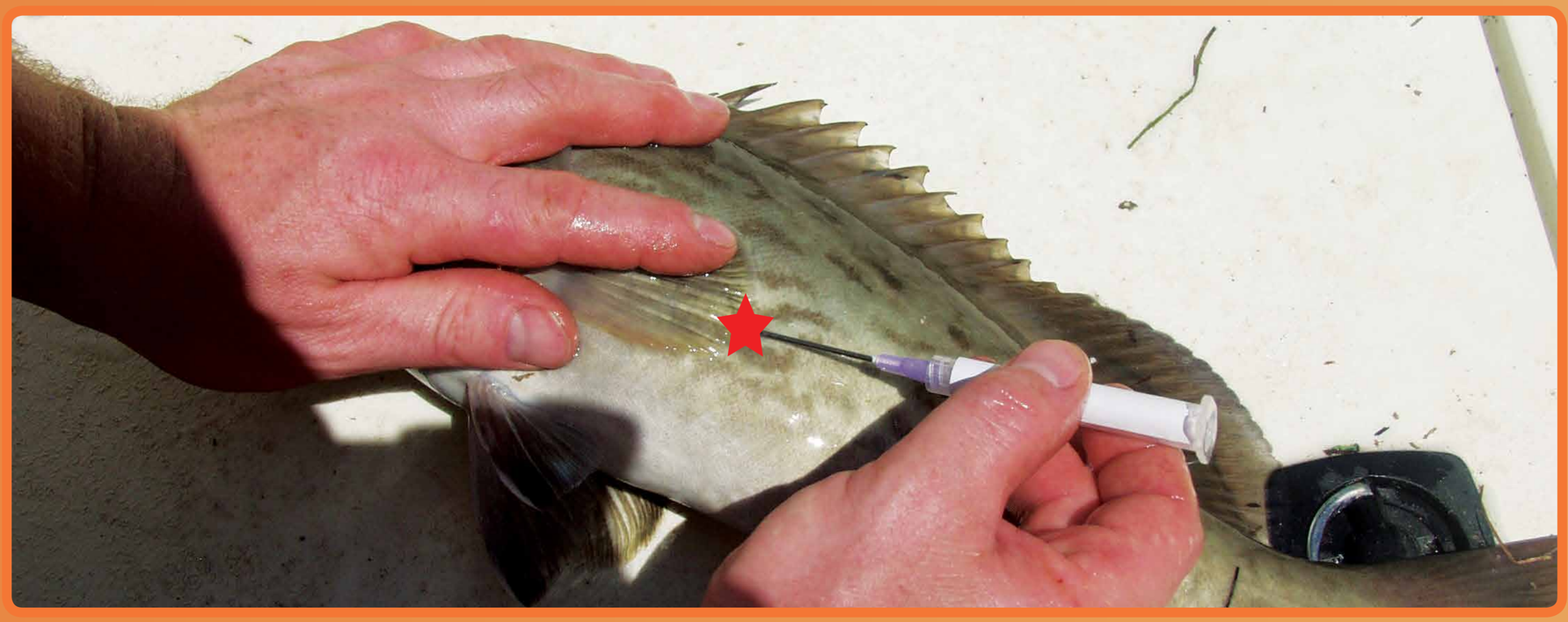
Watch it!

