## IN SEARCH OF NEW MEXICO'S NATIVE TROUT



University of Wisconsin Zoological Museum, Madison

When you mention that you're taking a trip to New Mexico, fish are usually not the first things that come to people's minds. Rather, they tend to talk of the desert and mountain scenery, indigenous Pueblo cultures, or spicy Hatch Chile cuisine. But for native fish enthusiasts like us, new fishes are always in our thoughts whenever we visit a new place. And so, it was for me as I planned a trip to Albuquerque in 2019.

I'm interested in all fishes, but I have a soft spot for native trout in their native habitats. A quick review of the scientific literature revealed that two trout species were originally found in New Mexico, the Gila Trout Oncorhynchus gilae, found primarily in the Gila Mountains of southwestern New Mexico and adjacent parts of Arizona, and the Rio Grande Cutthroat Trout O. clarkii virginalis, a subspecies of Cutthroat restricted mainly to the Sangre de Cristo Mountains of northern New Mexico and southern Colorado. Both species had once been much more widespread but were now greatly reduced in distribution and limited to remote, small, high-mountain streams. The status of both species is precarious, and both are threatened by lack of water from drought, forest fires, competition with introduced Brown Trout Salmo trutta, and hybridization with introduced Rainbow Trout O. mykiss.

I had only a couple of days to fish, making it impossible to go after both species, so I decided to pursue the Gila Trout. The most promising spots required long and challenging hikes, a deal-breaker given my limited time and gimpy knees. But then I found an article about a promising site that could be driven to with a four-wheel-drive vehicle: Willow Creek, deep within the Gila National Forest. Historically, this had been a native Gila Trout stream, but over time Brown Trout had colonized and eventually eliminated the Gila Trout. In 2012 the huge Whitewater-Baldy Forest Fire swept through the area, devasting many streams and eliminating all Brown Trout from Willow Creek. Seizing the opportunity, the New Mexico Game and Fish Department, the US Forest Service, and a variety of other state, federal, and non-governmental partners built a fish barrier to prevent Brown Trout from recolonizing from downstream and then stocked Willow Creek with Gila

## Photos by the author.

John Lyons is the Curator of Fishes at the University of Wisconsin Zoological Museum. He is a former Wisconsin Department of Natural Resources Fisheries Research Scientist who has been working on Wisconsin fishes since 1979. He received his PhD and MS in Zoology from the University of Wisconsin–Madison and his BS in Biology from Union College, Schenectady, NY.

Trout. The Gila Trout thrived and began reproducing naturally.

The article talked about how easy it was to catch Gila Trout from Willow Creek on artificial flies and that the hardest part was getting there. The author said he lost count of how many he hooked. He hooked me too, and I made my plans to fish Willow Creek, reserving a four-wheel drive truck at the Albuquerque Airport and a motel room in Reserve, the nearest town.

Reserve was about a four-hour drive from Albuquerque, mainly on secondary roads, and had just one main street with a gas station, a couple of stores, a cafe, and a few houses. The motel didn't even have a clerk, and it was unclear how to check-in. My cell phone had no service, but I eventually found a land line and called the owners and got instructions as to where to find my key. Only one other group was staying there, and they were scouting for elk for the upcoming hunting season. They seemed a bit dubious when I said I was there to fish.

It was too late in the day to head up into the mountains, so I decided to explore the local area. The San Francisco River flows nearby but was not very encouraging (Figure 1). It was October and the water was very low and almost stagnant. The channel was shallow and full of sand and silt, and no fish were to be seen. At the few bridge crossings, well-maintained barbed wire fences and prominent "no trespassing" signs discouraged exploration. I drove along the river for over 30 miles before I finally found an old road right of way that allowed access.

The river there didn't look like much, and I had minimal expectations. It wasn't easy scrambling down the bank through the



Figure 1. San Francisco River near Reserve, New Mexico.



Figure 2. Longfin Dace from the San Francisco River.



Figure 3. The Gila National Forest on the way to Willow Creek.



Figure 4. A forest recently burned in the Gila National Forest.

brush, and the streambanks were deep, sticky, foul-smelling mud. But in a small pool I thought I saw a fish dart away. I rigged up my microfishing rig and cast a minute piece of worm on a tiny hook. To my surprise, I immediately had a bite, and after a few frustrating misses, managed to land a three-inch Longfin Dace *Agosia chryogaster*, a native Sonoran Desert species (Figure 2). I was delighted. I caught five more then dragged my small-mesh landing net through the pool, finding native Speckled Dace *Rhinichthys osculus* and young-of-year Sonora Sucker *Catostomus insignis* and non-native Fathead Minnow *Pimephales promelas*. This ugly looking stream had proven to be a gem!



