaden, *B. smithi* (have a single dark spot)

**Habitat:** Nearshore waters

**Size:** Rarely over 10 inches

**Notes:** Spawn offshore across the northern Gulf in the winter; valuable commercial fishery



## Yellowfin Menhaden

*Brevoortia smithi*

**Family** Clupeidae, Herrings

### Description:

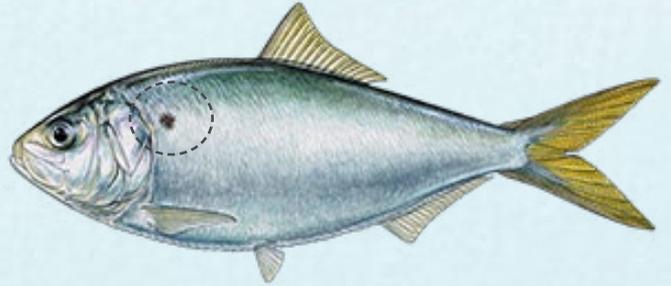
- Oval-shaped body that is deep and compressed
- Single spot near top of gill cover (not followed by smaller spots)
- Fins are golden yellow
- Silver body with a greenish or bluish back
- Notch in the middle of upper jaw

**Similar Species:** Gulf menhaden, *B. patronus* (have small spots trailing the prominent dark spot)

**Habitat:** Found nearshore and in bays and estuaries

**Size:** Up to 13 inches

**Notes:** Feeds by filtering phytoplankton



## Gulf Flounder

*Paralichthys albigutta*

**Family** Paralichthyidae, Large-tooth Flounders

### Description:

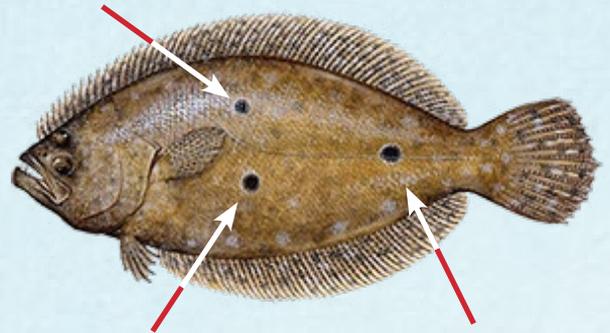
- Brown body color, with numerous spots and blotches
- Three prominent dark, eyelike spots forming a triangle-shape (one spot on lateral line, one above and one below)
- Numerous white spots scattered throughout body and fins
- Belly is white or dusky
- Strong canine-like teeth
- Wedge-shaped tail, its tip in the middle

**Similar Species:** Southern flounder, *P. lethostigma* (has no eyelike spots; color pattern is key to distinguishing the two species)

**Habitat:** Inshore on sandy or mud bottoms, often ranging into tidal creeks; occasionally caught on nearshore rocky reefs

**Size:** Common to 14 inches (2 pounds)

**Notes:** Right eye migrates over to left side early in life; a bottom-dweller thought to spawn offshore; feeds on crustaceans and small fishes



## Southern Flounder

*Paralichthys lethostigma*

**Family** Paralichthyidae, Large-tooth Flounders

### Description:

- Light to dark brown color with dark spots and blotches
- No eyelike spots
- Belly is white or dusky
- Strong canine-like teeth
- Wedge-shaped tail, its tip in the middle

**Similar Species:** Gulf flounder, *P. albigutta* (has three prominent eyelike spots)

**Habitat:** Brackish bays and estuaries, sometimes ranging into tidal creeks and freshwater

**Size:** Common to 20 inches

**Notes:** Right eye migrates over to left side early in life; a bottom-dweller thought to spawn offshore; mostly feeds on small fishes



## Hardhead Catfish

*Ariopsis felis*

**Family** Ariidae, Sea Catfishes

### Description:

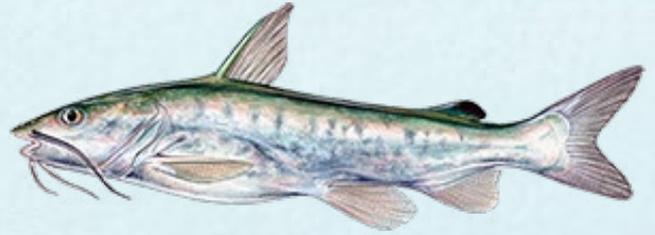
- Body brownish to gray-green, with a white to yellowish belly
- Three prominent, sharp spines (one at beginning of dorsal fin and one on each pectoral fin)
- Spines do not have fleshy filaments
- Four barbels on chin
- Barbels at corner of mouth (shorter than head and not flat)

**Similar Species:** Gafftopsail catfish, *B. marinus* (has two chin barbels and spines with long filaments)

**Habitat:** Coastal waters; enters brackish waters

**Size:** Up to 24 inches (12 pounds)

**Notes:** Males incubate the eggs in their mouth



## Gafftopsail Catfish

*Bagre marinus*

**Family** Ariidae, Sea Catfishes

### Description:

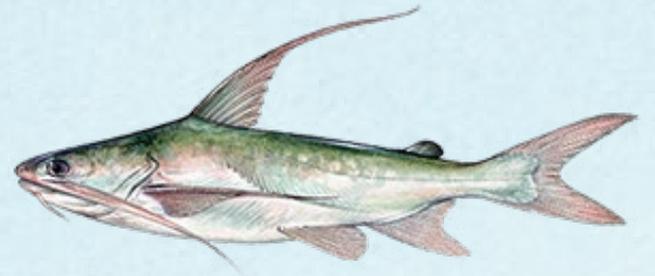
- Bluish-green back, fading to a silver-white belly
- Three prominent, sharp spines (one at beginning of dorsal fin and one on each pectoral fin)
- The three prominent spines have elongated, fleshy filaments
- Two barbels on chin
- Barbels at corner of mouth are flattened and very elongated

**Similar Species:** Hardhead catfish, *A. felis* (has four chin barbels and spines lack filaments)

**Habitat:** Coastal waters; may enter brackish waters

**Size:** Up to 27 inches (10 pounds)

**Notes:** A good food-fish that is usually less common than the hardhead catfish



## Striped Mullet (Black Mullet)

*Mugil cephalus*

**Family** Mugilidae, Mulletts

### Description:

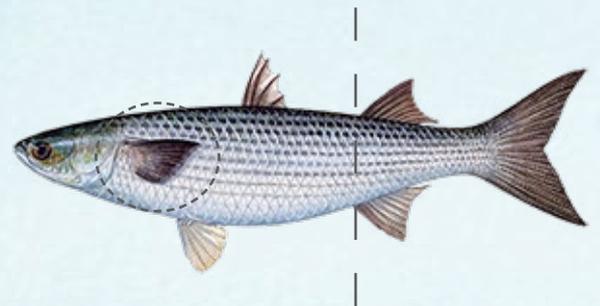
- Back is bluish-gray or green, shading to silvery sides and a white belly
- Indistinct horizontal black stripes on sides
- Second dorsal fin starts over the beginning of the anal fin
- Blunt nose and small mouth
- No black blotch at base of pectoral fin

**Similar Species:** Fantail mullet, *M. gyrans*; and white mullet, *M. curema* (both have a black blotch at base of pectoral fin and lack dark stripes)

**Habitat:** Coastal waters

**Size:** Common to 3 pounds

**Notes:** Adults migrate offshore in large schools to spawn; juveniles migrate inshore at about 1 inch in size; they frequently jump out of the water; consume algae, decaying matter and other tiny marine life



## Fantail Mullet

*Mugil trichodon*

**Family** *Mugilidae*, Mulletts

### Description:

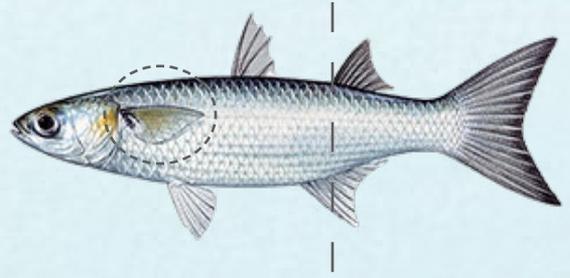
- Back is olive green with blue tints, shading to silvery sides and a white belly
- Anal and pelvic fins yellowish
- Dark blotch at base of pectoral fin
- Second dorsal fin starts behind the beginning of the anal fin
- Inverted V-shaped mouth
- Lacks dark stripes

**Similar Species:** Striped mullet, *M. cephalus* (has stripes and lacks black blotch at base of pectoral fin), and white mullet, *M. curema* (lacks pigmented second dorsal fin)

**Habitat:** Coastal waters, occurring along beaches in the fall

**Size:** Usually less than 1 pound

**Notes:** Spawn in nearshore or inshore waters during spring and summer; juveniles found inshore; feed on algae, small crustaceans and decaying matter



## Atlantic Spadefish

*Chaetodipterus faber*

**Family** *Ephippidae*, Spadefishes

### Description:

- Silver color with 4 to 6 black vertical bars on each side (may fade in larger fish)
- Deep, compressed body
- First and second dorsal fins separated
- Tail-shape concave
- Second dorsal fin and anal fin elongated
- Young are entirely dark brown or black in color

**Similar Species:** No close resemblance; frequently called angelfish by mistake

**Habitat:** Inshore, nearshore, over seagrass beds and around structure

**Size:** Up to 36 inches (20 pounds); common to 2 pounds

**Notes:** Spawn in spring and summer; travel in large schools; small juveniles may drift on their sides to mimic floating debris; feed on crustaceans and other invertebrates



## Striped Mojarra (Sand Perch)

*Eugerres plumieri*

**Family** *Gerreidae*, Mojarras

### Description:

- Dark olive color on back
- Tan to silver on sides, often with a metallic sheen
- Black stripe along center of each scale row, except toward belly
- Anal fins sometimes dark orange
- Three anal spines
- Dorsal and anal spines long and stout
- Pelvic spine and first two anal spines are pale

**Similar Species:** Other mojarras

**Habitat:** Brackish and coastal waters (in limestone regions) and seagrass beds

**Size:** Up to 12 inches

**Notes:** Often used for bait, but larger specimens may be eaten



## Striped Anchovy

*Anchoa hepsetus*

**Family** Engraulidae, Anchovies

**Description:**

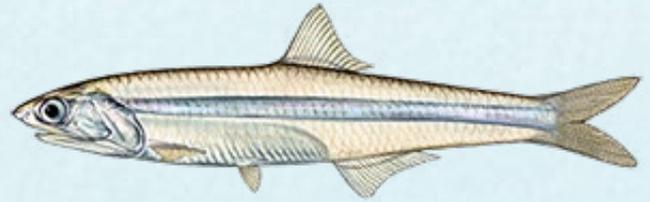
- Snout length somewhat less than eye diameter
- Anal fin begins below middle of dorsal fin
- Silver stripe on body
- Greenish color on back

**Similar Species:** Bay anchovy, *A. mitchilli* (anal fin begins below beginning of dorsal fin)

**Habitat:** Shallow bays and estuaries

**Size:** Up to 6 inches

**Notes:** Form dense schools and tolerate a wide range of salinities



## Bay Anchovy

*Anchoa mitchilli*

**Family** Engraulidae, Anchovies

**Description:**

- Snout very short, only slightly overhanging mouth
- Anal fin begins below beginning of dorsal fin
- Body relatively deep when compared to striped anchovy
- Silver stripe on body, often faint or absent toward front
- Stripe fades after death

**Similar Species:** Striped anchovy, *A. hepsetus* (anal fin begins below middle of dorsal fin)

**Habitat:** Shallow bays and estuaries; common in brackish waters

**Size:** Up to 4 inches

**Notes:** Form dense schools and tolerate a wide range of salinities



## Snook, Family Centropomidae

### Common Snook

*Centropomus undecimalis*

**Family** Centropomidae, Snook

**Description:**

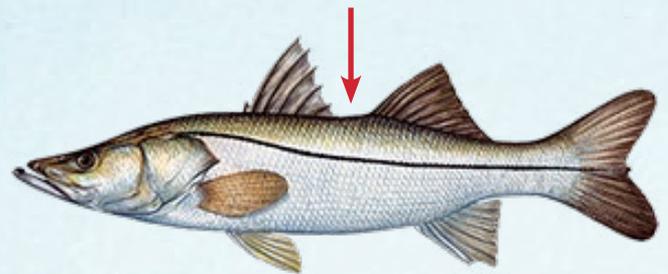
- Large mouth with a protruding lower jaw
- Jaw reaches below the rear portion of the eye
- Sloping forehead
- High dorsal fin that is divided
- Black lateral line extends onto tail
- Pelvic fin yellow in color

**Similar Species:** Other snook species

**Habitat:** Inshore in coastal waters, including mangrove shorelines, seagrass beds, beaches and around structure

**Size:** Up to 48 inches (50 pounds); grow much larger than other snook species

**Notes:** Cannot tolerate water temperatures below 60° F; can tolerate freshwater; form schools during spawning season; feed on fish and large crustaceans



## Fat Snook

*Centropomus parallelus*

**Family** Centropomidae, Snook

### Description:

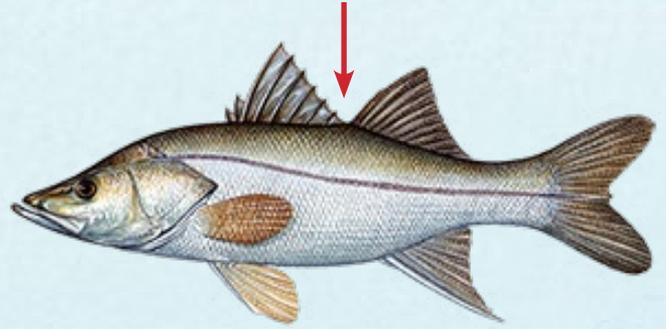
- Deeper body than other snook species
- Mouth reaches below the center of the eye
- Black lateral line extends onto tail
- Yellow-brown to green-brown on back
- Silver color on sides

**Similar Species:** Other snook species

**Habitat:** Inshore species found in mangroves; commonly found in freshwater; occurs more in freshwater than other snook species

**Size:** Common to 10 inches, but may reach 28 inches

**Notes:** Mangrove shorelines serve as nursery grounds for young



## Swordspine Snook

*Centropomus ensiferus*

**Family** Centropomidae, Snook

### Description:

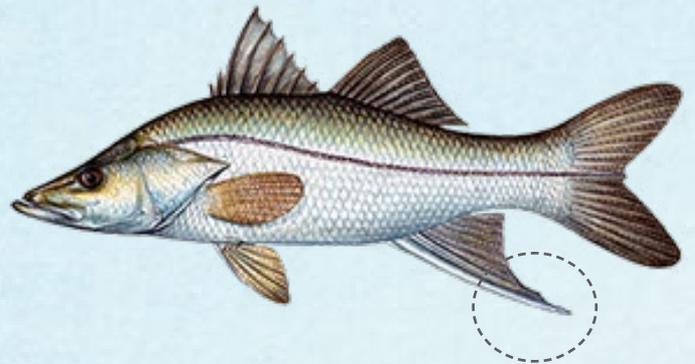
- Anal fin extends past the base of the caudal fin
- Largest scales of all snook
- Color yellow-green to brown-green on back with a silver belly
- Smallest of the snooks
- Profile slightly concave
- Prominent lateral line extends onto tail

