

HEISENBERG'S TROUT

S. C. Bachus

For many California trout anglers summer is a time of hibernation. With the end of May the hills put on their tawny mantles, our fishing rods are stored away and, as our ursine friends do in winter, we closet ourselves inside our homes, waiting for the first early autumn cold front. We have learned to fish the edges, not only along the banks of our streams and lakes, but of the seasons as well. Spring and fall are the angler's edge months. They are the time when trout fishing is at its best.

So, this July as the temperature went well into triple digits in the interior Coast Range, I decided to take advantage of some fishing downtime and get my tackle organized and cleaned up a bit. Rummaging through an old lure box, I came across a forgotten lure from the 1950s. It was something called a Daredevil, probably no more than a quarter ounce of spoon-like metal. It had once trailed a treble hook, however, two of the trebles had been clipped off, and the barb on the third hook had been pressed down. That was my father's work. He always carried a little pair of needle-nosed pliers when he went fishing, so that all his lures carried only a single barbless hook before they hit the water. He also was a master at using those little pliers to unhook and release wild trout without removing them from the water. I looked down at the old Daredevil from which Dad had probably released hundreds of little brook trout. He was a dedicated lure fisherman, but in all the years we fished together I never saw him kill a trout.

If it was my father who taught me how to release fish, it was his mother who taught me how to catch them. I remember in a respectful way, how he jokingly hinted that my grandmother was probably part Cherokee, when I told him that on my first fishing trip with her she admonished me that, "If you want to catch trout, you have to fish like an Indian."

We were up on a little willow-choked stream that eventually found its tenuous way into Butte Creek. She had me get down on my hands and knees and crawl within a couple of feet of the water. She kept quietly repeating, "Move slow, move real slow". And then, "Don't get so close that you can see the water. If you see the water, the fish will see you." So, from the start of my angling life I learned the importance of stealth. I learned how to come upstream behind the fish, always seeking cover behind a boulder or tree trunk. That's how I caught my first brown and brook trout. Brightly colored little fish that my grandmother called "natives".

But, as my father would later point out, those little brookies and browns, and even the high-country rainbows, were not "natives". I remember sitting with him at the campfire one evening on upper Slate Creek, a little seasonal stream whose snow-fed waters eventually end up in the Feather River. Earlier in the day we had hiked down Slate to Panhandle Creek and came into a nice of run of brookies. It was getting toward Fall and most of the undersides of the male fish had turned the bright crimson-orange of

spawning time, which caused me to assert with the omniscience of a 15 year-old, "Native brookies sure are beautiful compared to the dumb hatchery fish we get back in Marin County."

My father looked at me and smiled, "Well, son, I agree with you that hatchery fish come out of the truck a bit dim-witted, and they certainly are drab looking when compared with the pretty brookies we got today. But those little fish we caught out of Panhandle are not natives, and they aren't even trout. They are charr, and they never occurred here along the West Coast naturally. That's the reason folks call them Eastern Brooks, 'cause they were originally native to streams in New England and the Appalachians. Most likely the ones we caught today were planted here by the CCCs during the 1930s."

"But, Dad, what about those brown trout we get up on Big Butte?", I asked.

"Same thing. The CCCs put browns in a lot of the California streams during the Depression. For just about any stream below 6,000 feet, like Soda or Butte creeks, if a CCC trail goes to it -- you know, the trails with the special blaze I showed you -- then you'll find brown trout. They won't interbreed, though. Browns mate with browns, brookies with brookies, and rainbows with rainbows. Think about Yellow Creek. You've seen your grandmother get all three species out of the same stretch of water. They're just like humans, if they got enough territory to survive in, everybody seems to get along."

*** *** *** ***

Over the years my father's words stayed with me. Three decades later in the 1980s we were on what was to be his last trip to Yellow Creek. The Forest Service had pushed a road around the caldera-like basin that forms the stream's headwaters near Humbug Summit. With the presence of the new road, we seemed to have little hope for much fishing luck. Finally, we spotted a long-abandoned logging spur that dropped down to the creek. A dead-fall had been blown down across it and blocked anything with wheels. We carried our gear down the spur to the creek, found a stand of tall old firs, and laid out our campsite in their shade.

