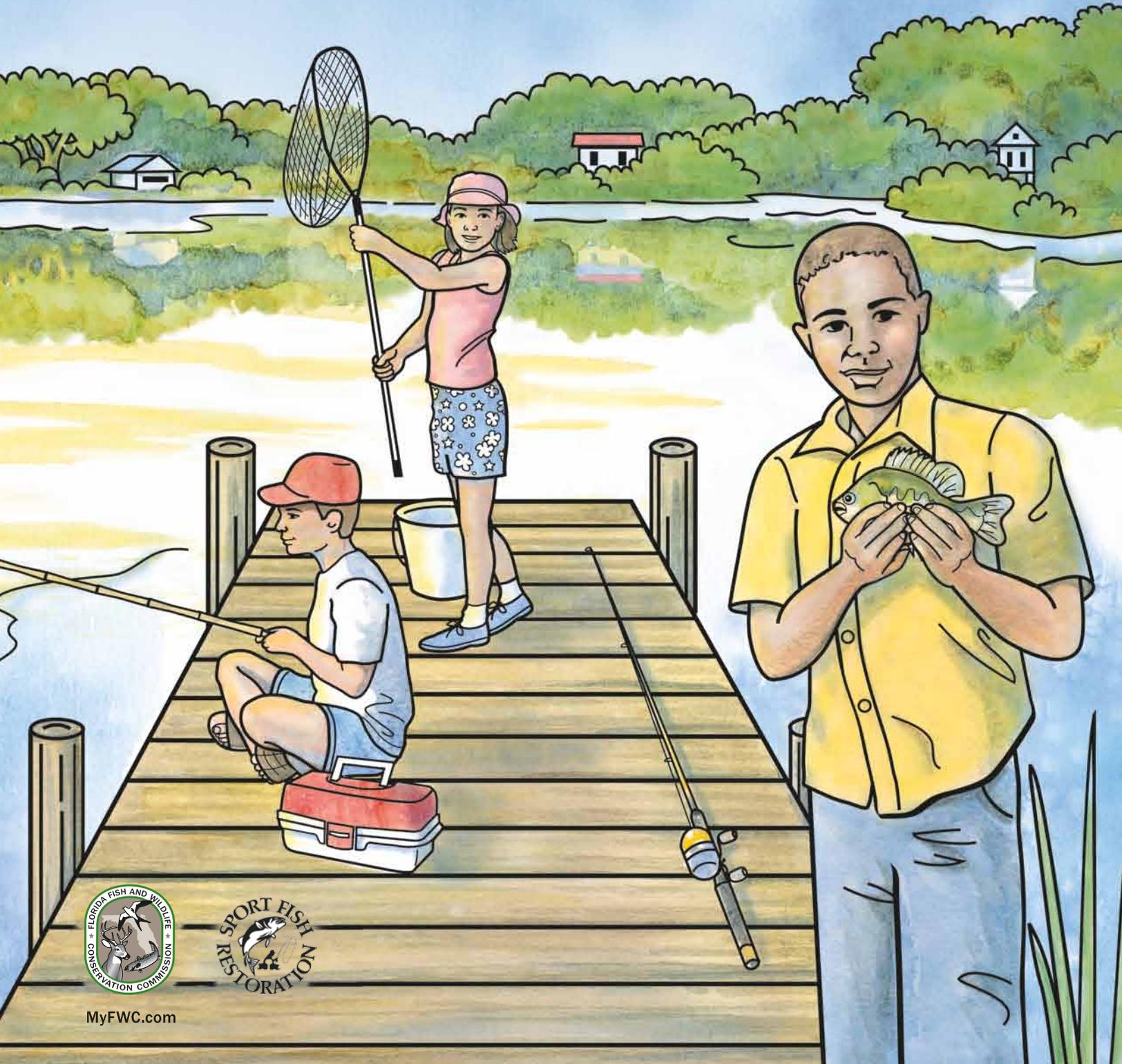


Fishing Florida



Florida fishing

It's catching on

The Florida Fish and Wildlife Conservation Commission is indebted to the Missouri Department of Conservation for developing the original material in this publication and allowing us to use it as the basis for our own fishing workbook.

Compiled by Steve Marshall and Rich Abrams

Cover and graphics by Lizabeth West

Freshwater fish identity art by Wallace Hughs

Saltwater fish identity art by Diane Rome Peebles

This agency does not allow discrimination by race, color nationality, sex or handicap. If you believe you have been discriminated against in any program, activity or facility of this agency, write to: Florida Fish and Wildlife Conservation Commission, 620 South Meridian Street, Tallahassee, FL 32399-1600.



Florida Fish and Wildlife
Conservation Commission

MyFWC.com

Florida Fish and Wildlife Conservation Commission

Our mission: Managing fish and wildlife resources for their long-term well-being and the benefit of people.



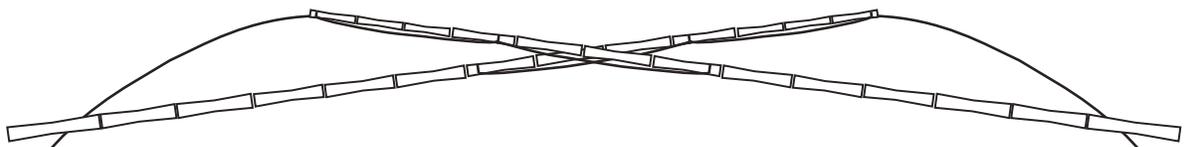
Color this seal:

1. Tan
2. Green

This workbook is designed to increase public awareness about the need for clean water and healthy habitat, the common freshwater and saltwater fish in Florida, their body parts, how and where they live and angling safety and ethics. Completing this book will make you understand better that protecting our natural resources is up to all of us.

The logo above is worn by employees of the Florida Fish and Wildlife Conservation Commission (FWC). FWC law enforcement officers enforce the rules that protect our fish, wildlife, birds, forests, oceans and rivers. Biologists are people who study the fish, wildlife, birds and their habitats to learn better ways to care for them. FWC officers and biologists work together to protect Florida's natural resources.

This workbook is funded through the Sport Fish Restoration (SFR) Program and Florida fishing license sales. Money for the SFR program comes from excise taxes on boating and fishing equipment, duties on imported boats and tackle and sales of motorboat fuel.



Fishing is a popular sport in Florida. Everyone who enjoys fishing, follows the rules and practices good outdoor manners is an ethical angler. Ethical anglers help protect our resources and make fishing safe for everyone.

Ethical anglers:

- Help protect places for fish to live, eat and reproduce
- Bring their trash back after a fishing trip
- Know fishing regulations and follow them
- Know about fish and how to catch them

Which line has a fish on it?

Do you think the water in this lake is clean? Why?



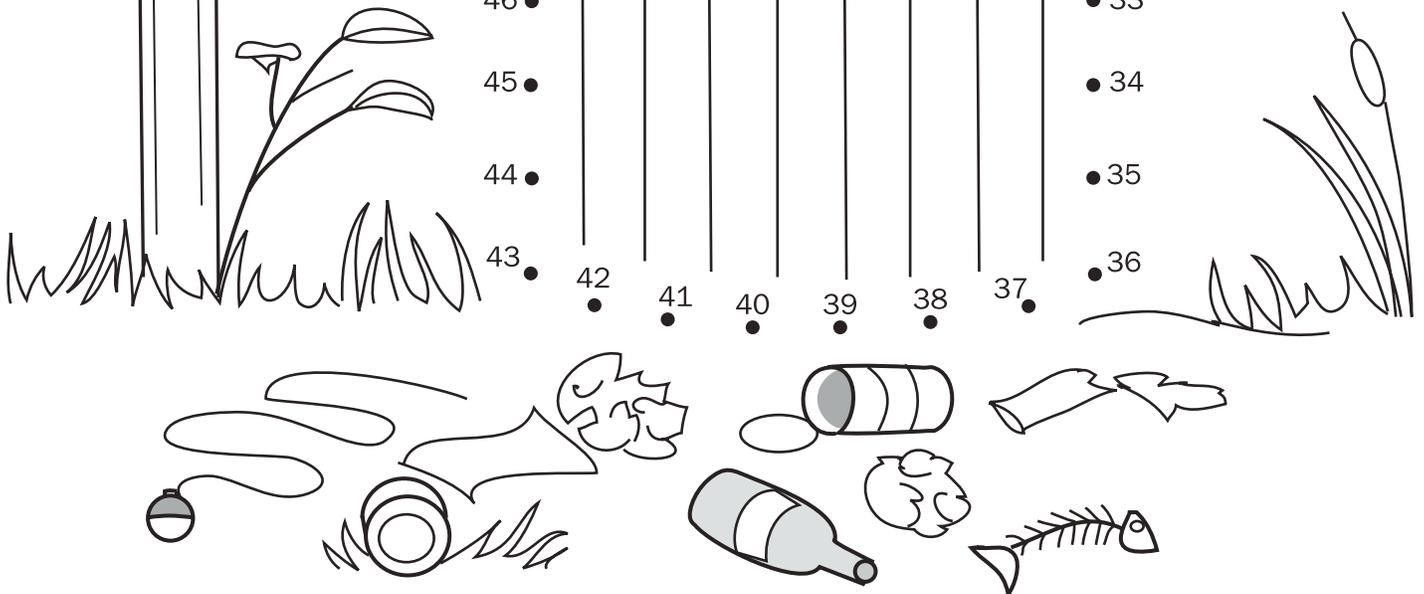
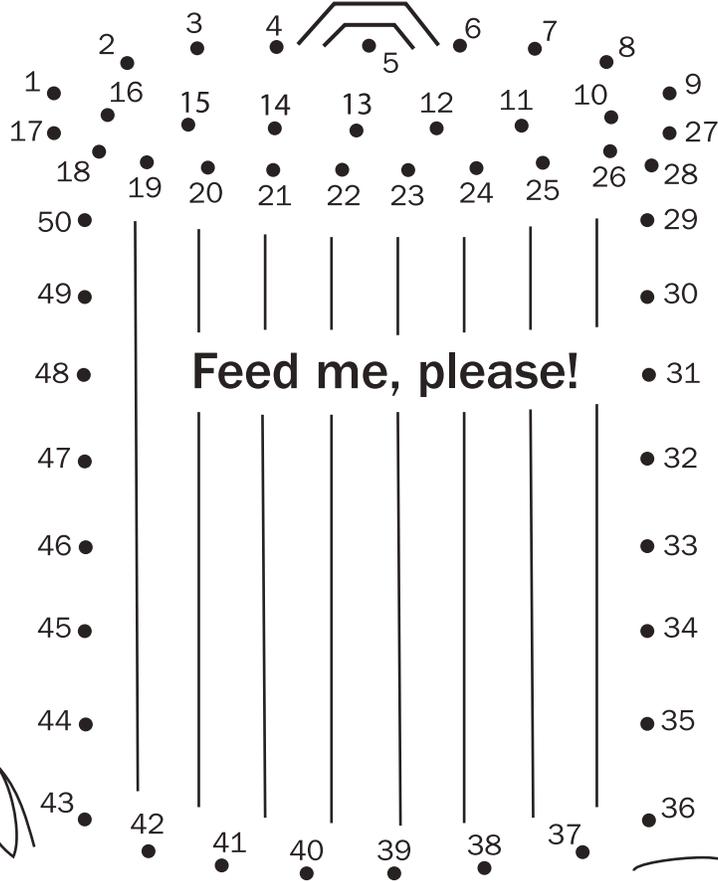
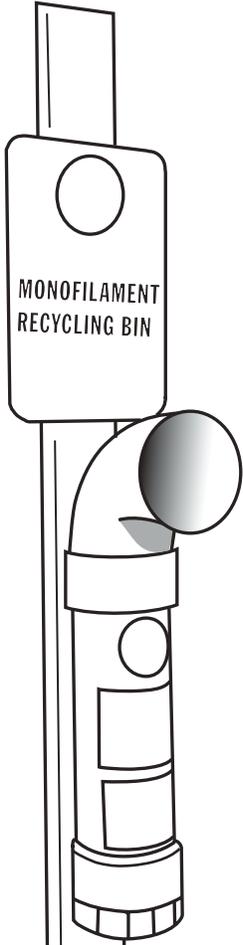
Liz West

Answer: Yes, because there are fish.

"Wherever you go to fish, if you do not find me,
carry out everything you brought with you."

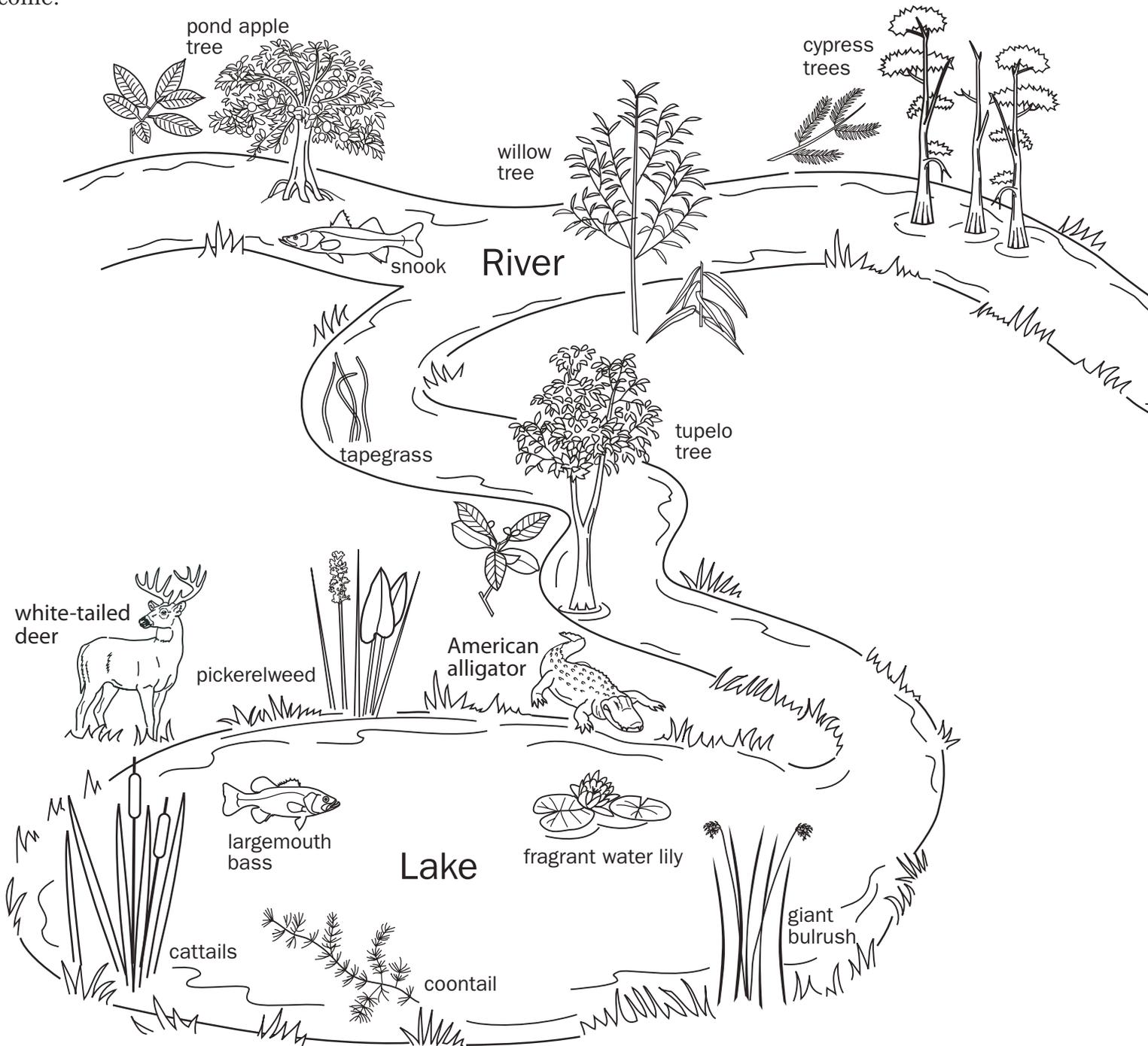
What am I?

