

Study suggests some fishing regs aren't in line with fishing reality

July 10 2013, by Adam Hinterthuer

(Phys.org) —A new study by University of Wisconsin-Madison Center for Limnology researchers says that when it comes to managing sport fisheries, regulations aren't in line with the reality of some fishing trips.

Limnology post-doctoral researcher Jereme Gaeta is lead author of the report, published in the *North American Journal of Fisheries Management*. He says that currently, the main tool fisheries managers have to control [population numbers](#) of [fish species](#) are regulations like catch-and-release seasons, bag limits and minimum size restrictions.

For example, the Wisconsin Department of Natural Resources has a mandatory catch-and-release season in late spring and early summer for largemouth bass, when males are sitting on nests and guarding eggs and young fish.

"The idea," Gaeta explains, "is that [if caught by an angler], catch-and-release restrictions will let these males get back to their nests and protect the next generation of bass. But what we found is that there is no change in catch-and-release rates [of largemouth] between the mandatory catch and release season and the regular season" when fishermen could keep the fish.

In other words, even when the mandatory catch-and-release season is over, anglers keep throwing back their bass—suggesting that some fishing regulations don't actually regulate angler behavior.

By inserting some fish-related questions into a large boater survey being conducted by UW-Madison limnologists, Gaeta was able to sample 652 anglers who went on 5,007 fishing trips across a 12,000 square kilometer (4,600 square mile) chunk of northern Wisconsin. The top three targets of these fishing trips were walleye, muskellunge and panfish like bluegill, perch and crappie.

According to the survey results, anglers released 99 percent of musky, 97 percent of black (small and largemouth) bass, 86 percent of pike and 67 percent of both walleye and panfish. Since the survey also asked why the fish were released, Gaeta and his team were able to conclude that they were mostly voluntary releases. Only walleye were being given back grudgingly.

"With panfish," Gaeta says, "they were catching so many and only keeping the 'good' ones. But for walleye, they were mostly releasing them because of size limits."

For a struggling fish species like walleye, DNR size restrictions appear to be helping the fish get back in the lake and live to fight and, ideally, reproduce another day. But the high rate of catch and release isn't ideal for the management goals of other species, Gaeta notes.

Again, bass provide a useful example. Bass used to be a table fish for lots of anglers, Gaeta says, but starting in the 1980s, fishing tournaments "really pushed for the idea of conserving bass and changed their image from table fish to trophies."

With most bass being taken out of a lake only long enough for a photograph, their numbers began to grow. That meant more bass in the lake fighting over food. The increased competition doesn't mean much in southern lakes, with warmer waters, longer growing seasons, and abundant food. But in northern lakes, bass overabundance can stunt

growth.

"Up here," Gaeta says, "a legal-size bass can be anywhere from 5 to 15 years old. In some systems they can be so stunted that only 1 out of 100 fish ever reach legal size limits."

Gaeta says it may be time for fisheries managers to add a few new tools to their toolbox. For example, outreach programs could promote the idea of getting a fish like bass back on the menu. He points to tournaments that promote bass and pike as good eats, like "You Hook 'Em, We Cook 'Em" events in northern Wisconsin, as an example.

Of course, the real trick might be deciding what it is anglers are after. "Anglers aren't just part of the fishery," he says. "They are part of a culture. And the flip side of this is, what do you call a good fishery? Do you want big bass, or do you want to hook a bass on every single cast?"

More information: www.tandfonline.com/toc/ujfm20...current#.Udwpxz5gY7U

Provided by University of Wisconsin-Madison

Citation: Study suggests some fishing regs aren't in line with fishing reality (2013, July 10) retrieved 26 April 2024 from <https://phys.org/news/2013-07-fishing-regs-arent-line-reality.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.