After camp was set up, my father pulled out a book and said he might read a bit, adding, "I'm a tad tired from the ride up here, but why don't you wet a line. Don't forget, this is where your grandmother could catch browns, brookies and rainbows from the same hole."

I picked up my rod and replied, "*That*, Dad, is a serious challenge. Do you really think after all these years I'm going get three kinds of trout out of this beat-up little stream. Heck, I'll be lucky if I even get a rise. It's probably been fished to death."

My father didn't reply – he just smiled and pointed upstream.

I found a deer trail above the campsite, which paralleled the stream along the shady side of the canyon. After following it for about a quarter mile, I climbed up a manzanita-covered rise. From its top I could look down on a large pool that had been formed where an ancient fir had toppled into the creek, probably during one of the many storms that had made for a heavy previous winter. With not a small amount of surprise, I could see what appeared to be small trout swimming at the shallow head of the pool, where the water ran in from an upstream riffle.

Well-learned from my grandmother's tutoring, the angling rules of engagement were clearly defined. A young cedar along the bank at the head of the pool would give me sufficient cover to get at least one of the small trout without disturbing any fish that might be holding in the deeper water downstream, where the fallen fir had dammed an already well-scoured hole. I crept out of the manzanita and crawled another 15 feet to the cedar. Looking through its branches, I could see several fish feeding at the head of the pool. They appeared to be picking small insects off the top of the water. As one of them turned on an insect, I could see the parr marks of young rainbow trout.

This made sense. One of the first lessons my grandmother taught me was that rainbows tend to feed in the faster water of a stream, either at the head of a long pool, or at its tail out, continuously feeding along large stretches of faster moving water. In contrast brown trout, especially the older larger ones, hold at a single feeding station, usually against an undercut bank or in really deep water. Since the rainbows were feeding on the surface, I picked up my rod and tied on a dry fly called a humpy. It floats high in the water, and the small little version I had tied on had an underside of bright red. Over the years a memory came back to me – my grandmother cutting up a red bandana, putting the fabric on a bare hook, and pulling fat rainbows out of Little Chico Creek. She had looked over at me and exclaimed "See, these Chico Creek rainbows just love red".

From my position hidden behind the cedar, I blind-casted the humpy to where I thought the current coming off the riffle would bring the fly within range of the feeding rainbows. It did. One of the little fish hit the humpy just as I had picked up the slack from a rather inelegant cast. There was no need to set the hook – the little fish had already done it for me. Fortunately, the rainbow was small enough that I could pull him into the shallows just beneath the cedar tree, and release him without scaring off any of his brown spotted cousins who might be hiding in the deeper part of the pool.

Before moving to the deep water, I removed the humpy and tied on what has become my go-to wet fly, a small imitation golden stonefly. About 18 inches up the leader ahead of the fly, I pinched on the smallest split-shot I could find. I hoped the tiny little weight would get the stonefly submerged sufficiently that I could drift it by the feeding stations of any browns that might be holding in the deeper water near the fallen fir. Assuming that the struggles of the just released rainbow had pretty much spooked most of the fish at the head of the pool, I flipped the stonefly into the current and tested the speed and depth of its drift. The presentation looked reasonably natural. Then, in one of those serendipitous conjunction of events that makes angling the sport it is, just as the leader

straightened near the deep water at the end of the test drift, a large deer fly landed on my rod hand. I twitched my hand and in response to the resulting rod action, the stonefly did a subtle submerged jump upstream. Immediately, a fish was on. The last thing I wanted happening was for it to swim into the deep water, which would be a clarion signal to any resident browns that all was not well in their little aquatic world. But, mindlessly the fish turned and ran upstream straight at me. It was a smaller second year fish, and as I brought it into the shallows to release it, along its olive back appeared the distinctive vermicular markings of an eastern brook trout. It was a male, and his pectoral fins already were demarcated with the bright white fringes of spawning season. I released him and he hung quietly for a bit near the bank, letting his iridescent red and blue spots flicker in the fading afternoon sunlight, then he was gone.

