Can walleye 'hooking mortality' be reliably tabulated?

By Joe Fellegy - Outdoor News, June 3, 2016

Before the 1980s, when lakespecific management, special regs, and voluntary release sprang forth, most Minnesota walleye anglers harvested keeper-sized walleyes until they "limited out." Whether it took a half-hour or all day, catching and keeping a statewide daily limit of eight walleyes (for many years prior to the mid-1 950s) or six walleyes was the typical goal. Along the way they'd release little dinks, twinks, cigars, or whatever they nicknamed small walleyes, especially under 12-14 inches. The quicker the limit the faster anglers could hit shore, brag, clean fish, and do other things.

In the 1980s, as releasing walleye "keepers" became more common, angling's pacesetters, outdoor media, and fisheries managers preached the basics of proper unhooking, gentle handling, and quick release. Fisheries managers and their angler-constituents know that a sport fishery's total walleye kill includes fish kept (harvested) and the relatively small minority of released fish that die. Those walleye deaths are variously labeled "hooking mortality" and "release mortality." (The latter term seems more appropriate since fish live or die depending on the whole release experience, not just unhooking. Yet "hooking mortality" often dominates the lingo.)

Walleye hooking-mortality studies from across the country include works by Minnesota biologists. For

example, in the late 1980s Don Pereira, research biologist and present Minnesota DNR Fisheries chief, co-authored "Hooking mortality of walleve caught on live and artificial baits" with DNR biologists Ron Payer and Rod Pierce. They used two Washington County study ponds. In 2003 and 2004, angler volunteers and DNR employees studied anglerreleased walleye mortality at Mille Lacs. The resulting report, "Factors influencing the hooking mortality of walleyes caught by recreational anglers on Mille Lacs, Minnesota," was written by DNR biologists Rick Bruesewitz and Keith Reeves. A 2005 work by DNR's Tom Jones discussed "The influence of circle hooks on the capture efficiency and injury rate of walleyes." Tim Goeman, recently retired DNR Northeast Region fisheries supervisor at Grand Rapids, authored a 1991 work, "Walleye mortality during a live-release tournament on Mille Lacs, Minnesota."

The above works were published in the American Fisheries Society's scholarly periodical, North American Journal of Fisheries Management. Yes, hooking mortality plays a role in walleye sport fisheries. Bag limits, size limits, tournament rules, voluntary release, the "selective harvest" philosophy, and modern angling trends encourage more release and more interest in mortality and survival of released fish. Sure, mortality is part of the overall picture. But in most places it's

rarely discussed and almost never a significant player in management decisions that impact local fishing-related economies and the well-being of a fishing community.

The giant exception is Mille Lacs, victim of the biggest ongoing PR disaster in the histories of Minnesota fishing, fisheries management, and fishing-related tourism. Given the annual political walleye quotas ("safe allowable harvests") set by state and tribal co-managers, walleye hooking mortality is a huge issue. It's factored into estimated total walleye kill by anglers. Last summer, guesstimated hookingmortality pounds pushed anglers over the state's super-low quota and closed walleye fishing for four months, starting Aug. 3. Now, given this season's low quota and hot walleye bite, a mid-season walleye-fishing shutdown could occur again - even with anglers keeping no fish and foregoing the lake's popular night-fishing tradition. Add a historic scarcity of anglers. Given no allowed harvest and an all-time-low fishing effort, how can managers even consider a walleye-fishing shutdown based on fuzzy hooking-mortality guesstimates?

Thank the flawed Mille Lacsunique state-tribal comanagement system, whose nutcake specifics and, DNR's loyalty to them were never envisioned by the 1837 treaty or ordered by any fish gods. At the April 28 meeting of the Mille Lacs Fisheries Advisory Committee (MLFAC), DNR Fisheries Chief Don Pereira was asked who, in which agencies, brought hooking mortality into Mille Lacs management. No answer. When asked where else hooking mortality is such a big deal, he muttered something about Red Lake and vaguely mentioned several other states. He correctly pointed out that walleyes dying via release are indeed part of total kill.

As for Red Lake, DNR does estimate hooking mortality and adds it to estimated angler harvest for total walleye kill on the Minnesota portion of Upper Red. But one rarely reads about hooking mortality as a Red Lake issue. Gary Barnard, DNR area fisheries supervisor at Bemidji, noted that release mortality is highest in mid to late summer, thanks to warmer water, but that overall angler catch rates and fishing pressure have declined by then. Catch rates and release rates are usually highest in May and June when water temps are cool and mortality low. Barnard observed that a typical openwater season sees an estimated 1,000 to 3,500 pounds of release mortality on Minnesota's portion of Upper Red. That's pretty insignificant against this year's angler quota of 240,000 pounds.

Study dodges angling realities

Skeptical anglers and some Mille Lacs Fishery Advisory Committee (MLFAC) members question if walleye hooking mortality can be reliably quantified for how it's used at Mille Lacs. After all, where else is hooking mortality such a big player? DNR's response is another study, a two-year "cutting edge" effort highlighted in DNR's May 26 press release. Angler-volunteers are helping gather 1,500 walleyes this year. DNR personnel collect catch info (how caught, water temps, depths, etc.), mark fish, place them in holding pens, count deaths, compile data, and will ultimately "refine" the hooking mortality model.

Meanwhile, DNR creel clerks are surveying Mille Lacs anglers about their released walleyes. Some MLFAC members wanted "moreaccurate data," so DNR expanded its list of survey topics. FISHING METHOD: bobber, Lindy Rig, crawler harness, straight line, casting, trolling (planer board, leadcore), trolling (downrigger, bottom bouncer); HOOK TYPE: single-pointed hook, circle hook, jig larger than 1/16 oz., small jig (1/16 oz. or less), treble hook; BAIT: leech, worms (nightcrawlers), minnows except suckers, suckers, crankbaits and other hard baits, soft plastics except Gulp, Gulp or other organic baits; LINE: monofilament, braided, leadcore.

Okay. Interesting stuff. Anglers variously catch, unhook, handle, and release walleyes. (This season's extremist Mille Lacs walleye regs require all release!) Most fish make it. Some don't. Go study. But experienced anglers can cite overlooked big players, like the important human element! Beyond the bait, method, depth, presentation, water temp, and hook location, there are the angler's smart or stupid hook-set

habits, reeling and landing practices, and fish-handling skills. They may be foremost in determining a released walleye's life or death. Big differences occur within the angling crowd. Cabin owners and lake residents versus occasional lake users? Guides and Mille Lacs regulars versus onetime and infrequent visiting anglers? Count two or a dozen rigs at a public access or on a fishing spot. Do those anglers possess the same release skills?

So it's not just bait, tackle, and fishing methods. Maybe the human factor is half the hookingmortality picture! But DNR numbers-crunchers don't psychoanalyze anglers, or get angler-profiling into the data mix. And what about fish moods? Super-hungry walleyes snap harder and inhale baits faster and deeper. Or? And do aggressive walleyes suck hooks deeper in wavy super-oxygenated shallow waters versus calm conditions?

Beyond the clutter of related topics, like circle hooks, here's my bottom-line take. Learning more about hooking mortality, a pretty subjective area, might be fine. But certain MLFAC members and others are right-on in demanding that there be no walleye-fishing shutdown based on fuzzy and unbelievable guesstimated mortality pounds. Mille Lacs anglers and businesses are already severely victimized by unjustifiable gone-mad "management."