Your fishing location is a special place,
Keep it clear of trash and a natural space,
Used fishing line belongs in a recycle container,
Recycling bottles, cans and paper is a "no-brainer"



Habitat – where animals and plants live

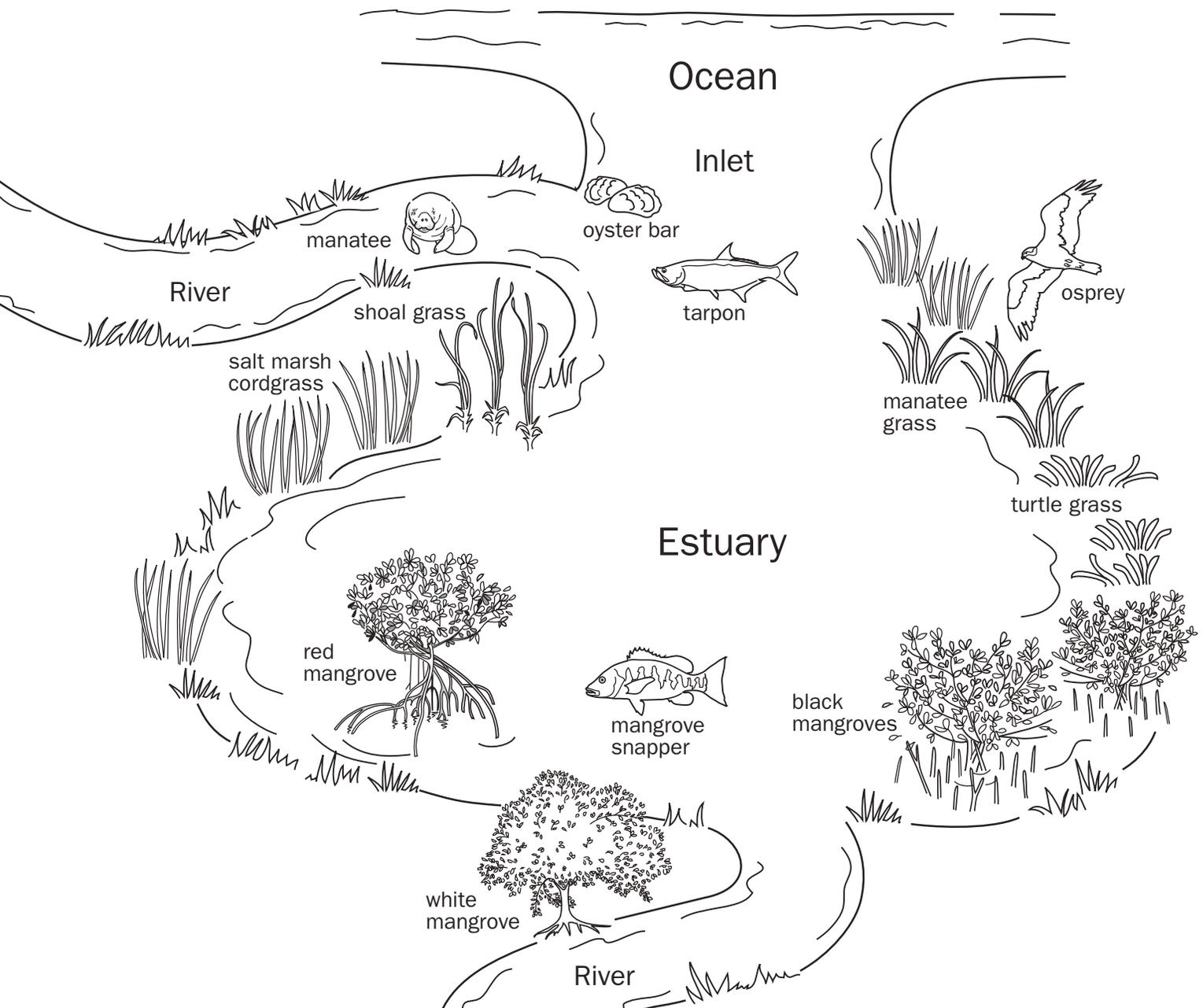
Florida contains over 7,700 freshwater lakes and more than 10,000 miles of rivers and streams. Additionally, many hundreds of miles of canals have been built. All are important resources that provide homes for Florida’s abundant freshwater fisheries. The plants listed on this page, as well as many others, provide valuable habitat for fish and other life. By protecting, maintaining and improving freshwater habitats, we can guarantee abundant fisheries resources, not only in fresh water but in marine systems as well, for many years to come.



Habitat is important

Estuaries are areas where rivers meet the sea. These areas have waters that can be variably salty or almost fresh. They are among one of the most productive ecosystems in nature. In Florida, estuaries include habitats such as mangroves (red, black, and white), sea grasses, and salt marshes.

Covering South Florida, mangroves nurture marine organism of all kinds, provide nesting sites for birds, shelter juvenile fish and protect the coast from wind and water surges during storms. Sea grasses provide shelter for juvenile marine organisms, trap sediments to prevent erosion, and calm water currents during storms. They also provide nurseries where juvenile fish and crustaceans mature into adults. In the northern regions of Florida, salt marshes are highly productive areas where freshwater and saltwater mix together to form brackish waters. These areas act as natural filters that trap sediment (sand) and some pollutants. They soak up water during storms and produce a large amount of plant material that begins important food chains. Salt marshes also provide a large amount of protective habitat for coastal organisms.



Fishing for facts

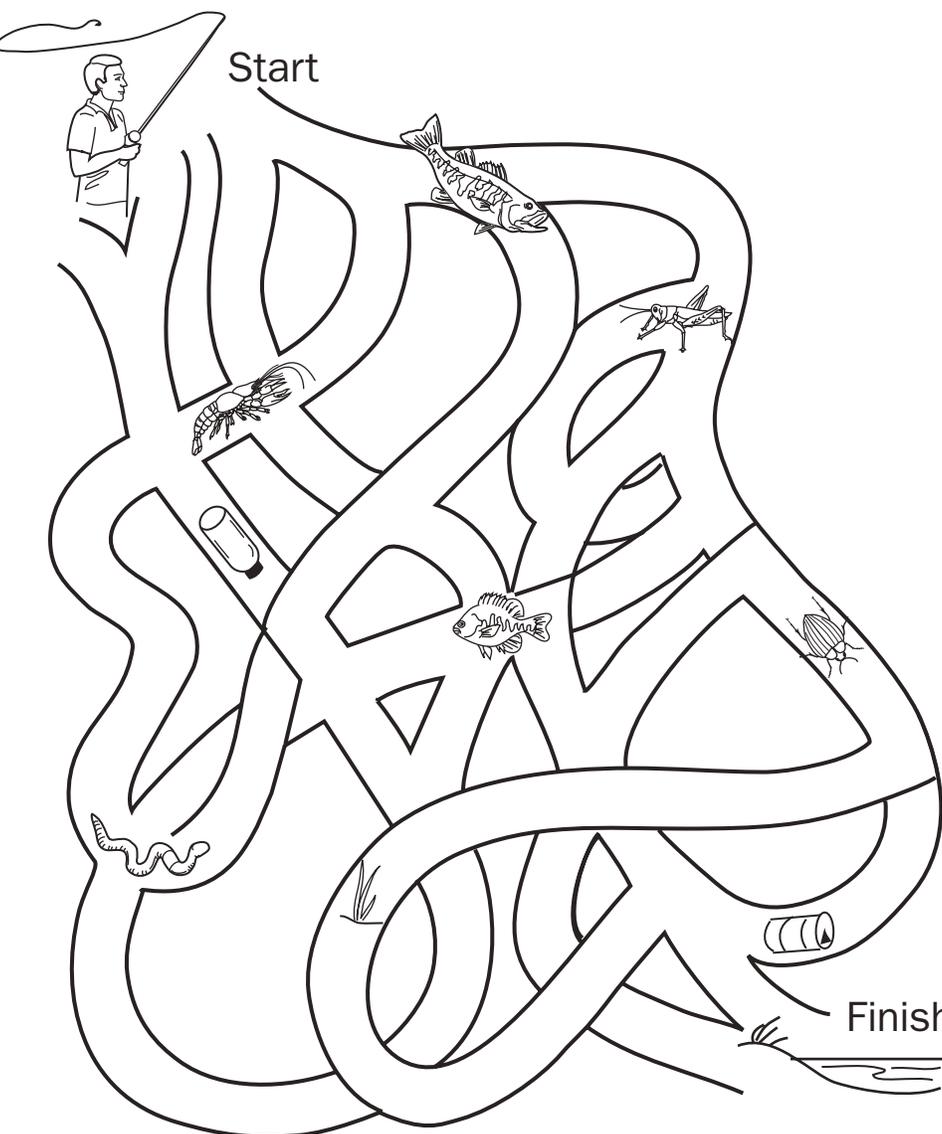
Fish are important to us. They provide food for millions of people, and anglers enjoy catching them for sport. Fish are also important in the balance of nature. They eat plants and animals and, in turn, become food for plants and animals. This system is called the food chain. The balance of plants and animals in aquatic systems may become upset by the actions of people. Fisheries biologists at the Florida Fish and Wildlife Conservation Commission study fish populations, work to improve habitats and establish fishing rules to help maintain this balance. It is necessary for you to learn the fishing rules for any body of water you fish. Keeping the balance of nature is up to all of us.

Try to follow the bass through the food chain.

Freshwater food chain

-  angler eats bass
-  bass eats bluegill
-  bluegill eats aquatic insects
-  aquatic insects eat aquatic plants
-  aquatic plants use soil
-  aquatic soil

Start



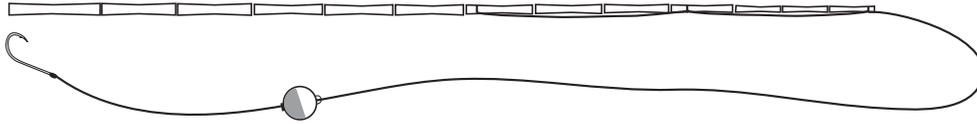
Finish

Saltwater food chain

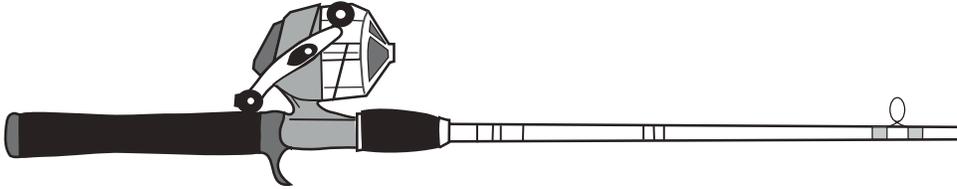
-  angler eats seatrout
-  sea trout eats pinfish
-  pinfish eats shrimp
-  shrimp graze on sea grass
-  sea grasses use nutrients & sunlight
-  nutrients

How do I get ready to go fishing?

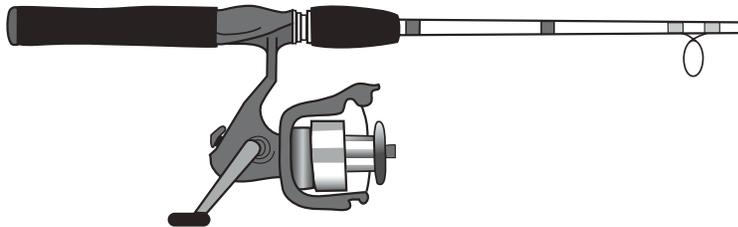
Choose the rod and reel for your fishing needs.



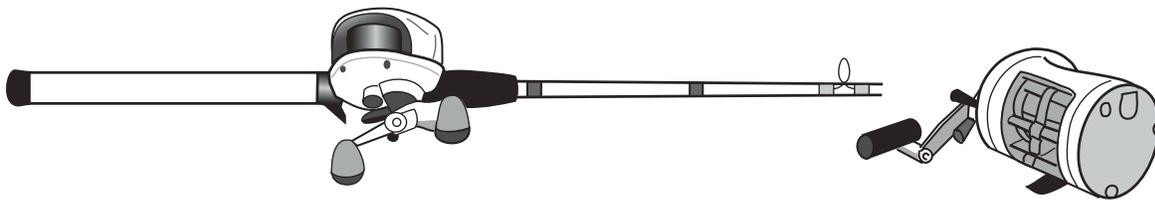
A **cane pole** is a simple fishing rod you can use to catch freshwater or saltwater fish. A piece of fishing line (the same length as the cane pole) is attached to the cane pole, along with a float and a hook.



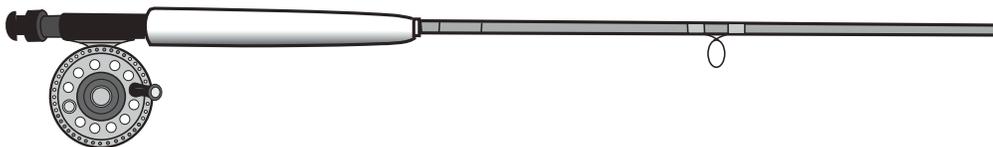
A **spin-cast rod** and reel is a very simple combo that will enable you to cast to fish. The reel has a push-button control for releasing the line off the covered spool. These reels are good to use in fresh water.



Spinning rods and reels are designed for use in either fresh water or salt water. They are 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.



Bait-casting and conventional rods and reels can be used in either fresh water or salt water. 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 of these reels have a device to wind the line neatly onto the spool.



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

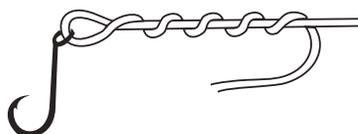
How do I tie that knot?

Things to remember: match knot to function, tie the knot correctly, wet the knot prior to fully tightening it. Trim tag end to $\frac{1}{8}$ inch after completely tightening the knot.

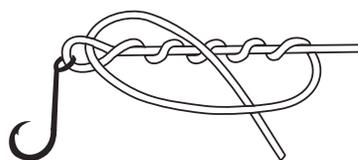
Improved clinch knot – Used for tying line to a hook, swivel and some artificial lures



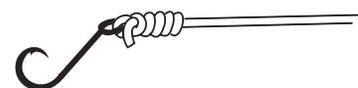
1. Put the tag end of the line through the eye of the hook and bring it back toward the line.