As I crept into position to fish the deep water, it hit me – two casts and two species of fish from the same hole. Was it too much to ask that the deep water might hold a brown? Somewhere, I knew my grandmother was smiling. Again, I blind-casted upstream but toward the outer edge of the current, which turned to slack water as it neared the fallen fir. The drift slowed as the stonefly hit the slack water, and then stopped dead. Decision time – do I set the hook? Two possibilities presented themselves, either a brown had grabbed the stonefly and hadn't yet tasted the hook, or the fly had wrapped itself around a submerged root, always the higher probability. My decision was made for me. Almost imperceptibly the leader started to move back upstream. Roots don't move upstream, I set the hook, and immediately a sizable fish started to bull its way into the current. It felt large enough that I knew the gossamer-thin leader would be blowing free in the wind if the fish got into the fast water. Somehow I got it turned, and it shot upstream toward the shallow end of pool. The fish was mine. I played it out in the shallows, released it, and watched a mean, foot-long brown trout swim angrily away to the darkness of the deep water.

Later that evening, my father and I sat around the campfire, watching the shadows creep down from the canyon rim, knowing but not saying that this would probably be our last fishing trip together. After dinner he remarked that he wasn't too surprised that I had indeed caught three species of fish out of the same pool. Then his eyes brightened and he said, "You know what, I think we should celebrate – why don't we invite our old buddy, Jim, over?"

"Sorry?", I replied. I knew my father was not his old self, but up to this point he'd been in full command of his faculties. Nobody else had driven with us the 250 miles up from the Bay Area to Yellow Creek.

"I'm sure you remember our friend, Jim. You'll find him resting in the bottom of my pack. Bring him on over to the campfire. I know he'll be glad to celebrate your trout with us.

I went over to my father's pack, worked my way down to the bottom, and found an unopened bottle of Jim Beam that had been carefully wrapped in a hand towel.

Dad looked up and smiled as I returned to the campfire with Jim. “For medicinal purposes...”, he paused a bit, “...beats the hell out of the pills I have to take now.”

So Jim, my father and I talked well into the night. At one point the conversation turned to all the years we had fished for trout, and how the quality of angling had plummeted with the increasing population of the state. For some reason, Jim always brought out a morose side of me and I said, “It’s getting worse, Dad. There are folks out there that think everything that isn’t native to California should be exterminated.”

Dad chuckled, “Hell, what’s so bad about that? We can get rid of three-quarters of the population and finally get some of the fishing pressure off the water.”

“No, no, I mean they want to exterminate everything in the natural environment that wasn’t here before the Spanish arrived – plants, animals, fish. If it wasn’t here before 1769, root it out,...exterminate it in a nice little environmentally correct holocaust.”

“And because they’re environmentalists, they of course have science on their side?”

“Of course.” I replied. “How many times have you heard them intone ‘salmonid’, ‘anadromous’, ‘ecosystem’, ‘bio-diversity’, or some other shibboleth whenever they begin the prescribed tribal litany about California’s environmental rapture.”

My father looked at me guardedly. “You’re sure that isn’t our friend Jim here who is talking for you? Give me an example, let’s say, bio-diversity.”

“OK, easy.” I plunged on into something that was becoming a rather ugly tirade. “There are people in the environmental movement that would propose that if three species of fish are found in Yellow Creek, then, all the fish that aren’t native have to be exterminated. Rainbows are the only fish native to the stream because the CCCs brought in all the brookies and browns. And, here’s the kicker, the usual coterie of scientists from Davis, or Berkeley, or Palo Alto will be trotted out to justify the extermination – on the grounds that it will be ‘to improve the bio-diversity of the Yellow Creek ecosystem’. I mean, any fool knows that a stream populated with one species of trout is far more bio-diverse than a stream populated with three species – at least that is what they would have us believe.”

