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FS# 7100SG

How to Get That Floater Back Down... Using Descending Devices

Fish that are caught in deeper water (greater than 60-80 feet) are known to experience problems when brought to the surface because of the rapid change in pressure. The gas in their swim bladders expands and ruptures the bladder, which causes the gas to be released into the body cavity of the fish. This gives the fish a bloated look and usually causes other symptoms such as bugged eyes and the stomach protruding from the mouth (often mistaken for the swim bladder). This condition is called barotrauma (i.e. the bloat and internal organ damage caused by pressure change). When the fish is released back into the water while still in this condition, it cannot swim back down to the bottom (these fish are often called “floaters”), which frequently results in mortality. Many anglers know this phenomenon and have seen floaters while fishing in deeper water. Most anglers try what they can to help the fish to swim back down to depth, usually by using a type of venting tool.

Venting involves using a sharp hollow instrument to puncture the body cavity wall, which releases the gases and reduces the bloated look of the fish. Once the gases are released, the fish will have an easier time swimming back down to depth because the “bubble” of gas is no longer keeping it floating at the surface. Venting can increase the survival of some fish, but not all, and survivability varies among different species of fish. A drawback to venting is that poking a hole in the body cavity is obviously injuring the fish in the process.



Proper position for venting fish.
Photo: Florida Sea Grant

Besides venting tools, there are many other devices, both commercially produced and homemade, an angler can use to send bloated fish back down to depth, called descending devices. Recent research along the U.S. west coast has shown that species of rockfish have a greater chance of surviving if quickly returned down to depth with the use of these devices. In one study, short-term survival increased with decreasing surface holding time showing that rapid recompression can decrease discard mortality (Jarvis and Lowe 2008). Florida Sea Grant Extension agents around the state have been conducting field trials with anglers to both develop expertise in using these devices and to determine how practical they are for use in Florida waters. Although more research needs to be done on the survivability of fish in Florida when using a descending device, preliminary trials have shown their probable use by anglers in Florida.

Here are just a couple of examples of commercial devices currently available for use in both Gulf and Atlantic state and federal waters. You can view more information about all of these devices at the catchandrelease.org website and on the updated (as of Jan 2014) Catch and Release brochure www.flseagrant.org/wp-content/uploads/SGEF202_CatchandRelease_web.pdf.

Descending Devices

Inverted Milk Crate or The Fish Elevator: This device can either be purchased with weights and line already attached or can be homemade. It's a weighted milk or utility crate that is filled with fish (more than one fish can be released using this device depending on their size) and then lowered until the fish swim out of the crate on their own. There is a video showing a grouper being released at depth using the utility crate on the catchandrelease.org website (the video can also be viewed at youtu.be/2Zactl_VsyQ).



Utility crate being used to release several species of fish.

Photo: Florida Sea Grant

Fish Descenders: There are several types of general fish descenders. The Blacktip and the Roklees (aka Coleeser) (www.ecoleeser.com) are examples. These work by attaching the device to a rod and reel, gripping the lip of the fish, and then lowering the fish to depth. A strong jerk of the line releases the fish. Anglers need a dedicated rod and reel (or yo-yo with line) and weights appropriate for the size of the fish in order to use these devices. The Shelton Fish Descender (www.sheltonproducts.com/SFD.html), an S shaped wire hook, is another type of descender that is stuck into the lip of the fish rather than gripping the lip. When the line is jerked up, the fish is released. The Shelton can actually be placed on a rod in use so that anglers can continue fishing after releasing the fish.



Blacktip with gag grouper.
Photo: Florida Sea Grant



Roklees on a yo-yo instead of a rod and reel.
Photo: Florida Sea Grant



Shelton Fish Descender.
Photo: Florida Sea Grant

Seaqualizer: This device can be set to release the fish automatically at a predetermined depth (50, 100, or 150 feet) (www.seaqualizer.com). The device is attached to a designated rod and reel (or yo-yo line), grips the lip of the fish, and is lowered to the depth the angler designates for releasing the fish. Here is a short video of the device being used: youtu.be/j0h-LZ9mh4. There are additional devices of this kind, with automatic releasing grips, and is one of the more popular devices with anglers because of ease of use. It is, however, also more costly when compared to other fish descending devices.



Seaqualizer on yo-yo line with red snapper.

Photo: Florida Sea Grant

Descending Devices

References

E.T. Jarvis and C.G. Lowe. 2008. The effects of barotrauma on the catch-and-release survival of southern California nearshore and shelf rockfish (Scorpaenidae, *Sebastes* spp.). *Canadian Journal of Fisheries and Aquatic Sciences* 65: 1286-1296.

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