**Similar Species:** Other snook species

**Habitat:** Occurs in inshore estuarine habitats

**Size:** Common to 10 inches, but may reach 15 inches

**Notes:** Mangrove shorelines serve as nursery areas for young; rare on Florida's west coast; prefers only slightly brackish or freshwater



## Tarpon Snook

*Centropomus pectinatus*

**Family** Centropomidae, Snook

### Description:

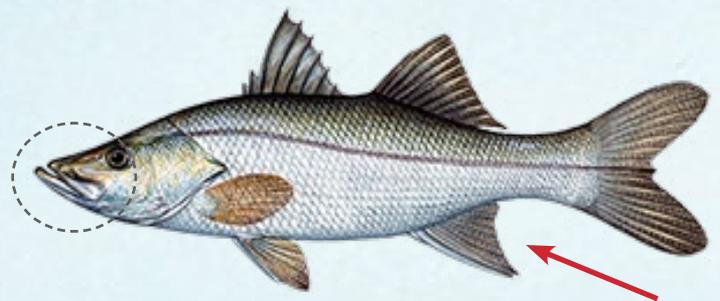
- Only snook with 7 anal fin rays (others have 6)
- Lower jaw curves upward
- Tips of pelvic fins reach beyond anus
- Compressed body
- Prominent black lateral line extends onto tail

**Similar Species:** Other snook species

**Habitat:** Inshore in coastal waters; frequently found in freshwater

**Size:** Common to 15 inches, but may reach 22 inches

**Notes:** Feed on small fish and large crustaceans; mangrove shorelines serve as nursery areas for young; rare on Florida's west coast



# Jacks and Pompanos, Family *Carangidae*

## Banded Rudderfish

*Seriola zonata*

**Family** *Carangidae*, Jacks and Pompanos

### Description:

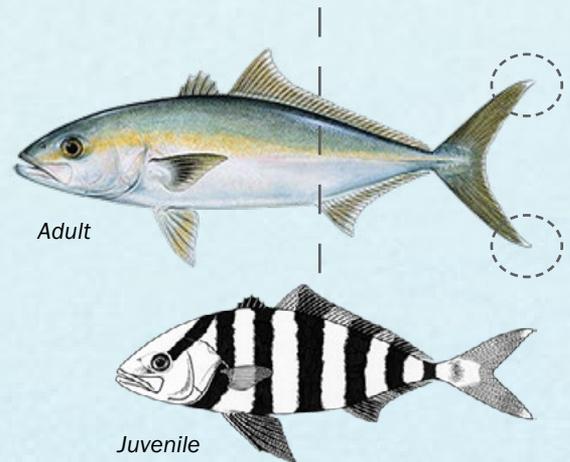
- Adults are bluish, greenish or brown and lack dark vertical bands
- Anal fin is half the length of the second dorsal fin
- Tail has white tips
- Slender body
- Juveniles have six dark bars on body and dark stripe from eye to first dorsal fin

**Similar Species:** Other jack species

**Habitat:** Nearshore and offshore over hard bottom, generally in shallower water than other amberjacks; young associated with weed lines or floating debris and may follow sharks and other large fish

**Size:** Usually under 24 inches (10 pounds)

**Notes:** Adults feed on fish and shrimp; spawn offshore most of year



## Almaco Jack

*Seriola rivoliana*

**Family** *Carangidae*, Jacks and Pompanos

### Description:

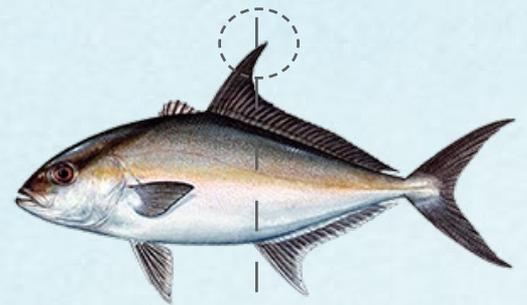
- Front of first dorsal fin and anal fin high and elongated
- Deep-bodied
- Anal fin is about 2/3 the length of the second dorsal fin
- Sometimes dark in coloration
- Body more compressed than banded rudderfish or greater amberjack
- No scutes (bone-like projections) on body

**Similar Species:** Other jack species

**Habitat:** Wide-ranging in offshore waters, not a common catch; young are associated with sargassum

**Size:** Common to 35 inches (10 pounds)

**Notes:** Spawn offshore during spring, summer and fall



## Greater Amberjack

*Seriola dumerili*

**Family** *Carangidae*, Jacks and Pompanos

### Descriptions:

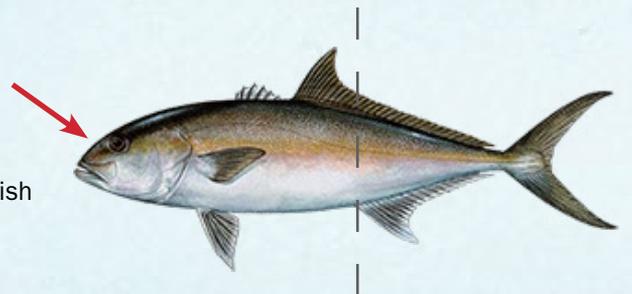
- Olive green or brownish back and silver sides
- Dark stripe from nose to front of dorsal fin that "lights up" when fish is in feeding mode
- Anal fin is about 2/3 the length of the second dorsal fin
- 11-19 gill rakers present on each gill arch (see page 37)
- No scutes (bone-like projections) on body

**Similar Species:** Other jack species

**Habitat:** Offshore species associated with rocky reefs, debris and wrecks, typically in 60 to 240 feet of water; sometimes caught nearshore in south Florida; juveniles associate with floating objects and may occur in water less than 30 feet deep

**Size:** Up to 60 inches (176 pounds); common around 40 inches and under 40 pounds

**Notes:** Largest of the jacks; thought to spawn offshore throughout much of the year; feeds on squid, fish and crustaceans



## Lesser Amberjack

*Seriola fasciata*

**Family** *Carangidae*, Jacks and Pompanos

### Description:

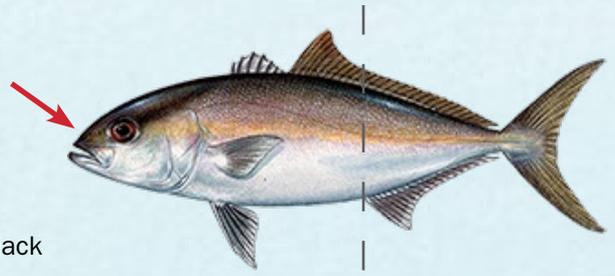
- Olive green or brownish back and silver sides
- Dark stripe from behind the eye to front of dorsal fin
- Proportionately larger eye and deeper body than greater amberjack
- Anal fin is about 2/3 the length of the second dorsal fin
- 21-24 gill rakers on each gill arch (see page 37)
- Juveniles have split or wavy bars on sides

**Similar Species:** Other jack species

**Habitat:** Found nearshore and offshore

**Size:** Usually less than 20 inches (10 pounds)

**Notes:** Believed to spawn offshore; adults eat fish and squid



## Florida Pompano

*Trachinotus carolinus*

**Family** *Carangidae*, Jacks and Pompanos

### Description:

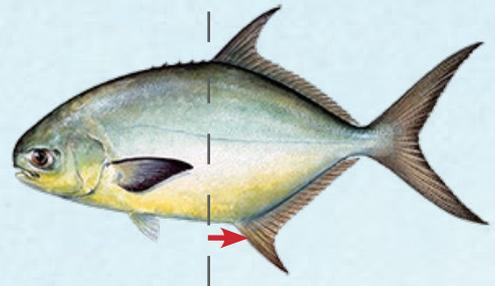
- Dark greenish-gray on back, shading to silver sides
- Yellowish coloration on belly
- Fish found in dark waters have yellow on throat, pelvic fins and anal fin
- Dorsal fin begins in front of anal fin
- Dorsal, anal and caudal fins are short and upright
- Forehead slopes gently backward
- Deep, compressed body with a small mouth
- Caudal fin with a wider fork than permit

**Similar Species:** Permit, *T. falcatus* (dorsal fin begins over the anal fin and grow much larger than Florida pompano)

**Habitat:** Inshore and nearshore waters, especially along sandy beaches, oyster bars and over seagrass beds, often in turbid water; found in water as deep as 130 feet

**Size:** Up to 24 inches (8 pounds)

**Notes:** Spawn offshore March to September; feed on mollusks and crustaceans, especially mole crabs (sand fleas)



## Permit

*Trachinotus falcatus*

**Family** *Carangidae*, Jacks and Pompanos

### Description:

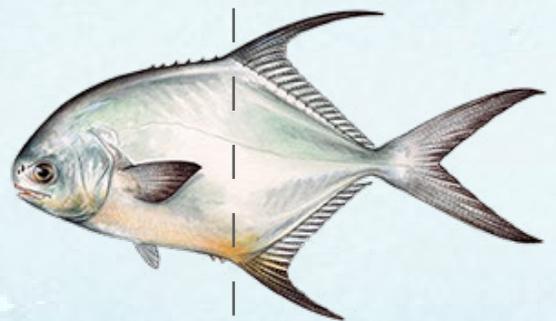
- Gray, dark or iridescent blue back, shading to silver sides
- Fish from dark waters have golden tints on belly
- Dorsal fin begins over anal fin
- Dorsal, anal and caudal fins long and sloped back
- Forehead sharply rises to a "hump" then slopes back
- Compressed body that is deeper than Florida pompano
- Caudal fin has a narrow fork
- Small permit have teeth on their tongue (absent in pompano)

**Similar Species:** Florida pompano, *T. carolinus* (dorsal fin begins in front of anal fin)

**Habitat:** Offshore near structure; inshore over grass flats, sand and in channels

**Size:** Common to 50 pounds

**Notes:** Feed on small fishes and invertebrates



## African Pompano

*Alectis ciliaris*

**Family** *Carangidae*, Jacks and Pompanos

### Description:

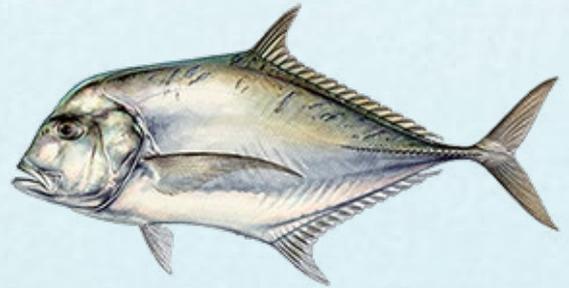
- Metallic-blue color on back, fading to a white belly
- Body is deep and compressed
- Front of head steep and rounded
- Dorsal fin begins in front of anal fin
- Juveniles have long, threadlike rays at front of dorsal and anal fins
- Scutes (bone-like projections) on sides in front of tail
- Dorsal and anal fins with no more than one finlet each
- Body becomes relatively longer with age

**Similar Species:** Other pompano species

**Habitat:** Young found in open waters; adults found to depths of 180 feet, often near reefs, wrecks and ledges

**Size:** Up to 42 inches (40 pounds)

**Notes:** Great fighter and good to eat; often found in schools over structure



## Palometa (Great Pompano)

*Trachinotus goodei*

**Family** *Carangidae*, Jacks and Pompanos

### Description:

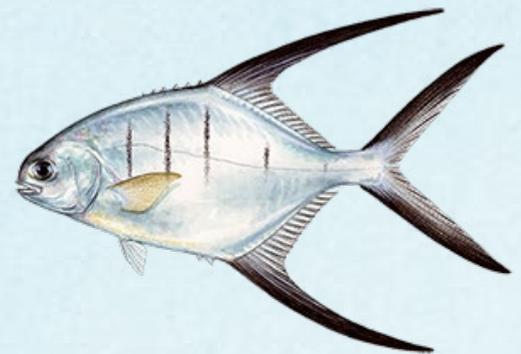
- Gray to blue-green on top of head and along the back
- Bright silver sides, yellowish belly
- Very elongated dorsal and anal fins, dusky or black with bluish edges
- Deep body; four narrow bars on the sides, traces of a fifth near the tail
- No scutes (bone-like projections)

**Similar Species:** Florida pompano, *T. carolinus*; and permit, *T. falcatus* (both lack elongated dorsal and anal fins and lack dark bars on sides)

**Habitat:** Clear water along sandy beaches and bays; occasionally over reefs

**Size:** Usually less than 20 inches (1 pound)

**Notes:** Spawn offshore in spring, summer and fall; most common in south Florida



## Crevalle Jack

*Caranx hippos*

**Family** *Carangidae*, Jacks and Pompanos

### Description:

- Back bluish-green to greenish-gold, belly silver or yellowish
- Prominent black spot on gill cover
- Black spot at the base of each pectoral fin
- Second dorsal fin and anal fin almost identical in size
- No scales on throat
- Body deep, front of head steep

**Similar Species:** Blue runner, *C. crysos* (lack black spot at base of pectoral fins); other jack species

**Habitat:** Common both inshore and in open waters

**Size:** Up to 20 pounds and common at 3 to 5 pounds

**Notes:** Tolerate a wide range of salinities; schools corner a pod of baitfish at the surface; feed mainly on small fishes; peak spawning occurs offshore March through September



## Blue Runner (Hardtail Jack)

*Caranx crysos*

**Family** *Carangidae*, Jacks and Pompanos

### Description:

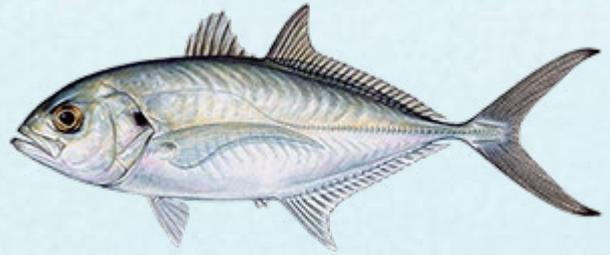
- Color light-olive to bluish-green on back, with a silver-gray to golden belly
- Usually have black spot on gill cover
- Scutes (bone-like projections) present on sides, in front of tail
- Tail tips black in color