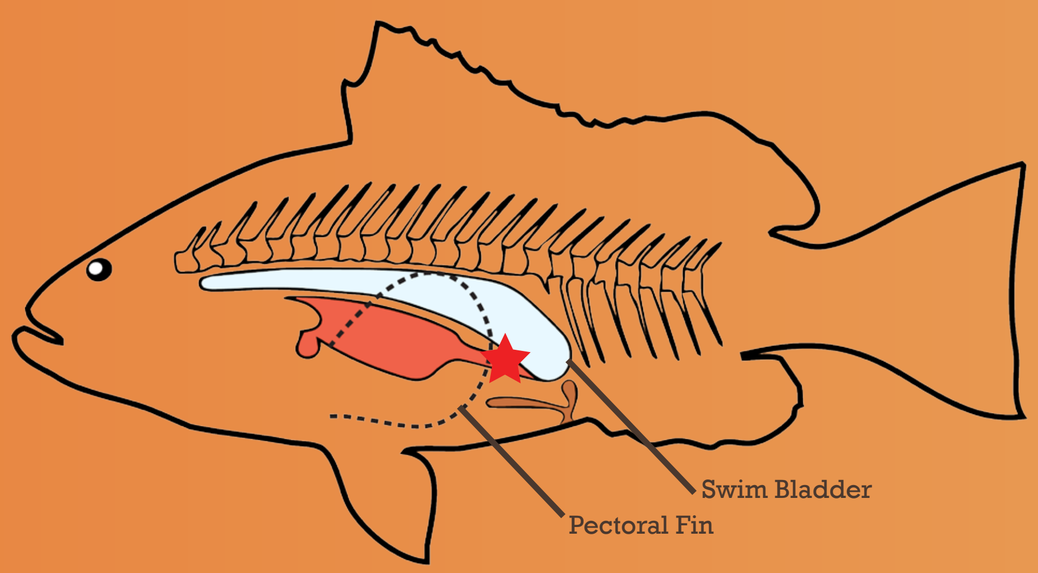
catchandrelease.org

VENTING

This is the traditional and conventional method. Data show it works if performed properly.



Hold the fish firmly on its side. Insert venting tool at a 45-degree angle at trailing edge of pectoral fin (lay fin flat and insert needle into the body just past the end of the fin). Return fish to water immediately after venting.



Pictured images do not imply commercial endorsement.

Venting helps release gases that expand within the body cavity when a fish is brought to the surface from depth. Reef fish are especially susceptible to barotrauma.

A wide variety of venting tools are available on the market. You can also make your own from any sharp *and hollow* instrument. Knives and icepicks are not suitable because they do not provide an escape route for the gas.

Dispelling the myths

Misconception: Venting is bad for the fish.

Fact: Most fish caught shallower than 125 ft heal quickly and if vented appropriately, will survive and resume normal activities within 24-48 hours.

Pros

- Quick
- If performed correctly, method is effective for fish survival
- Tools are cheap and small

Cons

- Puncture risk to angler
- Research indicates ~50% anglers are improperly using the tool:
  - incorrect location of puncture
  - incorrect angle and/or insertion depth of needle
- Fish needs to swim to bottom on its own (increases predation risk)

CATCH & RELEASE

Getting to the Bottom of Things

DEALING *with* BAROTRAUMA

What is barotrauma? Barotrauma occurs when reef fish are brought up from depth and the resulting reduction in ambient barometric pressure causes gases within the fish to expand. When this occurs, fish may be unable to return to depth after release.

There are two ways you can help fish suffering from barotrauma:

1. Venting, which releases gas that has expanded within the swim bladder.

2. Returning them to depth quickly using a weighted descending device.

Studies show that both approaches are effective if applied correctly. The approaches have different advantages and disadvantages – choose the one that is best for you, and make sure you know how to do it correctly.