2. Make five twists around the standing line.

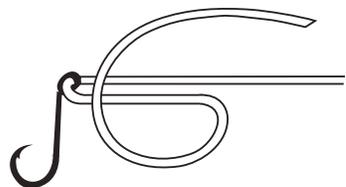


3. Take the tag end back toward the hook and push it through the first loop nearest the eye. Bring the tag end back through the big loop you made in the previous step.

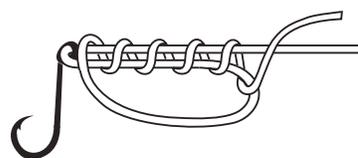


4. Holding the hook and the line, pull the knot tight until it looks like the knot at left.

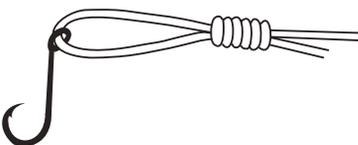
Uni-knot – Used for tying line to hook, light line to heavy line and many other applications



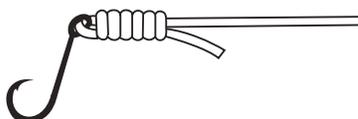
1. Run line through eye of hook at least 6" and fold to make two parallel lines. Bring end of line back in a circle toward hook.



2. Make six turns with the tag around the double line and through the circle. Hold the double line at the point where it passes through the eye and pull the tag to snug up turns.



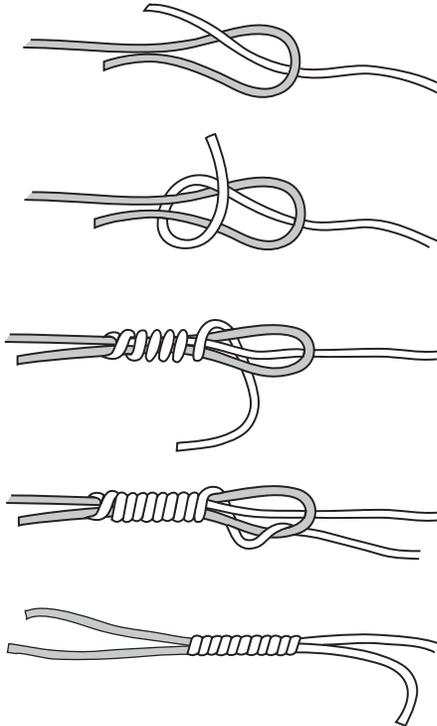
3. Pull standing line to slide knot up against eye.



4. Continue pulling until knot is tight. Trim tag end flush with closest coil of knot. The uni-knot will not slip.

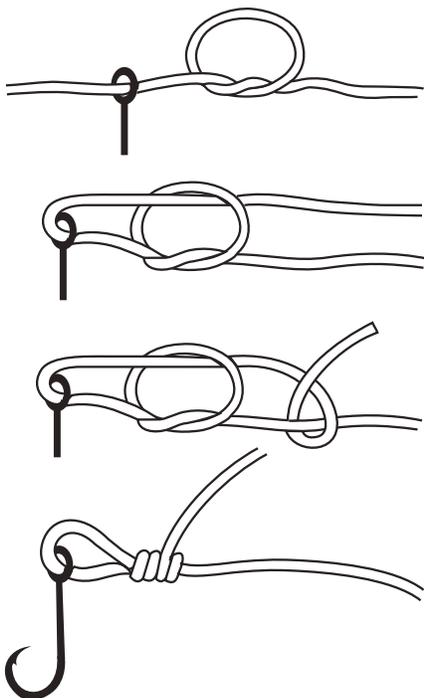
More knots to tie

Albright special – Used to tie light line to heavier line, such as a leader



1. Make a loop with the heavier line. Pass about 10-12 inches of the lighter line through the loop.
2. Wrap the lighter line around the base of the loop, opposite the side of the loop where the line came out.
3. Wrap the light line back over itself and the doubled leader line. Make 10-15 turns.
4. Insert the light line back through the loop in the opposite direction it was previously inserted into the loop.
5. Pull gently on the standing part of the line to remove slack; then pull gently on the tag end of the leader. Finally, pull the tag end of the line as tight as possible and then pull the standing line tight.

End-loop knot – Used to tie leader to lures that require freedom of movement, like jigs and plugs

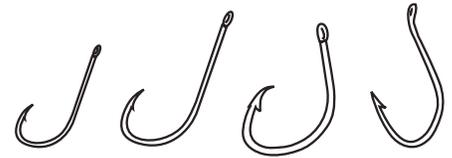


1. Tie a simple overhand knot in the line several inches from the end; do not tighten the knot at this point.
2. Insert the line through the lure eye, turn and insert the end of the line through the wide portion of the overhand knot.
3. Loop size is determined at this point by moving the overhand knot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

Terminal tackle for fishing

Hooks

Hooks keep the fish attached to your fishing line. Hooks are available in a wide variety of sizes, styles and coatings for many different applications.

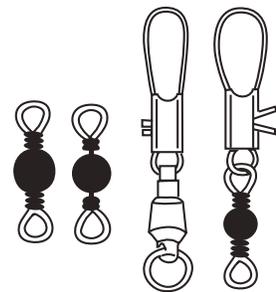


Hook hints

Match the size of the hook to the size of your bait. Always make sure your hook points are sharp. If you are getting bites and no fish, try a smaller hook. When bait fishing, use non-offset circle hooks to prevent gut-hooking fish. Crimping the barb will make it easier to release an unwanted fish. Avoid using hooks that will not rust if they remain in a fish. If a fish is gut-hooked or you cannot easily remove a hook, cut the line as close to the mouth as possible.

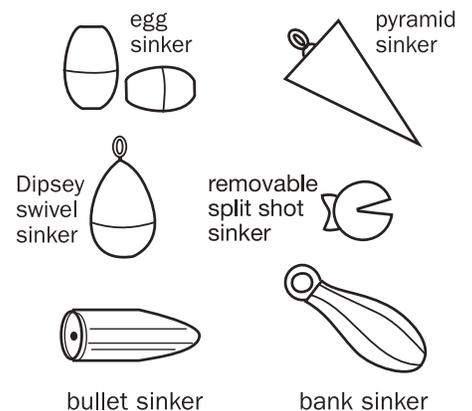
Snaps and swivels

These items reduce or prevent line from twisting and provide a quick connection between other tackle. The two major types of swivels are barrel and ball-bearing. Either type is available in a variety of sizes and with or without snaps. Match swivels to your tackle and the fish you are targeting.



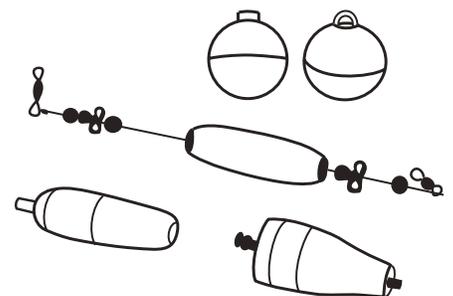
Weights/sinkers

Weights are used to cast bait or keep it at a certain depth. They come in a variety of sizes and shapes for use in different fishing situations. Non-lead sinkers are also available to help prevent lead from entering aquatic systems. Egg sinkers are used in fishing rigs to allow the bait to move away once the sinker is on the bottom. Split shot sinkers can be added at any point along the fishing line when you need a small amount of weight. Pyramid sinkers dig into the bottom and prevent the bait from moving to another area. Dipsey swivel sinkers are commonly used for trolling or bottom fishing with live bait.



Floats

Floats are used to keep bait off the bottom and tells the angler when a fish is biting the hook. Floats should match the bait and tackle you are using. Different colors, sizes, materials and styles are available for floats. Some floats have noise makers to attract fish while others have a small amount of weight in them to aid in casting the bait.



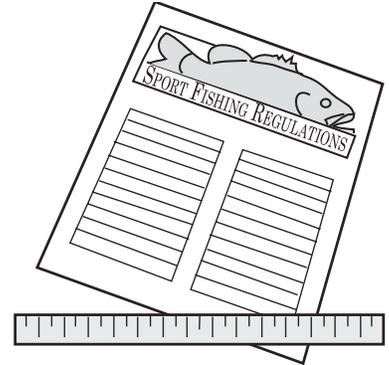
Other tackle box items

Regulations/identification manual

Good anglers always carry a copy of the current fishing regulations to know the size and bag limits of the fish in their area. Carrying a manual to identify any fish you do not know is part of being a good angler.

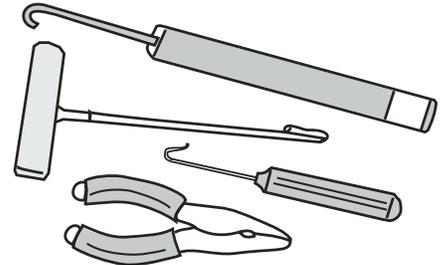
Measuring device

A measuring device is needed to check your fish with the current fishing regulations. It is up to all of us to help manage our fish populations.



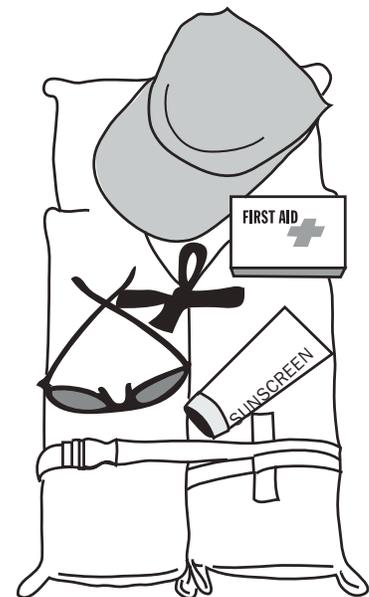
Pliers and de-hooking devices

Needle-nosed pliers are useful for cutting line, pulling line tight when tying knots, holding items, removing hooks and crimping split shot. De-hooking tools allow you to remove hooks from fish without touching them. If this tool is used properly, much of the slime covering a fish will remain on a fish when released, giving the fish a much better chance of living.



Safety equipment

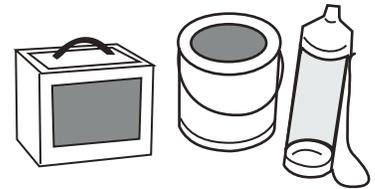
A hat, sunglasses and sunscreen are necessary to protect you from the sun. Polarized sunglasses also give you the ability to see into the water and observe grass beds and other underwater habitats. A small first aid kit is also recommended for the tackle box. If you are fishing from a boat, it is your duty to have the required safety equipment. A personal flotation device (PFD) is required for every person on a boat. Be certain you know all the safety requirements before boating. If you are unsure, please check with the FWC Division of Law Enforcement.



Other tackle box items (continued)

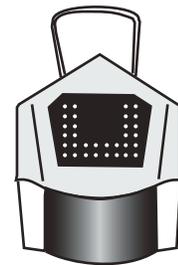
Cricket bucket and worm container

Crickets and worms are good baits for certain freshwater fish. These containers enable you to transport live and healthy crickets to your favorite fishing spot. There is also a variety of worm containers available to maintain healthy night crawlers for fishing.



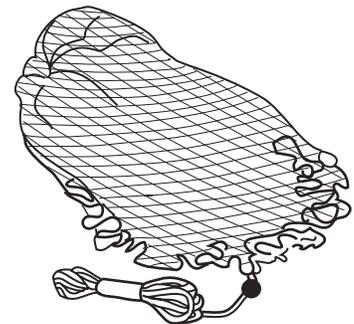
Flow-through baitwell

These containers can be used from shore, while wading or from a boat. The design allows them to be tied off and placed in the water to exchange the water in the baitwell with outside water. This procedure keeps baitfish or shrimp alive for fishing.



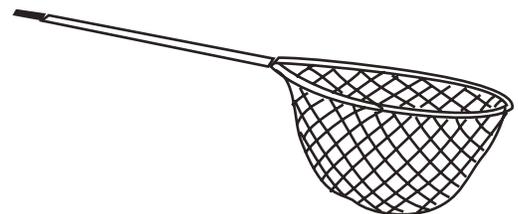
Cast net

Cast nets are used to catch bait fish for live bait fishing. They are available in a variety of lengths and mesh sizes. A great deal of practice is required to throw these nets correctly. Care is important when throwing them from a boat.



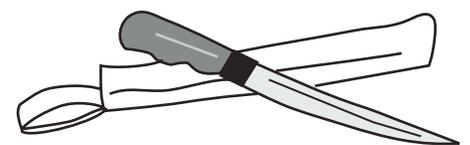
Landing net

Landing nets are used to land large fish or fish with teeth. Care should be taken to remove fish quickly from the net. If fish are to be released, they should be handled with care. Knotless nets are better for fish because these nets remove less fish slime and do not scratch the fish. There is a wide assortment of landing nets.

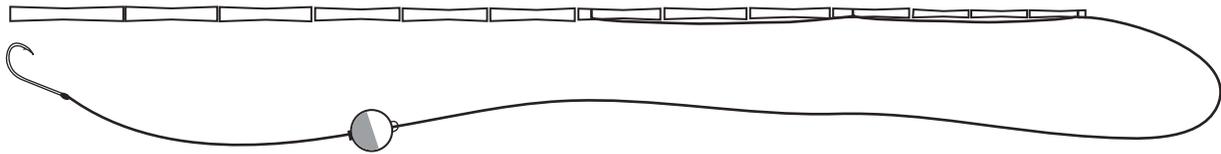


Fillet knife

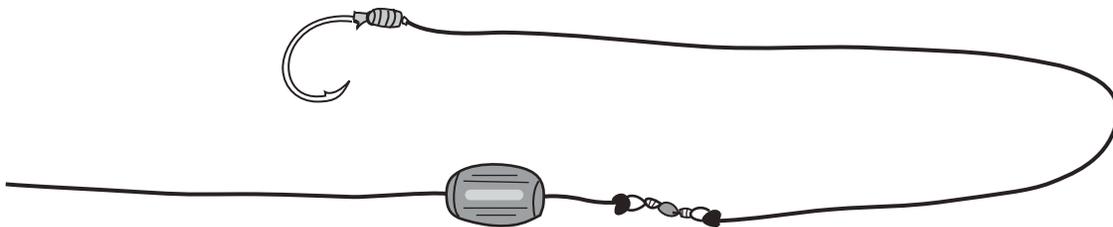
Fillet knives are used for cleaning fish to eat. A fillet knife should be thin and kept very sharp. Knives should be washed and dried thoroughly after each use. Be careful when using any knife.