**Similar Species:** Bluefish, *P. saltatrix*; crevalle jack, *C. hippos* (lacks scutes); and other jack species

**Habitat:** Juveniles found offshore; adults found inshore and nearshore

**Size:** Up to 20 inches (4 pounds); and common under 1 pound

**Notes:** Mature at 9 to 10 inches; spawn offshore January through August; young form schools near floating objects or structure; adults feed on fish, shrimp and squid



## Horse-eye Jack (Big-eye Jack)

*Caranx latus*

**Family** *Carangidae*, Jacks and Pompanos

### Description:

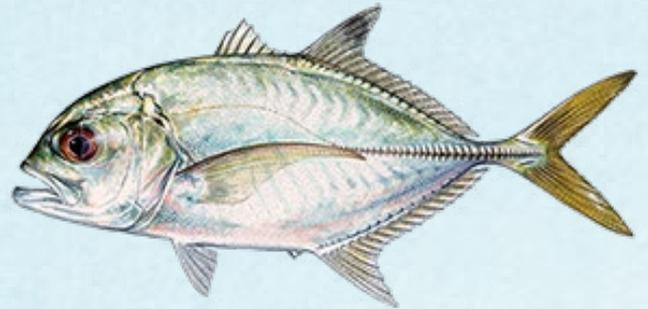
- Front of head less steep than crevalle jack
- Darkly colored scutes (bone-like projections) on sides, just in front of tail
- Lack dark spots on pectoral fins
- Dark spot on gill cover is small or absent
- Caudal fin yellow in color
- Belly is scaly, except in juveniles less than 3 inches long

**Similar Species:** Other jack species

**Habitat:** Often found in schools near offshore reefs

**Size:** Up to 30 inches (8.5 pounds)

**Notes:** Diet includes fishes, shrimp and other invertebrates



## Lookdown

*Selene vomer*

**Family** *Carangidae*, Jacks and Pompanos

### Description:

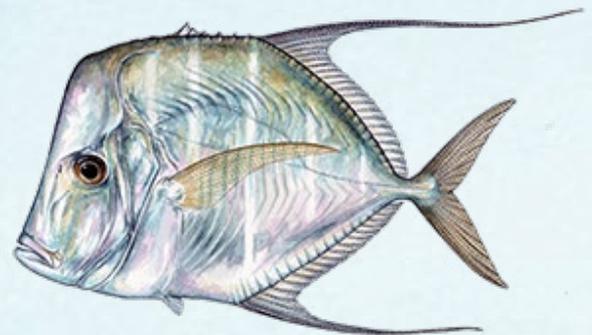
- Color is silver and iridescent, sometimes with brassy highlights
- Front of head very steep
- Pelvic fins small
- Elongated front filaments of second dorsal fin and anal fin
- Body extremely compressed and deep (plate-like)
- Lateral line arched toward front
- Juveniles with spines on front of dorsal fin and elongated rays on pelvic fin

**Similar Species:** Other jack species

**Habitat:** Coastal waters and estuaries over hard or sandy bottom

**Size:** Up to 12 inches

**Notes:** Juveniles have faint vertical bars that fade with age



### Round Scad (Cigar Minnow, Hardtail)

*Decapterus punctatus*

**Family** *Carangidae*, Jacks and Pompanos

**Description:**

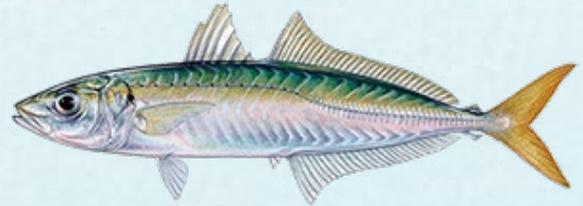
- Greenish-blue fading to silver on sides and a white belly
- Long, cigar-shaped body
- Small black spots along lateral line
- Detached dorsal and anal finlets
- Narrow yellow stripe from head to tail

**Similar Species:** Bigeye scad, *S. crumenophthalmus* (lacks finlets)

**Habitat:** Found mid-water or near the bottom, juveniles sometimes at surface

**Size:** Up to 12 inches; common to 7 inches

**Notes:** Feed on plankton; spawn offshore throughout the year



### Bigeye Scad (Goggle-eye)

*Selar crumenophthalmus*

**Family** *Carangidae*, Jacks and Pompanos

**Description:**

- Eye very large, diameter greater than snout length
- No detached dorsal and anal finlets
- Two fleshy tabs on inside of rear edge of gill chamber
- Scutes present only on rear part of lateral line

**Similar Species:** Round scad, *D. punctatus* (has detached dorsal and anal finlets)

**Habitat:** Prefers clear oceanic waters

**Size:** Up to 24 inches

**Notes:** Usually nocturnal and feed at night on invertebrates and plankton



### Leatherjacket (Leatherjack)

*Oligoplites saurus*

**Family** *Carangidae*, Jacks and Pompanos

**Description:**

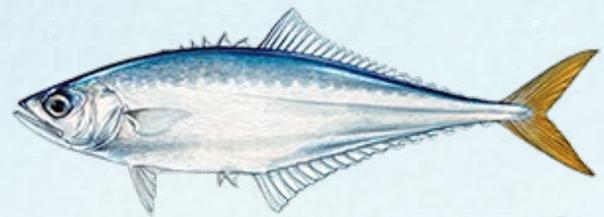
- Body silvery-white on sides and belly, with a bluish-green back
- Pectoral and caudal fins yellow
- First dorsal fin has five well-developed, unconnected spines
- Finlets present behind dorsal and anal fins
- Scales tiny and embedded, causing skin to appear smooth
- Long body that is strongly compressed
- Lateral line nearly straight

**Similar Species:** Other jack species

**Habitat:** Inshore in bays and estuaries, often in turbid water

**Size:** Up to 12 inches

**Notes:** Diet includes small fishes and crustaceans



## Atlantic Bumper

*Chloroscombrus chrysurus*

**Family** *Carangidae*, Jacks and Pompanos

### Description:

- Greenish-blue back, fading to silvery-gold sides and belly
- Black spot on caudal peduncle (just before the tail)
- Lateral line arched at front
- Anal and caudal fins yellow
- Small black area at rear edge of gill cover
- Deep, compressed body with lower profile more curved than upper profile

**Similar Species:** Other jack species

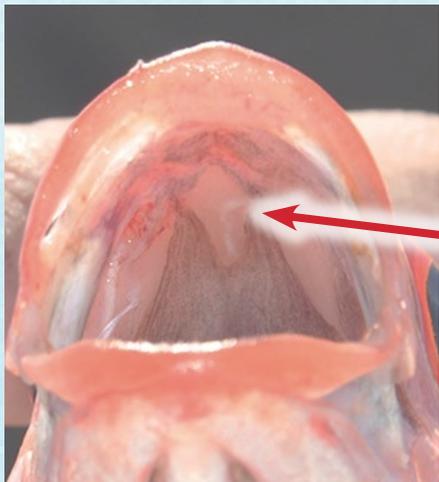
**Habitat:** Found offshore and inshore in bays and estuaries

**Size:** Up to 25 inches; common to 10 inches

**Notes:** Diet includes fishes, invertebrates, plankton and decaying matter; juveniles often found in estuaries in association with jellyfish



## Snappers, Family *Lutjanidae*



Vermilion snapper

### Vomerine Tooth Patches

Found on the roof of the mouth  
in snappers

Look at the shape of the tooth  
patch on the roof of the mouth



**Anchor-shaped**  
Gray snapper, most others



**Chevron-shaped**  
Mutton snapper



**Triangular-shaped**  
Cubera snapper



**Rhomboid-like**  
Vermillion snapper

## Red Snapper

*Lutjanus campechanus*

**Family** *Lutjanidae*, Snappers

### Description:

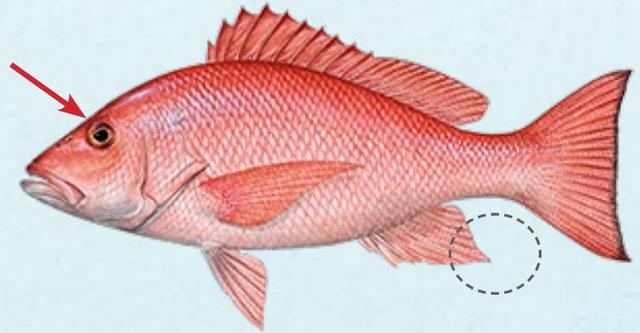
- Body is pinkish-red in color, fading to a white belly
- Snout long and triangular
- Red eye
- Rear of anal fin pointed
- No dark spot on sides in adults

**Similar Species:** Silk snapper, *L. vivanus* (has a yellow eye); and vermilion snapper, *R. aurorubens* (has rounded anal fin)

**Habitat:** Offshore near structure

**Size:** Up to 36 inches (35 pounds)

**Notes:** Juveniles are found over sand or mud bottoms; adults can live more than 20 years, possibly even up to 60 years; spawn from June to October; feed on fishes and crustaceans



## Silk Snapper

*Lutjanus vivanus*

**Family** *Lutjanidae*, Snappers

### Description:

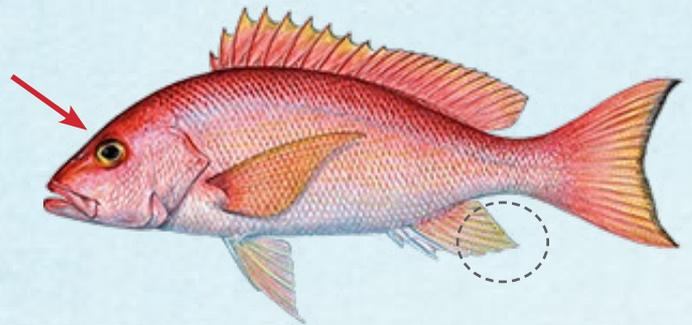
- Body is pinkish-red, fading to a lighter belly
- Sides have undulating yellow lines
- Yellow eye
- Rear of anal fin pointed
- Pectoral fins pale yellow
- Back edge of tail trimmed in black
- No dark spot on sides in adults

**Similar Species:** Red snapper, *L. campechanus* (has a red eye)

**Habitat:** Offshore; most common in south Florida

**Size:** Usually less than 30 inches (5 pounds)

**Notes:** Spawn late spring through summer; feed on fishes and crustaceans



## Vermilion Snapper (Mingo, Beeliner)

*Rhomboplites aurorubens*

**Family** *Lutjanidae*, Snappers

### Description:

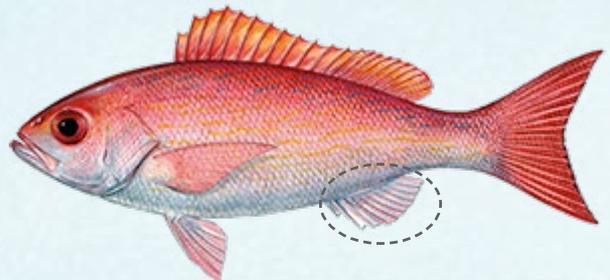
- Rosy-red back, fading to a lighter belly
- May have irregular yellow lines on sides below the lateral line
- Large red eyes
- Anal fin not sharply pointed
- Rhomboid-like vomerine tooth patch (page 67)
- No large canine teeth

**Similar Species:** Red snapper, *L. campechanus* (has pointed anal fin)

**Habitat:** Offshore over structure

**Size:** Up to 24 inches (6 pounds); common to 14 inches and under 2 pounds

**Notes:** Spawn April to September, feed on fishes and invertebrates



## Mahogany Snapper

*Lutjanus mahogoni*

**Family** *Lutjanidae*, Snappers

### Description:

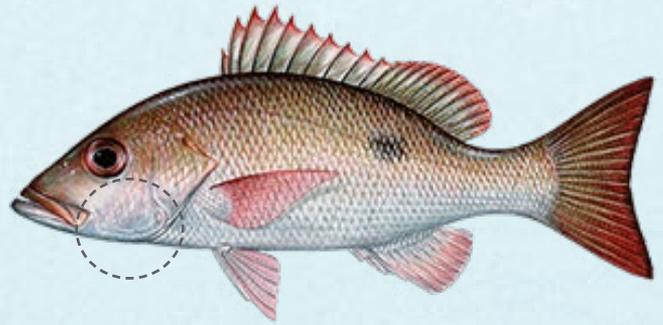
- Olive gray color with a reddish hue, fading to a lighter belly
- Large red eye
- Edges of fins are red
- Dark spot present on lateral line
- Preopercle (cheek) with serrated spur

**Similar Species:** Lane snapper, *L. synagris* (has yellow stripes and a smaller eye)

**Habitat:** Prefer clear coastal waters, usually over reefs

**Size:** Up to 15 inches (3 pounds)

**Notes:** Feeds at night on small fishes and invertebrates



## Blackfin Snapper

*Lutjanus buccanella*

**Family** *Lutjanidae*, Snappers

### Description:

- Color mainly red, fading to silver on lower sides and belly
- Dark crescent-shaped blotch at base of pectoral fins
- Anal fin rounded; fins yellowish-orange
- Eye is orange or bronze

**Similar Species:** Other snappers

**Habitat:** Coastal waters, with adults in deeper water and juveniles in shallower areas

**Size:** Up to 30 inches (30 pounds)

**Notes:** Diet mainly consists of fishes



## Yellowtail Snapper

*Ocyurus chrysurus*

**Family** *Lutjanidae*, Snappers

### Description:

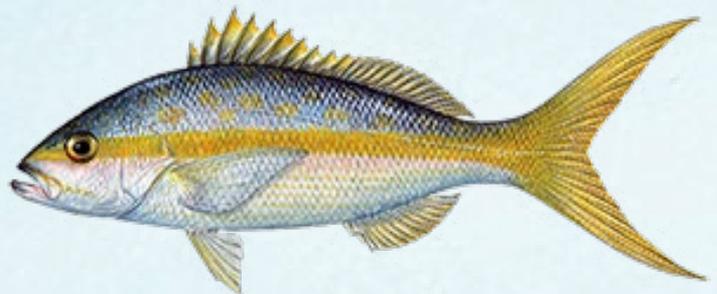
- Olive to bluish back with yellow spots
- Yellow stripe on side, from mouth to tail, broadening toward rear
- Tail is yellow and deeply forked
- Lower sides and belly with narrow pink and yellow stripes
- No dark spot on side below dorsal fin