Figure 5. Willow Creek on a cold October morning.

I was too excited to sleep well that night, and I woke very early the next morning. Too antsy to wait for the café to open for breakfast, I left before dawn. It was freezing cold, about 20° F, and I was wearing every stitch of clothing I had brought and was still chilly. The road was easy to follow, not in too bad of shape except for a couple of spots. The drive was quite scenic (Figures 3, 4), and two hours later I was at Willow Creek. The sun was above the horizon, but it was still bitterly cold, and I shivered continuously as I rigged up. The creek was crystal clear, and although I saw no evidence of fish anywhere, I started fishing with great optimism (Figure 5).

After an hour, my optimism had evaporated. I had covered a couple of hundred yards of good habitat and hadn't had any response to my flies nor seen any fish. And it was still cold. I finally decided to stand in a sunny opening along the creek to warm up (Figure 6). As the sun climbed overhead the temperature rose into the 40s and I felt a little better. I started to see tiny fish darting around in the creek in front of me. I re-rigged my fly rod for microfishing. The fish were so small that it took a while to get a good hookset, but eventually I landed a two-inch Speckled Dace (Figure 7) on a piece of worm. I wasn't sure how they had gotten there, and I wondered if these fish had somehow survived the forest fire.

They weren't trout, but my fishing motto has always been "action is action," so I concentrated on catching more Speckled Dace. It was challenging but fun. About 15 minutes later, as I was drifting my tiny hook towards some chubs, an eight-inch trout darted out from under the bank and grabbed my bait. I was completely unprepared, the hook was too small to hold the trout well, and it escaped after a couple of seconds.

I was stunned but then energized. I immediately switched to a larger hook, a larger piece of worm, and a stronger line. I worked the bank edges carefully and soon was rewarded with another

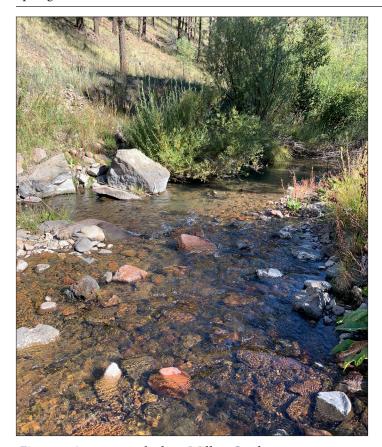


Figure 6. A sunny patch along Willow Creek.



Figure 7. Speckled Dace from Willow Creek.



Figure 8. My first Gila Trout from Willow Creek.



Figure 9. Another Gila Trout from Willow Creek.



Figure 10. The barrier dam on Willow Creek that prevents non-native trout from recolonizing upstream.

strike. But I missed it. A few minutes later I had another strike, but I missed that one too. This happened five more times over the next hour. I couldn't believe it. I felt snakebit and feared that I would have nothing to show from my trip but brief glimpses and lost fish. Finally, I drifted my bait into a nice slot between two boulders and a trout took it. It was hooked solidly, and I winched it to shore as fast as I could and threw myself on it to prevent it from escaping. Finally, success!

The Gila Trout proved to be a handsome fish (Figure 8). It reminded me of a subdued Rainbow Trout, not a surprise as the two species are closely related. I carefully released the fish and continued fishing. Now that the hex was off I stopped missing strikes. I picked up four more trout in the next 100 yards (Figure 9) and then I reached the barrier dam (Figure 10). There was a plunge pool below, and I switched back to a fly and caught one last Gila Trout on a weighted nymph. After starting out so cold, the day had now gotten hot, both temperature and fish-wise. But I had a long drive ahead, so I packed it in and headed back to Albuquerque, feeling pretty good about my experience and life in general.

I had hoped to get back to New Mexico in 2020 to look for Rio Grande Cutthroat Trout, but the pandemic intervened. Finally, in fall 2022 I felt comfortable taking long-distance trips again, and my wife and I drove out to see our oldest daughter, who lives near Denver. We had a great time there and then headed south to northern



Figure 11. Rio Hondo near Taos Ski Resort.



Figure 12. Brown Trout from Rio Hondo.

New Mexico for a few days. Finding Rio Grande Cutthroat was a priority, but not the only one, so once again my fishing time was limited, and a long hike into the back country was not in the cards. However, unlike for the Gila Trout, I could find no online information that directed me to an easily accessible stream that had Cutthroats. Finally, I called the Fly Shop in Taos where we were to stay for a couple of nights. The fishing guide I talked to was very helpful but a bit unsure and it took a while before he came up with a recommendation: the Rio Hondo, which originates on the slopes of the Taos Ski Resort about 25 miles north of town.

