

Stoddard Creek Trout Population Estimate

Scott Cornett, Region Nine Fisheries

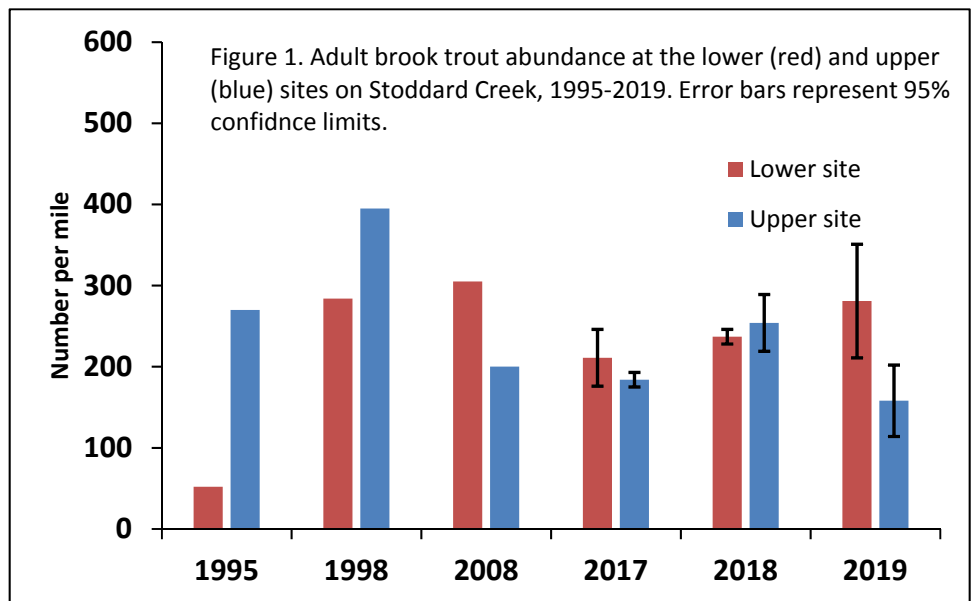
6/20/19

Stoddard Creek, a tributary of Red House Lake in Allegany State Park, provides a fishery for wild brook trout. This is a small stream, averaging 10-15 feet in width, and containing large-boulder adult trout habitat typical of most park streams. As part of our region-wide trout population monitoring, two sites were sampled by electrofishing on June 19, 2019. Both sites had previously been sampled five times (Figure 1). In 2017-2019, trout population abundance was estimated from two electrofishing passes, while earlier surveys utilized single-pass methodology.

In 2019 at our lower site (600 feet long), we captured 29 adult brook trout ranging from 4.3 to 8.9 inches, along with 15 young-of-year (YOY). This resulted in an adult brook trout population estimate of 281 fish/mile (± 70). At our upper site (600 feet long), we captured 17 adult brook trout and 6 YOY, resulting in an adult brook trout population estimate of 158 fish/mile (± 44). The adult brook trout captured at this site ranged from 3.8 to 6.4 inches long.

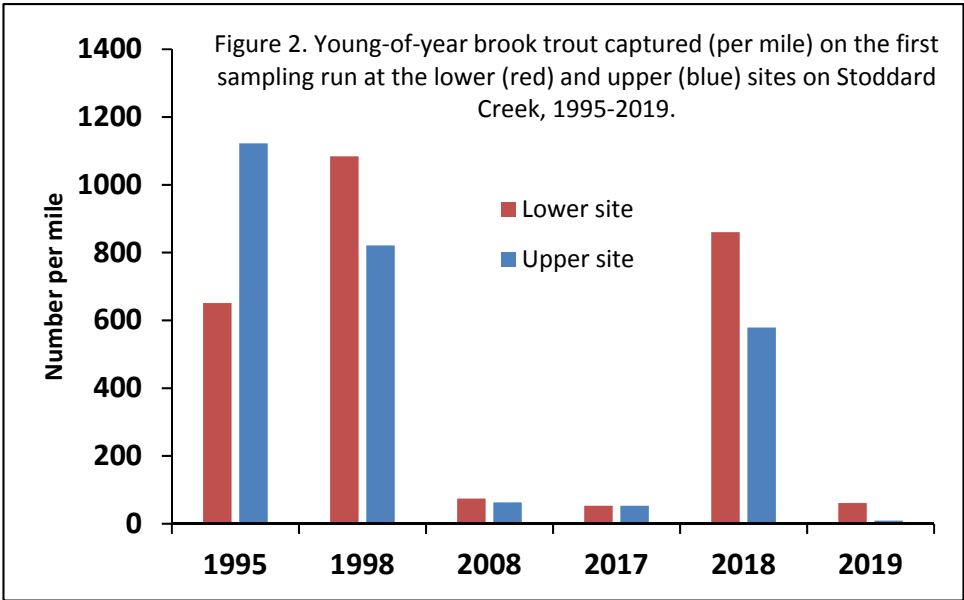
Adult wild brook trout populations typically show substantial variation between years, often due to

variation in the success of the previous year's reproduction influenced by winter and spring flooding. At our lower site on Stoddard Creek, the adult brook trout abundance showed a long-term increasing trend from 1995 to 2019, but no short-term trend from 2017 to 2019 (Figure 1). Adult brook trout abundance at the upper site on Stoddard Creek showed a long-term decreasing trend, but no significant short-term trend



from 2017 to 2019 (Figure 1). Reproduction of brook trout (number of YOY/mile captured on the first shocking run) at our lower site in 2019 (61/mile) equaled the lowest we have seen in any of our sampling years, and the number of YOY captured at our upper site in 2019 was the lowest (9 fish/mile) we have seen in any sampling year (Figure 2). This followed relatively good reproduction in 2018. Both the population estimates for adults and the numbers of YOY captured in 2019 should be compared with past years cautiously. Well above normal stream flow at the time of sampling this year led to substantial difficulty in capturing adult and especially YOY brook trout. This likely caused our wide confidence limits on the adult population estimates and may have underestimated the numbers of YOY present at both sites. Based on this year's sampling





in Stoddard Creek, the stream should continue to provide good fishing for anglers wishing to pursue small wild brook trout in a scenic, forested setting. Brook trout from this naturally infertile stream seldom exceed eight inches and these fish may take at least 4 to 5 years to reach this size, thus anglers are encouraged to limit their harvest of brook trout to provide anglers with sustained quality fishing in future years. No

changes to management or regulations are expected for Stoddard Creek based on the 2020 state-wide Inland Trout Stream Management Plan.