

searching through the veneer for salmonidae

I will forever be entwined - whether I like it or not, regardless where my home is perched, totally unrelated to where I earn my cash - with mixed-coniferous forests, clear-water reservoirs, and the stinging, isolating icicle breath of western mountains from autumn to spring. It's Lake Arrowhead's fault, of course - so many aspects of my personality were crystallized among Arrowhead's gin water, the verdant pines and firs, the pure, alabaster snow, that such a setting, no matter its geographical location, feels like home. Allied with the mountain environment's trinity - snow, water, conifers - is a fourth defining feature, and a fourth that, perhaps, strikes most deeply into my soul among all the mountain's facets, a fish type elegantly adapted to the harrowing and harsh and beautifully austere mountain world: salmonids. A cold-water fish that happily feasts and breeds while snow blankets the slopes and ridges, while ice tendrils fork out from frozen riverbanks, while warm-water fishes such as smallmouth bass and common carp scurry to the depths to escape the lashing, angry, baleful swings and swoons of the cooler seasons. A cold-water fish exquisitely tuned to the changes in river flows, to the snowpack's melting, to epilimnetic cooling and subsequent autumn turnover. A cold-water fish that I knew intimately, in isolation, in lovely dichotomy when alone on the mountain's lakes and reservoirs - Gregory, Arrowhead, Green Valley, Big Bear. A cold-water fish with which I *still* maintain connection, albeit in adopted waterways such as Stampede and Deer Creek reservoirs and, in the case of anadromous salmonids, the Trinity and Mattole rivers. A fish with which I play a life-or-death game, a reenactment of an ancient rite, a rekindling of the primitive passion play between a human hunter and a wild prey.

The problem, however, is that the prey ain't what it used to be. Domesticated and mongrelized and hybridized to a mutt barely reminiscent of the wild animal it once was (*e.g.*, Pearse and Garza 2015), California's modern salmonid is mostly a vestige, a ghost, a simplified facsimile of what was once a carnal, wild, worthy prey. From the idea that white men's rapacious desire for salmonids exceeded the bounty that Nature could provide, early fisheries workers felt that only with helping human hands could the want for salmonid meat be met. The result? Hatcheries. Hatcheries were considered such viable population boosters that they were assumed appropriate replacements for the steelhead/salmon-producing natal streams forever denied ocean-going fish by dams. Enthusiasm for hatcheries led to planting of previously salmonid-less waterways with both native and non-native trouts and chars, regardless whether the waterway was capable of supporting wild populations, and into waterways totally unlike ancestral habitat: fucking urban ponds, canals, flat-land water-supply reservoirs, and sterile, stream-less alpine lakes. With little or no understanding of homing or local adaptation, agencies transferred California-native strains into alien watersheds (Pearse and Garza 2015); genetically distinct runs were crossed unknowingly. Incredibly rapid artificial selection rates in hatchery fish (Christie *et al.* 2016) coupled with high straying proportions (*e.g.*, Austing and Null 2015) and subsequent introgressing of hatchery- and wild-origin adults (Pearse and Garza 2015) basically eliminated local adaptations - eliminated native anadromous *salmonids*, really - and reduced life-history strategies (Williams 2012), sacrificing salmonid ability to weather tough times such as droughts and shitty ocean conditions (Satterthwaite and Carlson 2015). As increasing water development rendered more and more juvenile salmonid habitat inhospitable, fisheries agencies began trucking young salmon to the ocean, bypassing poor river habitat but furthering species homogenization by escalating adult straying rates (Satterthwaite and Carlson 2015). As an added slight, hatchery workers often spawned one male with several females,

thereby decreasing effective population size and genetic diversity (Abadia-Cardoso *et al.* 2013), further tarnishing anadromous salmonids by bequeathing greater susceptibility to killers such as food-poor oceans and diseases. The consequence of all this human interference in salmonids is that, today, there really is no such thing as a native, wild California salmonid: the wild wolves have been subsumed by domestic poodles, the guileful elk have been superceded by tamed cattle.

