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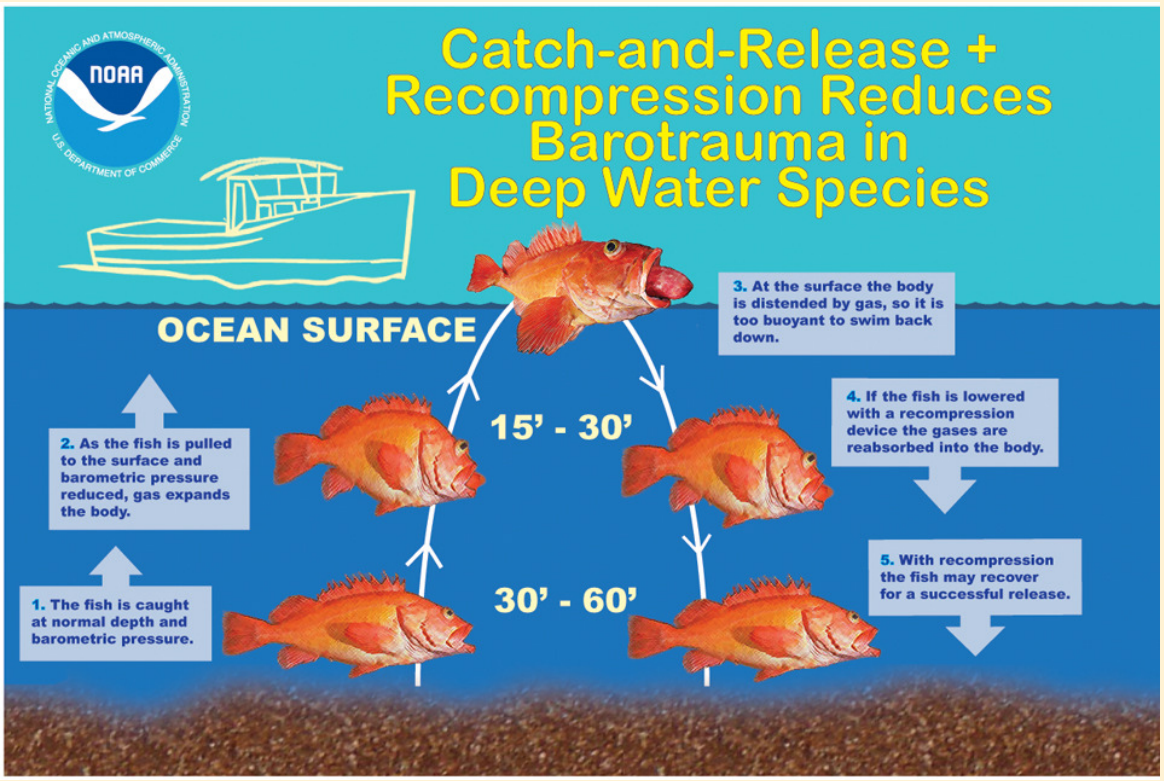
Catch and Release for Puget Sound's Rockfish: the Catch is in the Release

Summer 2013

Recreational fishermen have been practicing catch-and-release fishing for years. Anglers who fish Washington's Puget Sound waters are no exception. The assumption has always been that the release part of the equation will result in a free-swimming fish that will survive. Barbless hooks, minimum handling, and quick return to the water have all been developed to insure high survival rates.

But fish caught at substantial depths – 30 feet or more – present their own challenge and it's a tough one. Fish don't typically get the bends – that sometimes fatal nitrogen-gas syndrome that befalls human scuba divers who rise too rapidly from depth – but some fish can get something equally dangerous: barotrauma. It's a phenomenon of the enormously swollen swim-bladder seen in some fish taken from depths of 30 feet or more. As a fish is reeled in from these depths, gases expand in the body and make it buoyant. This prevents fish from swimming back down and can cause some fish to die.



Releasing a fish is smart for conservation, but ensuring it survives is challenging. Puget Sound's sport fishermen are rising to this challenge and finding new ways to improve the survival of released fish, particularly the Sound's rockfish, a bottom-dwelling fish that's protected under the federal Endangered Species Act.

To increase the survival of released fish, marine anglers are using devices, like release weights and baskets, to manually lower fish to the appropriate depth before releasing them. Known as recompression, lowering fish to their natural depths in a controlled manner allows the gas to be reabsorbed into their bodies. This increases their chances of survival.

This spring, Puget Sound Anglers, the largest fishing club in the state of Washington, dedicated time and resources to combat barotrauma. In April, the organization purchased 330 recompression devices, essentially a mechanism that allows anglers to lower and release fish to natural depths. The manufacturer donated an additional 100 apparatuses. Members of Puget Sound Anglers, along with help from the Washington Department of Fish and Wildlife, traveled throughout northern Puget Sound, Strait of Juan de Fuca, and coastal marine areas to distribute the gear and educate anglers on how to identify rockfish and safely release them.

The recent fishing season for halibut, which mix with protected rockfish, is a testament to their efforts. Puget Sound Anglers, the Washington Department of Fish and Wildlife, Snow Creek Campground, The Cape, Big Salmon Resort, and the LaPush Marina handed out all 430 of the devices free of charge to anglers at Neah Bay and LaPush. Eyewitness accounts show promising results.

Kevin Lanier, with Puget Sound Anglers, said he had never before seen so many fish successfully returned to their natural depths. "It would be my estimate that our success rate, in the four-day halibut opener, was better than 80 percent," he reported. "Most fish didn't resurface once lowered. This has to excite everyone."

Lanier's observation mirrors recent research that suggests recompression technology is more effective for many Pacific species than the traditional practice of piercing the fish's swim bladder and releasing the gas. Pilot projects on recompression techniques for Pacific rockfish

have shown survival can increase by as much as 90 percent, with fish taken from substantial depths – 60 to 100 feet – having the best improvement in survival

NOAA Fisheries fully supports technological innovation and early results indicate that recompression technology is a powerful tool that can help protect our marine fisheries. The partnership between NOAA Fisheries, Puget Sound Anglers, Washington Department of Fish and Wildlife, and others fosters the development of innovative catch-and-release techniques; and working with these partners allows us to collect the data necessary to assess the effectiveness of fishing gear. We are proud to support the dedicated people throughout our region that are taking action to advance science and improve the survival of non-target fish species—allowing them to rebound to healthy, fishable numbers.

To learn more about rockfish identification, barotrauma, and effective catch-and-release techniques, check out the following resource brought to you by Puget Sound Anglers: **Save Our Fisheries: Learn to Identify These Species**.

The following video is an additional resource for you to learn more about barotrauma: **http://www.youtube.com/watch?v=EiZFghwVOyI** Near minute 2:30 you will find information on different types of recompression devices.

Barotrauma graphic: NMFS Northwest Region

NOAA photograph: courtesy Bo Whiteside, PSMFC