Has Catch-and-Release **Gone Overboard?**

The case for harvesting trout

By Tom Dickson

he fish leapt, made a strong run upstream, leapt again, then finally submitted as I led it into the shallows next to an island on the Missouri River upstream from Craig. Kneeling in the water, I cradled the trout in Swimming' or 'CPR' [Catch, Photo, Remy hands and slipped the hook free. Then, looking to make sure no one was watching, I bashed the 19-inch rainbow in the head with a softball-size rock.

Killing that big, beautiful fish was perfectly legal and biologically justifiable. But to a growing number of anglers, what I'd done ought to be a hangin' offense.

Which is why I was taking pains not to be seen. Game wardens weren't the concern; I was well within the legal limit. What I dreaded was another angler drifting past and chewing me out for doing something that to many seems downright barbaric these days: taking a trout home to eat.

"More and more we're seeing bait fishing and trout harvest pushed underground. People are now embarrassed to admit they are keeping fish," says Eric Roberts, Fisheries Management Bureau chief with Montana Fish, Wildlife & Parks.

"Bait Fishermen Suck" stickers on fly-

fishing boats don't help. And heaven help the naïve angler who shows a stringer on social media. "It's reached a point on Facebook that if you post a shot of yourself holding a big fish and don't tag it with 'Still lease], you'll get lambasted in the comments section," says Zack Shattuck, FWP Native Species Program coordinator.

But is being sautéed in butter really the worst fate to befall a fish? I'm not the only one wondering whether the catch-and-release ethic, even with all its accomplishments, has

NOT WELCOME A sticker on a fishing raft in Helena sums up attitudes of a growing number



gone too far. "One question I constantly get at social gatherings is what's my take on catch-and-release," Shattuck says. "Older anglers especially, who've fought for stream protection and public access and consider themselves conservationists, are basically asking me if it's still okay to kill a fish."

10 pounds plus one fish

It certainly has been for most of human history. Though fishing has always included some aspects of sport, relaxation, and nature appreciation, its main purpose most of the past 40,000 years has been to get food.

That started changing after World War II, as income levels rose and fewer Americans needed fish to supplement their larders. Around the same time, anglers began to notice that fish populations were finite and that liberal harvest regulations, like the "10 pounds plus one fish" daily limit allowed on the Big Hole and other rivers until the mid-1960s, were depleting fisheries.

The idea of releasing fish was first widely promoted by fly angler and author Lee



I know they mean well, but fly anglers who scorn spin and bait anglers are just driving people away from fishing altogether."

Wulff, who wrote in the late 1930s (about Atlantic salmon), "A good game fish is too valuable to be caught only once." The practice of releasing fish to be caught another day slowly took off among trout anglers. Among the first Montana advocates was Don Martinez, a renowned West Yellowstone fly shop owner who, starting in the 1940s, began urging clients to let trout go. "Some of the best fishermen do not carry a basket or a net, releasing all of their catch



BEST MANAGEMENT PRACTICE? The act of releasing trout has become sanctified throughout most of the United States and Canada. But fisheries biologists warn that the practice isn't all it's cracked up to be. "In many cases," says Eric Roberts, chief of the FWP Fisheries Management Bureau, "some of our trout fisheries would actually be better off with more harvest."

26 | MAY-JUNE 2020 | FWP.MT.GOV/MTOUTDOORS MONTANA OUTDOORS | 27



SUCCESS STORIES Controversial at first, the idea of releasing fish began with Atlantic salmon and spread to largemouth bass and trout as anglers saw that fisheries across the United States were being overharvested. The practice was especially successful with Yellowstone (above) and westslope cutthroat trout, which readily take flies and lures and can be easily overharvested.

except for an occasional very large specimen," he wrote in his shop newsletter. Elsewhere, catch-and-release took off with largemouth bass anglers beginning in the 1970s. By the 2000s it was even being embraced by some anglers who fished for walleye and catfish, long considered food fish species. "Let 'em go, let 'em grow" became the mantra of anglers everywhere.