Such degradation of a once-fine fish certainly throws obstacles in the path of a fish Romanticist pining for a wild battle in the pines with an appropriately wild fish.

When I first started casting a line at the tender age of 10, the first trout I caught were hatchery-bred, put-and-take rainbows dumped into water-supply reservoirs or other human-created waterways. Castaic. Pyramid. Fucking Apollo Park in the desolate, depressed Antelope Valley. Littlerock Reservoir. Among burnt chaparral hills or within flat, debased desert, the blunt-finned, dumb, bewildered 10-inch hatchery trout was my first personal experience with a salmonid. It seemed, frighteningly, *normal* at that age, those domesticated hints of wild long gone - I remember being shocked that largemouth bass and bluegill in Pyramid *weren't* stocked but persisted without any deigning help from man. That any fish could survive without man's intervention seems fantastical to me now, 30 years later, but, back then, it was a logical conclusion for a kid raised in the stolid, sordid, human-centered and -created suburban world.

I don't remember the exact moment I began to question the aesthetics of pursuing hatchery-bred trout, no epiphany shattered my narrow perceptions and revealed that something was amiss in driving to a roadside waterway and dumping PowerBait and filling a stringer within minutes, but the realization reached fruition in early adolescence when my revulsion at hatchery trout breathed its first breath - I wrote a nasty missive about put-and-take fish to *Western Outdoor News*. The timing of that realization, my early teenage years, is no surprise given the social and physical changes and new realities emerging in that period of life: everything was suddenly ambiguous, open to question. By 14, 15 years old, I'd actually caught a few wild trout and so had a reference point with which to compare the put-and-take fish that had previously been my dance partner. Digging through my mind's cobwebs, I believe the first wild salmonid I ever held in hand was a beautiful, spooky little rainbow trout inhabiting lovely, intimate Seeley Creek. What a world apart Seeley's trout were from the put-and-take world - full finned, shy, and hard to catch, Seeley's fish looked more like sharp-finned golden trout than the pasty globs of lazy flesh that comprised put-and-takers. Around the same time, I also caught wild trout in the Mt. Whitney area and in Deep Creek - not only 'bows but also brownies and brookies. Like the Seeley fish, these wild trout also required a bit more savvy to hook than their hatchery brethren. The consequence of these new experiences was that I stopped fishing for trout in my local mountain lakes and instead focused on self-sustaining, albeit non-native, fishes: black crappie, largemouth bass, and catfishes.

By my late teens, however, my moratorium on hatchery fish had softened. It was, again, Arrowhead's fault but also Green Valley's; more importantly, it was autumn's fault. Come autumn, come the disappearance of the cockroach tourists, come the stinging chill of the mountain evening, the hatchery truck vanished, its load of debased, domesticated fish evaporated from the mountain. The lakes cooled, and with that cooling came holdover rainbows, full-finned, rose-banded, big, and totally unwilling to eat a fucking chemist's doughy concoction. No, these fish, while born in a hatchery, *behaved* as if they were *real* trout - they were spooky, they required skillful presentations, they required either natural baits or lures imitating natural foods, and they required a reasonable understanding of lentic dynamics. Put another way - the

holdover, hatchery rainbows within the austere cold of autumn and winter mimicked a more wild hunter-prey interaction than put-and-take fish thrown into summer's warm waters.

As I grew into my 20s, whatever aversion I'd had for hatchery fish had totally eroded. Part of it stemmed from my tenure in Portland. Oregon was a totally foreign world to me, scary, and I desperately needed some type of familiar experience to provide some grounding - catching put-and-take rainbows in shitty urban waters fulfilled that need. My time in San Diego likewise quelled my ethical concerns: a few drinking buddies were interested in learning to fish, and I could think of no better introduction than put-and-take trout. A similar drive existed when I moved to Davis, where my friend Tom had never caught trout until I took him to summertime Sly Park and piles of dumb, fin-eroded 'bows. I'd also justified it to some extent since you still had to do a few things to catch put-and-takers with any regularity, namely using very thin line and sliding-sinker rigs.