I quieted down as a smile worked its way across my father’s well-lined face, “My, my... sounds to me like a bunch of medieval scholastics have moved to Davis, Berkeley and Palo Alto.”

We were both silent for a moment. My father picked up a few dried out branches of manzanita, and carefully placed them on the fire. It burned low but hot with hardly any smoke. He watched the fresh fuel renew the flames. In the early night’s stillness the only sound was the creek as it tumbled down the canyon.

“Creek sounds nice doesn’t it? Always loved that sound,” he began.

“You know, son, three generations of our family have fished Yellow Creek, and the scholastics are right, the brookies and browns that we have caught here are not native. But they sure as hell are wild trout. They’ve been wild for each year’s spawn since the CCCs put the first batch in during the ‘30s. What’s that -- about forty or fifty generations of wild fish?. To say that the those browns and brookies *should* be exterminated is, to my uneducated mind, just about as subjective as you can get. If, as you say, some of those environmentalist folks *believe* we would be better off if we just purged certain kinds of trout from our streams, well, that’s not any better than say’n my religion is any better than yours. There’s a heck of a far piece of road between *ought* and *is*, and I think some of those boys that sit behind their seminar tables and government desks should learn the difference. Otherwise, they’re just babbling unscientific value judgments.”

He paused, looked out toward the creek, and started speaking again: “But, calling it a value judgment doesn’t stop it from happening. No, there is more to it than simply values, and that ‘*more*’ involves science...You’re going to have to help me here... Remember way back when you were in grad school and you wrote that paper that argued that the social sciences never could truly be scientific. You based your argument on a theory of some German scientist. Damn, I must be getting old, what was his name?”

“I don’t know where you’re going with all this, Dad,” I replied, “but his name was Heisenberg – Werner Heisenberg, a German physicist. Actually, I think he died fairly recently, sometime in the mid-1970s. He was a pretty important guy – mostly because he was one of the creators of quantum mechanics. The theory you’re thinking about is his theory of indeterminacy. It was a pretty important contribution to the philosophy of science, because it says that some things, especially when dealing with quantum mechanics, are unknowable or, under the best of conditions, indeterminate. The indeterminacy theory is based on the assumption that physical experiments in quantum mechanics will never produce true or complete knowledge of quanta because the instruments of empirical observation themselves influence the behavior or the phenomena being observed.”

My father nodded in understanding, “Oh, sure, Heisenberg, the guy that said that if you get in the picture you’re going to screw it up.”

“Thanks Dad. Concisely if not elegantly said.”

“No problem. Anyway, the CCCs got into the picture when they first planted this little stream with browns and brookies. But, people have always been getting into the picture. Did you know that two years after Lake Lagunitas in Marin County was created in the 1870s, the local water company stocked it with 20,000 brook trout they had brought out by railroad from the East Coast. Those little guys probably all died by the end of their first Bay Area summer. For that matter, it can be said that we’ve been doing that same sort thing ever since the Anza expedition. So, here we are – all 25

million of us – collectively screwing up California’s native environmental picture. How can any reasonable person think that by squandering public resources we can, or even should, return that environment to what it was in 1769?”

My father looked over to the creek. We each had a little bit of our friend Jim’s spirit left in our camp cups. My father raised his cup, as I did mine, and offered up a toast:

“Here’s to Yellow Creek and its Heisenberg trout, long may they endure.”

*** *** *** ***

Twenty years after that final fishing trip with my father I returned to Yellow Creek. The government had opened up the surrounding forest to logging operations. A private company had all but clear-cut the old stands of fir that had grown in the area where we had camped back in the early 1980s. The loggers had made an attempt to control erosion, but a thunderstorm had hit the previous night and, as I looked below me, the creek was a rusty brown torrent hemorrhaging down the middle of the canyon. I left my fishing rod in the back of the truck. I no longer had the will or desire to float a fly on Yellow Creek.