Fishing rigs



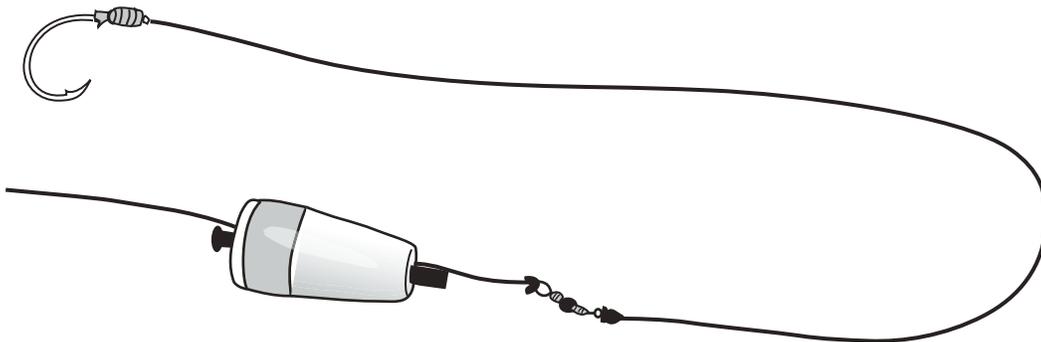
Cane poles should have the fishing line attached to them, not only at the tip, but should be tied back down the pole with the first tie being about one foot down from the tip and the second tie three feet down from the tip. If you have a two-piece cane pole, the second tie should be tied to the base or bottom piece of the pole. To complete a cane pole rig, the free line that will be cast should be the same length as the pole, just as shown in the picture.



Slip-sinker or fish-finder rig

This rig can be used for bottom fishing from shore or on a boat. The design of this rig allows the bait to move once the egg sinker is on the bottom. The swivel prevents the egg sinker from sliding to the hook.

Tying: First, slide a sinker onto the fishing line, then attach a swivel using a clinch or uni-knot. Next, tie a leader to the other loop on the swivel and finally tie the desired hook at the end of the leader.

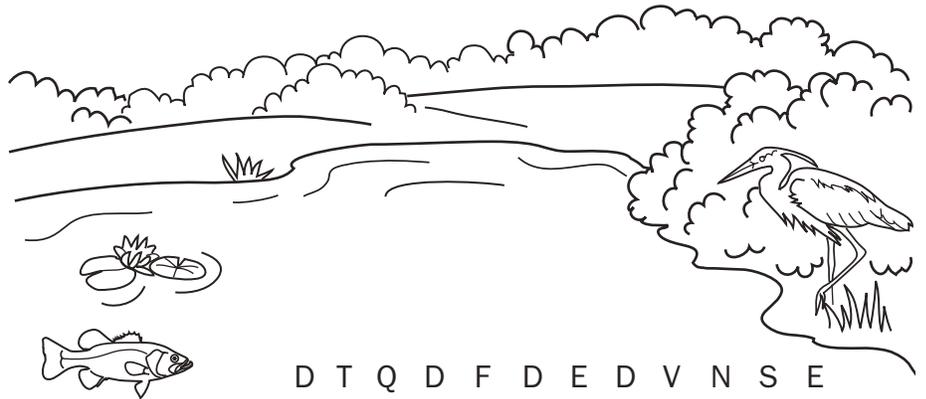


Float rig

This rig is used when the targeted fish feed away from the bottom. A variety of floats are available; they differ in the construction and the methods used to attach them.

Tying: 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 and attach a leader with a hook to complete the float rig. Adjust the float to the desired height above the bait.

Lake and river word find



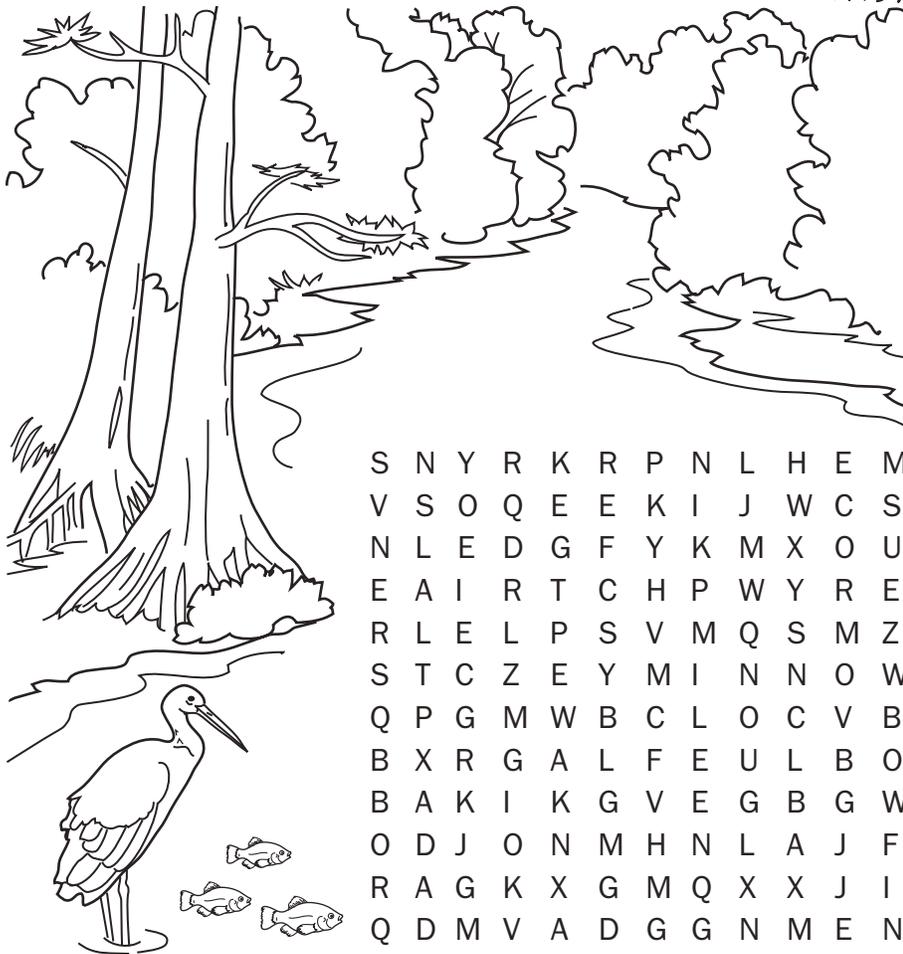
Lake system

Words for the lake system:

- Frog
- bait
- worms
- lily pad
- catfish
- bass
- insect
- log
- coot
- heron



D	T	Q	D	F	D	E	D	V	N	S	E
I	L	H	R	B	C	A	T	F	I	S	H
T	N	O	T	I	A	B	P	G	F	A	O
U	G	S	G	L	V	H	T	Y	Z	B	X
S	J	H	E	Z	T	O	C	O	L	R	F
G	Q	E	A	C	O	O	F	D	V	I	M
S	F	R	X	C	T	O	R	X	L	I	L
O	S	O	D	U	P	U	O	T	J	Y	W
Z	K	N	W	K	H	W	J	N	K	O	E
D	W	M	E	N	L	S	W	N	R	G	U
P	A	D	L	C	Z	P	K	M	J	C	Z
T	U	R	A	F	S	B	S	G	S	X	U



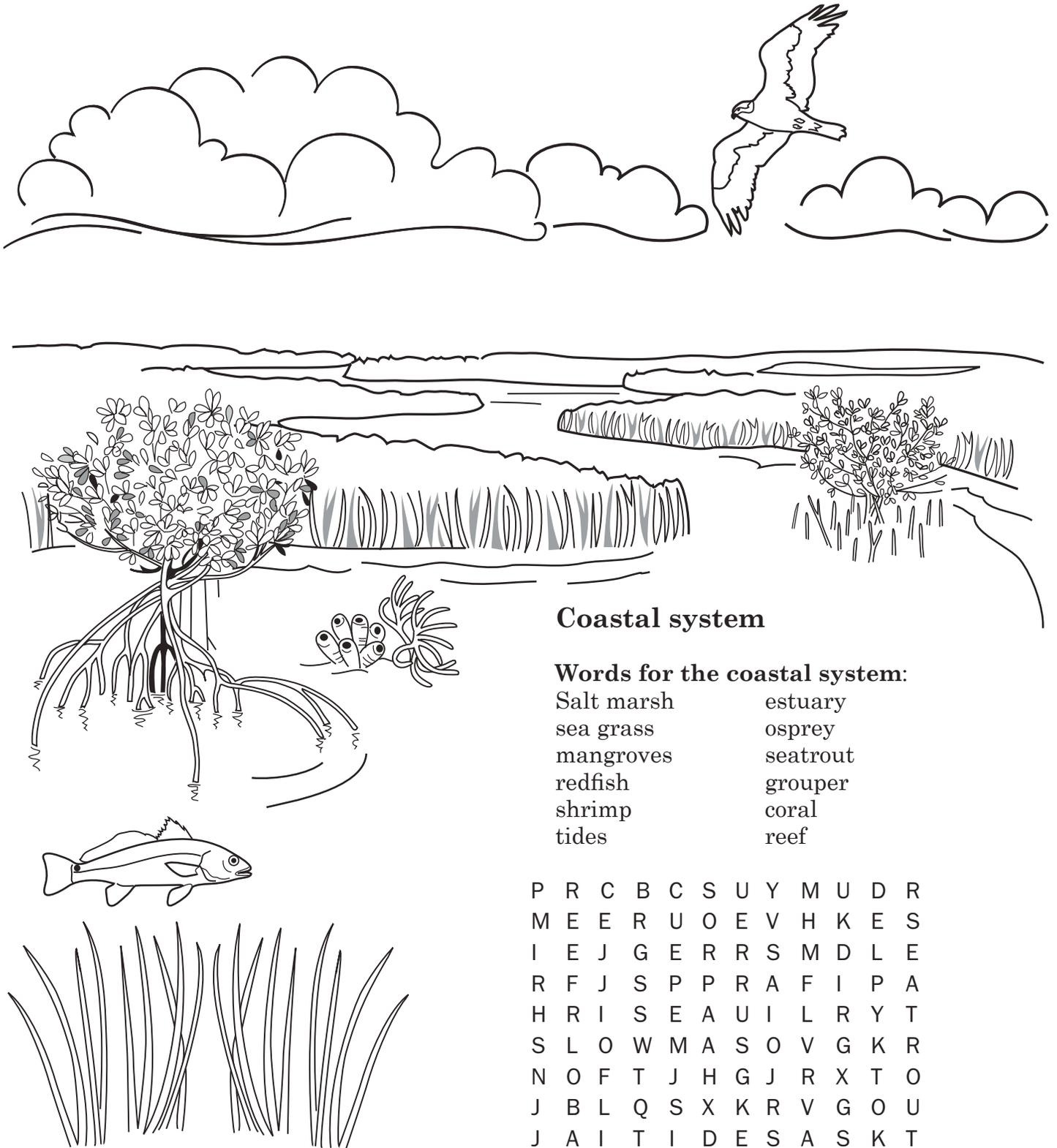
River system

Words for the river system:

- Slider
- minnow
- egret
- cypress
- limpkin
- bowfin
- blue flag
- gar
- owl
- spring

S	N	Y	R	K	R	P	N	L	H	E	M
V	S	O	Q	E	E	K	I	J	W	C	S
N	L	E	D	G	F	Y	K	M	X	O	U
E	A	I	R	T	C	H	P	W	Y	R	E
R	L	E	L	P	S	V	M	Q	S	M	Z
S	T	C	Z	E	Y	M	I	N	N	O	W
Q	P	G	M	W	B	C	L	O	C	V	B
B	X	R	G	A	L	F	E	U	L	B	O
B	A	K	I	K	G	V	E	G	B	G	W
O	D	J	O	N	M	H	N	L	A	J	F
R	A	G	K	X	G	M	Q	X	X	J	I
Q	D	M	V	A	D	G	G	N	M	E	N

Coastal word find



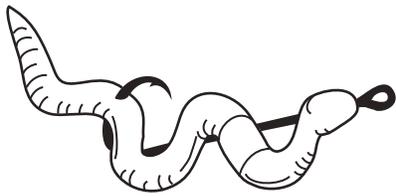
Coastal system

Words for the coastal system:

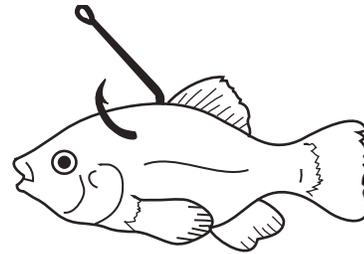
Salt marsh	estuary
sea grass	osprey
mangroves	seatrout
redfish	grouper
shrimp	coral
tides	reef

P R C B C S U Y M U D R
 M E E R U O E V H K E S
 I E J G E R R S M D L E
 R F J S P P R A F I P A
 H R I S E A U I L R Y T
 S L O W M A S O V G K R
 N O F T J H G J R X T O
 J B L Q S X K R V G O U
 J A I T I D E S A S K T
 S Y R A U T S E N S S C
 W T M A N G R O V E S Q
 S F G O U K R R U N Z Y

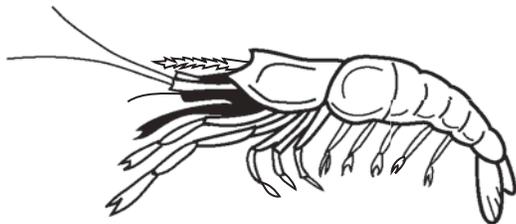
What do I use for bait?



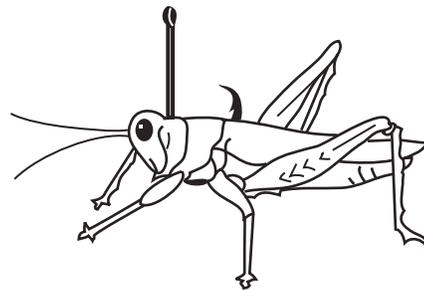
WORMS are a favorite freshwater fishing bait. The worm will wiggle. Hold it tightly at one end with your thumb and finger. Bring the hook down through one end of the worm until the worm covers the hook.



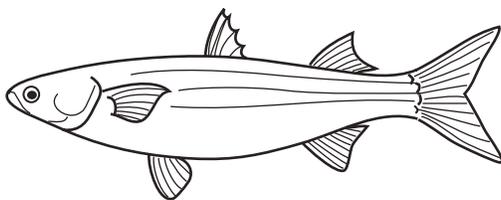
MINNOWS used for bait in fresh water are generally 1 to 3 inches long. Put the hook through the very top of its back, just in front of the dorsal fin. Hooking the fish this way will keep it alive and allow it to swim in the water.



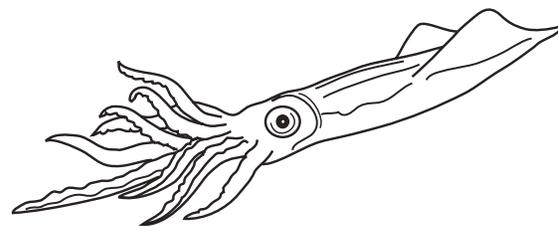
SHRIMP, either live or dead, are a great bait for many inshore saltwater fish. Live shrimp should be hooked through the head region, taking care to avoid the dark spots. Shrimp can be fished near or on the bottom or they are also effective fished midwater using a float rig. Freshwater grass shrimp can be found in the vegetated edges of ponds and waterways. They can be collected with a small-mesh dip net and are good bait for sunfish.



GRASSHOPPERS and **CRICKETS** are good freshwater baits. Hook them through the collar that is just behind the neck. The hook should be exposed after slipping it under the collar. The insect will remain alive and move around in the water.