But the pendulum began to swing back to aversion around the time I hooked up with an enlightening, lovely lady in my mid-30s. My relationship with this one really significantly altered how I felt about hatchery trout in two ways. First, she was a "conscientious eater" - she restricted her diet to foods that weren't awful for health and that didn't rape the land. In the case of put-and-take trout, she accurately equated hatcheries with factory farms or feedlots, none of which is good for either the animal being raised for slaughter or the surrounding land and water receiving the feedlot/hatchery's waste. Given that slant, fishing for put-and-take trout became analogous to hunting fucking dairy cows - it just was no longer a meaningful interaction between hunter and hunted, it no longer felt as if I was accomplishing anything by limiting on 10-inch, PowerBait-gobbling planters. The second prong was more indirect but perhaps struck a little deeper - it was a question of aesthetics. The lovely lady was an amazing visual artist, whether the media was a camera or a piece of sketch paper. From her, from her art, I absorbed a heightened sense of visual aesthetics, especially the capture of the true *wild* in photographs. Put-and-take fish, what with their bloated, battered bodies, with their deposition into human-trampled waterways, with their ridiculous ease of capture, were simply poor representations of that non-human *other*, of Nature, of a worthwhile prey. Both the fish and the environment were too fucking domesticated, too industrial, too modern to really touch on an authentic level the atavistic pulsing and pumping of a well-conducted hunt. It also didn't help that my skill as a fisherman began accelerating around the same time and concurrent with earning two college degrees in aquatic sciences - however easy hatchery trout had been captured in the past paled to the effortlessness I now paid to put blunt-fins on a stringer.

And so the discussion, the conflict, about what type of salmonid is worthy of chasing with the rod and lures has resurfaced here in Davis, where more salmonid species and life-history types (*e.g.*, anadromous fish) reside than in the San Bernardino Mountains and thus greater, more insidious hatchery effects exist. This second round of moral qualms regarding salmonid fishing, what with the broader consciousness that middle age provides relative to teenage years, has revealed that it's really also about Nature's domestication, of the greater world that salmonids inhabit. The questions are myriad: is there a point where hatchery fish become worthy opponents? Does context affect the hunt's value, with some waterways providing a more authentic experience with hatchery fish than others? Is there a temporal component? What salmonid, what environment, does my conflicted ass need to feel like it's acquiring something worthwhile from the hunt? By what do I measure these facets of the relationships among salmonids, salmonid environments, and *me*?

It's especially pressing because, as I type this, autumn is here, brownies and 'bows and lakers and cutt's are rising to lake and reservoir surface waters, while kings and steelhead infiltrate rivers still open to the ocean, and I gotta immerse myself in these opportunities somehow.

One bookend, obviously, is wild, native trout in untarnished watersheds, a condition, a situation that really doesn't exist in California. Perhaps the closest any region/species comes to this pristine ideal is golden trout in the upper Kern River watershed, or maybe rainbows in the Warner Wilderness. Ironically, the most primitive, the most *real* salmonid experience I've had has been outside California, namely Alaska, what with that state's chums and pinks and silvers and grayling all running through rivers resembling closely their forms from thousands of years ago. Nevertheless, both of these scenarios, these locations and fishes, point to two explicit prongs necessary to really feel like salmonid fishing is primal: the fish and the setting.

Ideally, native trout would appear the most worthy opponent - a fish exquisitely adapted to its habitat, surviving through the tumult of Nature's wrath and warmth through endless years - that's a tough fish, that's a well-earned fish if hooked with care and grace. But in this state, "native" is often an empty term - so many native trout, whether goldens high in the Sierra, steelhead swimming in the Trinity, or rainbows bangin' around in the upper Sacramento watershed, have been diluted by hatcheries. And native salmonids, such as kings, dependent on hatcheries are really domesticated fish - adapted to concrete and children feeding 'em pellet food, hatchery smolts bear less *wildness* in 'em relative to non-native trout, such as brownies in some locations, that've had myriad previous generations fighting it out in actual streams, in lakes. Put another way - how "native" is a native salmonid if a substantial portion of its life is blown in raceways and is reflected in its genome after countless generations (Christie *et al.* 2016)?

