

FishSmart Pacific Workshop Makes Headway with Management and Research Recommendations

Fifty individuals representing researchers, fisheries managers, anglers, communication specialists, and the sport fishing industry gathered in Portland, Oregon for the "FishSmart Pacific Workshop on Improving the Survival of Released Fish Focusing on Barotrauma." Two days of intensive presentations and interactive discussion covered recreational fisheries from Alaska, Hawaii, and the length of the West coast to address ways of reducing mortality in fisheries that are constrained by high release mortality.

As in other FishSmart workshops, participants emphasized the need for anglers to avoid catching restricted species altogether, thereby averting the need to take special measures to help improve the fish's chances of survival. Avoidance techniques include knowing where restricted species are likely to be caught and avoiding them, use of gears that allow anglers to better judge depths and target species that they are seeking while avoiding those that would need to be returned to the water, and changing locations when too many restricted fish are being encountered.

If a fish caught in deeper water must be released, workshop participants supported using weighted grippers, "lip hangers," or baskets to return a fish to the depth where it was caught or as deep as possible wherever this is not possible (generally called "recompression") as the first choice to improve survival. Venting (releasing swim bladder gasses from the fish's body to enable it to return to deeper waters on its own) should generally be a last option. Some fish are caught at significant depths (up to 1,200 feet in Hawaii) or are too large to return using devices for recompression, necessitating venting as the only choice.

West coast rockfish (*Sebastes spp.*), a group of about 60 or more species, constituted a large part of the discussions due to the current situation where a few species with low abundance are constraining fishing for other species that are often caught in the same location and times. The high release mortality of these "choke species" prevents sustainable fishing activity for the other species. While some gaps in research remain, workshop participants coalesced around the concept that sufficient science already exists to allow managers to consider ways to incorporate "improved survival" scenarios into management and address mechanisms that would permit limited fishing in closed areas or otherwise increase fishing opportunities. Currently, the mortality rate used for management of most rockfish species caught at depths deeper than 30 fathoms (180 feet) is 100%, assuming that anglers take no special measures to improve their survival. However, numerous studies have shown that use of recompression devices when returning a fish to deeper waters significantly improves survival. Incorporating a lower



release mortality rate into management scenarios for these deeper caught rockfish would potentially allow expanded fishing opportunities in some fisheries. Workshop participants stressed that existing angler dockside surveys in Oregon, Washington, and California must incorporate questions to determine the extent of use of recompression techniques among anglers to better apply lower mortality rates into the modeling and management actions.

Management actions based on angler adoption of techniques to improve survival have already been approved in Alaska. Beginning in 2013, charter operators in southeast Alaska will be required to have a deep-water release mechanism onboard for use on rockfish that they release. Descending devices are anticipated to lower the mortality rates of released rockfish from as high as 90 percent to as low as 10 percent.

Best practices include a combination of avoidance, release techniques, and handling fish before release (see www.fishsmart.org). Workshop participants felt that voluntary adoption of these best practices and recompression techniques should be immediately implemented rather than waiting for mandated regulations. Voluntary adoption would allow greater flexibility to change as new information became available. Many anglers and Commercial Passenger Fishing Vessels (CPFV) already utilize, and aggressively promote, release techniques that improve survival but expanded communication efforts are needed to increase the number of anglers who use them in order to have a greater impact on the fish stocks. Several well established communication programs already exist and could become more effective with additional coordination. Expanded communication programs through organizations such as the Recreational Boating and Fishing Foundation could provide greater use of online and social media to reach additional audiences.

Finally, workshop participants discussed the current process of acquiring exempted fishing permits (EFP) to use in studies of gear and techniques that might increase the survival of released fish. In some cases, permit authorization can take more than two years, meaning that the time from permit application to final results and potential implementation by management entities could be 6 years or more. The process for applying for and obtaining such permits should be streamlined to allow quicker approval and initiation of studies.

The workshop was part of the larger FishSmart effort, a program lead by the sport fishing community to work with anglers and industry to improve the survival of caught and released fish. The initial phases of FishSmart are being funded by NOAA Fisheries Service through a grant to the Atlantic States Marine Fisheries Commission. Additional details of the program can be found at:

(http://www.nmfs.noaa.gov/stories/2012/04/04 11 12fishsmart workshops.html).

These workshop highlights will be part of a full that will be posted at www.fishsmart.org in the near future. For more information about FishSmart, visit www.fishsmart.org.