The first morning in Taos I was up before dawn and on my way to the Rio Hondo while my wife slept in. The stream flowed



Figure 13. Costilla Creek just below the barrier dam.

along the road and looked great (Figure 11), but I resisted the urge to stop and, as advised, drove all the way up to the resort before I started fishing. The first cast I made, a trout rose to my dry fly but turned away at the last second. As one does in these situations, I tied on a different fly and, after a couple of casts, the trout came back and took it. Now this was what I had hoped for! After a brief fight, I excitedly brought the fish to shore and netted ... a Brown Trout (Figure 12). My heart sank. From what I'd read, if Browns were present, then it was likely Cutthroats were scarce at best. I dutifully fished for three hours over several hundred yards of stream but only caught a few more Browns. The elevation was 9,000 feet and walking the stream was tough going, steep and full of boulders and downed trees. By the end I was gassed.

When I got back to Taos, I went to the Fly Shop for more advice. I talked to a different guide who was equally helpful but seemed more knowledgeable. He confirmed my suspicion that the Rio Hondo had few Cutthroats and recommended instead Costilla Creek, two hours away. I had read about this stream, which had been "rehabilitated" for Rio Grande Cutthroat Trout restoration a few years before. Rehabilitation consisted of poisoning the entire upper part of the creek and all its tributaries to kill all the fish present, mostly Rainbow Trout and Rainbow Trout x Cutthroat Trout "Cutbow" hybrids. A barrier dam was constructed at the lower end of the rehabilitation area to keep invaders out, and the creek was then restocked with pure Rio Grande Cutthroat Trout. Apparently, the restoration had been a success, but the rehabilitation area was still closed to fishing to allow the new trout population to become firmly established. But the guide told me that in the fly-fishing-only water right below the new barrier there were



Figure 14. Costilla Creek just below the barrier dam.

good numbers of "almost pure" Cutthroats and that they were my best chance without a long difficult hike.

I was pretty worn out from the Rio Hondo, but I resolved to go to Costilla Creek early the following morning before we left for Santa Fe. My wife was incredulous, given how tired I was, that I wanted to fish some more, but she's become used to my eccentricities and obsessions concerning fish and just shook her head. The next morning I was up by 4 a.m., bleary eyed and achy, and was soon on my way so that I could arrive at Costilla Creek at dawn. The drive was quite enjoyable, climbing from high desert into juniper foothills and through a narrow canyon to reach the high mountain valley of Costilla Creek just as the sun rose. The stream was beautiful (Figures 13, 14), a trout angler's dream, and my spirits were high. I was glad I had made the trip.

But the fish were uncooperative: I fished hard for an hour without any action. Finally, I reached the plunge pool below the barrier dam (Figure 15). I cast a weighted nymph, recommended by the guide at the shop, without much hope. To my amazement, a fish struck and was hooked and, low and behold, it was a Rio Grande Cutthroat! Maybe it wasn't completely pure, with a few too many Rainbow-Trout-like smaller spots along its flanks, but it was spectacular. Orange-greenish sides with large dark spots concentrated towards the tail, bright red gill covers, and an even brighter red slash under the jaw. I was enthralled. I quickly fumbled with my phone to take a picture. But the fish had other ideas and, in a flash, did an Olympics-quality twirling backflip out of the net, caromed off my lunging hands, and escaped back into the stream. I couldn't believe it.

OK, I'd caught one fish, so I could catch another. I fished the stream with grim determination. But despite covering lots of great-



Figure 15. The barrier dam on Costilla Creek that prevents non-native trout from recolonizing upstream.

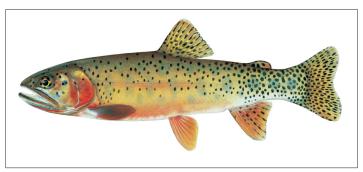


Figure 16. Rio Grande Cutthroat Trout, drawn by Joe Tomelleri and used with permission.

looking water with all sorts of flies, I never had another strike. My time ran out. As I drove downstream out of the fly-fishing-only stretch, I passed another angler, the first I'd seen all day, fishing worms with his kids below a bridge. A glutton for punishment, I couldn't resist stopping and asking how he was doing. Not too bad he replied. A couple of Rainbows and a bunch of Cutthroats ...

I was a bit frustrated and angry at missing the photo. It had been such a pretty fish. But as I drove back towards Taos I soon felt better. The scenery was wonderful, and it was a gorgeous day. I had met my goal and caught a Rio Grande Cutthroat Trout, a magnificent species, and the memory was clear in my mind and captured well in a great Joe Tomelleri drawing (Figure 16). And maybe I'd be able to come back some day and catch another.

