## **Bureau of Fisheries Technical Brief #tb919032**

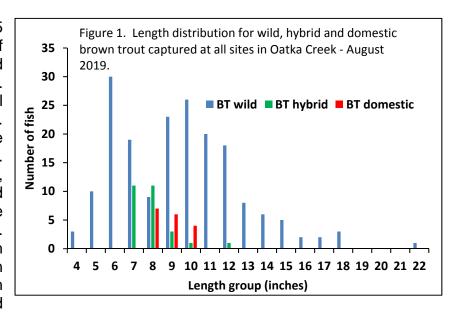


## Oatka Creek Trout Stocking Experiment Scott Cornett, Region Nine Fisheries

11/26/19

Oatka Creek, south of the Village of Warsaw in Wyoming County, provides a fishery for wild brown trout. It is also stocked each spring with hatchery brook and brown trout. There are no public fishing rights easements on Oatka Creek and access is only on privately owned, non-posted lands. Oatka Creek is managed as a year-round trout fishery, with the period from October 16 to March 31 restricted to catch and release, artificial lures only allowed. In late-August 2019, as part of a study evaluating the relative survival differences between our domestic strain of brown trout and a hybrid (domestic x wild) strain of brown trout developed in New York, Oatka Creek was sampled by electrofishing at five sites throughout the four-mile-long stocked section. On May 7, 2019, a total of 1,100 brown trout were stocked in Oatka Creek, at the five sampling sites, split equally between domestic and hybrid strain fish.

We electrofished a total of 10,815 feet of stream (2.05 miles or half of the stocked section). Sites ranged from 650 to 3,355 feet each. Sampling was done with the goal of handling the most trout possible. Stocked brown trout were differentiated by unique fin clips. We collected a total of 233 trout, 185 of which (79%) were wild brown trout and three which were April-stocked hatchery brook trout. The remainder of the catch consisted of 28 hybrid strain brown trout and 17 domestic strain brown trout. One hybrid strain stocked



brown trout was a hold-over fish from 2018 stocking. Electrofishing efficiency was deemed to be moderate to good at all the sites (85%) with average stream flows. Adult wild brown trout captured ranged from 4.6 to 22.6 inches and averaged 9.9 inches (Figure 1). Average length of the hybrid strain brown trout was 8.2 inches, while for domestic strain brown trout it was 9.3 inches.

Based on this sampling, it appears that the hybrid strain of stocked brown trout may have survived marginally better through the late spring and summer than the domestic strain fish. However, given the numbers of trout stocked and the numbers recaptured in late August, it appears that survival of both strains, or else their retention in the stocked section into late summer was low. Combined, the two strains of brown trout were stocked in early May at a density of 275 fish/mile. However, they were recaptured at a density of only 26 fish/mile in August (9% survival rate). The average density of wild brown trout for all five sites in August was 106 fish/mile, with the density decreasing from the upstream sites to downstream sites.