**Similar Species:** Other snappers

**Habitat:** Coastal waters, mainly near coral reefs

**Size:** Up to 30 inches (5 pounds)

**Notes:** Found mainly in tropical waters; spawn in mid-summer; feed on fishes and invertebrates



## Gray Snapper (*Mangrove Snapper, Mango, Black Snapper*)

*Lutjanus griseus*

**Family** Lutjanidae, Snappers

### Description:

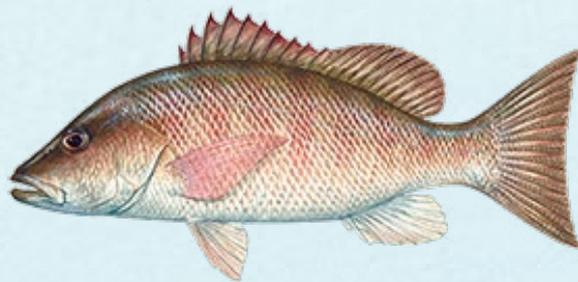
- Dark brown or gray in color, with red-orange spots in bars along the sides
- Two large canine teeth near front of upper jaw
- Anchor-shaped vomerine tooth patch (page 67)
- Dorsal fins with dark or reddish borders
- Young have dark stripe from snout, through eye, to upper edge of gill cover

**Similar Species:** Cubera snapper, *L. cyanopterus* (triangle-shaped tooth patch (page 67) and grow much larger than gray snapper); schoolmaster, *L. apodus* (yellow fins and faint white bars); and true black snapper, *A. dentatus* (rare in Florida; do not range north of the Florida Keys)

**Habitat:** Coastal waters near structure such as reefs, mangroves and seagrass; juveniles may enter freshwater

**Size:** Common to 24 inches (10 pounds)

**Notes:** Spawn June through August; feed on crustaceans and fishes



## Cubera Snapper (*Cuban Snapper*)

*Lutjanus cyanopterus*

**Family** Lutjanidae, Snappers

### Descriptions:

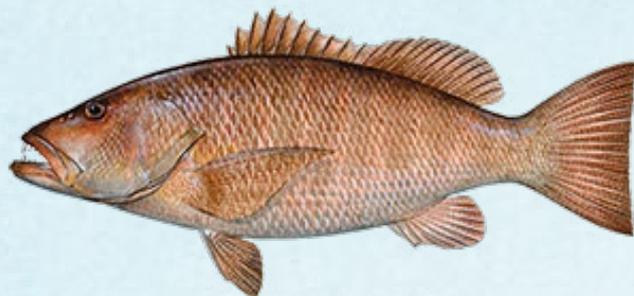
- Dark brown or gray in color, possibly with a red hue and pale bars on sides
- Triangle-shaped vomerine tooth patch (page 67)
- Thick, heavy lips
- Strong canine teeth found in both jaws, one pair visible when mouth closed

**Similar Species:** Gray snapper, *L. griseus* (has anchor-shaped tooth patch on roof of mouth)

**Habitat:** Coastal waters near structure; juveniles found in estuarine areas

**Size:** Up to 125 pounds and common to 40 pounds

**Notes:** Among largest snapper species; feed on fishes and crustaceans; spawn in the Keys during late summer



## Mutton Snapper

*Lutjanus analis*

**Family** Lutjanidae, Snappers

### Description:

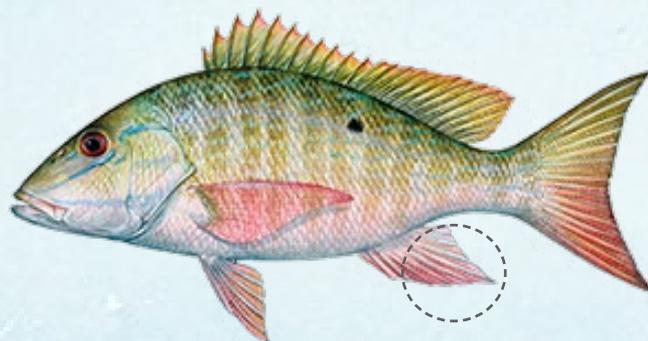
- Olive green color on back and upper sides, fading to a lighter belly
- Chevron-shaped vomerine tooth patch (page 67)
- Anal fin pointed
- Dark spot on side, just above lateral line
- Blue stripe below eye, following contour of gill cover
- Red hue on fins below the lateral line

**Similar Species:** Lane snapper, *L. synagris* (rounded anal fin)

**Habitat:** Coastal waters near structure

**Size:** Up to 30 inches (25 pounds)

**Notes:** Spawn in July and August; feed on fishes and invertebrates



## Lane Snapper (Candy Snapper)

*Lutjanus synagris*

**Family** Lutjanidae, Snappers

### Description:

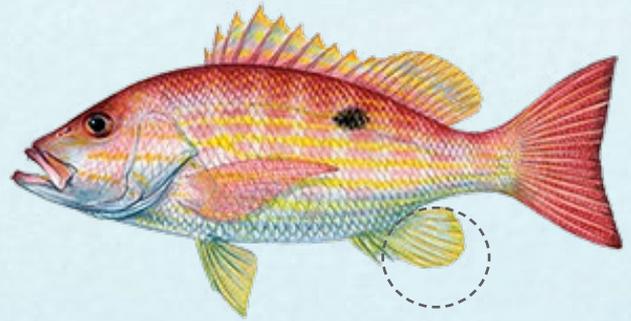
- Pinkish-red color on back, fading to a silvery belly
- 8 to 10 yellowish stripes on sides
- Anal fin rounded
- Dark spot on side, touching the lateral line, about as large as the eye
- Edge of tail trimmed in black

**Similar Species:** Mutton snapper, *L. analis* (has pointed anal fin)

**Habitat:** Coastal waters near structure

**Size:** Usually less than 14 inches (1 pound)

**Notes:** Spawn March to September; sexually mature at 6 inches long; feed on small fishes and invertebrates



## Schoolmaster

*Lutjanus apodus*

**Family** Lutjanidae, Snappers

### Description:

- Body is olive gray or brown with a yellow hue, fading to a lighter belly
- Fins are yellow
- Narrow white bars on sides, fading with age
- Blue stripe below eye, broken in adults
- Snout long and pointed
- Canine teeth enlarged in upper jaw, visible when mouth is closed

**Similar Species:** Dog snapper, *L. jocu* (has pale triangle below eye) and gray snapper, *L. griseus* (lack yellow fins and lack blue stripe below eyes)

**Habitat:** Coastal waters

**Size:** Up to 24 inches (8 pounds); and common under 1 pound

**Notes:** Spawn in July and August; feed on fishes and invertebrates



## Dog Snapper

*Lutjanus jocu*

**Family** Lutjanidae, Snappers

### Description:

- Olive brown color with a bronze tinge, lighter on sides
- Pale triangle and row of blue spots below the eye
- Canine teeth enlarged in upper jaw, visible when mouth is closed

**Similar Species:** Schoolmaster, *L. apodus* (lack white triangle below eye; fins are more yellow)

**Habitat:** Coastal waters near structure; juveniles found in estuaries

**Size:** Up to 36 inches (30 pounds)

**Notes:** Spawn from spring through fall; feed on fishes and invertebrates



## Queen Snapper

*Etelis oculatus*

**Family** Lutjanidae, Snappers

### Description:

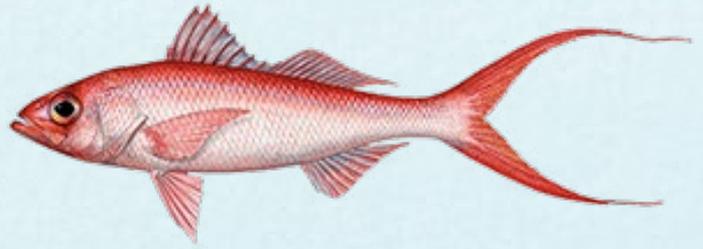
- Back and upper sides are red, fading to a lighter belly
- Large yellow eyes
- Tail is deeply forked
- Body is long and slender
- Dorsal fin with a notch in the middle
- No dark spot on side below dorsal fin

**Similar Species:** Other snappers

**Habitat:** Coastal waters over rocky reefs

**Size:** Up to 36 inches

**Notes:** Mainly consume small fishes and squid



## Groupers and Sea Basses, Family Serranidae

### Bank Sea Bass

*Centropristis ocyurus*

**Family** Serranidae, Groupers and Sea Basses

### Description:

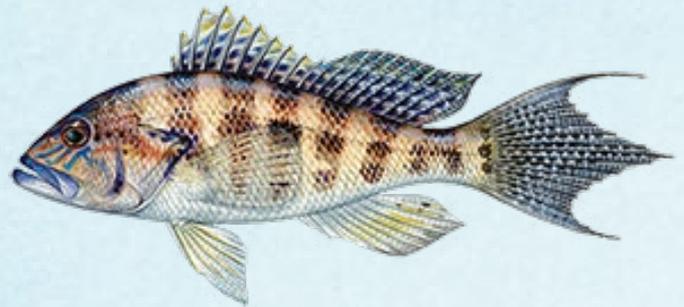
- Pale olive or brassy-brown on back, fading to a lighter belly
- Black blotches form dark bars on sides (darker blotch above pectoral fin)
- Head with wavy blue lines
- Lips are purplish-blue
- Adults have tail with three lobes
- Top of head (nape) lacks scales

**Similar Species:** Rock sea bass, *C. philadelphica* (has spot near middle of dorsal base and head is fully-scaled)

**Habitat:** Coastal waters over hard bottom areas

**Size:** Up to 12 inches

**Notes:** Feed on small fishes and invertebrates



### Rock Sea Bass

*Centropristis philadelphica*

**Family** Serranidae, Groupers and Sea Basses

### Description:

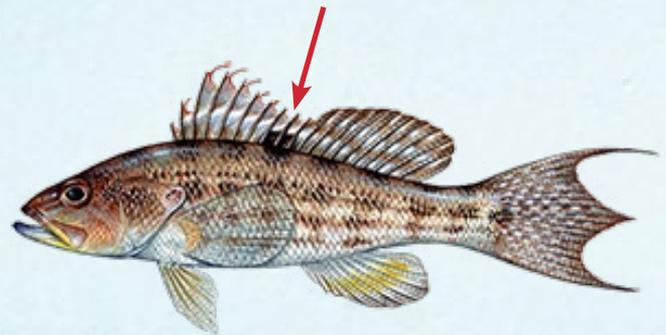
- Olive-bronze on back, fading to a lighter belly
- Black blotches form vertical bars on sides
- Dark black spot near middle of dorsal fin base
- Tip of lower jaw is purple
- Head and fins with bright blue and orange markings
- Adults have tail with three lobes and elongated dorsal filaments
- Top of head (nape) is fully-scaled

**Similar Species:** Bank sea bass, *C. ocyurus* (lack spot near middle of dorsal fin base and nape lacks scales)

**Habitat:** Coastal waters over hard bottom areas; also found near sand or mud bottoms

**Size:** Rarely more than 10 inches in length

**Notes:** Spawn January through March



## Black Sea Bass (Rock Bass, Rockfish)

*Centropristis striata*

**Family** Serranidae, Groupers and Sea Basses

### Description:

- Body color dark brown or black
- Dorsal fin with stripes of white over black
- Large males have a fatty hump on head, in front of dorsal fin, as well as blue and ebony markings on body
- Females may have faint vertical bars
- Tail may have three lobes
- Adults have elongated ray on top part of tail
- Back edge of gill cover has a sharp spine

**Similar Species:** Other sea bass species

**Habitat:** Coastal waters near structure and rocky bottoms

**Size:** Up to 24 inches (8 pounds); common to 12 inches (1.5 pounds)

**Notes:** Spawn January through March; feed on small fishes and crustaceans



## Sand Perch (Squirrelfish, Sand Sea Bass)

*Diplctrum formosum*

**Family** Serranidae, Groupers and Sea Basses

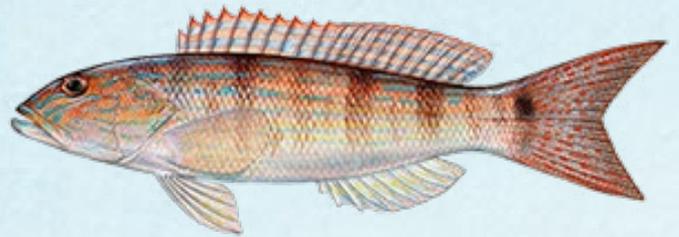
### Description:

- Body and dorsal fins have dark-brown bars and orange and blue stripes
- Head has many blue lines
- Body is slender and cylindrical
- Preopercle (cheek) with spines radiating from two clusters
- Adults have elongated upper lobe of tail

**Habitat:** Coastal waters, including bays, seagrass beds and shallow banks

**Size:** Up to 12 inches

**Notes:** Despite their common name, sand perch are not “true” squirrelfishes



## Yellowfin Grouper

*Mycteroperca venenosa*

**Family** Serranidae, Groupers and Sea Basses

### Description:

- Body is greenish-olive or bright red
- Oval groups of dark spots form horizontal rows on the body
- Outer third of pectoral fins are bright yellow
- Small bright red spots are found on lower parts of large individuals

**Similar Species:** Black grouper, *M. bonaci* (lacks bright yellow on outer third of pectoral fins)

**Habitat:** Coastal to offshore waters, typically near reefs; juveniles found in seagrass beds

**Size:** Common to 20 pounds

**Notes:** Feed on fishes and squid



## Black Grouper

*Mycteroperca bonaci*

**Family** Serranidae, Groupers and Sea Basses

### Description:

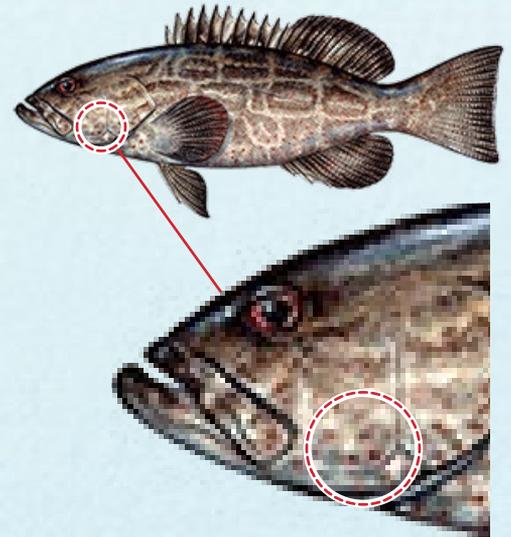
- Color olive or gray with rectangular black blotches and brassy spots
- Bottom of preopercle (cheek) is gently-rounded
- Second dorsal, anal and caudal fins black on outer third part of fin
- Pale yellow or white margin on pectoral fins

**Similar Species:** Gag, *M. microlepis* (spur on preopercle is serrated); and yellowfin grouper, *M. venenosa* (pectoral fins trimmed in bright yellow)

