Release Techniques for Marine Fishes

It is the responsibility of every angler to strive for 100% survival of fish that are released.

Techniques to Increase Survival of Released Fish:

- Use appropriate tackle and bring the fish in quickly to reduce exhaustion. Using tackle that is too light and playing the fish to exhaustion depletes the fish’s energy reserves and can cause mortality. It also puts the fish at risk of predation.

- Use circle hooks when fishing with natural or live bait. Fish tend to swallow these baits more often than artificial lures. Circle hooks seldom gut hook a fish and usually hook fish in the jaw, making it easier to release a healthy fish. Fish also stay hooked better with circle hooks allowing you to catch more.

- Use artificial baits to reduce the likelihood of fish swallowing the bait and becoming gut hooked.

- Plan ahead and be prepared to release a fish before it is hooked.

- Know the best way to handle the fish species you are targeting and have release equipment ready. Using release tools is safer for the fish and for you. There are many devices for removing hooks from fish. Commercial dehookers, forceps and needle-nose pliers can be found in most tackle shops.

- If you can’t see the hook, cut the leader as close to the hook as possible without removing the fish from the water.

A fish is too valuable to catch only once!
Handling and Releasing the Fish:

- Leaving the fish in the water during release is best, but not always practical. Never boat large fish, take pictures of them in the water. They are dangerous to the boat crew and may harm themselves.
- Minimize stress on a fish when handling it out of the water. Handle it as little as possible and release it as quickly as possible.
- Avoid removing the fish’s slime which protects it from bacterial infection. Only touch the fish with wet hands. The use of release tools makes touching the fish unnecessary.
- Release fish gently head first into the water. A fish that has been stressed by the fight or handling should be revived by moving it forward in the water to promote water flow over the gills. A large fish can be revived by towing it slowly with the boat, but make sure the fish’s head is totally submerged.

- Use good judgement if you decide to take a fish. Never gaff a fish until you are sure it is a legal size and species (i.e. not closed season). This information is available to the public in the FWC “Fishing Lines Newsletter”. You can get a copy of this quarterly publication from your local tax collector’s office.

Reef Fish

Releasing reef fish may require special handling to decrease mortality. When reef fish are brought quickly to the surface from water more than 70 feet deep, the gases in their swim bladder expand, often rupturing the swim bladder.

A sign of this condition is visible to anglers when the stomach of a fish is pushed out the mouth. Researchers at Mote Marine Laboratory have found that ruptured swim bladders of snappers and groupers become functional within four days after the release and heal within 2 weeks.

- Venting may increase the survival rate of reef fish that are released. Proper use of a venting tool can improve the fish’s chances of survival by allowing it to return to the bottom quickly.

Once it has been determined that a fish needs venting, several methods can be used. Some recommend a small puncture in the everted stomach. Others recommend using a venting tool made from a large bore hypodermic needle.

If you have a venting tool, follow the instructions and take care not to damage other internal organs during the venting process. Venting tools and instructions are available from the Florida Sea Grant Extension Program.

Florida Sea Grant
6900 Florida St.
Punta Gorda, FL 33950-5799

For more information about release techniques for marine fishes contact:

Division of Marine Fisheries Outreach and Education Program
2590 Executive Center Dr., Suite 204
Tallahassee, FL 32301

Note the everted stomach visible in the mouth of this red grouper