

Benefit and Use of Dehooking Devices



Dehooking devices are an important conservation tool and help increase the chances that released fish survive.

Increased fishing pressure on coastal and pelagic fish species has prompted more stringent state and federal regulations which have led to more undersized fish being released by recreational anglers. Although catch and release fishing is a valuable conservation tool in marine fisheries, the effectiveness of management is diminished if fish do not survive after being released.

Simply releasing a fish back in the water after it is caught does not guarantee a fish's survival; anglers must consider how their actions will affect the health and well being of their catch if they do not plan to keep it.

Where a fish is hooked, how it is handled before and during hook removal, and how long it is kept out of the water all play significant roles in the survivability of a fish once it is released.

A dehooking tool, or dehooker, is a simple device that fishermen of all ages can use to greatly increase the chances that released fish survive. It should become part of every fisherman's gear.

Why do catch and release fish die?

A fish that is caught and landed has just been in a battle for its life. It is usually exhausted, especially if it has struggled for a long time during capture, and will suffer from a number of physical and chemical stresses, including a buildup of excessive amounts of lactic acid in its blood and muscle tissue. The stress of capture may be great enough to cause death -- even if the fish appears unharmed when released, it may later die. Released fish mortality is usually associated with two factors:

- Mortality associated with hooking, including the location and depth of the hook, or excessive bleeding
- Mortality associated with physiological stress caused by capture and landing, subsequent handling by the fisherman, hook removal, time out of water, barotrauma, or release.

Dehooking tools can help minimize the trauma and stress that fish suffer from many of these factors.

Dehooking Tools are Better for the Fish... and the Fisherman

The use of a dehooking tool to removed embedded hooks can help alleviate some of the stresses and physical damage associated with catching and handling a fish. They are also used to remove hooks from sea turtles and other marine life. In addition, they help protect the angler from sharp hooks, pines, and teeth.

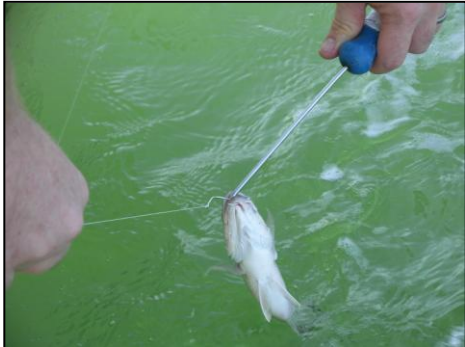
There are several types, styles and manufacturers of dehooking devices available on the market today. Although costs vary, an angler can expect to pay on average between \$8 and \$20. Some tools have been more extensively field tested by researchers and industry than others and meet NOAA fisheries minimal design standards. Pliers and forceps are often used as dehooking devices, but dehooking devices that can grab the fishing line, slide down the line, and remove the hook quickly are recommended because they require minimal to no handling of fish and better secure the hook during removal.



**Dehooking tools come in a variety of shapes and sizes, and can be found in any store that sells fishing gear. Here is just a small sample of the kinds available today. Use the appropriate size for the hook you are removing and the fish you have caught.*

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Excess handling of fish especially with dry hands or towel can negatively impact fish by removing their protective slime layers, which protects them from disease and aides in movement. Dehooking devices allow anglers to remove terminal tackle with minimal to no handling.



Dehooking devices allow anglers to keep fish in the water while removing the hook, thus reducing the amount of time exposed to air.

Furthermore, anglers using dehooking devices are generally able to keep a fish in the water when removing terminal tackle, thus minimizing the amount of time of air exposure to the fish. Even short periods of air exposure can cause elevated stress levels in fish. Studies on rainbow trout (Ferguson and Tufts, 1992) and rock bass (Cooke, et al. 2001) indicated 30 seconds of air exposure resulted in two full hours of cardiac recovery for their perspective fish.

Another benefit of dehooking devices is they help minimize injury and excess bleeding by quickly and safely removing hooks. Most devices are also designed to reduce the risks of hooks re-engaging once they are removed, thus preventing further injury to the fish.

Some dehooking devices are specifically designed to remove deeply swallowed hooks in addition to external lip or foul hooks. Instructions for removing deeply swallowed hooks may differ slightly from tools that only remove external hooks. Consult with the manufacturer and/or salesperson for instructions.

If you gut hook a fish and do not have a dehooking device that can properly remove deeply swallowed hooks or are not comfortable using one, cut the leader as close to the hook as possible. The hook will eventually rust out and/or the fish will be able to expel it. A general rule of thumb is if you cannot see the hook in the fish's mouth, you should cut the leader.

Using a dehooking tool

Using a dehooking device is a relatively simple process even for novice anglers including children, but may require some practice to ensure it is done correctly. If you are not familiar with using a dehooking device, you can practice on a corrugated cardboard box before using it on a real fish. While there are variations on the use of different brands of dehooking devices, below is a general description of how to remove an external (lip or foul) hook from a fish using a long-handled dehooking device.

- Hold the leader in one hand and the dehooking tool in the other.
- Place the rod of the dehooking device on the leader like a bow and arrow and slide it towards yourself until the leader encounters the end of the dehooking tool.
- Slide the dehooking device down the leader until it engages the hook.
- Pull the leader and dehooking device apart with constant pressure.
- While keeping pressure on the leader and dehooking device, lower the leader while raising the dehooking tool. A slight twist of the dehooking tool may be needed to release the fish (*The weight of the fish will help remove the hook*).



Even beginning anglers can use dehooking devices with relative ease. Consider practicing on a cardboard box before using it on a real fish.

New Gulf of Mexico Reef Gear Regulations

Effective June 1, 2008 state and federal regulations in the Gulf of Mexico require commercial and recreational fishermen to have on board and use dehooking devices when targeting reef fish. Dehooking devices must be:

- Constructed to allow the hook to be secured and the barb shielded without re-engaging during the removal process
- Blunt and all edges rounded
- Appropriate to secure the range of hook sizes and styles used in the reef fish fishery

The Florida Fish and Wildlife Conservation Commission considers that reef fish species include all snappers, groupers, sea bass, amberjacks, gray triggerfish, hogfish, red pogy and golden tilefish.

Keep in Mind

- Regardless if you fish from a boat or land, a dehooking device will prove useful to quickly and efficiently release fish.
- Boat or wade fishing will make it easier for an angler to keep a fish in or near the water while removing the hook.
- Never dehook a fish in the boat or on dry land as this can increase the likelihood of injury when the fish is released.
- Fishing from a pier, bridge, seawall, or other high structure presents its own special challenge due to the distance between the angler and water, and the potential impact of releasing a fish from such a distance. Be sure to dehook the fish over the water to avoid the fish hitting any rocks, pilings, or other obstructions below.
- In either situation, the less time the fish is kept out of the water, the less stress it will endure.



The key to successfully using a dehooker is to pull the leader and dehooker apart with constant pressure, then lower the leader while raising the tool. Give the tool a slight twist if necessary, and let the weight of the fish do the rest.

Remember, quicker/ safer hook removal and release of fish = increased chance of survival!

Sources

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Ferguson, R.A and B.L. Tufts. 1992. Physiological effects of brief air exposure in exhaustively exercised rainbow trout. Canadian Journal of Fisheries and Aquatic Sciences. Vol. 49, no. 6, pp. 1157-1162

Written by

Bryan Fluech
Collier County Sea Grant Extension Agent
fluech@ufl.edu
(239) 417-6310 x204

Betty Staugler
Charlotte County Sea Grant Extension Agent
staugler@ufl.edu
(941) 764-4340

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