Mostly it worked. Even after Montana switched from stocking rivers to managing for wild trout in the 1970s, the growing catch-and-release ethic helped conserve populations and maintain catch rates in the face of ever-increasing fishing pressure. That's still the case. On crowded rivers especially, trout fisheries would be quickly depleted if every angler kept even one fish per outing. "It's been vital for westslope cutthroat trout, which are gullible and can easily be overharvested," says David Schmetterling, FWP Fisheries Research Program coordinator. For instance, FWP recently enacted a new regulation banning

Tom Dickson is editor of Montana Outdoors.

treble hooks on all three forks of the Flathead River to make it easier to release trout to protect low-density cutthroat populations.

But over the past two decades, something unexpected has happened, causing fisheries managers to reconsider whether releasing fish is all it's cracked up to be. "In many cases, we've reached a point where some of our trout fisheries would actually be better off with *more* harvest," Roberts says.

Increase harvest, increase size

Every river, stream, lake, or reservoir has a limited amount of food that can support a



Catch-and-release has become so ingrained that we've lost our main tool for managing species composition, size structure, and population size."

finite poundage of fish, known as its biological "carrying capacity." Let's say a theoretical river can grow 1,000 pounds of trout per mile. In most cases, that population could be represented by a pyramid, with large numbers of small trout, far fewer medium-sized trout, and relatively few large trout. If anglers want to catch more large trout in this river, they'd need to kill ("harvest") many of the small trout at the base of the pyramid to free up food and space for the remaining fish to grow. "Those smaller two- and three-year-old trout feed like crazy and are far more aggressive than big trout," Roberts says.

In many waters where a trout population is at carrying capacity and few anglers keep fish anymore, the lack of harvest can actually reduce average trout size. That's not true everywhere—the Missouri River below Holter Dam, for instance—but many fisheries could produce larger fish, though fewer fish overall, if anglers brought more small trout home to eat. "For a generation we have been convinced that catch-and-release is conservation, but that's not necessarily the case these days," Schmetterling says.

"As long as the habitat is in good shape and a fishery isn't being overharvested, all catchand-release does in most cases is reconfigure the sizes of fish in a given population."

One example was the Bighorn River in the early 2000s, when anglers hooked abundant 13- to 15-inch browns and rainbows but rarely caught larger trout. "We don't know for sure, but likely the best way for them to have seen more 16-plus-inch fish would have been to harvest more trout below 13 inches, but that wasn't happening," Schmetterling says.

On the Beaverhead River, Dillon-based fisheries biologist Matt Jaeger says that during some years he could double or triple the number of 18-plus-inch trout per mile on the Clark Canyon Reservoir tailwater fishery. But that would take convincing unwilling anglers to harvest thousands of 10- to 16-inchers. "They understand the science but aren't comfortable harvesting fish," Jaeger says. "Some have told me privately they'd prefer us to go in and electroshock those smaller fish and remove them ourselves."

In particular, biologists say they are frustrated they can't convince anglers to harvest brook trout, browns, and rainbows to help protect westslope cutthroat trout, a species so vulnerable it has repeatedly been proposed for listing under the Endangered Species Act. Brookies and browns outcompete cutthroats, and rainbows hybridize with the native species, diluting genetics. "Catch-and-release has become so ingrained in angler behavior





BELLY UP? Most released fish live to fight another day. But roughly 8 percent of the trout that anglers catch and then release die from the stress of the fight and overhandling. Rates are even higher in late summer when water temperatures became dangerously warm.

that we've lost our main tool for managing species composition, size structure, and population size," Schmetterling says.

What's the harm?

Ironically, many fish that catch-and-release absolutists believe they are saving end up floating belly up downstream after release. FWP biologists estimate that this "incidental mortality"—caused by the stress of the fight or mishandling—accounts for an average of 8 percent of all released fish, depending mainly on water temperatures. "When temperatures are at lethal levels of over 72 degrees in July and August, fish caught and released are essentially dead," says Roberts.