**Habitat:** Coastal waters near structure; juveniles can be found inshore

**Size:** Up to 48 inches (180 pounds); common to 40 pounds

**Notes:** Spawn between May and August; feed mainly on fishes



Gently-rounded preopercle

## Gag

*Mycteroperca microlepis*

**Family** Serranidae, Groupers and Sea Basses

### Description:

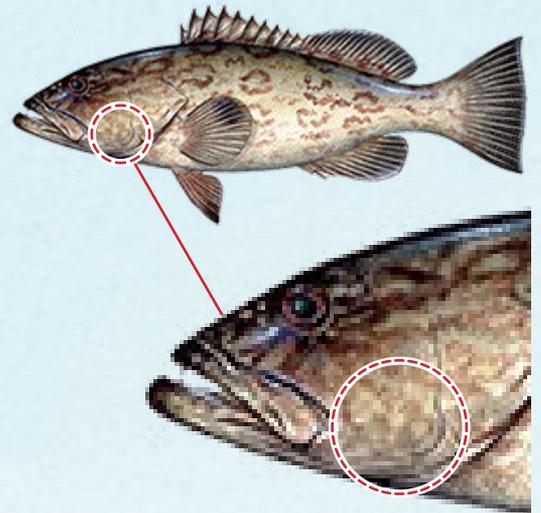
- Color brownish-gray with dark worm-like markings on sides
- Bottom of preopercle (cheek) has strong serrated spur
- Fins are dark, with white edges on anal fin and tail
- Dark lines radiate from the eyes

**Similar Species:** Black grouper, *M. bonaci* (spur on preopercle is gently rounded, not serrated)

**Habitat:** Coastal waters near structure; juveniles found in estuaries and seagrass beds

**Size:** Up to 36 inches (50 pounds); common to 25 pounds

**Notes:** Spawn January through March; feed on fishes and invertebrates



Serrated spur on preopercle

## Nassau Grouper

*Epinephelus striatus*

**Family** Serranidae, Groupers and Sea Basses

### Description:

- Body with brown or red-brown bars on sides and a light background
- Stripe on top of head in the shape of a tuning-fork
- No dots around the eyes
- Third spine of dorsal fin is longer than second spine
- Pelvic fins are shorter than pectoral fins
- Large black spot on caudal peduncle

**Similar Species:** Red grouper, *E. morio* (has tiny dark spots near eyes)

**Habitat:** Coastal waters; juveniles found nearshore and adults occur in deeper waters near structure; found mostly in south Florida

**Size:** Up to 36 inches (55 pounds); common under 10 pounds

**Notes:** Feed on fishes and invertebrates



## Scamp

*Mycteroperca phenax*

**Family** Serranidae, Groupers and Sea Basses

### Description:

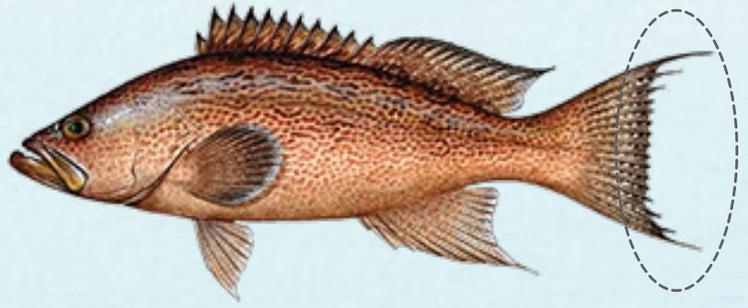
- Light gray or brown body
- Sides with dark or reddish-brown spots, often grouped into rosettes
- Upper and lower caudal fin rays elongated in adults
- Corners of mouth may have yellow coloration

**Similar Species:** Yellowmouth grouper, *M. interstitialis* (inside and corners of mouth are yellow)

**Habitat:** Nearshore and offshore reefs, ledges and rocky bottoms

**Size:** Common to 12 inches, but may reach up to 42 inches

**Notes:** Spawn in late spring; feed on small fishes and invertebrates



## Yellowmouth Grouper

*Mycteroperca interstitialis*

**Family** Serranidae, Groupers and Sea Basses

### Description:

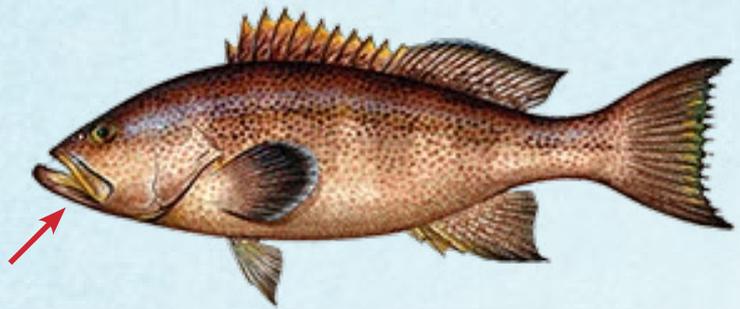
- Tan or brown body, fading to a lighter belly
- Small, dark spots on top of head and over most of body
- Some yellow coloration around the eyes
- Outer edges of fins trimmed in white or light yellow
- Mouth is yellow at corners and inside

**Similar Species:** Scamp, *M. phenax* (elongated caudal fin rays; lacks yellow on inside and corners of mouth)

**Habitat:** Coastal and offshore waters near structure

**Size:** Up to 20 pounds

**Notes:** Feed on fishes



## Red Grouper

*Epinephelus morio*

**Family** Serranidae, Groupers and Sea Basses

### Description:

- Body color is brownish-red
- Tiny black dots found on snout
- Mouth lined in scarlet-orange color
- Sides have irregular white blotches
- Second spine of dorsal fin is long
- Pectoral fins are longer than pelvic fins
- No large black spot on caudal peduncle

**Similar Species:** Nassau grouper, *E. striatus* (large black spot on caudal peduncle)

**Habitat:** Bottom-dwelling fish found over hard and muddy bottoms

**Size:** Up to 42 inches (50 pounds); common to 20 inches (15 pounds)

**Notes:** Spawn in April and May; feed on a variety of fishes and invertebrates



## Goliath Grouper (Jewfish)

*Epinephelus itajara*

**Family** Serranidae, Groupers and Sea Basses

### Description:

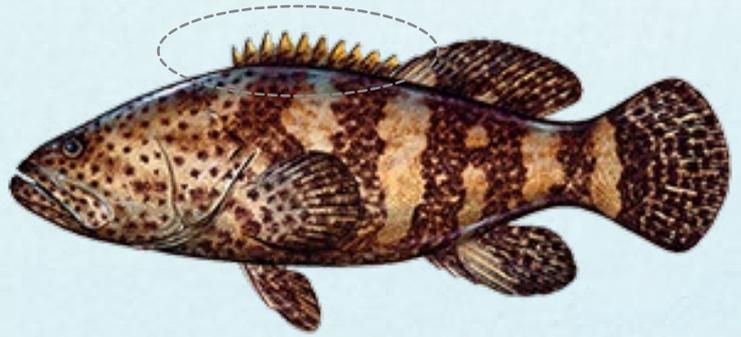
- Head and fins have tiny dark spots
- Irregular dark bars on the sides
- Eyes are small and set forward
- Caudal and pectoral fins are rounded
- First dorsal fin is much shorter than the second dorsal fin
- Dorsal spines low; all nearly the same height

**Similar Species:** Warsaw grouper, *H. nigritus* (dorsal spines at varying heights)

**Habitat:** Coastal and nearshore waters over structure or muddy bottoms; juveniles found in estuarine areas

**Size:** Up to 8 feet and 800 pounds; largest grouper species in western Atlantic waters

**Notes:** Spawn during summer months; feed on fishes and crustaceans



## Warsaw Grouper

*Hyporthodus nigritus*

**Family** Serranidae, Groupers and Sea Basses

### Description:

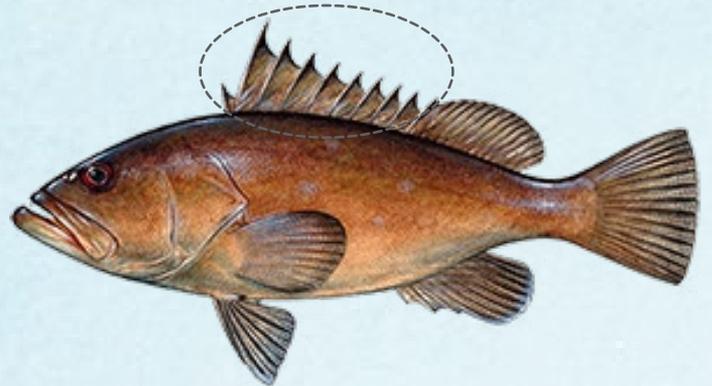
- Mottled dark reddish-brown or brownish-gray on back, fading to a lighter belly
- Uniformly colored; lacks distinctive markings
- Second dorsal fin spine very high (higher than the third spine)
- Caudal fin (tail) is squared-off
- Juveniles with yellowish caudal fin and dark spot on caudal peduncle

**Similar Species:** Goliath grouper, *E. itajara* (dorsal spines all at same height)

**Habitat:** Rocky bottoms in water over 200 feet deep; juveniles found inshore

**Size:** Up to 90 inches (580 pounds)

**Notes:** Feed on fishes and crustaceans



## Grunts, Family Haemulidae

### Tomtate (Brown Grunt)

*Haemulon aurolineatum*

**Family** Haemulidae, Grunts

### Description:

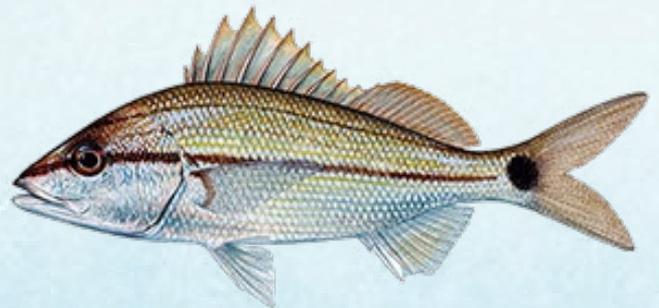
- Gray to tan on back, fading to a white or silvery belly
- Yellow-brown stripe on side, extends from head to tail
- Black spot at base of tail (faded in larger individuals)
- Mouth lined with bright orange

**Similar Species:** Other grunt species

**Habitat:** Coastal waters

**Size:** Up to 10 inches (1 pound)

**Notes:** Feed on invertebrates, plankton and algae



## White Grunt (Key West Grunt)

*Haemulon plumierii*

**Family** Haemulidae, Grunts

### Description:

- Light bluish-gray body with touches of bronze or yellow, fading to a white belly
- Horizontal, narrow blue stripes on head, ending at operculum
- Mouth is red and large
- Preopercle with black blotch

**Similar Species:** Other grunt species

**Habitat:** Coastal to offshore waters; juveniles found inshore

**Size:** Up to 18 inches

**Notes:** Make a grunting noise by grinding pharyngeal teeth together; feed on small fishes and invertebrates



## Pigfish (Grunt)

*Orthopristis chrysoptera*

**Family** Haemulidae, Grunts

### Description:

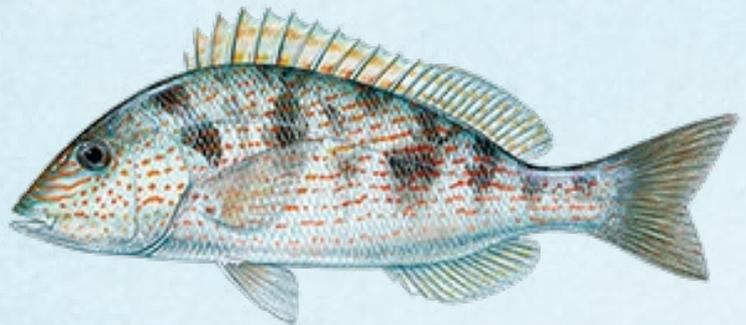
- Mottled light brown or gray body, often with a bluish tint
- Many small orange and blue markings on body
- Small mouth ends below front nostril

**Similar Species:** Pinfish, *L. rhomboides* (has incisor-like teeth; mouth ends behind front nostril); other grunt species

**Habitat:** Coastal waters

**Size:** Up to 15 inches

**Notes:** Feed on small fishes and invertebrates



## Porgies, Family Sparidae

### Sheepshead (Convict Fish)

*Archosargus probatocephalus*

**Family** Sparidae, Porgies

### Description:

- Body has lightly colored background with vertical black bars on sides
- Prominent teeth, including incisors, molars and rounded grinders
- No barbels on lower jaw
- Dorsal and anal fins with strong, sharp spines

**Similar Species:** Black drum, *P. cromis* (has chin barbels and lacks incisor-like teeth); and Atlantic spadefish, *C. faber* (lacks incisor-like teeth)

**Habitat:** Coastal waters near structure

**Size:** Up to 36 inches; common to 13 inches

**Notes:** Feed mainly on invertebrates



## Red Porgy

*Pagrus pagrus*

**Family** Sparidae, Porgies

### Description:

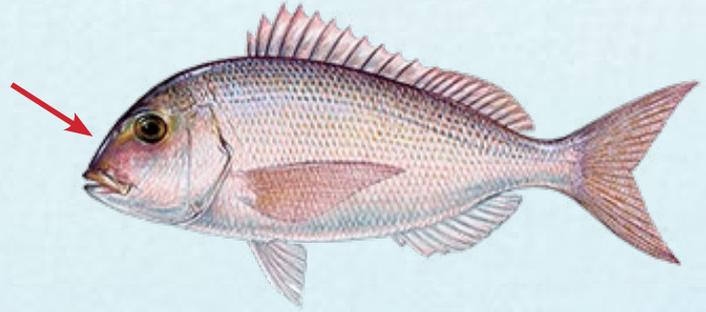
- Head and body color is pinkish-silver with several tiny blue spots
- Yellow coloration around eye and snout
- Only Florida porgy with a round rear nostril (not slit-like)
- Head rounded, not projecting

**Similar Species:** Other porgy species (have slit-like rear nostrils)

**Habitat:** Coastal waters over rocky or sandy bottoms

**Size:** Up to 36 inches

**Notes:** Feed on fishes and invertebrates



## Jolthead Porgy

*Calamus bajonado*

**Family** Sparidae, Porgies

### Description:

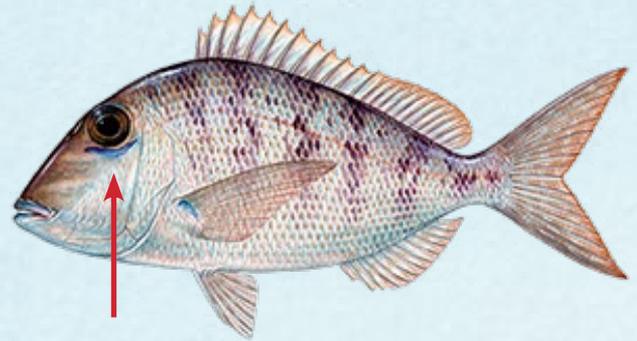
- Body is silvery to brassy in color, with a bluish tint
- Front of head is brown
- Head rounded, not projecting
- Blue line present below each eye
- Corner of mouth is orange