About the closest any salmonid can get to *native* in this state is *wild*: a fish spawned, reared, and matured - in a stream, a lake, some waterway other than a fucking raceway - all by itself. That's a fish that's weathered changing stream flows or temperature regimes, that's avoided dopey PowerBait dangled maladroitly from treble hooks, that's eaten real aquatic food such as bugs, such as zooplankton, such as crawdads and fishes. It's a fish resonating with its environment, successfully, such that a fisherman, too, has to feel the pulse of the watery world to really have much of a chance of hooking such a fish. *Wild* does not discriminate between native and non-native salmonids: it's reasonable to assume that a brookie derived from a stock planted 100 years ago has adapted to survive in and thus reflects its environment nearly as well as a "native" California 'bow swimming in its natal stream.

Then why did those holdover 'bows that ate my carefully crawled, hand-tied olive marabou jig in the freezing winter waters of Big Bear Lake, encircled by snow, by pines, by stolid granite, feel so *right*? For that matter, more recently, why did those holdover 'bows in Rollins that plowed my bounced Krocodile just last year feel like such an accomplishment? Why did those big hen 'bows in Sly Park's autumn austerity make me pump my fist in ecstatic elation? I mean, fuck, man, these fish had only been in the waterways were I hooked 'em for, at a minimum, six months - far less time than the generations of fish I'd captured in less accessible streams or still waters.

It's related to a second prong of what defines *wild* - not genetics, which presumably have molded wild fish into what the waterway has required, but *behavior*. Hatchery fish in general are dumb as shit, but I find it hard to believe that in that mongrel horde variation in learning is totally absent. Most put-and-take fish are caught within the first few days of planting; it's reasonable to assume that those that persist beyond that time, especially those that've been in their adopted

waterway for several years, such as the four-pound holdover rainbows I've bagged in Sly Park and Stampede, are within the right tail of the learning bell curve. This difference is further reflected in diet: newly planted fish often have the most senseless non-foods in 'em, such as cigarette butts, sticks, rocks, and male pine cones, while holdover fish contain identical foods to their wild brethren - bugs and fish. Additionally, holdover fish are often mixed in with wild fish, a situation I've experienced myriad times in Big Bear, in Stumpy Meadows, in Prosser Creek Reservoir and Stampede. Further, in those waterways without wild populations - Lake Gregory of my youth's a good example - there comes a time when the only hatchery fish remaining are holdovers that will not touch a commercial bait. Planting of Gregory ceased, if I remember correctly, in September - by January, the only baits you could bag trout on were nightcrawlers and roe. Thus the gist is this: the skills needed to hook these wizened holdover salmonids are identical to those used to garner wild fish.

But if the evidence, in part, to gauge the value of holdover fish is wild-fish presence, then the requirements of wild fish have to be present - this is where the environment, where the waterway, where the theater of the hunt becomes important. With the exception of brookies and lakers, if the waterway is a lake or reservoir, it has to have a spawning stream. If it's a still water, it has to have cold, oxygenated water to house salmonids through summer. Those two criteria are met more fully the one climbs in elevation, although the big foothill reservoirs such as Berryessa and Shasta sustain holdover fish. Of course, Berryessa and Shasta, and higher-elevation reservoirs such as Stumpy Meadows and Stampede, are artificial - they're man-created, not Nature-created. Nevertheless, they contain features that mirror the now-drowned river, even more so than the rivers downstream of the dams. For example, the reservoirs, mainly those used for water supply, have stages that more closely resemble the river's ancestral hydrograph better than the river flowing downstream of the dam: the reservoir's stage increases in winter, reaches a max in spring, and then declines through summer until bottoming out in autumn. Similarly, the temperature profile of the reservoirs follows the air, the seasons, being hottest in summer and coldest in winter. Conversely, rivers below the dams are often flat-lined in both flow and water temperature - they're homogenous environments, reflecting little the change of the seasons. When the volume of the reservoirs increases dramatically in winter and spring, big plots of terrestrial land get flooded, resulting in a bloom of aquatic productivity - just like the floodplains of the rivers used to be before they were leveed off. So, ironically, mountain reservoirs, in this day and age of water development, actually provide dynamic salmonid habitat that throws out some worthwhile challenges far more than the tamed rivers below dam outlet gates.

