

restraint

One oily-rain night, while pondering way too heavily on what to eat for dinner, a buddy called me with a plaintive plea to help him unhook a Great Horned Owl that attacked his giant topwater plug. Kind of surprising given my imploding entombing that frequently infects me during the weekend, I grabbed pliers, scissors, a towel, and foul-weather gear and rolled over to the scene of the crime. No question of whether I should attempt to free the bird, no recoil, no shying away from the potentially nasty scene occurred - I just *went*.

So I arrived there 'bout 20 minutes after the call, found my buddy, and then he and I, in the urban darkness of the Port of Sacramento, scoured the bank for the poor bird. We found her, foot impaled by the lure, her hanging upside down from a bush, looking really tired and forlorn. I tossed the towel over her head, grabbed her legs, then addressed the wound - pretty bloody, for sure, but the ease with which I was able to remove the hook suggested it looked worse than it was. After freeing the lure and clearing the line, I righted her, still under the towel, walked her up to a flat, open field, then quickly removed the towel and reintroduced her to freedom. She immediately flew away but alighted about 100 feet away from us. She'd thrashed a lot in the brush before I rescued her, and we'd feared she'd damaged her wings in the process. However, her wings seemed to fold back neatly, suggesting that her short flight was more due to exhaustion rather than injury. She did hop a little bit, favoring the injured foot - no surprise, since it likely hurt after having a 2/0 hook shoved into it. She then lifted up and flew again to a thicket, where she perched and chilled and, we hoped, regained her energy and began the healing process so she could once again be a successful hunter of the night.

My friend, good guy that he is, felt fucking awful, hence his call not only to me but also the cops and his mom. It absolutely was not his desire to catch and harm that bird. While his goal was to catch *fish*, he would've preferred to not harm the aquatic vertebrates, too, or to at least minimize the harm while regaling in the glory of a well-caught fish.

In a jaunt up to Folsom for post-spawn spots, man, I fucking crushed bass that'd pinned a big threadfin shad school in a narrow, shallow cove. While spotted bass were the dominant species, a few bigs were mixed in with the more streamlined model, so I kept catching the spots, wading through 'em until getting three biggies, reaffirming a pattern I discovered at Rancho Seco during summer when bigs busting threadfin annihilated the little Sammy to the near exclusion of other lures. Once I did reach that mark - the third largemouth - and acquired a good shot for the Pornfolio, I just kept casting - and catching - both species, despite now having plenty of proof that I had the pattern down, a pattern I'd already established in other waterways and years, a pattern for *both* species. I was like an automaton, a robot, albeit a robot reveling in the success. It was real fuckin' easy getting the spots and bigs to crush the Sammy, and I guess it'd been so long that I'd had such easy, explosive action that I had quite the empty cup to fill before I felt I was satiated. There hadn't been a damn time on a personal trip in the previous several months before Folsom where I didn't work my ass off for a few great fish - native cypriniforms, the main target, are quite the fuckin' stubborn, difficult quarry. Shit, even when on the Delta, I'd yet to be gifted with ideal conditions - I'd earned every single damn centrarchid I'd nailed out there. I guess, too, since it'd been, God, over two years since I'd thought about and targeted spotties, I really needed a lot more fish than normal to feel intimate with the species again. And intimate I got - many, many times, I caught myself talking to the fish. I do have to say that except for two spots I killed, the third topwater big, and one beautiful bull 'gill, all fish - and there were a LOT -

were fought very quickly, never removed from the water, were only caught on artificial lures, and were unhooked delicately (*i.e.*, I employed sound catch-and-release practices), rendering the continued catching seemingly harmless...save one of the last spots. That one spotted bass, unlike the dozens of others, woofed down the Sammy a bit too much, causing the hook to pierce a gill arch that subsequently gushed blood. Regardless that I played the fish quickly, never exposed to her to air, and had her dash out of my hands after unhooking, the profuse bleeding was a sign that I just released her to die.