**Similar Species:** Red porgy, *P. pagrus* (has round rear nostrils); other porgy species

**Habitat:** Coastal waters

**Size:** Up to 24 inches

**Notes:** Feed mainly on invertebrates



## Knobbed Porgy (Key West Porgy)

*Calamus nodosus*

**Family** Sparidae, Porgies

### Description:

- Deep-body that is silver with a reddish tint
- Front profile of head very steep
- Nape strongly projecting in adults
- Front of head is dark purplish-gray with yellowish-bronze spots
- Base of pectoral fin has large blue spot

**Similar Species:** Littlehead porgy, *C. proridens* (has many wavy, dark blue lines on snout)

**Habitat:** Coastal waters over hard bottoms

**Size:** Up to 21 inches

**Notes:** Feed mainly on invertebrates



## Littlehead Porgy

*Calamus proridens*

**Family** Sparidae, Porgies

### Description:

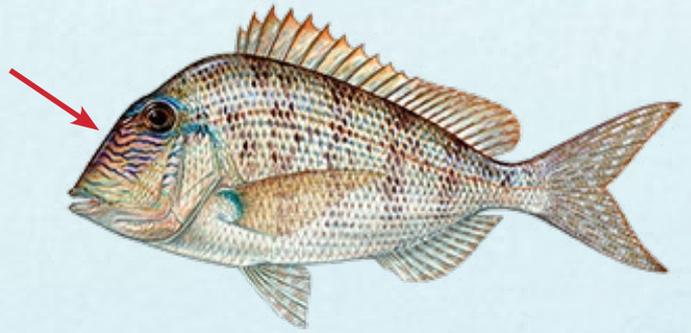
- Body is silvery, with faint bluish lines along scale rows
- Areas between bluish lines can be brassy in color
- Many wavy, dark blue lines present on snout and cheek

**Similar Species:** Knobbed porgy, *C. nodosus* (lacks dark blue lines on snout)

**Habitat:** Coastal waters over hard bottoms

**Size:** Up to 18 inches

**Notes:** Feed mainly on invertebrates



## Grass Porgy

*Calamus arctifrons*

**Family** Sparidae, Porgies

### Description:

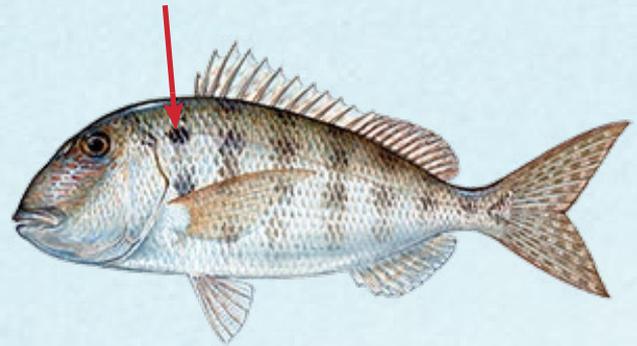
- Body is pale tan to silver, with a dark-olive back
- Dark bar goes through eye to corner of mouth
- Dark blotches on sides resemble bars and stripes
- Prominent dark spot near beginning of lateral line
- Dark V-shaped patch of color at base of caudal fin

**Similar Species:** Jolthead porgy, *C. bajonado* (has blue line below eye); other porgy species

**Habitat:** Coastal waters in seagrass beds

**Size:** Up to 10 inches

**Notes:** Feed mainly on invertebrates



## Pinfish

*Lagodon rhomboides*

**Family** Sparidae, Porgies

### Description:

- Body silvery, with blue and yellow stripes and yellow fins
- Large, dark spot behind the gill cover
- Mouth is small with incisor-like teeth
- Sharp spines on dorsal and anal fins

**Similar Species:** Spottail pinfish, *D. holbrookii* (has dark spot on caudal peduncle); pigfish, *O. chrysoptera* (no incisor-like teeth; mouth ends below front nostril)

**Habitat:** Coastal waters near structure; may enter freshwater

**Size:** Usually less than 8 inches

**Notes:** Feed on small fishes and invertebrates; popular live bait



## Spottail Pinfish

*Diplodus holbrookii*

**Family** Sparidae, Porgies

### Description:

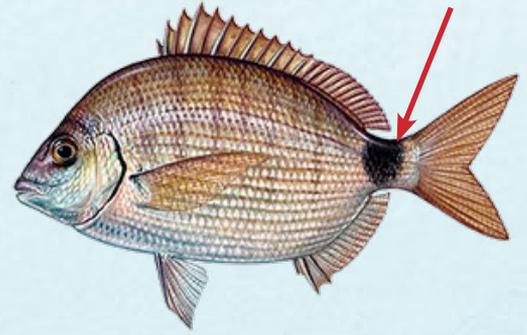
- Back is brownish, fading to a lighter belly
- Eight faint bars on sides (more visible in juveniles)
- Large, dark spot on caudal peduncle
- Edge of gill opening is lined with dark color

**Similar Species:** Pinfish, *L. rhomboides* (lacks large black spot on caudal peduncle)

**Habitat:** Coastal waters with vegetated bottoms

**Size:** Up to 18 inches

**Notes:** Feed mainly on invertebrates



## Drums, Family Sciaenidae

### Atlantic Croaker

*Micropogonias undulatus*

**Family** Sciaenidae, Drums

### Description:

- Body is silvery-gray or bronze, iridescent on head
- Indistinct wavy bars or lines on upper sides
- Strongly serrated preopercle (bone on cheek)
- Small barbels on lower jaw

**Similar Species:** Spot, *L. xanthurus* (caudal fin is forked and preopercle is smooth)

**Habitat:** Coastal waters

**Size:** Up to 20 inches (4 pounds)

**Notes:** Spawn offshore in the fall; feed on fishes and invertebrates



### Spot

*Leiostomus xanthurus*

**Family** Sciaenidae, Drums

### Description:

- Back is bluish-brown, fading to brassy sides and a silvery-white belly
- Dark spot behind gill cover
- Only drum in Florida with a forked caudal fin (tail)
- Upper sides have 12 to 15 dark diagonal lines

**Similar Species:** Atlantic croaker, *M. undulatus* (has strongly serrated preopercle)

**Habitat:** Coastal waters

**Size:** Up to 14 inches

**Notes:** Feeds on invertebrates and decaying material



## Gulf Kingfish (Whiting)

*Menticirrhus littoralis*

**Family** Sciaenidae, Drums

### Description:

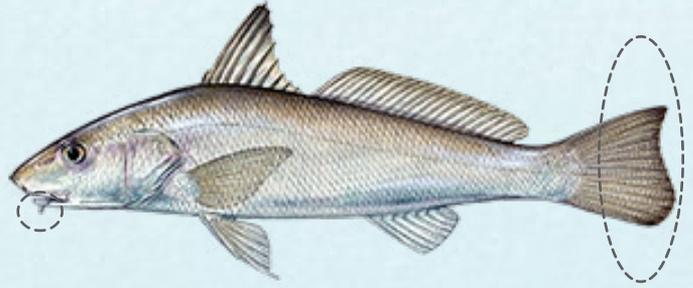
- Body is silvery all over, without dark marks
- First dorsal fin tip is often dusky-brown
- Caudal fin (tail) has a blackish tip
- Scales on underside are smaller than body scales
- Barbel on lower jaw

**Similar Species:** Southern kingfish, *M. americanus* (caudal fin lacks a blackish tip); and northern kingfish, *M. saxatilis* (distinct "V" mark above pectoral fins)

**Habitat:** Coastal waters; common in surf zones along beaches

**Size:** Up to 18 inches

**Notes:** Feed on fishes and invertebrates



## Southern Kingfish (Whiting)

*Menticirrhus americanus*

**Family** Sciaenidae, Drums

### Description:

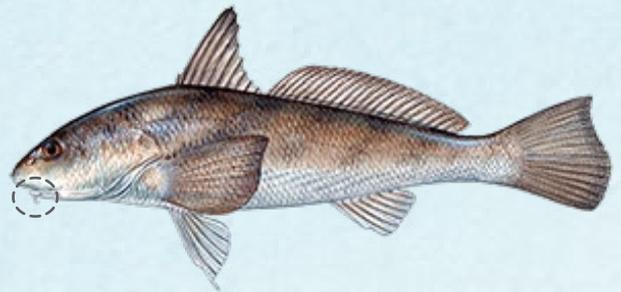
- Back is grayish-brown, fading to silvery sides and belly
- 7 to 8 indistinct diagonal dark blotches on sides
- Scales on underside are nearly the same size as body scales
- Barbel on lower jaw

**Similar Species:** Gulf kingfish, *M. littoralis* (caudal fin has blackish tip); and northern kingfish, *M. saxatilis* (distinct "V" mark above pectoral fins)

**Habitat:** Coastal waters; common in surf zones along beaches

**Size:** Up to 19 inches

**Notes:** Feed on fishes and invertebrates



## Black Drum

*Pogonias cromis*

**Family** Sciaenidae, Drums

### Description:

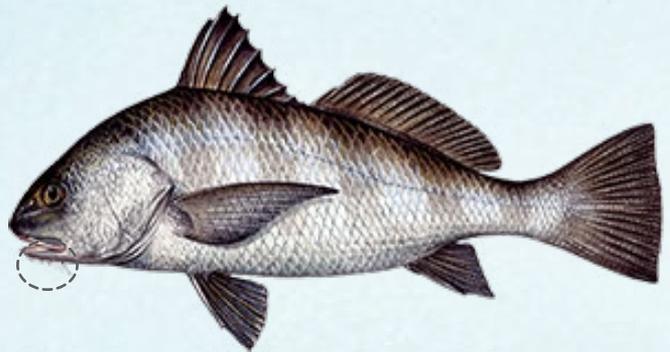
- Back is highly-arched and gray or black, fading to a lighter belly
- Juveniles have 4 to 6 dark vertical bars on sides (fade with age)
- Barbels on lower jaw
- Large scales
- Powerful pharyngeal teeth used to crush oysters and other shellfish

**Similar Species:** Red drum, *S. ocellatus*; and sheepshead, *A. probatocephalus* (both lack barbels on lower jaw)

**Habitat:** Coastal waters; juveniles found in estuaries

**Size:** Up to 67 inches

**Notes:** Largest drum species; spawn nearshore in winter and early spring; feed on fishes and invertebrates



## Red Drum (Redfish)

*Sciaenops ocellatus*

**Family** Sciaenidae, Drums

### Description:

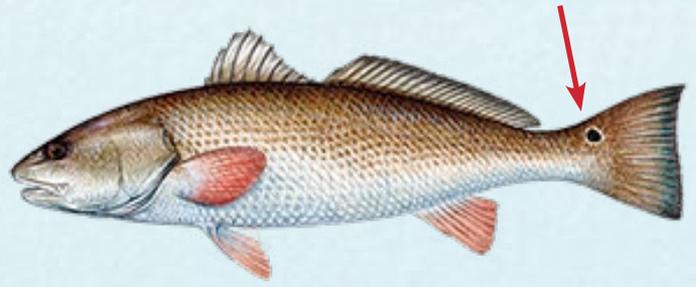
- Body is copper-bronze, fading to a lighter belly
- One or more dark, ocellated spots at base of tail (occasionally without spot)
- Lack barbels on lower jaw
- Large scales
- Powerful pharyngeal teeth used to crush oysters and other shellfish

**Similar Species:** Black drum, *P. cromis* (has chin barbels and lacks spot on tail)

**Habitat:** Coastal waters

**Size:** Up to 61 inches

**Notes:** Move from inshore waters to nearshore waters at about 30 inches in length (4 years of age); spawn in nearshore waters from August to November; feed on fishes and invertebrates



## Silver Perch

*Bairdiella chrysoura*

**Family** Sciaenidae, Drums

### Description:

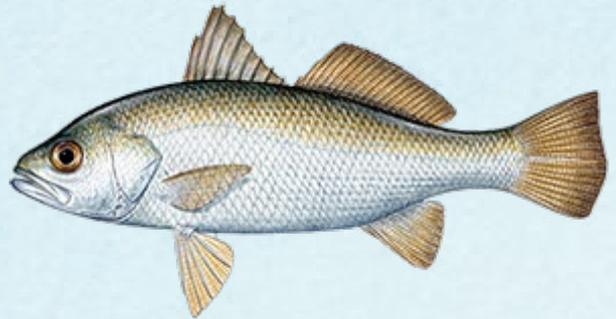
- Silvery or greenish-blue back, fading to silvery-yellow sides and belly
- Fins are yellow or dusky
- 5 to 6 chin pores
- Finely serrated preopercle (cheek bone)
- Lacks spots, large canine teeth and barbels on lower jaw

**Similar Species:** Sand seatrout, *C. arenarius* (has canine teeth and lacks chin pores)

**Habitat:** Coastal waters; may enter freshwater

**Size:** Up to 12 inches

**Notes:** Feed on invertebrates and small fishes



## Sand Seatrout (White Trout)

*Cynoscion arenarius*

**Family** Sciaenidae, Drums

### Description:

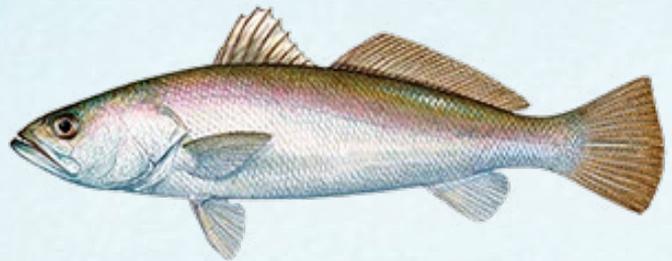
- Body is pale with a tan or yellowish back, fading to a silver or white belly
- Pair of large canine teeth at tip of upper jaw
- Inside of mouth is yellow
- 10-12 soft anal fin rays
- Lacks dark spots on back and barbels on lower jaw

**Similar Species:** Silver seatrout, *C. nothus* (more silvery color and smaller size); silver perch, *B. chrysoura* (has chin pores and lacks canine teeth); and weakfish, *C. regalis* (upper sides have wavy lines of small, irregular spots)

**Habitat:** Coastal waters over sand bottoms in the Gulf of Mexico (rare in Atlantic waters)

**Size:** Usually less than 15 inches (1 pound)

**Notes:** Feed mainly on small fishes and shrimp



## Silver Seatrout (White Trout)

*Cynoscion nothus*

**Family** Sciaenidae, Drums

### Description:

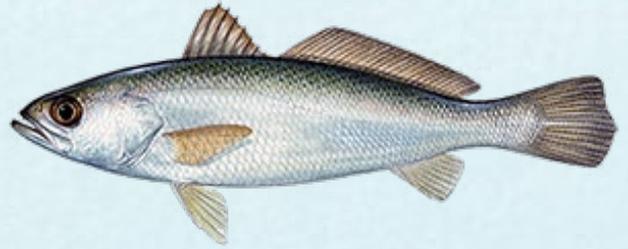
- Grayish back, silvery sides and white belly
- Faint rows of spots may be present on upper sides
- All fins are pale yellow, except for the darker, dusky dorsal fin
- Pair of large canine teeth at tip of upper jaw
- Eyes large and snout short
- 8 to 9 soft anal fin rays
- Bottom half of tail more elongated than upper half