And the rivers - the poor rivers, especially the anadromous rivers. Above the reservoirs, the rivers are the shit - they're the real deal, really the only vestige of what an experience with stream trout was like. But man, below the lower-most dams, especially in this watershed, *my* watershed, they're just - fuckin' wrecked. The rivers that still have anadromous fisheries are especially painful - the American, the Feather, the Sac. Leveed to shit, dead-line hydrographs, gravel injections, massive hatchery inputs (often of inbred fish), fucking smolt-trucking (at least for kings), urban/ag encroachment, and, perhaps worst of all, hordes of fucking classless, clueless goddamn fishermen. These rivers, ironically, relative to the manmade reservoirs, are more of a reflection of human activity than Nature. Fishermen trip over themselves to fish hatchery outflows rather than seeking out ideal flows, water temperatures, feeding or holding stations; river flows are more a function of dam operations than rainfall or snowmelt; sediment dynamics are more a function of tractors than erosion and deposition; and the adjacent lands, whether hoisting trophy homes or hoisting manicured agricultural fields - man, they're just

tamed. Digging through all this human artifice seems damn near impossible given its depth, its pervasiveness.

And it breaks my heart since, shit, man, salmon and steelhead, the methods used to catch 'em, the waters they inhabit, they're all so different than the small creeks and lakes and reservoirs I grew up with, making anadromous salmonids and waters novel, alluring. Additionally, the lower American and lower Feather and Sac below Shasta, they're *my* rivers, they're the last limbs of *my* watershed before finally meeting and returning, at least somewhat, to a more wild state, best represented by Suisun Marsh.

The first time I visited the lower American River for an anadromous fish was fucking awful, was just so fucking against the ideal, the purpose, of why the fuck I get out and chase fish. That initial experience that left me feeling fishing was so fucking wrong was notable given my ignorance: I knew nothing of flattened hydrographs or gravel injections or trucking juvenile salmonids to salt water. Anyway, it was the Sunrise access where this debasement occurred during autumn 2003. In evening light, I donned waders, trekked down to a tailout, and wiggled into a position downstream of several dudes on my side of the river in addition to several dudes on the opposite side. Kings breached frequently as I bombed my big Spin-N-Glow on a really salmon-underpowered medium-light rod. Given that all I knew about salmon was gleaned from reading about 'em while living in Portland, I was utterly perplexed by the rigs tossed by my fellow fishermen: insanely long leaders with tiny fucking beads. Curious. I received no strikes and caught no fish. The dudes upstream of me, however, at least "caught" a fish, and, remarkably, the same one - one guy on my side of the river snagged the king in the face, while a dude on the other side snagged it in the ass. They fought over it, both with their rods and their words, cursing, bellowing, and thereby driving me from the fucking scene. Dudes fighting over a snagged fish just seemed fucked up.

I left and never, ever went back to the American at Sunrise for kings - and, again, this was *before* I understood how degraded anadromous salmonid management in California was - is.