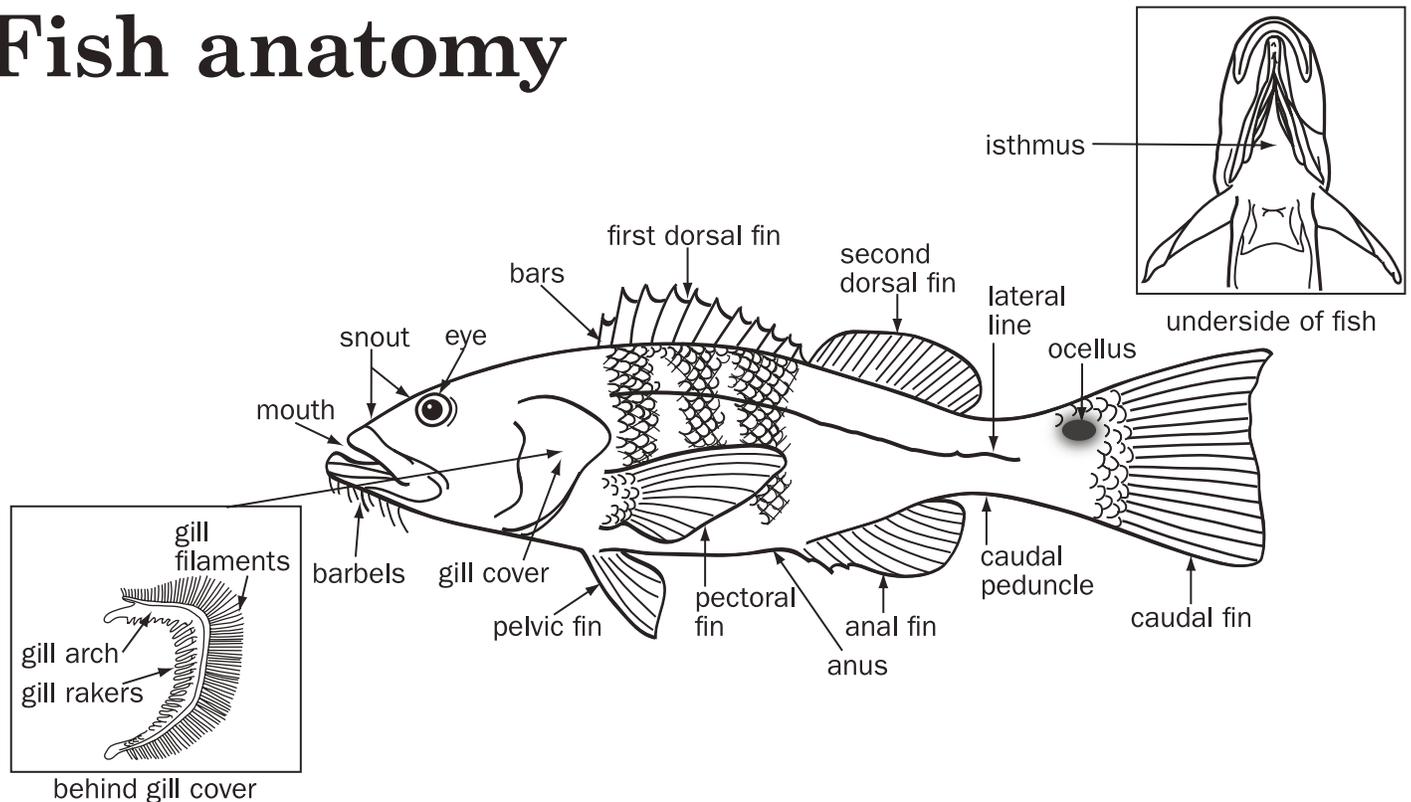


There are many types of **BAITFISH** anglers can use for saltwater fishing. Care is necessary in collecting and keeping these fish alive for fishing. Baitfish also can be saved and frozen. For live use, insert a circle hook across the “nose” of the fish, upward through the top of the mouth or across the top of the fish.



SQUID are sold frozen and will have to be cut into pieces for fishing. If they are whole, remove the head and the pen (clear hard support structure) then cut the squid into the desired sizes. Squid make a very good bait for bottom fishing.

Fish anatomy



Glossary

Anatomy – The parts of a fish.

Anal fin – The median fin on the midventral line behind the anus.

Anus – The opening through which waste products are expelled.

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

Barbel – A fleshy sensory appendage on the head, usually on the snout, around the mouth or on the chin.

Caudal fin (tail) – The median fin at the rear end of the body.

Caudal peduncle – The rear, usually slender, part of the body between the caudal fin base and the base of the last dorsal- and anal-fin rays.

Dorsal fin – The median fin on the back. There are many variations of this fin in fish.

Gill cover (Operculum) – The various bones which cover the gills and open and close at the rear during respiration.

Gill rakers – Structures which project forward from the gill arches, like the teeth of a comb. Very fine to coarse in appearance based on what the fish eats.

Isthmus – The triangular fleshy region extending forward on the throat between the gills.

Lateral line – A canal along the 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.

Pectoral fins – A pair of fins generally located in the shoulder region of the fish.

Pelvic fins – A pair of fins on the lower part of the body. These fins can vary in their placement on the body in different fish species.

Ray – One of the supporting elements, soft or spiny, in a fin.

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

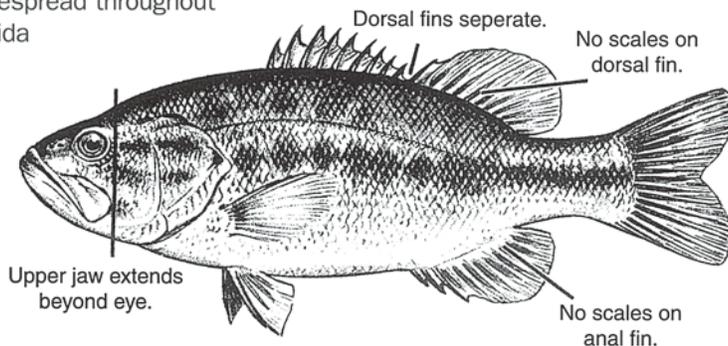
Which freshwater fish will I catch?

Florida has more than 7,700 lakes and 1,700 streams throughout the state. There are more than 100 species of freshwater fish in Florida, including such popular fish as largemouth bass, sunshine bass, redear sunfish, crappie, warmouth, pickerel, catfish and bluegill. These are 17 of the most commonly caught fish in Florida.

How many fish can you remember?

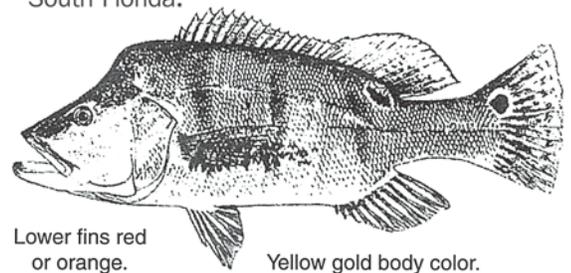
Largemouth bass

Micropterus salmoides
Widespread throughout Florida



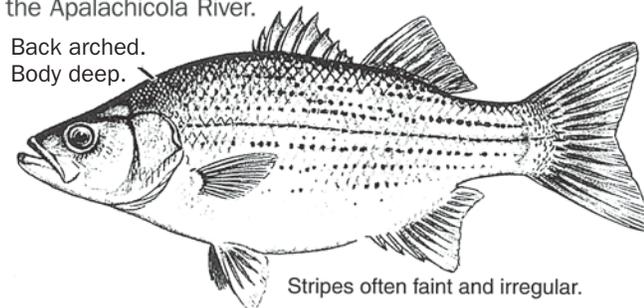
Butterfly peacock bass

Cichla ocellaris
Found in extreme South Florida.



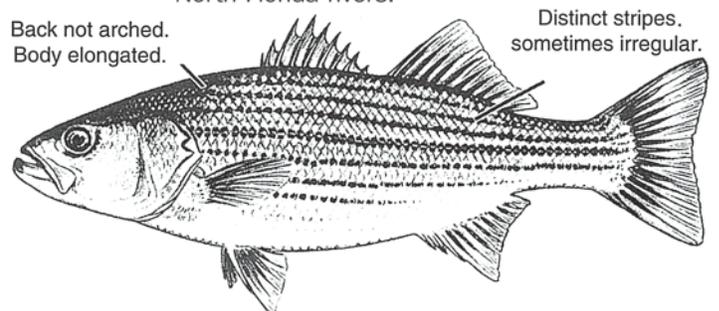
White bass

Morone chrysops
Found in Lake Talquin, Lake Seminole and the Apalachicola River.



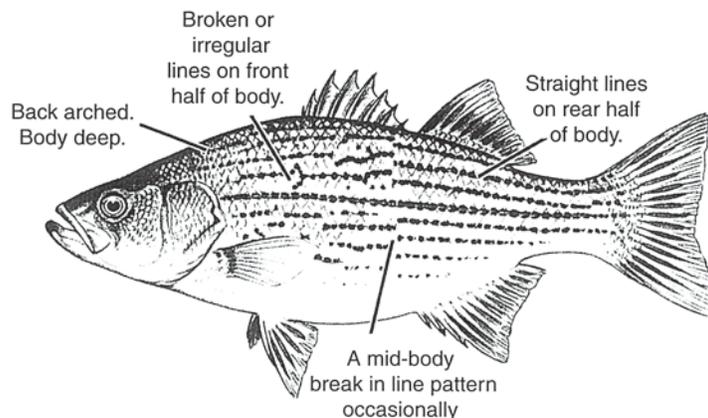
Striped bass

Morone saxatilis
Found mostly in large North Florida rivers.



Sunshine bass

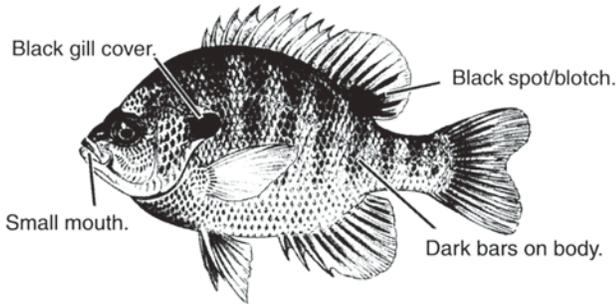
M. chrysops x M. saxatilis
Hybrid between the white bass and striped bass which is produced by Commission biologists at hatcheries and stocked in Florida waters.



Which freshwater fish will I catch? (continued)

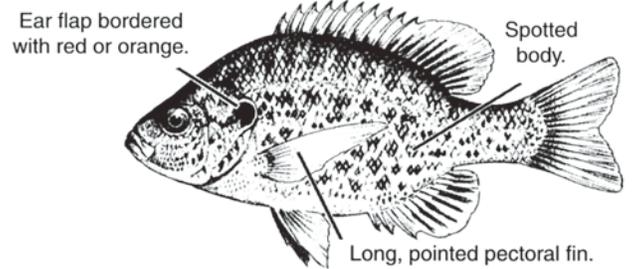
Bluegill

Lepomis macrochirus
Widespread throughout Florida.



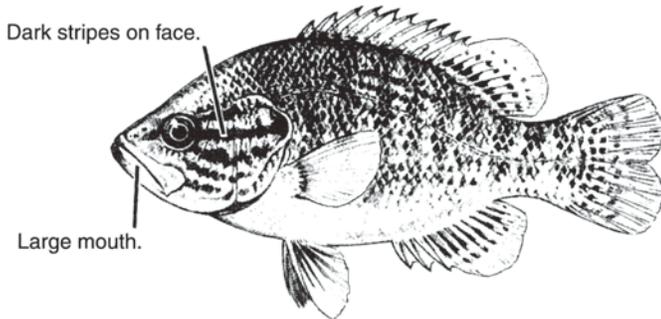
Redear sunfish (shellcracker)

Lepomis microlophus
Widespread throughout Florida.



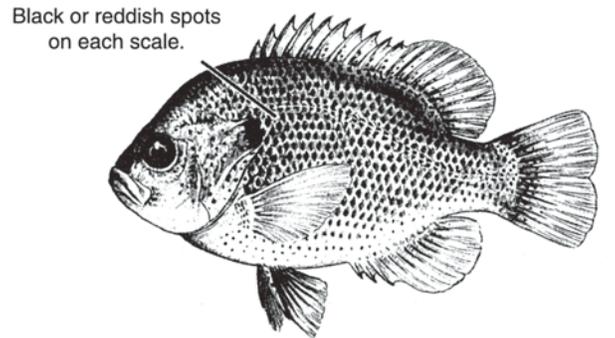
Warmouth (warmouth perch)

Lepomis gulosus
Widespread throughout Florida.



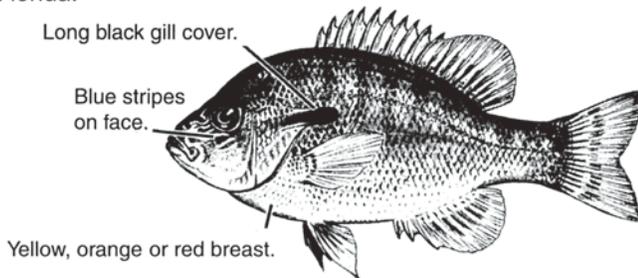
Spotted sunfish (stumpknocker)

Lepomis punctatus
Widespread throughout Florida.



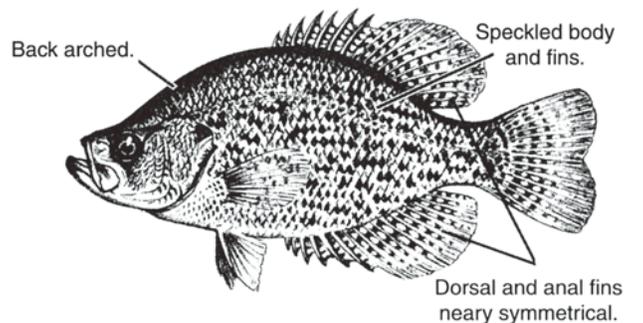
Redbreast sunfish

Lepomis auritus
Found in northern parts of Florida.



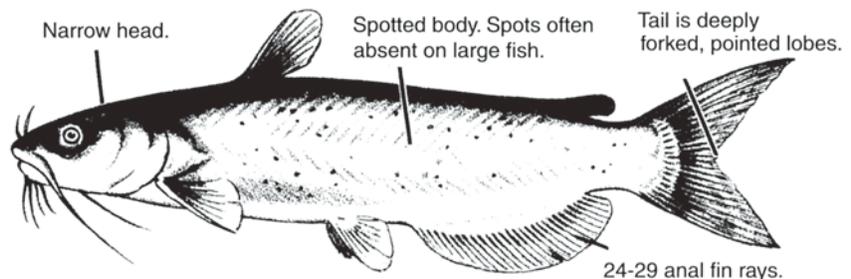
Black crappie (speckled perch)

Pomoxis nigromaculatus
Widespread throughout Florida.