Shockingly, on a Thursday day off, I managed to wrangle myself out of bed before 4 AM, zoom off in the cover of pre-dawn darkness to Cache Creek, and immerse myself via the rod in its flashy, roily, warm waters ostensibly for hardhead but happy with whatever species she chose to gift me. She gave me half a fuckin' dozen: the requisite hardhead, a mirror of a foot-and-a-half squaw, a big ol' hitch, a big sucker, a ~21" channel (unwanted on the light-power gear), two thick ol' white cats, and a reminder of temperance. The cypriniforms were absolutely exhilarating, all stunning, all reaffirming previous experiences. The minnows, consistent with every other fucking time I caught 'em, all chewed my well-drifted baits with the sun off the water - the hitch, the hardhead, the squaws, all backing up experiences I've had during summer on Putah, on the North Fork American, and on Cache itself. The sucker was the last of the four to drown my float, sun on the water but still early in the post-dawn morning, similar to Putah in previous years. Also consistent with light sensitivity - despite probably three, four additional hours of drifting baits in the right type of habitat in the searing sun, a good-sized cypriniform never again adorned my hook. The cats broke the drought by burying my float in deeper water, but as far as non-adipose-finned fishes, only baby squaws bothered my baits during the day's apex.

I fished the entire day with a worm chunk impaled by a tiny barbless baitholder hook, a rig that, especially when hung under a float, nearly always yields a lip-hooking and, if taken too deeply and needs to be cut, very likely poses little risk to the fish. Of the four big cypriniforms, the three cats, myriad little smallies and small squaws, in only one fish - a yearling squaw, the last fish I caught - was I not able to get the hook out cleanly. The poor guy likely got the point in a gill arch since he was bleeding moderately after I removed the hook, albeit he stayed upright and swam out of my hand on his own power. Tellingly, at that scene chiseled into a rock was a petroglyph of a bow-and-arrow hunter backed by what I assumed was his wife and overlooked by an eclipsed sun. Was it a bona fide carving by a long-gone human from a culture that lived in assimilation with Nature rather than in domination, or was it from some drunk fuckin' white dude pecking at the stone to fool suckers like me? The latter isn't unreasonable since I was only a mile or so, albeit a tough mile, from a two-lane highway. Regardless who bashed it out, I felt that finding that image coincident with a bleeding little squaw signaled that that was enough - I put the rod down.

Most conscientious fishermen, decent guys and gals that want the glory of conquering and possessing a slice of Nature's wild, believe that playing catch-and-release, when conducted well, is harmless. But that's just a pipe dream, a ruse, as the above examples illustrate. Every time we decide to pick up a rod and fling something with a hook in it, we also implicitly choose to maim and possibly kill regardless our intentions. I damn well might've released a soon-to-be-dead spotted bass that is now gone, forever unavailable to me when I really may need the meat, let alone being able to contribute to the population by spawning again. The chance of that little

pikeminnow surviving the gill-arch puncture, reaching adult size, and then becoming a worthy subject for a predatory pursuit is pretty fucking unlikely. And the owl - fuck, man, it's not unreasonable to imagine the hook wound becoming infected and subsequently killing the bird. Bottom line is that mortality and/or injury rates *always* exist when catching and then releasing fish (e.g., Meka 2004, Taylor *et al.* 2001, Nelson 1998), even if the method is with a barbless fly on heavy line and the fish is never removed from the water. I recall a conversation with Oregon Department of Fish and Wildlife biologists who lifted gear restrictions on steelhead because bait guys would catch two a day, kill 'em, then leave, while fly/lure guys would catch up to 40 fish a day, release 'em, and end up killing more than the gut-hooking bait guys because the survival rate of lure/fly-caught-and-released fish was 80 percent. If enough catch-and-release occurs with a population, even very low mortality rates can have a substantial population-level effect, as estimated with East Coast striped bass (Tiedemann and Danylchuk 2012). Additionally, as in my friend's case, an unexpected casualty may occur. Thus for those who care about fishery health *and* Nature's health, a sensible limit to caught-and-released fish must exist, some number for that atavistic impulse to be sated while minimizing probability of death and injury.