Everted or protruding stomach

Bulging eyes

Bubbling scales

Photo by Hayden Staley, FWC

Inability to return to depth

Distended intestines and bloated belly

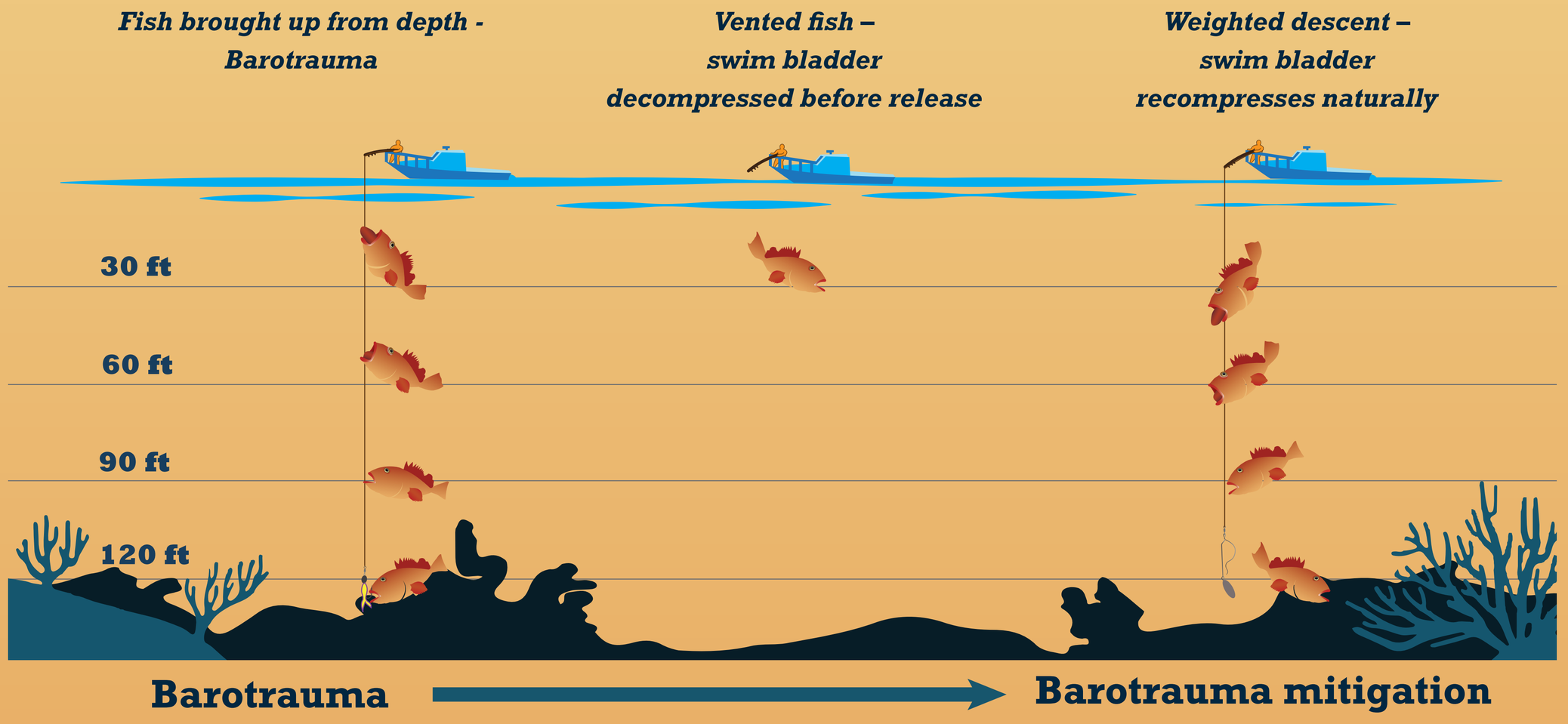
Barotrauma severity varies by species, depth of capture, and environmental conditions. It is rare at depths less than 30 feet. Occurrence and severity increase with depth. Not all fish require action. Use your best judgement!

Why do it?

- Increase the survival of released fishes!
- Reduce impacts of catch and release

There's proof it works!

More and more recreational anglers, commercial fishermen and fisheries managers support the use of barotrauma mitigation strategies.



Careful handling points: The quicker the fish gets back in the water the better it will do. Use gear that minimizes fight time to reduce lactic acid build up and stress, and fast handling on deck for quick release.

DESCENDING GEAR

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Weighted descent is a recent addition to the angler's barotrauma mitigation toolbox. This method is an equivalent alternative to venting – well established in other regions and gaining popularity in the southeastern United States. It allows for natural recompression as the fish is descended to depth.




Above are a few examples of fish descending gear. Multiple tools are available commercially, and anglers are constantly coming up with new devices that work for them.

Reef fish rely on structure for refuge; vulnerability to predators increases at the surface or in open water, and with stress after capture event. Descending gear gets them back to habitat quickly.

Dispelling the myths

Misconception: Descending scares away the other fish; predators may attack the fish and tool on descent, resulting in tool loss; or it takes too much time and is hard to learn.

Fact: Most descending gear is relatively simple; no evidence of decreased catchability or increased predation as a result of fish descent (in fact, predation events often decrease with weighted descent).

Pros

- Non-invasive technique encourages minimal injury to fish
- No sharps onboard
- Easy to learn; technique and response similar across species (e.g., you don't need to remove a scale or identify exact location of swim bladder)
- Easy to make your own and minimize cost
- Minimize predation risk (e.g. from dolphins, sharks, barracudas)

Cons

- Potential extra gear on boat
- Cost of new pre-made gear
- Descending gear might not be amenable to all anglers if catching really big fish or catching lots of fish within a very short time frame
- Tool specificity for environmental conditions (e.g. crate doesn't work in high current; descending may become an entanglement issue)

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