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Dyke Creek Trout Population Evaluation Logan Stratton, Region 9 Fisheries

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Dyke Creek is a tributary of the upper Genesee River, located in southeastern Allegany County near Andover. There are no public fishing rights easements on this creek, so fishing access is obtained through non-posted, private lands. Dyke Creek is primarily a stocked trout fishery with 3,100 yearling and two-year-old domestic brown trout stocked in April and May over 6.1 miles of stream. However, it does support a limited population of wild brown and brook trout in a section downstream of the Village of Andover. On August 14, 2019 Region 9 fisheries staff and volunteers conducted an electrofishing survey at one site on Dyke Creek in order to estimate the trout population. Our sampling site was located at the Route 417 crossing of the creek below Andover. Previously, this site had been sampled in 1992, 2005 and 2016 to 2018. From 2016 to 2019, trout population abundance was estimated from two electrofishing passes; while in previous years we used single-pass methodology.

Our sampling site in 2019 (740 feet long) produced 18 adult (yearling and older) wild brown trout, 16 hatchery brown trout and no adult brook trout. We also captured 28 young-of-year (YOY) brown trout and four YOY brook trout. Adult wild brown trout ranged in length from 7.0 to19.1 inches (Figure 1) with an average of 11.2 inches. Adult wild brown trout abundance in 2019 was estimated at 129 fish/mile (±7) (Figure 2). Ten of the 16 hatchery brown trout that were captured were yearling fish (Figure 1), while five were likely stocked as two-year-old this spring. There was one hatchery brown trout (20.6 inches) that may have been a holdover two-year-old from 2018 stocking or perhaps a hatchery brood stock fish released into the Genesee River last fall. Adult hatchery brown trout ranged in length from 8.2 to 20.6 inches (Figure 1) with an average of 11.3 inches. The abundance of hatchery brown trout at this site for 2019 was 114 fish/mile (±7) (Figure 2).

In 2019, the abundance of wild and stocked brown trout was significantly lower than the previous year, however it was comparable to the data from 1992-2017 (Figure 2). This year, 2019, was the first year sampled where no adult brook trout were captured (Figure 2). The number of YOY brown trout caught from 1992-2017 consistently increased, however the catch in 2018 and 2019 was quite low. The number of YOY brook trout captured has consistently declined from 1992-2019 and remain very low. Overall, catch rates for all trout were substantially lower than in 2018 (Figure 2). Two reasons for this could be that the water level of Dyke Creek when sampled in 2019 was above normal and we sampled two months later than usual due to high water levels in June. In higher water, electrofishing efficiency is much lower. When sampling later in the summer there are many possible reasons why there would be fewer fish. For example, as water temperatures increase, fish could have higher mortality rates and/or they can move to a different area with colder temperatures. These factors make it more difficult to get an accurate abundance estimate. The upper stocked section of Dyke Creek still appears to be supporting a moderate population of adult wild and stocked brown trout and should continue to support a good quality fishery for anglers wishing to pursue wild and stocked trout in a rural setting. Minor changes to angling



regulations and trout stocking are expected for this stream beginning in 2021, based on the 2020 state-wide Inland Trout Stream Management Plan.