Channel catfish

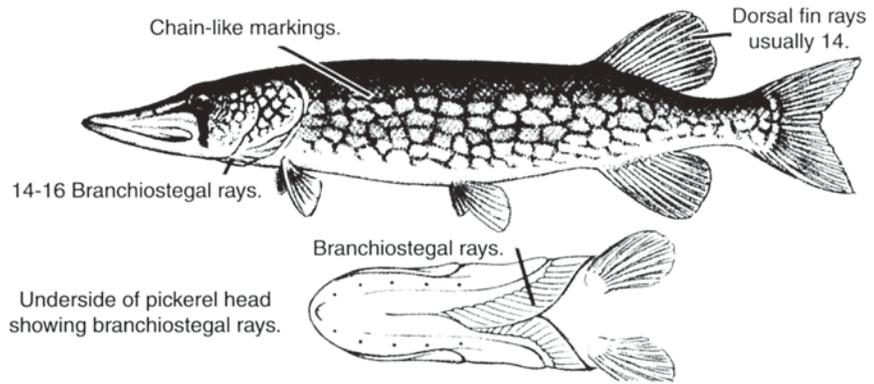
Ictalurus punctatus
Widespread throughout Florida.



Which freshwater fish will I catch? (continued)

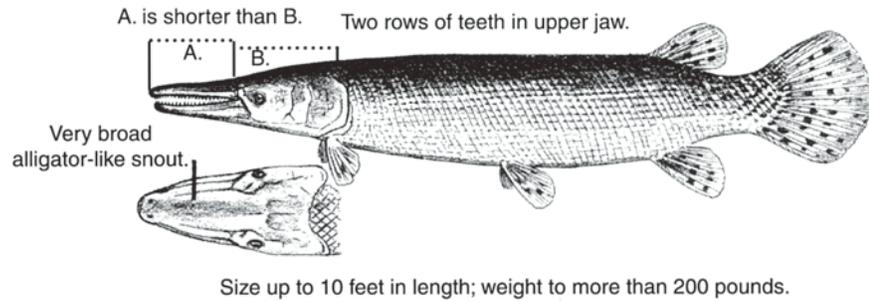
Chain pickerel

Esox niger
Found in most of Florida.



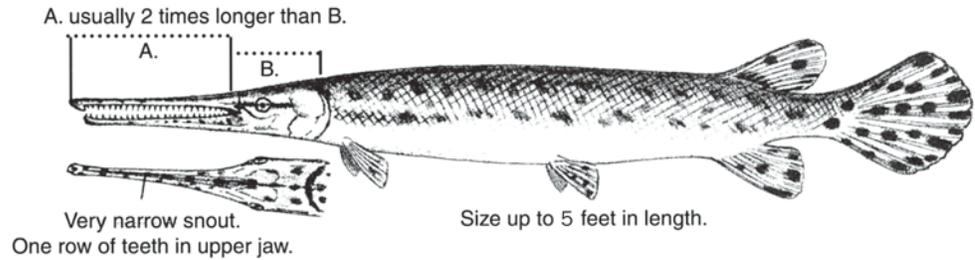
Alligator gar

Lepisosteus spatula
Found in Northwest Florida rivers.



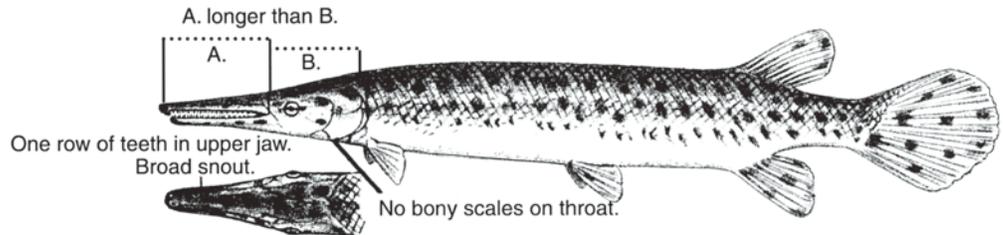
Longnose gar

Lepisosteus osseus
Found in most of Florida.



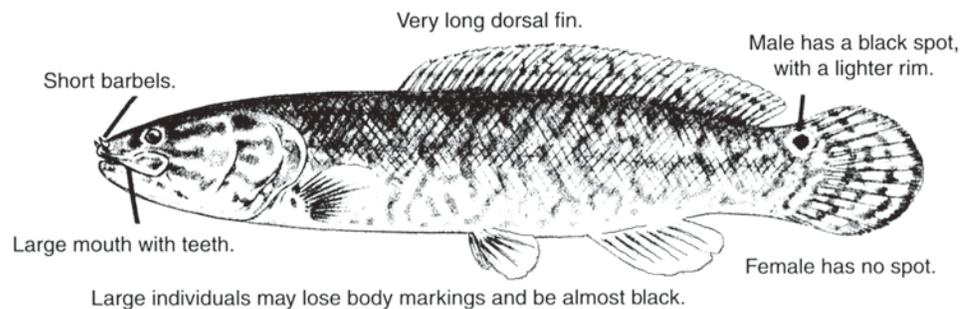
Florida gar

Lepisosteus platyrhincus
Found east of the Ochlockonee River in Florida.



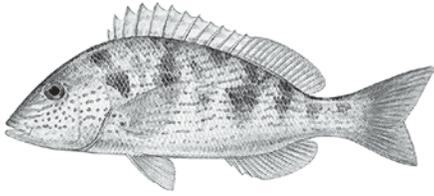
Bowfin (mudfish)

Amia calva
Widespread throughout Florida.



Common saltwater fish

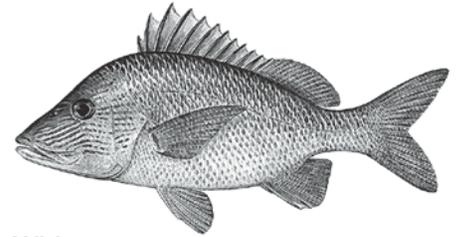
These fish are some of the more common inshore fish found in Florida's coastal waters. Check *Fishing Lines: Angler's Guide to Florida Marine Resources* for more fish images and the current *Florida Fishing Regulations: Saltwater Edition* for size and bag limits.



Pigfish

Orthopristis chrysoptera

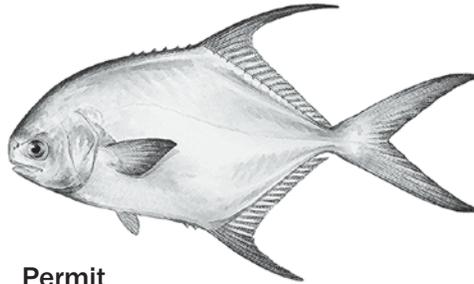
Inhabits sea grass beds in bays and feeds on small invertebrates.



White grunt

Haemulon plumieri

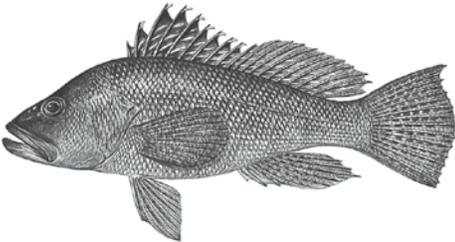
Prefers structure from shore to the outer reef edge and feeds on small crustaceans, mollusks and fish.



Permit

Trachinotus falcatus

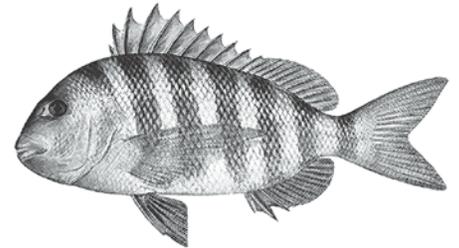
Inshore on grass flats, sand flats and offshore over wrecks and debris, eating bottom crustaceans and small fish.



Black sea bass

Centropomus striata

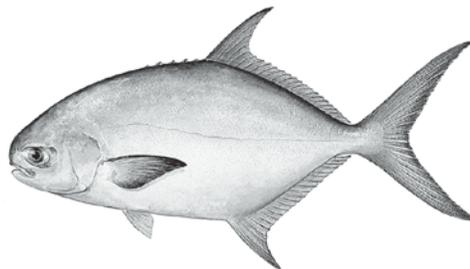
Found around structure and eats small fish, crustaceans and shellfish.



Sheepshead

Archosargus probatocephalus

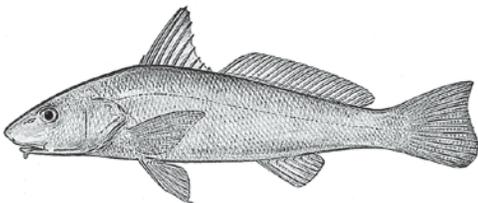
Inhabits oyster bars, seawalls, tidal creeks, rocky outcroppings and artificial reefs, feeding on mollusks and crustaceans.



Florida pompano

Trachinotus carolinus

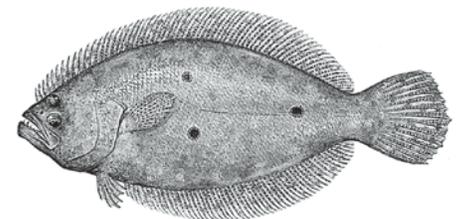
Inshore and nearshore waters around sandy beaches, oyster bars and seagrass beds where it feeds on mollusks and crustaceans.



Gulf kingfish

Menticirrhus littoralis

Inhabits surf zone where it feeds on small invertebrates.

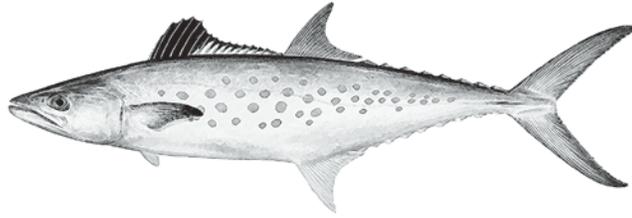


Gulf flounder

Paralichthys albigutta

Prefers inshore waters with sandy or mud bottoms and nearshore rocky reefs.

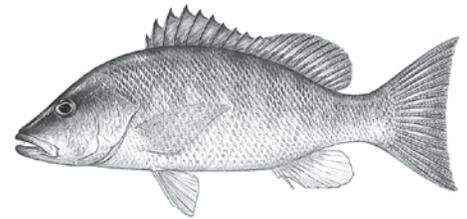
Common saltwater fish (continued)



Spanish mackerel

Scomberomorus maculatus

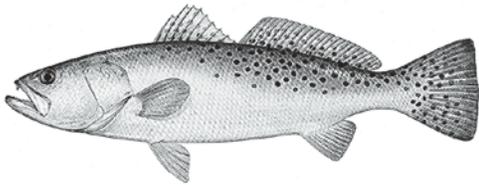
Prefers inshore, nearshore and offshore waters over deep grass beds and reefs feeding on small fish and squid.



Gray (mangrove) snapper

Lutjanus griseus

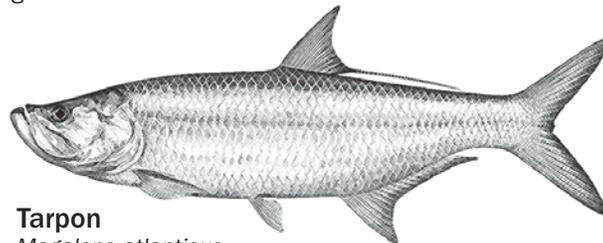
Found in sea grass beds, mangroves, and coral and rocky reefs, feeding on crustaceans and small fish.



Spotted seatrout

Cynoscion nebulosus

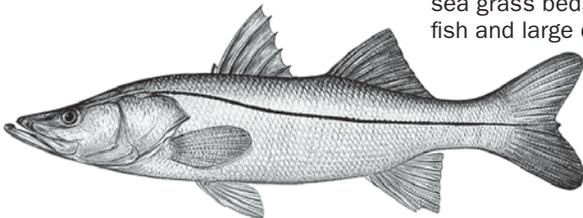
Occurs in sea grass beds, sandy bottoms in inshore and nearshore waters, feeding on small fish and shrimp.



Tarpon

Megalops atlanticus

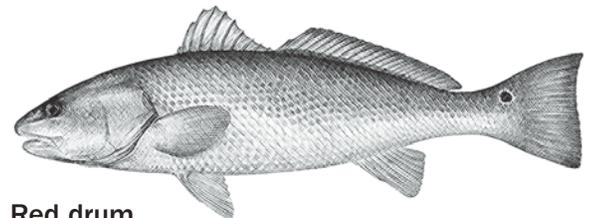
Inhabits inshore and offshore waters in association with sea grass beds or other natural structure and feeds on fish and large crustaceans.



Common snook

Centropomus undecimalis

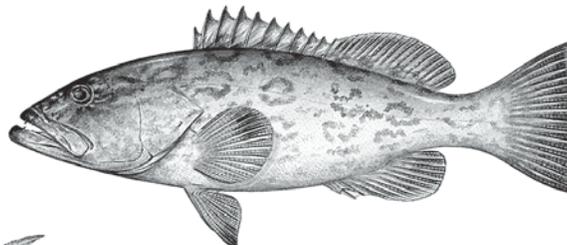
Inhabits inshore coastal and brackish waters along mangrove shorelines, seawalls, bridges, reefs and pilings. Feeds on fish and crustaceans.



Red drum

Sciaenops ocellatus

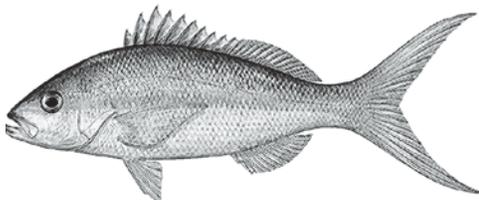
Frequents sea grass beds, tidal creeks, sandy areas in nearshore and inshore waters, feeding on shrimp, fish and mollusks.



Gag grouper

Myctoperca microlepis

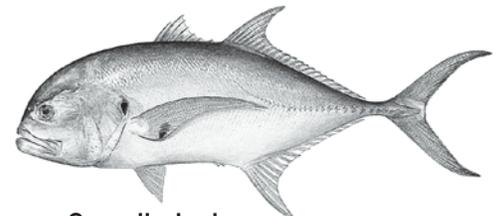
Found over rocks, reefs (artificial and natural) and sea grass beds, feeding on fish and squid.



Yellowtail snapper

Ocyurus chrysurus

Occur over sea grass beds, back reefs and sandy areas adjacent to reefs, feeding on small fish and invertebrates.



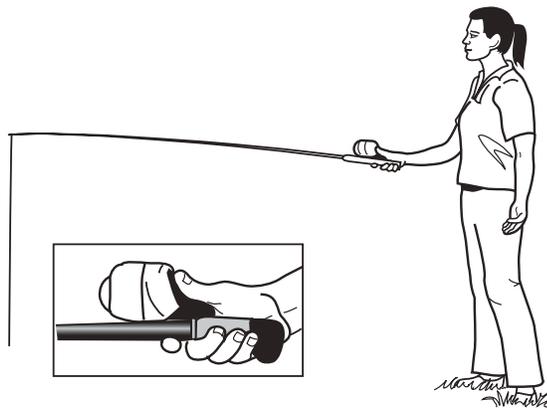
Crevalle jack

Caranx hippos

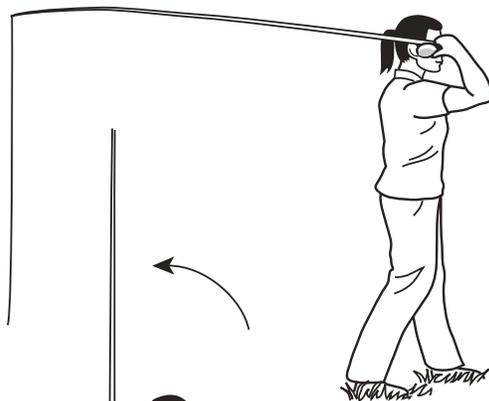
Inhabits inshore and nearshore waters and feeds mainly on small fish.

