

South Yuba River State Park Fishes

*Ralph Cutter, California School of Fly Fishing,
Nevada City, CA ©2013*

The South Yuba River historically hosted one of the greatest and most fantastic fisheries in the world. It included 12-foot sturgeon, lamprey eels, steelhead trout, and giant salmon so dense one could almost walk on their backs from bank to bank.

Demise of Native Fishes

Native Nisenan elder Everett "Weary" Smith, who was raised at Rice's crossing just upstream from the covered bridge near the South Yuba River State Park, said:

"There were as many salmon in the river as there were stars in the sky. Throughout the year run after run after run of salmon would ascend the river from the ocean. Unlike many rivers, there wasn't a special season to celebrate the arrival of the salmon because they were always here. We celebrated instead the arrival of the acorns and the migrating herds of deer."



Chinook Salmon

The rush for gold with its hydraulicking, river diversions, and dams seemed destined to doom the salmon to extinction, yet, with every pulse of clean water a few salmon would determinedly forge their way upstream to lay their eggs and continue the species. Their demise wasn't sealed until almost sixty years after the gold boom when the 280 foot high Englebright Dam was built during the depression era as a public works project, ostensibly to catch mining debris. The dam construction created badly needed jobs, but didn't provide means for the Yuba's sturgeon, salmon, or lamprey to reach their historic breeding grounds.

Some governmental and non-governmental agencies are now working together to heal the river by allowing fishes to pass the barrier and return these iconic fishes back to their native waters in the South Yuba River State Park.

Current Species

Today, there are many species of fishes in the park. Some, such as bullhead, bass, carp and sunfish are introduced from distant locales, but a few native species remain.

Pike Minnow

The most obvious fish is the Sacramento pike minnow. Schools of pike minnow can be seen roaming the clear waters of the Yuba as they search for insects, crustaceans and small fish to eat. Young fish have a deeply forked tail, a brassy hue, and a dark lateral line along their side. As they get larger, they become increasingly solitary and hide in the deeper pools or in cover where they ambush unsuspecting fish.

Pike minnow have evolved alongside salmon over hundreds of thousands of years and have been unfairly blamed for the decline of salmon. The truth is, pike minnow



Pike Minnow

now are only a threat to salmon at man-made structures such as dams and diversions where baby salmon can become trapped in unnaturally high numbers and make easy fare for the opportunistic pike minnow.

Suckers

The other commonly seen native fish are the Sacramento suckers. Suckers have thick sensitive lips beneath their head. This "sublexed" mouth is perfect for vacuuming insects, crustaceans and eggs from the river bed. Suckers can grow to nearly two feet long and often gather in vast numbers. From a distance, suckers are easily differentiated from pike minnow because they don't have a dark lateral line, have a square instead of forked tail, and tend to hold along the river bed rather than cruising about. Despite their somewhat ungainly appearance, suckers were prized food among Native Americans and among certain tribes the flesh of the sucker was held in even higher esteem than that of the salmon.



Sacramento Sucker

Rainbow Trout

The iconic rainbow trout is found throughout the Yuba River. Due to upstream water diversions, summertime water temperatures are considerably warmer than during historic flows. Warm water carries significantly less oxygen than cool water, and the upper temperature tolerances of rainbow trout are tested almost every year. The trout survive by locating cool springs or seeps, by migrating back down to deeper, cooler lakes, or by nosing into the bubbles of riffles. Riffle bubbles physically charge oxygen into the water and give rainbow trout a temporary refuge when temperatures are warm. In the spring, trout congregate in clean, cool riffles where they dig nests into the gravel. The female deposits her eggs into the nest (known as a redd) and the male trout sidles next to her and releases a cloud of sperm that fertilizes the eggs. After the eggs are fertilized, the female trout moves immediately upstream and commences to dig a new nest. In the process, gravel is swept downstream and covers the vulnerable eggs. In about 50-60 days the eggs hatch and tiny trout, not much larger than a few grains of rice wriggle into the gravel interstices and feed from a bright orange yolk sack that distends from their bellies. In less than a week the egg sack is nearly depleted and the fry pushes up through the gravel and starts pecking for tiny bits of food that might include insect larvae and small creatures such as daphnia "water fleas" and copepods.



Rainbow Trout

The vast majority of the baby trout die from disease, predation, or simply from the rigors of living in a wild, natural environment. A single rainbow trout can lay upwards of a thousand eggs, and since an entire mile of the river might only hold 800 trout, it is easy to understand how just a few surviving baby trout can ultimately replenish and support the system. Like everything else in the Yuba, rainbow trout are resilient, and when simply provided with clean, cool water they will thrive.