However, I did return in winter 2012, with both more appropriate equipment to the task (this time steelhead were the target) and much better understanding of salmonid debasement. The experience, recalling it now, was gratifying, pleasant - it was good hunt. It occurred at an access point well below the hatchery on a weekday, in the afternoon, well after the general steelhead opener on January 1. My goal really wasn't to chalk up another fish on my headboard - it was more about learning how to fish pretty heavy-flowing water. While much of the lower American resembles a slow-flowing slough from historical diking and channelizing, skeleton, unbridled river features still exist in some sections: mid-channel bars, riffles, chutes, tailouts, and, yeah, big, slow-flowing pools. Variety. I felt that sifting through that variety with metal lures - spoons and spinners - would help round out my skill set. Armed with some knowledge about steelhead in relation to water color and temperature, I chucked a black-and-gold spoon at edges between fast water with a broken surface and softer near-bank water given a temp of 48°F and not a smidgen of turbidity. The reading of the current; the attention given to my rod tip and the vibrations transmitting from the spoon, through my line, and to my hand; the willows wafting in the soft, unseasonably warm winter breeze; they all conspired to set my brain back a bit in time, to return somewhat to that primitivism. That primitivism reached a paradoxical height when I felt a solid thump, saw a flash of silver, and then witnessed five pounds of hen steelhead racing and jumping in heavy riffle water. I managed to finagle the fish to shore, tailed her, and then, thinking more of meat than anything else, desperately hoping *not* to find an adipose fin, I looked and didn't. Consequently, I got of a few good hero shots and then killed her - my first

steelhead. I continued slinging metal into the river until sunset, after which I traipsed back to the car in isolation and in dying light.

Those few hours in winter 2012 were quite a fucking world apart from those in autumn 2003. And, really, the biggest reason wasn't hydraulic diversity, although it helped - the Sunrise access has some riffly stuff mixed in with the slow tailouts and frog water. It really wasn't that I caught a fish, it being hatchery spawned notwithstanding (particularly since the ridiculous straying rates of hatchery fish results in interbreeding with wild-spawned fish such that the two types are indistinguishable genetically). It was, and which is the third key to having a meaningful salmonid fuckin' hunt in this state in this modern age - lack of people. Before I ventured to the American for my steelie, I checked the Internet fishing message boards to see where people were catching steelies. Figuring that with the increasing proportion of time, fuck, man, of experience, of *life* spent in the glow of electronic screens, and assuming that increasing technological reality was inverse to *actual* experience with non-media-mediated reality, most fishermen would be where technology *told* 'em to be. I ran across not a single mention of the reach I fished, and, as my visit affirmed, no Internet report equaled virtually no people. I remember seeing only one other dude fishing the mile or so of river I fished, and that guy was a plunker on a mid-channel bar - even with a heroic cast, I couldn't reach the water he was working. In other words, lack of people meant I could *breathe* a little bit, that I could engage with the river and the fish more completely - I wasn't shoved into a tiny chunk of water by a bunch of fucking flossers flogging the same fish over and over and over again. I didn't have some leering fucking asshole running over to the slot I nailed that steelie. Shit, man, unless some homeowner on the river-right side of the river was checking me out with binoculars or a telescope, I didn't have *anyone* spying on my doings.

It was, then, in that sense, getting more to that primitive core, even if so much of the environment - the fucked-up river, the houses on the opposite bank - was domesticated. Even in that trashed landscape, where, over the levee, the fucking asphalt and concrete and waferboard of suburbia expanded seemingly endlessly, a vestige of wild still remained. The skeleton of an unbridled river. A fish that at least had to survive in the ocean for a year or two and then make it back to the fucking river. And a wonderfully freeing paucity of people. Not only do the fish have to at least *pretend* to be wild via their behavior, not only does the environment need to have some wild left in it, be it a natural stage regime or riffle-pool-run sequence, but people have to be either sparse or absent.

And so now, November, as the cold air whips and rages outside, as snow falls on stately, emerald pines and firs, as rivers rise and fall and concomitantly turn brown then green then clear, the shards of a skillful salmonid hunt exist in the cracks and gaps of human civilization. In the deafening silence of a deserted autumn mountain reservoir, along inaccessible river reaches with bends and chutes well-removed from hatcheries, where wily wild brown trout and brook trout and wizened holdover rainbows reside, humans are absent and atavism's alive.

For now.

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