Mortality rates increase every time a fish is captured. On the Madison River, each rainbow trout is caught an average of 4.5 times. Though the vast majority of released fish survive to fight another day, FWP biologists estimate that roughly 32,000 released rainbows die each year on that river alone. "Anglers can do a lot to increase sur-

PROUD HARVEST Once common throughout Montana, the practice of keeping a few fish to bring home for supper has been pushed underground. FWP officials say some anglers have publicly shamed others for keeping trout.

vival, like playing a fish quickly and not to exhaustion, and reducing the time they handle the fish, especially out of the water," Schmetterling says. "But the number one thing they can do is to not fish for trout when water is above 70 degrees."

Another misconception is that big trout need to be released so they can "fight another day." "Every spring, we hear from anglers complaining about the 'slaughter' of big rainbows coming near shore on Helenaarea reservoirs," says Adam Strainer, FWP biologist in Helena. "But those fish—like most big trout in other Montana reservoirs and rivers—are at the end of their life span. If released, they'd probably die before ever getting caught again."

Besides, "these are stocked fish that are meant to be harvested," Strainer adds.

Also lost in the always-release approach are the many benefits of harvesting organic, free-swimming protein. Wild fish are better for you and the environment than the farmraised, plastic-wrapped fish in a grocery store. Fattened on wild foods, wild trout taste better, too.

Anglers who let fish go—and I count myself among them, releasing about 95 percent of my catch—might also want to reconsider

28 | MAY-JUNE 2020 | FWP.MT.GOV/MTOUTDOORS

the ethics of what growing numbers of people view as harassing fish for fun. For instance, in Germany, where catch-andrelease is considered inhumane, all sport-caught fish above certain sizes must be harvested. In *The Founding Fish*, best-selling author—and devoted shad angler who kills all his catch—John McPhee writes, "The idea of playing with things for your own enjoyment while they go through great anguish and suffering is fundamentally wrong."

It's never been proved that fish feel pain or otherwise suffer as we humans understand it. But there's no doubt a hooked fish struggles with all its might to escape. In fact, I'll be the first to admit that that's what makes fighting a fish so much fun.

After conceding that unsettling truth and then factoring in the number of released fish that die anyway, it seems fair to ask which approach to fishing is more defensible: catching and releasing 30 fish in a day, or catching and killing two and then calling it a day?

Something wrong

Eileen Ryce remembers the moment she realized that catch-and-release might have

gone a bit overboard. "A few years ago we were at the Wolf Creek Bridge on the Missouri and watched a boy fishing from shore land a nice rainbow and put it on a stringer," says the head of FWP's Fisheries Division. "Two guys in a boat who were drifting past started giving him a hard time about keeping his fish, which was perfectly legal and biologically supported by our regulations. I thought: 'Something is wrong with this picture."

One problem is that many

anglers now take it upon themselves to determine—and enforce through public shaming—which levels are appropriate. Ryce says that's where FWP comes in. "Each year we combine angler input with fish population and creel surveys to determine just how much harvest each fishery can sustain," she says.

If you want to know if it's okay to keep a fish, simply check the FWP regulations.

Another concern with "harvest shaming" is that it assumes a moral hierarchy in the an-



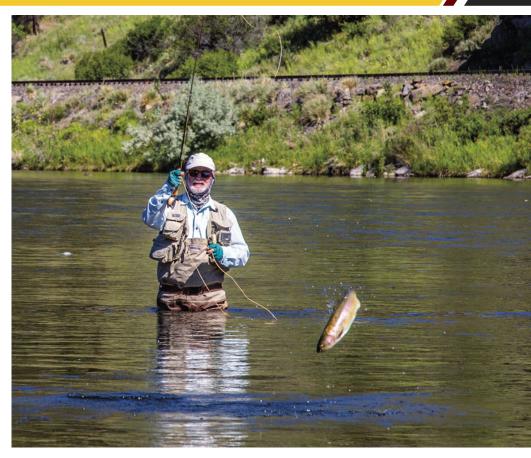
BUMPER STICKER BACKLASH Harvest anglers have responded to perceived prejudice with slogans of their own. Wrote one fishing site blogger about displaying the sticker shown here: "I just want to piss off the out-of-state fishers wearing \$2,000 of fly-fishing gear who look down on those of us who actually catch and eat trout."