**Similar Species:** Sand seatrout, *C. arenarius* (more yellow color and larger size)

**Habitat:** Coastal waters over sand or sandy mud bottoms

**Size:** Usually less than 10 inches (1 pound)

**Notes:** Smallest seatrout species; feed mainly on small fishes and shrimp



## Spotted Seatrout (Speckled Trout)

*Cynoscion nebulosus*

**Family** Sciaenidae, Drums

### Description:

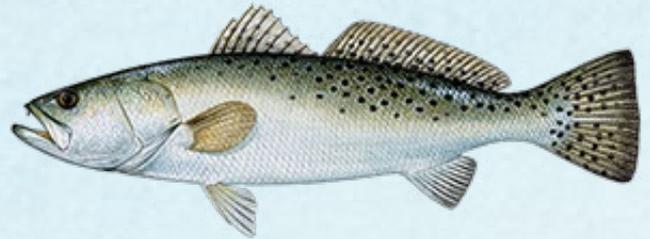
- Back is dark gray or green, fading to a silvery or white belly
- Several black spots on back extend to dorsal fins and tail
- Pair of large canine teeth at tip of upper jaw
- Lack barbels on lower jaw

**Similar Species:** Weakfish, *C. regalis* (has irregular wavy lines instead of spots)

**Habitat:** Coastal waters over sand bottoms or seagrass beds

**Size:** Up to 39 inches (17 pounds); common to 14 inches

**Notes:** Spawn inshore from March through November; feed mainly on small fishes and shrimp



## Weakfish

*Cynoscion regalis*

**Family** Sciaenidae, Drums

### Description:

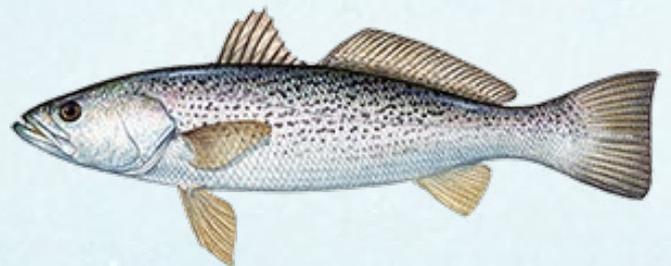
- Back is dark olive or blue-green, fading to silvery sides and belly
- Upper sides have wavy lines of small, irregular, dark spots
- Pelvic and anal fins yellowish, other fins more pale
- Pair of large canine teeth at tip of upper jaw
- Tip of tongue colored with black
- Lack barbels on lower jaw

**Similar Species:** Spotted seatrout, *C. nebulosus* (has prominent spots); silver seatrout, *C. nothus* (bottom half of tail is longer than upper half); and sand seatrout, *C. arenarius* (lacks dark spots)

**Habitat:** Coastal to offshore waters of the Atlantic (typically not in the Gulf of Mexico); juveniles found in estuaries

**Size:** Common to 20 inches

**Notes:** Spawn nearshore between April and October; feed mainly on fishes and crustaceans



# Mackerels and Tunas, Family Scombridae

## Cero

*Scomberomorus regalis*

**Family** Scombridae, Mackerels and Tunas

### Description:

- Back is bluish-green, fading to silvery sides and belly
- Sides with silvery-yellow spots, some forming broken lines
- Yellowish stripe on side extends from pectoral fin to caudal fin
- Bluish-black blotch on front of first dorsal fin
- Lateral line slopes gently from behind the gill cover to the tail

**Similar Species:** Spanish mackerel, *S. maculatus* (lack yellowish stripe on sides); and king mackerel, *S. cavalla* (lateral line drops sharply below second dorsal fin)

**Habitat:** Coastal waters, especially over coral reefs and other structure

**Size:** Up to 36 inches

**Notes:** Spawn offshore in mid-summer; feed on small fishes and invertebrates



## Spanish Mackerel

*Scomberomorus maculatus*

**Family** Scombridae, Mackerels and Tunas

### Description:

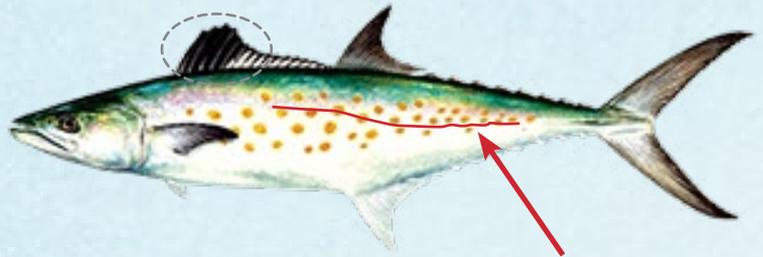
- Back is bluish-green, fading to silvery sides and belly
- Irregular golden-yellow spots on sides
- Bluish-black blotch on front of first dorsal fin
- Lateral line slopes gently from behind the gill cover to the tail

**Similar Species:** Cero, *S. regalis* (has yellowish stripe on sides); and king mackerel, *S. cavalla* (lateral line drops sharply below second dorsal fin)

**Habitat:** Coastal to offshore waters

**Size:** Up to 36 inches

**Notes:** Spawn offshore from spring through summer; feed on small fishes and invertebrates



## King Mackerel (Kingfish)

*Scomberomorus cavalla*

**Family** Scombridae, Mackerels and Tunas

### Description:

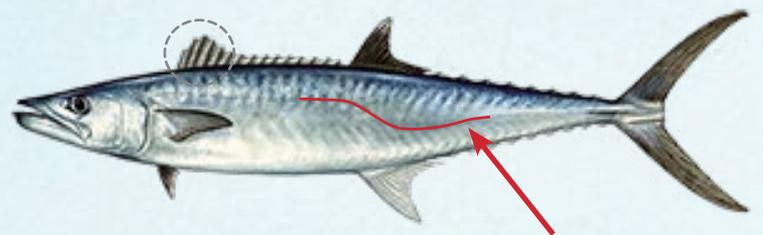
- Back is bluish-green, fading to silvery sides and belly (no spots)
- Front of first dorsal fin lacks a dark blotch
- Lateral line drops sharply below the second dorsal fin
- Juveniles may have yellowish spots, similar to Spanish mackerel

**Similar Species:** Cero, *S. regalis*; Spanish mackerel, *S. maculatus* (both have gently sloping lateral lines and a dark blotch on front of first dorsal fin); and wahoo, *A. solandri* (first dorsal fin long and continuous)

**Habitat:** Coastal to offshore waters

**Size:** Up to 72 inches

**Notes:** Spawn offshore in mid-summer; feed mainly on fishes



## Wahoo

*Acanthocybium solandri*

**Family** Scombridae, Mackerels and Tunas

### Description:

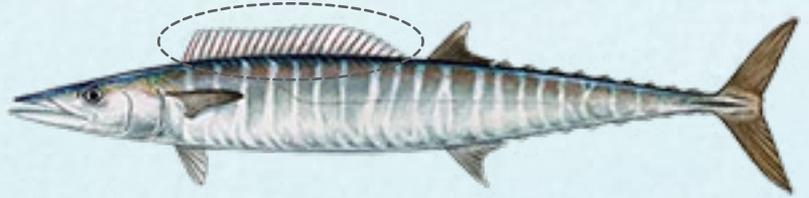
- Slender body with a dark bluish-green back, silvery sides and a whitish belly
- 24 to 30 wavy, dark blue bars on sides
- Jaws elongated, forming a pointed beak with triangular finely-serrated teeth
- First dorsal fin is low and long

**Similar Species:** King mackerel, *S. cavalla* (lateral line drops sharply)

**Habitat:** Offshore waters

**Size:** Up to 98 inches

**Notes:** Feed on fishes and squid



## Little Tunny (Bonito, Blue Bonito)

*Euthynnus alletteratus*

**Family** Scombridae, Mackerels and Tunas

### Description:

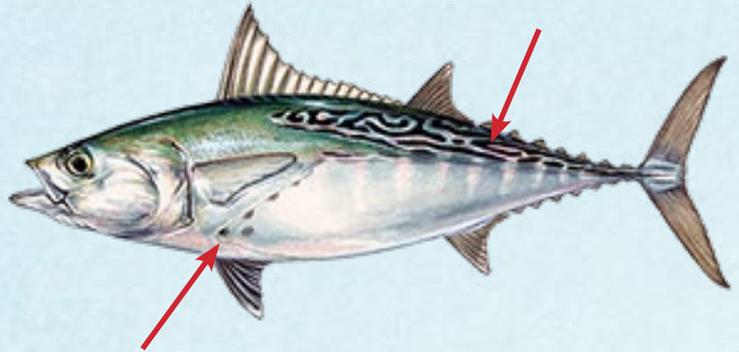
- Broken, wavy, diagonal dark stripes on back
- 3 to 7 dark spots under each pectoral fin
- Lack dark stripes on belly
- Relatively short pectoral fins

**Similar Species:** Atlantic bonito, *S. sarda* (lack spots below pectoral fin; dark stripes on back are mostly straight)

**Habitat:** Coastal to offshore waters

**Size:** Up to 48 inches

**Notes:** One of the most common tuna species in our area; feed on small fishes and invertebrates



## Atlantic Bonito (True Bonito, Northern Bonito)

*Sarda sarda*

**Family** Scombridae, Mackerels and Tunas

### Description:

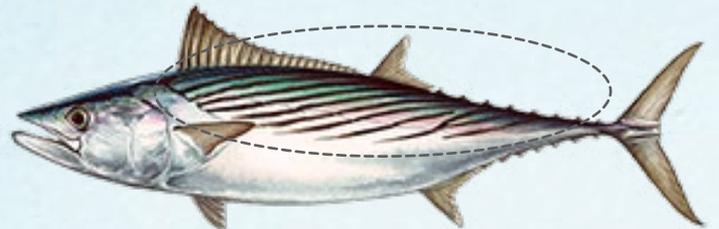
- Mostly straight, diagonal stripes on back
- Dark blue color on back and upper sides
- Lack dark stripes on belly
- Relatively short pectoral fins

**Similar Species:** Little tunny, *E. alletteratus* (wavy dark stripes on back; 4 to 5 dark spots below pectoral fin); and skipjack tuna, *K. pelamis* (stripes on lower sides, not on back)

**Habitat:** Coastal to offshore waters of the Atlantic Ocean (rarely found in the Gulf)

**Size:** Up to 36 inches

**Notes:** Feed on small fishes and invertebrates



## Skipjack Tuna (Oceanic Bonito)

*Katsuwonus pelamis*

**Family** Scombridae, Mackerels and Tunas

### Description:

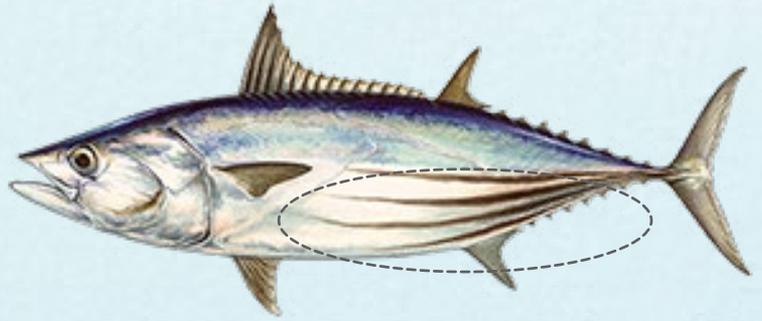
- Back is dark purplish-blue, fading to silvery lower sides and belly
- 4 to 6 horizontal stripes on lower part of sides
- Relatively short pectoral fins

**Similar Species:** Little tunny, *E. alletteratus*; and Atlantic bonito, *S. sarda* (both have stripes on back, not on lower sides)

**Habitat:** Offshore waters

**Size:** Up to 43 inches

**Notes:** Feed on fishes and invertebrates



## Yellowfin Tuna

*Thunnus albacares*

**Family** Scombridae, Mackerels and Tunas

### Description:

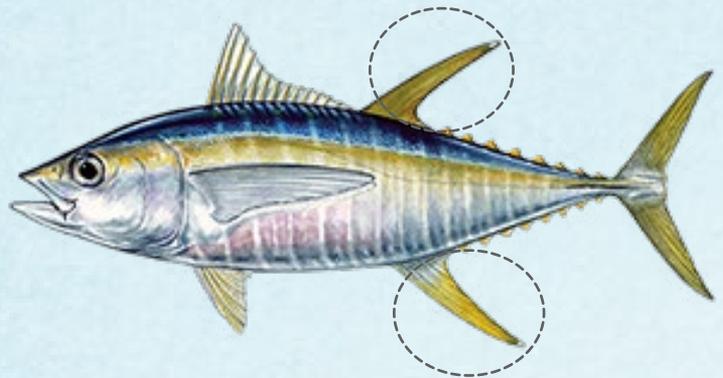
- Second dorsal and anal fins very elongated (about 1/5 of total length)
- Second dorsal fin and all finlets are yellow and may be trimmed in black
- Golden-yellow stripe on sides
- Long pectoral fin reaches below the beginning of the second dorsal fin

**Similar Species:** Blackfin tuna, *T. atlanticus* (lacks elongated second dorsal and anal fins)

**Habitat:** Offshore waters

**Size:** Common to 60 inches

**Notes:** Spawning peaks in the summer; feed on fishes and invertebrates



## Blackfin Tuna

*Thunnus atlanticus*

**Family** Scombridae, Mackerels and Tunas

### Description:

- Second dorsal and anal fins not elongated
- Bronze stripe on sides
- Second dorsal fin dusky and all finlets dark with white edges
- Long pectoral fin nearly reaches below the beginning of the second dorsal fin

**Similar Species:** Yellowfin tuna, *T. albacares* (elongated second dorsal and anal fins); and bluefin tuna, *T. thynnus* (has short pectoral fins and reaches a much larger size)

**Habitat:** Coastal to offshore waters

**Size:** Common to 28 inches

**Notes:** Feed on small fishes, invertebrates and plankton



## Bluefin Tuna

*Thunnus thynnus*

**Family** Scombridae, Mackerels and Tunas

### Description:

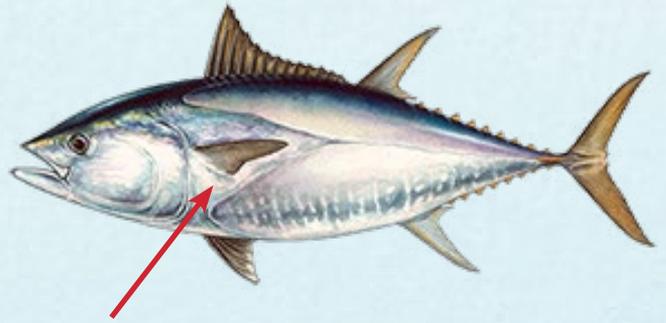
- Back is dark blue-black, fading to a silvery-white belly
- Second dorsal and anal fins not elongated
- Short pectoral fin does not reach area between first and second dorsal fins
- First dorsal fin is yellow or blue and the second dorsal fin is reddish-brown
- Anal fin and all finlets bright yellow with black edges
- Lack distinct body streaks, stripes and spots