One approach for garnering a number that would signify skilled fishing prowess would be to see how well a fisherman's catch compared to the proportion of catchable fish - in other words, those fish willing to eat (or in the case of non-eating river salmon, those willing to attack). For example, if five of 10 largemouth bass inhabiting a rockpile in spring during morning are willing to eat crawdads, and a guy catches those five biggies with a crawdad-imitating lure, then that guy is the ultimate example of prowess - he actualized the potential maximum catch. However, knowing the requisite numbers to gauge a fisherman's catch is nearly impossible. In the above example, the following numbers would have to be known: the population number of fish in the habitat; the number of fish willing to eat/attack in the habitat, which is a function of water temperature and gut fullness, the calculation of the latter of which is itself a serious impracticality; stress levels, the higher of which will decrease the proportion of willing-to-attack fish; and no doubt many others. Result? This assessment's beyond impractical.

A second approach would be to see how a guy's catch rate compared with that of average fishermen, but this method blows, too. First, published hook-and-line catch rates, garnered by creel surveys and nearly solely for sport-fish species, are virtually unknown - I think I've run across two in California, one for kings and one for sturgeon. Data for most species and situations are simply unavailable for contrast. Second, catch rates are often based on an unrepresentative population of fishermen that don't appropriately compare to many other line-dunkers, especially those that chase fish in a stripped-down guise. Is it fair to say that *three* striped bass some boat guy staring at his fish-finder jigged up by following some other fish-finder-following butthole is reflective of more predatory prowess than a bank guy restricted to far less area banging *two* nice fish while stalking a shallow tidal feeder creek? I've little doubt that my catch rate for kings on the lower American is lower than the average fishermen while I absolutely understand the species better - the disparity in catch rate is because the typical lower American guy is fucking snagging his fish, not tempting 'em to attack. Third, the core relationship in fishing consists of two parties - fish and fisher - and it seems inconsistent to bring a third party - other fishermen - into what is otherwise a binary interaction.

A third approach is using the ideal of a pure subsistence fisherman and his required daily caloric intake - atavistic, purely wild, and without another person in the equation. Assuming need for 2,000 calories a day and about 540 of those calories needing to be fat (given protein intake exceeds daily requirements) that would be derived solely from fish, simple math yields

number of fish needed per size class to meet daily nutritional requirements (I'll follow fishing-tackle conventions for fish size classes: light power, medium power, and heavy power). Say, for example, the target is stream trout that're averaging about 14 inches and weighing nearly a pound (*i.e.*, light-power fish). If the fish are field-dressed (*i.e.*, meat yield is just a little less than whole-fish weight) and fat per fish is about 130 calories, then a stud'd need to catch five 14-inch trout to meet his daily fat needs. When the light-power fish are smaller, such as bluegills or crappies, half a dozen fish seems a reasonable choice. If the prey is a medium-power fish that averages about four pounds, such as striped bass and channel catfish, that're best filleted (*i.e.*, meat yield is roughly 40 percent of whole-fish weight) and have about 100 calories of fat per pound, then you'd need to catch at least four fish to meet and exceed 540 fat calories. In the case of heavy-power fish, sturgeon and king salmon, it's needless to do math - one of those fish a day's more than enough.

I have a hard time imagining a prehistoric wild man, the ghost we emulate when out playing at fishing, not smiling to himself in contentment at day's end when he had a stringer of five fat 'bows glinting in the evening light, or when his four chrome schoolie stripers on the bank contrasted with the ochre sand and emerald tules, or when his single blushing three-foot-long king salmon colored cold, clear river water a vivid red while bleeding out. We should be content with the same when playing fishing.

REFERENCES

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An *ad hoc* literature sweep on worst-case-scenario catch-and-release (deeply hooked fish caught bait-fishing where the hook was removed) mortality rates pretty consistently gave an average of about 1 in 5 fish caught dying: 20%. Four multiplied by 0.2 is less than 1, and if better catch-and-release techniques are used than the worst-case scenario, then, on average, the chance of one of those four fish dying is real fuckin' low.