gling universe, with dry-fly purists on top and bait anglers on the bottom. "But no single group of anglers has a monopoly on conservation ethics," Shattuck, the Native Species Program coordinator, says. "Everyone wants to do the right thing."

The right thing, suggest FWP fisheries biologists, might be spending more time helping them protect trout habitat (contact your local fisheries office for suggestions) and less time worrying about whether someone keeps a few fish for the smoker. "I know they mean well," Schmetterling says, "but fly anglers who scorn spin and bait anglers are just driving people away from fishing altogether. When you consider actual threats like aquatic invasive species, chronic dewatering, and climate change, that's the last thing our streams and rivers need."

A certain amount of catch-and-release definitely remains essential for sustaining Montana's renowned trout fisheries. Rivers can't support harvest levels like they did when Granddad and his pals filled their wicker baskets every weekend.

But not every trout needs to go back in the water. In fact, some fisheries could even benefit from additional harvest. With that in mind, anglers who follow regulations set by FWP fisheries professionals and keep a few trout can feel just as good about their actions as those who let theirs swim away.



SHARED PASSION Whether using a size 18 PMD emerger, a #3 Mepps spinner, or a piece of night crawler, all trout anglers love to catch fish. Some may differ on what to do with a trout after it's in the net, but all can agree that hooking a big rainbow, brown, or cutthroat is one of the great thrills of fishing in Montana.



Walleye start receiving the catch-and-release treatment

The walleye's sweet, bone-free fillets have long made it a food fish favorite. So it may come as a surprise that more and more walleye anglers are releasing some of their catch—and demanding others do, too. "I've seen it at the cleaning station when someone is filleting a 24-inch walleye and they start getting the stink-eye from other anglers or have rude comments thrown their way—even though there's no biological justification for letting that fish go," says Heath Headley, FWP fisheries biologist at Fort Peck Reservoir.

Headley says many walleye anglers commonly release large fish to "protect the prime spawners." In fact, reservoirs have plenty of eggs each spring from the tens of thousands or even millions of walleye swimming there. "What usually limits walleye numbers and average size is spawning habitat and decent water levels, not the lack of eggs," Headley says.



LET IT GO? A walleye this size is so old that, if released, it would likely die before another angler could ever catch it. As for egg production, most reservoirs don't need more walleye eggs; they need more walleye spawning habitat.

Canyon Ferry's walleye population could benefit from far more harvest, though of small fish, not big ones, says Adam Strainer, FWP fisheries biologist in Helena. The reservoir is swarming with 10- to 13-inchers. "If anglers want to see more fish over 20 inches, they'll have to start keeping a lot more of those little guys," Strainer says. The rate of released walleye has increased from 10 percent to 60 percent over the past two decades, while the average length has dropped from 18 inches to 13 inches. "If anglers don't start taking more small fish home over the next two years, there won't be enough food for fish to get bigger."

Strainer and Headley point out that the effects of walleye harvest differ from one reservoir to the next. For instance, Canyon Ferry is small enough and has enough fishing pressure for harvest to affect average fish size. "But Fort Peck is such a large system and fishing pressure is so limited that harvest isn't a factor," Headley says. "If some anglers want to release a big walleye there, by all means, go ahead. But if you want to keep a big Fort Peck walleye to eat or have mounted, you shouldn't be ashamed. In no way will that harvest affect the fish population or what anyone else catches down the road."