**Similar Species:** Blackfin tuna, *T. atlanticus* (has long pectoral fins and reaches much smaller size)

**Habitat:** Offshore waters

**Size:** Common to 78 inches; largest tuna species

**Notes:** Feed on fishes, squid and occasionally crustaceans



## Swordfishes, Family Xiphiidae

### Swordfish

*Xiphias gladius*

**Family** Xiphiidae, Swordfishes

### Description:

- Back dark brown to purple, fading to a lighter belly
- Long, wide, flat and sword-like upper jaw
- First dorsal fin is very high, rigid and short
- Single keel on each side of caudal peduncle
- Lack pelvic fins, scales and teeth
- Eyes large

**Habitat:** Offshore waters

**Size:** Up to 15 feet (1400 pounds)

**Notes:** Feed primarily on fishes, but may also consume invertebrates



## Billfishes, Family Istiophoridae

### Longbill Spearfish

*Tetrapturus pfluegeri*

**Family** Istiophoridae, Billfishes

### Description:

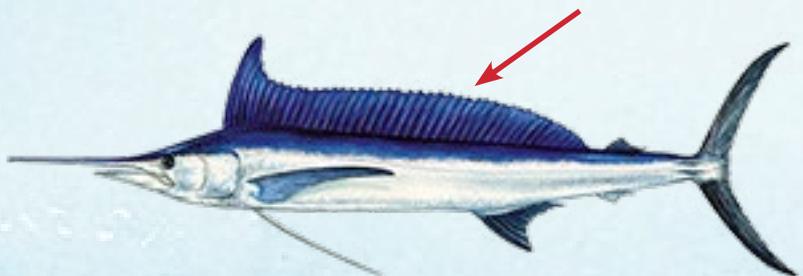
- Dark blue back, white and brown sides, fading to a silvery-white belly
- Dorsal fin dark blue, other fins dark brown-black
- First dorsal fin peaks at front, then dips slightly, but remains somewhat high
- Upper jaw elongated into a spear shape

**Similar Species:** White marlin, *K. albidus* (dorsal fin raised in front, then becomes very low)

**Habitat:** Offshore waters

**Size:** Up to 8 feet (120 pounds)

**Notes:** Feed mainly on fishes and squid



## White Marlin

*Kajikia albida*

**Family** Istiophoridae, Billfishes

### Description:

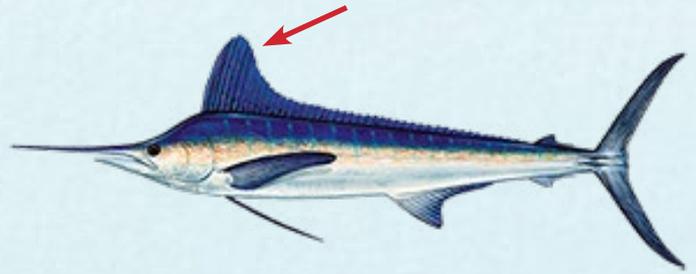
- Body dark blue to brown, fading to a silvery-white belly
- Dorsal fin dark blue with noticeable black spots
- Tips of first dorsal, pectoral and first anal fins are rounded
- Upper jaw elongated into a spear shape
- Scales with a single sharp point
- Lateral line curves over the pectoral fin

**Similar Species:** Blue marlin, *M. nigricans* (dorsal fin pointed and lacks spots; tips of pectoral and anal fins pointed); and longbill spearfish, *T. pfluegeri* (dorsal fin raised in front, then dips slightly, but remains somewhat high)

**Habitat:** Offshore waters

**Size:** Up to 9.5 feet (180 pounds)

**Notes:** Feed mainly on fishes and squid



## Blue Marlin

*Makaira nigricans*

**Family** Istiophoridae, Billfishes

### Description:

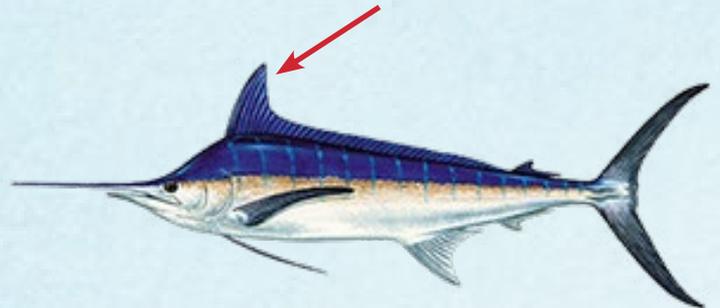
- Back is blue-black, fading to a silvery-white belly
- Tips of dorsal, pectoral and anal fins are pointed
- Lack black spots on dorsal fin
- Upper jaw elongated into a spear shape
- Scales with one or two sharp points
- Lateral line is interwoven like a net, hard to see in large individuals

**Similar Species:** White marlin, *K. albida* (dorsal fin rounded with noticeable spots; tip of pectoral and anal fins rounded)

**Habitat:** Offshore waters

**Size:** Up to 16 feet (1400 pounds); largest Atlantic marlin species

**Notes:** Feed mainly on fishes and squid



## Sailfish

*Istiophorus platypterus*

**Family** Istiophoridae, Billfishes

### Description:

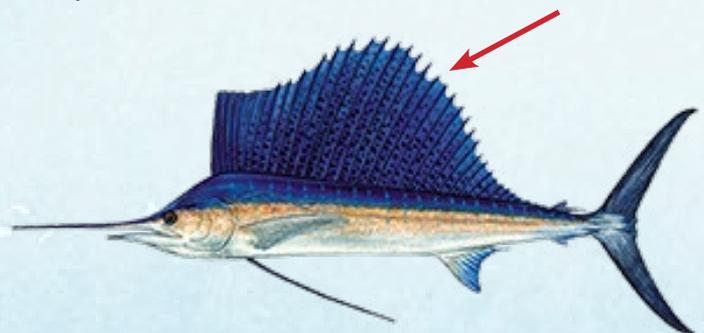
- Dark blue back, brownish-blue sides, fading to a silvery-white belly
- First dorsal fin is greatly enlarged and sail-like, has black spots, squared-off in front and is highest in the middle
- Pelvic fins are extremely long and narrow
- Upper jaw elongated into a spear shape
- Scales with blunt ends
- Lateral line curves over the pectoral fin

**Similar Species:** White marlin, *K. albida*; and juvenile blue marlin, *M. nigricans* (both lack the large sail-like dorsal fin of sailfish)

**Habitat:** Offshore waters

**Size:** Up to 11 feet (220 pounds)

**Notes:** Feed mainly on fishes and invertebrates



# Who to Call for What

## Marine Regulatory & Management Agencies

### South Atlantic Fishery Management Council

**SAFMC.net**

4055 Faber Place Dr., Suite 210  
North Charleston, SC 29405

**(866) 723-6210**

*Manages marine fisheries 3 to about 200 nautical miles off of Florida in the Atlantic Ocean.*

### Gulf of Mexico Fishery Management Council

**GulfCouncil.org**

2203 N. Lois Avenue, Suite 1100  
Tampa, FL 33607

**(888) 833-1844**

*Manages marine fisheries 9 to about 200 nautical miles off of Florida in the Gulf of Mexico.*

### NOAA Fisheries

**nmfs.noaa.gov**

263 13th Ave. South  
St. Petersburg, FL 33701

**(727) 824-5301**

*Manages marine fisheries outside of state waters in coordination with the councils.*

## Florida Fish and Wildlife Conservation Commission Contacts

### Marine Fisheries Management

**(850) 487-0554**

**MyFWC.com/Fishing**

620 South Meridian St.

Tallahassee, FL 32399-1600

*Manages marine fisheries in Florida's state waters, from shore to 9 nautical miles in the Gulf of Mexico and from shore to 3 nautical miles in the Atlantic Ocean.*

### Hunting and Game Management

**(850) 488-3831**

### Habitat and Species Conservation

**(850) 488-3831**

### Boating and Waterways Section

**(850) 488-5600**

### Law Enforcement

**(850) 488-6251**

### Wildlife Alert

**(888) 404-FWCC (3922)**

### Angler Tag Return Hotline

If you catch a tagged fish in Florida waters,

call **(800) 367-4461**

or email **TagReturn@MyFWC.com**

### Fish Kill Hotline

To report a fish kill, call **(800) 636-0511**

or submit a report online

at **MyFWC.com/FishKill**

### Red Tide Status

For information on current red tide

conditions, call **(866) 300-9399** (*toll-free*

*inside Florida only*) or **(727) 552-2448**

*(outside Florida)*

### Freshwater Fisheries Management

**(850) 488-0331**

### Fish and Wildlife Research Institute

**(727) 896-8626**

### Licensing and Permitting

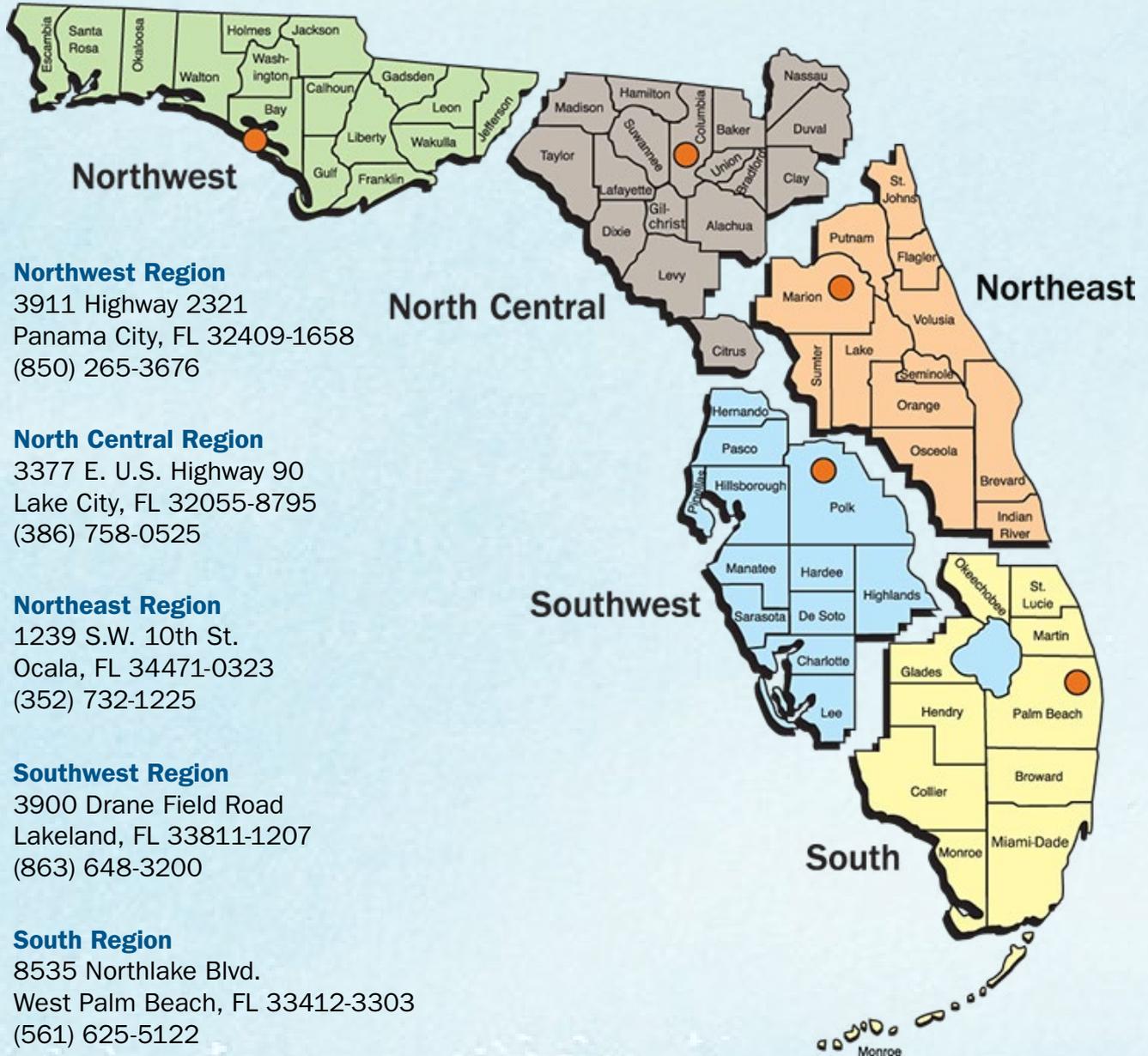
Recreational: **(850) 488-3641**

Commercial: **(850) 487-3122**

**GoOutdoorsFlorida.com**

# FWC Regional Offices

## Florida Fish and Wildlife Conservation Commission Regional Offices



### Northwest Region

3911 Highway 2321  
Panama City, FL 32409-1658  
(850) 265-3676

### North Central Region

3377 E. U.S. Highway 90  
Lake City, FL 32055-8795  
(386) 758-0525

### Northeast Region

1239 S.W. 10th St.  
Ocala, FL 34471-0323  
(352) 732-1225

### Southwest Region

3900 Drane Field Road  
Lakeland, FL 33811-1207  
(863) 648-3200

### South Region

8535 Northlake Blvd.  
West Palm Beach, FL 33412-3303  
(561) 625-5122

### Tallahassee Office

620 S. Meridian St.  
Tallahassee, FL 32399-1600  
(850) 488-4676

## **Wildlife Alert**

If you suspect a wildlife violation, report it to the FWC Wildlife Alert Reward Program for violations that are in progress or need immediate attention. Examples of violations include: illegal hunting, killing or capturing of protected species; fishing by illegal methods; and boating under the influence. You can also contact Wildlife Alert to report stranded or injured marine mammals and sea turtles.

Call **(888) 404-FWCC (3922)** or cellular phone customers can use **\*FWC** or **#FWC**. Telephones are answered 24 hours a day, seven days a week.



Your purchase of a fishing license, fishing equipment and motor boat fuels supports these Sport Fish Restoration funded saltwater programs in Florida:

- Aquatic Education
- Angler Outreach
- Artificial Reefs
- Stock Enhancement
- Marine Fisheries Research
- Boating Access Improvements

Give us your feedback by visiting [MyFWC.com/FishingLines](https://www.myfwc.com/fishinglines)