How do I cast a fishing rod?

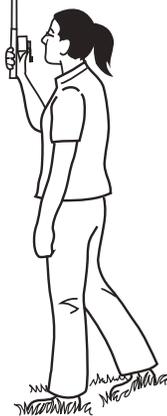
Illustrations and text are for casting a push-button spin-cast rod and reel.



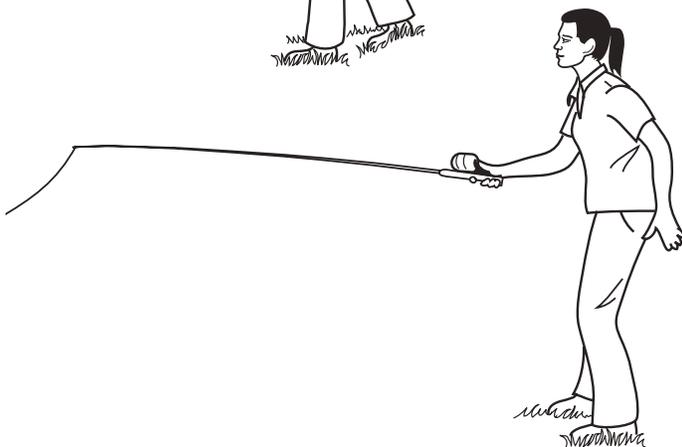
1. Point the rod at the target. For spin-cast reels, push and HOLD the button. The rod should be held firmly and your body in a squared position.



2. Look behind you to make sure the area is clear. Bring the rod over your shoulder in a straight line until the rod is parallel to the ground and the reel is beside your ear. Keep an eye on your loose line so it does not get tangled on the fishing rod.



3. Swing the rod forward until the rod is at a 90-degree angle with the ground; the rod tip should be pointing over your head. At this point, release the button. This movement should be a very smooth motion. If the lure hits the ground in front of you, the button was released too late. If it lands in back of you, the button was released too early. Adjust your cast to release the button when the rod tip is above your head.



4. Follow through the casting motion until your rod is parallel to the ground and your rod tip is pointed at your target. If you are using live or natural bait to fish, always keep the line taught. If using a lure, retrieve the lure in the desired manner.

Fighting a fish

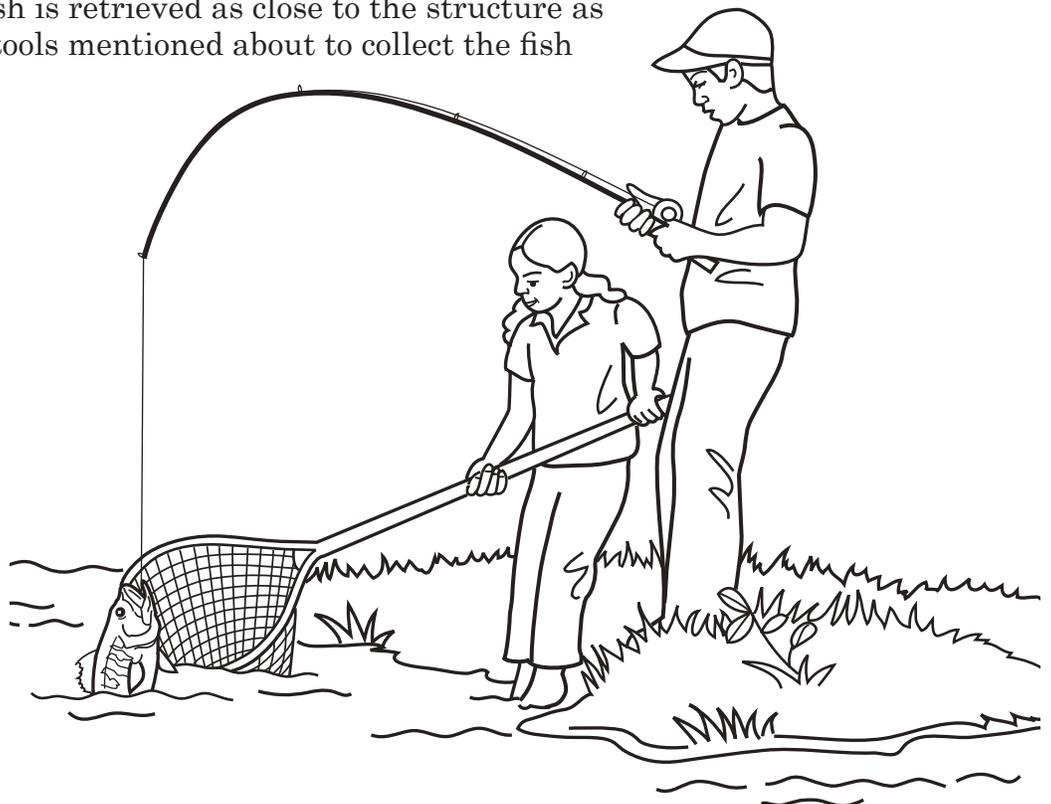
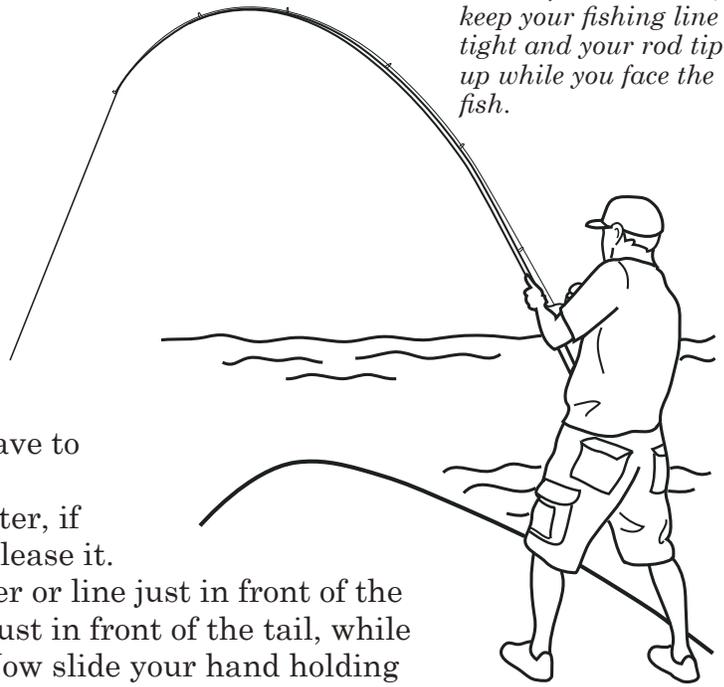
Once the fish is hooked, keep your fishing line tight and your rod tip pointed up while you face the fish. Always position yourself and your rod in the direction of the fish. If it moves to the left you turn yourself to the left. Slowly reeling in the fish, keeping the rod tip bent will maintain constant pressure on the fish. Constant pressure is required when using barbless hooks to keep the fish hooked. Different situations are described below if you have to land the fish.

From Shore: While the fish is still in the water, if you are not keeping it, use a dehooking tool to release it. If you think you will keep the fish, grab the leader or line just in front of the fish, pull the fish toward you and grab the area just in front of the tail, while its body weight is still supported by the water. Now slide your hand holding the leader under the fish and lift the fish horizontally from the water. Another option to land the fish is using a knotless net.

From a Boat: While the fish is still in the water, if you are not keeping it, use a dehooking tool to release it. If you think you will be keeping the fish, lean over the gunwale while it is in the water, and grab the leader just in front of the hook or lure with one hand. With your other hand grab the area just in front of the tail firmly. Now slide your hand holding the leader under the fish and lift the fish horizontally from the water. Another option to land the fish is using a knotless net.

From a Pier, Dock or Jetty: Fishing from these areas involves specialized landing equipment such as: a hoop net or long handled dip net. These nets should be constructed of knotless netting. Once a fish is retrieved as close to the structure as possible, use either of the tools mentioned about to collect the fish and bring it up to you.

Once a fish is hooked, keep your fishing line tight and your rod tip up while you face the fish.



Landing a fish using a knotless net.

Catch-and-release techniques

What you need to practice to ensure a healthy future for fisheries in Florida.

- Be able to identify fish in the region and know the current regulations.
- Use tackle heavy enough to quickly land and minimize tiring out the fish.
- Use non-offset (in-line) circle hooks when fishing with live or natural bait.

- Release the fish without removing it from the water whenever possible. The most ethical anglers even take pictures of their fish in the water!

- Use wet hands when handling the fish to prevent the removal of the fish's protective slime coating.

- Revive a tired fish before releasing by holding it horizontally in the water and moving it forward with its mouth open to allow water to flow over its gills until it can swim away under its own power.

- Release the fish as quickly as possible after it has recovered.

- Avoid removing very large fish from the water. If the fish must be lifted from the water, support the weight horizontally to prevent internal injury.

- Do not put fingers or other objects in the gills or eyes of the fish.

- Use de-hooking devices to release fish with minimal handling.

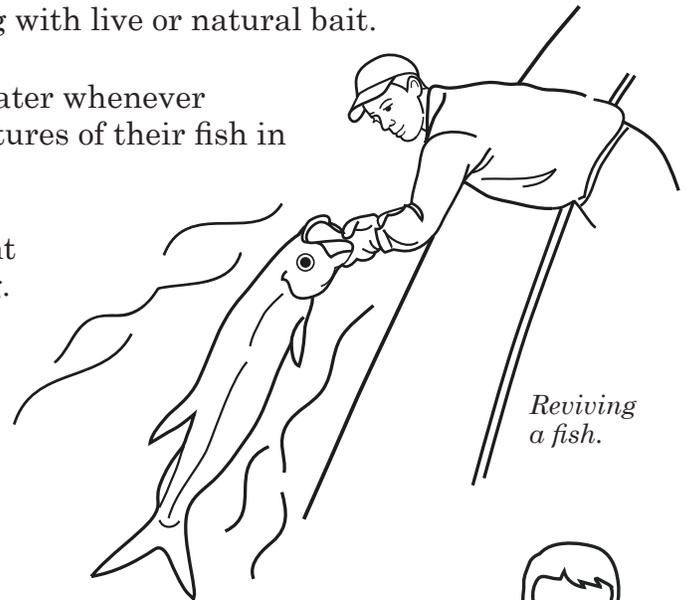
- If the fish is hooked deeply, cut the line as close to the mouth as possible.

- If you must use a net, use a knotless landing net to preserve the fish's slime coat.

- Crimp the barbs on all hooks to give the fish a fighting chance and aid in removal of the hook.

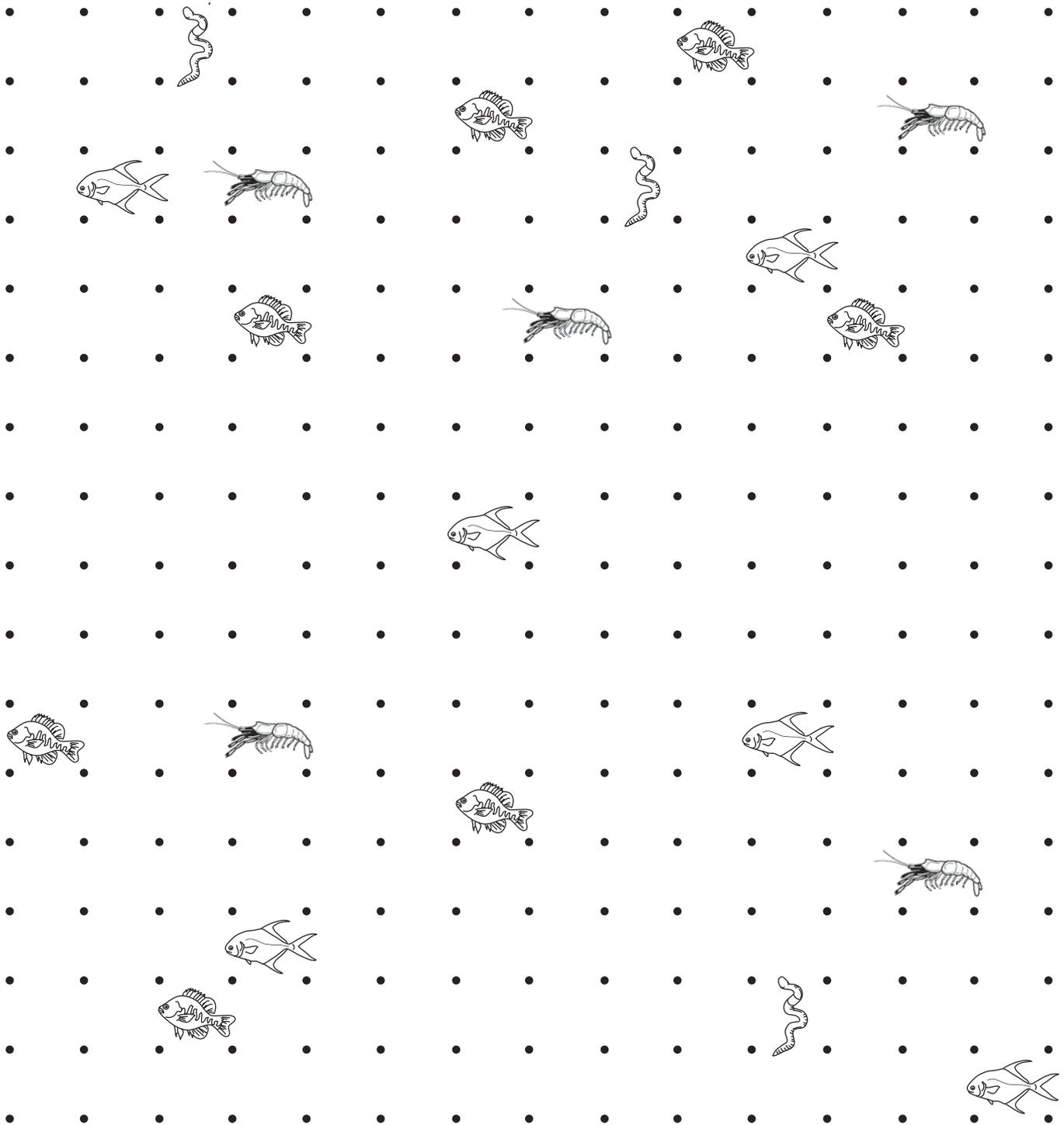
- Lures with multiple treble hooks should be modified to leave one remaining treble hook.

- Employ effective venting of deepwater fish that exhibit swim bladder expansion to enable these fish to return to the depth where they were caught.



