

Fish Friendly Angling Techniques: The Use and Benefits of Circle Hooks

What is a circle hook?

A circle hook is a type of fish hook which is sharply curved back in a circular shape. It has become widely popular among anglers in recent years because it hooks a much higher percentage of fish and is rarely swallowed.



How does a circle hook differ from a traditional hook?

A circle hook is designed to have a point turned sharply in toward the shank to form an oval shape. Its unique shape prevents the hook from catching the gut cavity or throat and typically embeds itself in the jaw or corner of the fish's mouth.

What species can a circle hook catch?

Circle hooks can catch almost all species of fish. (They work best when used with either live bait (croaker, minnow, or shrimp) or dead bait (cut crab or baitfish).

Why use circle hooks?

Many undersized or out of season fish do not survive after their release because of poor handling practices. Research shows that circle hooks increase the survival rate of released fish because they cause less damage to the fish than traditional hooks; they are also less likely to cause collateral damage to the fish (eye damage, gut and mouth tears, jaw dislocation, etc.) than a traditional "J" hook.

What are the best fishing methods when using circle hooks?

With a few exceptions, use traditional saltwater fishing methods when fishing with circle hooks. Circle hooks are widely used by recreational anglers when fishing with live bait, dead bait, bottom fishing, trolling, and drift line fishing. Some of the many species of fish caught using circle hooks include: red drum, speckled trout, snapper, and grouper.

How do I use a circle hook?

When using a circle hook, there is only one thing to remember: Do not set the hook! A fish will set the hook when it grabs the bait; then, apply pressure by reeling. The act of rapidly setting a circle hook often results in pulling the hook out of the fish altogether.



FISH FRIENDLY PRACTICES FOR RECREATIONAL ANGLING



*A conservationist's guide to correctly
handling and releasing fish in the
state waters of Louisiana*



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Recreational anglers catch millions of saltwater fish every year in the Gulf of Mexico.

Fisheries management tools including bag limits, size limits, and seasonal closures require anglers to release some of their catch. The expanding demand on our fishery resource highlights the needs for every angler to know how to properly handle and carefully release undersized, or otherwise restricted take of fish. This is especially important for undersized fish, so they can mature to spawn and potentially be caught again. Research shows that any species of fish (even speckled trout – which is thought to be a more delicate fish) can survive at high rates when handled properly.

The Louisiana Department of Wildlife and Fisheries promotes the conservation of our resources; the Department encourages all fishing practices that include responsible catch and release techniques.

BAROTRAUMA

Barotrauma is the injury of certain organs caused by a change in atmospheric pressure. Many fish, including most marine reef fish, have a swim bladder. The swim bladder is a gas-filled organ that controls buoyancy and allows a fish to maintain depth without the need to continuously swim. Anglers that rapidly bring fish to the surface by hook and line fishing techniques often change the internal pressure of the fish, which is caused by the gases within the swim bladder expanding. Barotrauma occurs when the bladder overinflates, causing stress and injury to the fish.

The most obvious sign of barotrauma is the inability of a fish to overcome the buoyancy of the inflated swim bladder, causing it to float on the surface. This prevents the fish from swimming back to its original depth, where it can recompress and recover. The stress and damage caused from barotrauma increases with depth. If the swim bladder becomes severely overinflated, it can damage the internal organs or even release gas bubbles into the body tissue, causing permanent damage to the fish.

You can help increase fish survival rates if you recognize the symptoms of barotraumas and act quickly. Depending upon the extent of over-inflation, there are two possible courses of action to save the fish:

- 1) Remove the gas by venting the swim bladder with a hypodermic syringe needle. (See below)
- 2) Recompress the gas by quickly returning the fish to one-half of its depth with a release weight.



Pictured above: A red snapper suffering from barotrauma. The swim bladder has ruptured and expanding gas has caused the stomach to evert. The chance of survival for this fish increases if quickly vented and/or returned to at least half of capture depth.



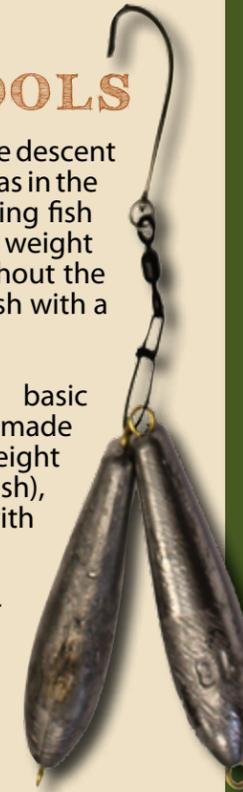
Pictured above: A red snapper about to be recompressed by use of a release weight. Note the barbless hook and two lead weights which aid the buoyant fish in returning to half of capture depth.

RECOMPRESSION TOOLS

Recompression tools use release weights to force the descent of a buoyant fish to a depth that recompresses the gas in the swim bladder; it is an alternative method of relieving fish from barotrauma. The advantage of using a release weight is that it allows the fish to recompress quickly, without the risks associated when puncturing the side of the fish with a needle.

Recompression tools can be handmade with basic tackle that is usually available on a boat. Homemade recompression tool kits include a heavy weight (20-ounces for a small fish or 40-ounces for a large fish), several swivels, a large stainless steel "J" hook – with the barb filed off – and several snap rings.

A good rule of thumb to ensure proper recompression of a fish is to return it to at least one-half of its capture depth where it can recover.



PROPERLY VENTING A FISH



A knotless rubber-coated net can be an asset when handling and releasing lively fish. Netting a fish that needs to be vented increases the speed of the release by calming the fish and protecting it from damage caused by flopping on hard surfaces.



A hands-free approach to venting can be achieved by suspending the net between a captain's chair and the side of the boat.



The swim bladder is in the upper part of the body cavity. With the fish on its side, locate a scale one to two inches back from the base of the pectoral fin.



Lift the scale with the tip of the needle, and insert the point of the venting tool under the scale straight into the body cavity until you hear gas flowing and you notice deflation. Be careful not to puncture vital organs and quickly return the fish to the water.

SURVIVAL TIPS



Time on the line and out of the water are the most critical factors determining the survival rates of released fish

Whenever possible, keep the fish in the water during the release. When using a net to release a fish, make sure it is a knotless, rubber-coated landing net.



Use appropriate line weight and tackle for the targeted species

Tackle that is too light can exhaust a fish to the point where it cannot recover and increases fish mortality.



Use gloves and a hook removal tool

Use a hook removal tool that can grip and turn the hook quickly with as little damage to the fish as possible. Use rubber-coated gloves. Do not handle a fish with a towel unless you intend to keep it.



Do not drop fish or let them flop around on the boat deck or shoreline if you intend to release them

It removes mucous and scales and can cause eye and organ damage that can be fatal.



Do not lift a gut hooked fish by the line or try to remove a hook from a gut hooked fish

Simply clip the line close to the hook and release them. The fish will survive and expel the hook.



Never gaff a fish you intend to release

A gaff is a valuable tool for landing large fish but causes mortal injuries. Good alternatives include removing the hook with the fish in the water, cutting the line close to the hook, or using a knotless rubber-coated net and a de-hooking tool.