

What are Fish Descending Devices?

Florida Sea Grant begins project to increase survival of deep-water released fish

Experienced deep-sea anglers are all too familiar with the problems of releasing fish (either undersized or out of season) caught in deep water. Fish retrieved from such depths (generally deeper than 60–80 ft.) experience problems caused by the rapid change in pressure. Gas in their swim bladders (used to control their buoyancy) expands and ruptures the bladder, releasing gas into the fish's body cavity.

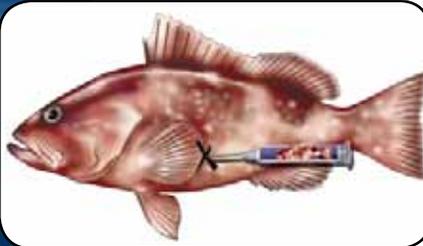
When this happens the fish appears bloated and cannot swim back down to the bottom, resulting in almost certain mortality. In severe cases, the gas trapped in the body everts the stomach, causing it to protrude from the mouth. It is a common misconception by anglers that this is the swim bladder, but it is the stomach.

Obviously, fishery management regulations that require release of fish will be ineffective if the released fish do not survive. One practice anglers can use to help fish return to depth and have an increased chance of survival is venting. Venting involves using a sharp hollow instrument to puncture the body cavity wall to release the expanded gases. However, it is not perfect. Venting can increase the survival of some, but not all, fish species and obviously results in some additional injury to the fish.

Until recently, regulations in the federal waters of the Gulf required anglers to vent fish that were unable to swim back to the bottom, but as of September 3, 2013, those anglers are no longer required to have onboard and use venting tools. The use of venting tools is still required in state waters of the Gulf of Mexico (within nine miles of shore).



Distended stomach of fish caught in deep-water. This is not the swim bladder. Photo: Bryan Fluech



*Proper position for venting fish.
Photo: Florida Sea Grant*

New on the horizon Fish Descending Devices

The problem of increasing survival of fish caught in deep water is not unique to southwest Florida, Gulf and Atlantic. In fact, it is fair to say it is a worldwide problem. Similar problems are encountered on the U.S. west coast for a group of bottom fish commonly referred to as rockfish. Along the U.S. west coast water as deep as 200-450 feet is easily in sight of land. Recent research has shown that many species of rockfish can survive if they are quickly returned to the bottom. A number of ingenious anglers have developed a variety of devices that can be used to accomplish this with minimum injury to the fish. Some of these devices have just come on the market in the past six to nine months.



Here is just a sampling of some of the new devices. There are more constantly being developed and some anglers are coming up with homemade devices.

INVERTED UTILITY CRATE: THE FISH ELEVATOR

This device can either be purchased or homemade. It consists of a weighted utility crate that can be filled with fish and then lowered until they swim free.



Photo courtesy of Steve Theberge



Releasing four red grouper at one time

Florida Sea Grant In Action

FISH DESCENDERS

Device attached to fish, rod and reel used to lower fish.
Strong jerk on line releases fish.



*Ace Calloway Fish Descender
(also called Blacktip)
www.git-r-down.com
Photo: Capt. Ralph Allen*



*Roklees Fish Descender
www.ecoleeser.com
Photo: Bryan Fluech*

SEAQUALIZER

This device can be set to release fish at
predetermined depth (ie. 50, 100, 150 feet).

[http://www.theseaqualizer.com/
SeaQualizer_-_Official_Website/Welcome.html](http://www.theseaqualizer.com/SeaQualizer_-_Official_Website/Welcome.html)



Photo: John Stevely

Florida Sea Grant Extension agents are now conducting field trials to develop expertise in the use of these devices. Furthermore, we are conducting field trials with volunteer anglers to evaluate if these devices are practical and whether anglers will be willing to use them. The hope is that eventually fishery managers will be able to provide anglers with options on how best to get fish back down to the bottom to maximize their chances for survival. We must stress this work is experimental at this time and more research will be needed and is being planned.

RULE CHANGE: As of September 3, 2013, anglers in the federal waters of the Gulf of Mexico may now use all types of venting/descending gear to help fish suffering from barotrauma.

Use of all types of venting/descending gear is currently permissible in the Atlantic.

Stay Tuned for More Developments!

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*Visit the Florida Sea Grant fisheries
outreach website at
www.catchandrelease.org*