How many fish can you catch?

Players take turns connecting 2 dots. Lines go across or down, not diagonally. Complete as many small squares as you can. Initial each square you complete and take another turn. Squares in which a fish is caught count 5 points. Squares where bait is caught count 3 points. All other squares count 1 point.



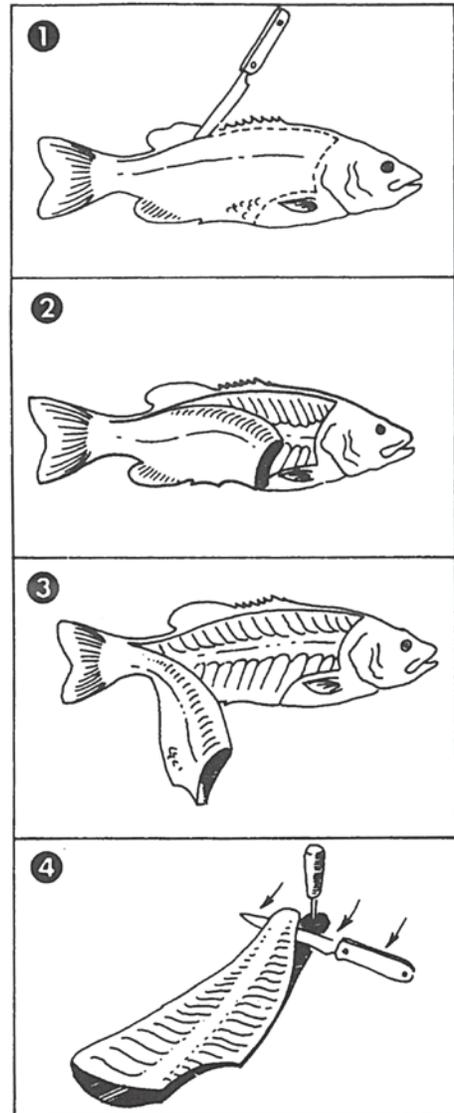
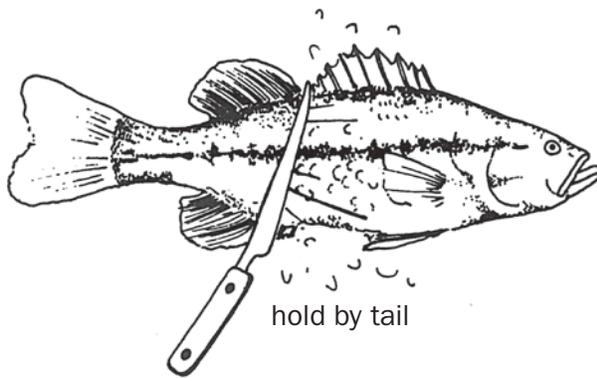
Fish for dinner!

You will want to help clean and cook your fish! Always ask for help from an adult when using a knife to clean your fish or when using the stove to cook your fish.

Filleting

To make boneless fish fillets:

1. Cut down to the backbone behind the head along the backside or side of the fish.
2. Slice off the meat, leaving the bones.
3. Turn the fish over and repeat.
4. If you want to skin the fillet, place it flat on the cutting surface, scales facing down. With a firm stroke of the knife, slice the meat off the attached skin and scales.

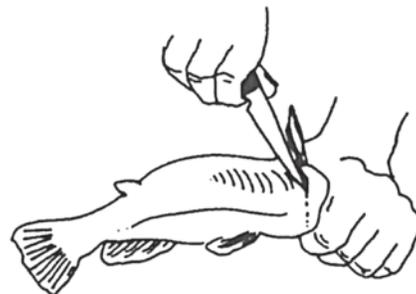


Scaling

Sunfish, crappie and bass need to have their scales removed if they are not filleted. To scale a fish, hold it by its tail and scrape from tail to head with a fish scaler or dull knife. Cut around the head with a sharp knife and remove the head and insides.

Skinning

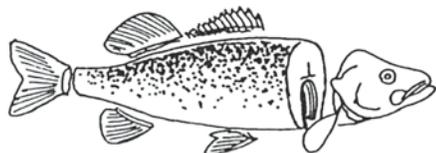
Catfish need to be skinned if they are not filleted, but make sure your fish is dead before you skin it. To skin a fish, cut around the head with a very sharp knife. Pull the skin back with pliers. Remove the head and insides.



Cooking your catch

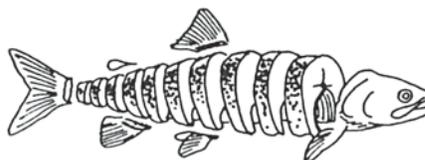
Each fish species has a different texture, flavor and appearance. The manner in which you cut and prepare your fish is a matter of personal preference. Below are some suggestions on cuts and cooking methods. Ask an adult to help you with cutting and preparing your fish.

Three basic cuts of fish



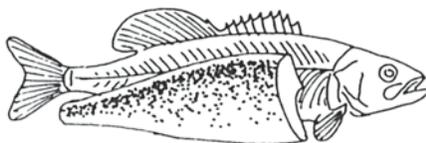
Dressed, or pan-dressed

Scaled, drawn with head, tail, and fins removed



Steaked

Cross-sectional slices are cut from larger fish



Filleted

Sides of fish are cut lengthwise along backbone

Helpful Hints:

- Fish is fully cooked when the flesh can be easily flaked with a fork. Avoid overcooking fish.
- Do not overhandle fish when cooking or serving.
- Never soak fresh fish in water. Wash fish quickly, drain and dry carefully.
- To freeze fish, place it in a freezer bag with enough water to cover the fish. Remove the air from the bag, seal it and place the bag in the freezer.

Broiling is a good method of cooking for most fish. Herbs and spices can be added to the fish according to your taste. Squeeze lemon over the top when cooked.

Deep-frying fish involves coating the fish with egg then rolling the fish in bread or cracker crumbs, corn meal or flour. Cook in hot oil until golden brown.

Blackened fish adds a spicy flavor to any meal. Lightly coat a fish fillet with butter, roll in blackening spices and drop into a very hot frying pan.

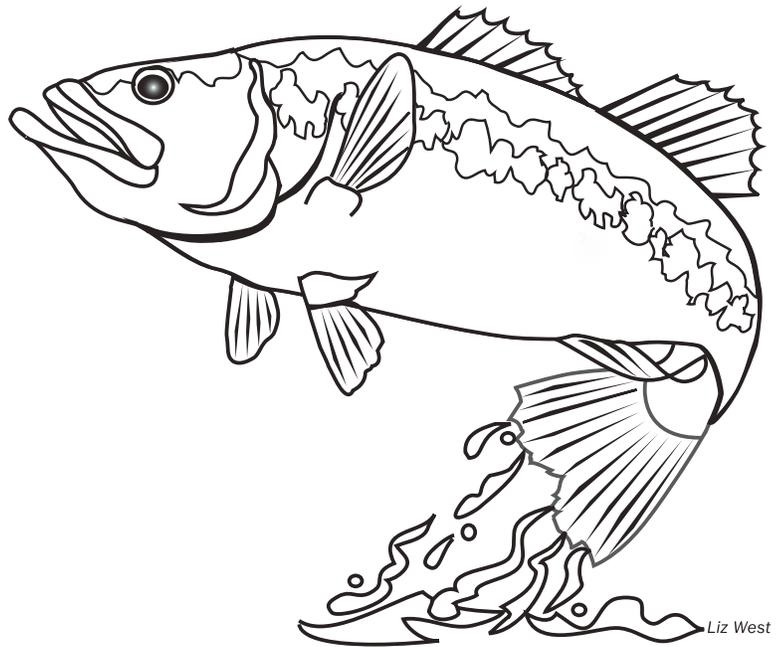
Baking is an alternative to deep-frying. Use seasonings and lemon juice or the fish can be dipped in a bread crumb and spice mixture and baked for a tasty meal.

Grilled fish is a great way to prepare a summer meal. Place a fish fillet with the skin on the grill and top with seasonings. Cook the fish and slide it off the skin.

Pan-fried fish uses a variety of methods: breaded, coated with spices or lightly sprinkled with lemon juice.

The ethical angler:

- **Protects all outdoor natural areas.** They do not teach trash to swim. Instead they put trash in garbage cans. Old fishing line is placed in fishing line recycling bins.
- **Knows the current fishing regulations.** They know how to identify fish and have the equipment needed to measure their catch correctly. Ethical anglers always fish by the rules!
- **No habitat – no fish! Ethical anglers protect the habitats of all plants and animals.** Poling through grass flats, leaving natural areas undisturbed and respecting the placement of fish attractors and artificial reefs are all ways to protect habitat.
- **Practices catch-and-release.** Use circle hooks for bait fishing to limit gut hooking fish, use a de-hooking tool to release unwanted fish, and handle fish with wet hands to keep fish slime on the fish. Never stick hands or fingers into the gills or eyes of a fish.
- **Limit your take; do not take your limit is the motto of every ethical angler.** Take what you need for several dinners and release the rest. Vary your catch, take one or two of several species instead of several of one species.
- **Always practices safety afloat.** Carry a first aid kit, sunglasses, a hat and sunscreen in your tackle box. When fishing from a boat make sure there is a personal flotation device (PFD) for everyone on the boat. Watch your hooks when fishing around people.
- **Shows courtesy and respect toward other anglers, giving everyone a good day.** Obey speed zones, slow down for people fishing and give people room while you are on the water.
- **Shares what they know to help fishing grow!** Healthy fish populations and clean habitat is ultimately up to all of us. Information helps everyone make good decisions about fishing.



What did I learn?

1. An angler is someone who _____.
2. A _____ knot is used to tie fishing line to a hook.
3. Using this type of hook for live or dead bait fishing will decrease gut hooking a fish.

4. After any outdoor trip trash should be placed in a _____ and recyclable items should be recycled.
5. Habitat provides animals with _____ and _____.
6. Always look _____ you before casting a fishing rod.
7. All animals need clean _____, _____ and _____.
8. This reddish-colored saltwater fish has a spot or spots on its tail and likes to eat shrimp. _____
9. Practicing good _____ and _____ techniques helps increase fish numbers.
10. Fish eat plants and animals and, in turn, become food for other plants and animals. This system is called a _____.
11. Used or old fishing _____ can be recycled in appropriate bins.
12. A channel catfish has _____ to help it find food items.
13. Call your local FWC _____ if you see a problem involving fish or wildlife resources.
14. Water is polluted when _____ change the water in a way that hurts living things.
15. Conservation of our natural resources is a job for _____.
16. A _____ reel hangs below a fishing rod when you use it correctly.
17. The best way to handle a fish that will be released is with _____.
18. A de-hooking tool will help you release a fish without touching the fish and removing its _____.
19. The state agency responsible for managing Florida's fish and wildlife resources is the _____ and _____.
20. A _____ attaches to your fishing line and prevents the bait from touching the bottom.
21. People who study fish and wildlife and their habitats to learn more about them are called _____.
22. Fish, wildlife, forests, rivers, springs, lakes, salt marshes, coral reefs, mangroves and sand dunes are all _____ that we should preserve.
23. Grasses, in both fresh and salt water, provide fish and wildlife with places to hide, food for some animals, have _____ to trap sediments and they also produce _____ so fish can breathe.
24. Always make sure that _____ are tied tight so they will not slip and snap your fishing line.
25. _____ are rules that tell an angler how many fish to keep, when not to keep fish and how many each day they are allowed to take home to eat.
26. When fishing from a boat, everyone on board should have their own personal _____ device.
27. A _____ holds your hooks, lures, fishing regulations, floats, swivels and weights.

Fishing diary

Take a few minutes after each fishing trip to complete a fishing diary. Writing down this information will show what bait works best at catching a certain fish species during any given condition. By charting the information from each trip, you will establish a pattern that will help you to be more successful and enable you to enjoy your time fishing better.

Site fished: _____

GPS coordinates: _____

Date: _____

Habitat description: _____

Time: (circle one) Early morning Mid-morning Early afternoon Late afternoon Evening

Wind conditions: (circle one) Calm Gentle breeze Occasional gust Strong winds

Weather conditions: (circle one) Cloudy Clear Light rain Stormy

Bait used: _____

Fish caught: (species and numbers) _____

Tides: _____

Depth: _____

Notes: _____

Page 30 Answers:

1. Fishes
2. Clinch or uni
3. Circle Hook
4. Trash (or garbage) can
5. Shelter and food
6. Behind
7. Water, habitat and food
8. Redfish (or red drum)
9. Catch-and-release
10. Food chain
11. Line
12. Barbels
13. Law Enforcement
14. Humans (or people)
15. Everyone
16. Spinning
17. Wet hands
18. Slime
19. Florida Fish and Wildlife
Conservation Commission
20. Float (or bobber)
21. Biologists
22. Natural resources
23. Roots, oxygen
24. Knots
25. Regulations
26. Flotation
27. Tackle box

**Florida Fish and Wildlife Conservation Commission
Regional Office Information**

Northwest Region

3911 Hwy 2321
Panama City, FL
32409
(850) 265-3676

North Central Region

3377 E. US Highway 90
Lake City, FL 32055
(386) 758-0525

Northeast Region

1239 SW 10th Street
Ocala, FL 34471
(352) 732-1225

Southwest Region

3900 Drane Field Road
Lakeland, FL 33811
(863) 648-3200

South Region

8535 Northlake Boulevard
West Palm Beach, FL 33412
(561) 625-5122

FWC, Division of Marine Fisheries Management

Outreach & Education

2590 Executive Center Circle East, Suite 204
Tallahassee, FL 32301
(850) 488-6058

FWC, Law Enforcement Numbers

Northwest Region

Carrabelle (850) 697-3764
Panama City (850) 233-5175
Pensacola (850) 595-8905
24-hour (850) 245-7710

North Central Region

Crystal River (352) 447-1633
Jacksonville (904) 270-2500
Lake City (386) 758-0529
24-hour (386) 758-0529

Northeast Region

Ocala (352) 732-1225
Titusville (321) 383-2740
24-hour (888) 404-3922

Southwest Region

Fort Myers (239) 332-6971
Lakeland (863) 648-3200
Tampa (813) 272-2516
24-hour (813) 558-5050

South Region

Jupiter (561) 624-6935
Miami (305) 926-2500
West Palm Beach (561) 625-5122
24-hour (561) 625-5125

Report a Fish or Wildlife Violation to (888) 404-3922 or cellular phone customers throughout most of the state can make a free call by dialing *FWC or #FWC depending on service carrier.

Florida law requires reporting of oil or other hazardous substance spills to (850) 413-9911 or 24-hour State Warning Point 1 (800) 320-0519.

Report catching a tagged fish to (800) 367-4461.

Report a fish kill, diseased fish or fish with other abnormalities directly to the Aquatic Health Group at FWC's Fish and Wildlife Research Institute in St. Petersburg by calling (800) 636-0511.

Report an injured or dead manatee or sea turtle to (888) 404-3922.

Purchase fishing & hunting licenses over the phone at:

Fishing (888) 347-4356*

Hunting (888) 486-8356*

*A surcharge will be added to licenses purchased at these phone numbers.

