

# Genesee River Angler Diary Program - 2020

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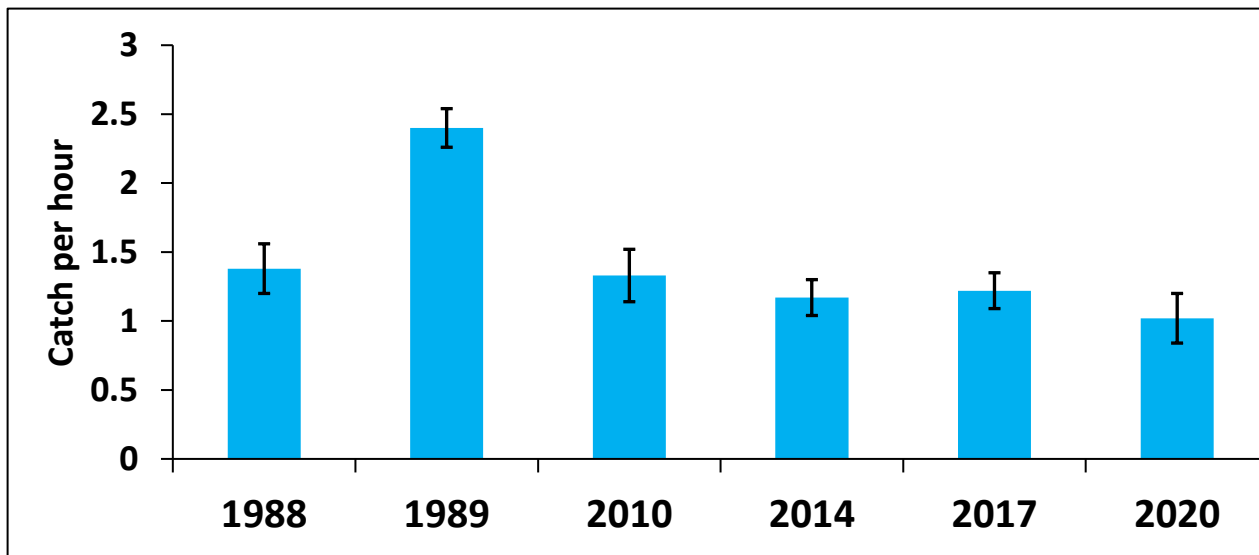
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From March through October 2020, DEC Region Nine Fisheries staff conducted an angler diary program on the Genesee River. The diary program covered the entire river within Region Nine from the Pennsylvania state line downstream to the Livingston County line in Letchworth State Park. The river is managed as a year-round stocked trout fishery from the PA line downstream to Belmont. There is also has a substantial population of smallmouth bass throughout its length and this diary program also collected information on that part of the fishery. Diary programs have also been used on the river in 1988, 1989, 2010, 2014 and 2017.

In 2020, 27 diaries were returned by anglers with usable trip information. Diarists made a substantial number of trips (249) and fished 723 hours. As with past years, most trips were made by anglers targeting trout (190), with 59 angler trips targeting bass. For all angler trips, a total of 205 yearling brown trout (99% released), 122 two-year-old and older brown trout (92% released), 268 rainbow trout (94% released), three brook trout (100% released) and 325 smallmouth bass (100% released) were reported by diarists. Brown and rainbow trout are stocked by DEC. Only five trout were reportedly caught on trips targeting bass, while 27 smallmouth bass were reportedly caught on trips targeting trout.

The combined average catch rate for brown trout and rainbow trout of 1.02 fish/hour, for angler trips targeting trout, was well above the management objective of 0.5 fish/hour (one fish caught every two hours of fishing) (Figure 1). However, it is important to keep in mind that diarists tend to be more experienced than the average angler, thus we would expect their catch rates to be higher.

Figure 1. Combined catch rates (fish/hour) for brown trout and rainbow trout (for anglers targeting trout only) in the 1988, 1989, 2010, 2014, 2017 and 2020 angler diary programs on the Genesee River. Error bars represent 95% confidence limits.



The diarist's average catch rate for brown and rainbow trout combined in 2020 (1.02 fish/hour) was not statistically different than the average catch rate found in 1988 and 2010-2017, but it was significantly lower than the catch rate found in the 1989 program (Figure 1). A considerable number of large brown and rainbow trout (16-18 inches) were reported by diarists in 2020, indicating there may be some stocked trout overwintering in the river, along with good catches of surplus brood-stock trout stocked in the fall by DEC. Additionally, the Pennsylvania Fish and Boat Commission may be stocking large brown and rainbow trout upstream in the spring, thus it is difficult to determine what proportion of the larger trout are actually holding over in the Genesee River. The largest brown trout reported in 2020 was 22 inches and the largest rainbow trout was 27 inches. The average length of brown trout reported by diarists in 2020 was 10.4 inches and the average rainbow trout was 11.0 inches. Combined catch rates for brown and rainbow trout by month ranged extensively, from a low of 0.25 fish/hour in March to a high of 2.93 fish/hour in June. While there was considerable variation in the average catch rates between months, due to sample sizes in most months and high variability between individual trips, statistically most months did not differ. While good catch rates were expected in April, May and June - the months trout are stocked in the Genesee - it was not unexpected to see catch rates for trout and angler use fall through the summer months and into the fall, especially given the heat and drought conditions we experienced in 2020.

For the 59 angler trips targeting bass in 2020, the average catch rate for smallmouth bass was very high at 2.04 fish/hour (Table 1). This year's smallmouth bass catch rate was virtually identical to values in 2014 and 2017 and statistically higher than the catch rate in 2010 (0.66 fish/hour). Considerably more trips and hours were spent fishing for bass in 2014, 2017 and 2020 than in 2010 by diarists. In 2010, all 12 trips were made by only two anglers. Conversely, in 2020, 59 trips were made by at least 10 anglers. Smallmouth bass reported in 2020 ranged from 3 to 19 inches, with seven bass longer than 16 inches caught. Eighty-five smallmouth bass (of the 325 caught or 26%) reported were at least legal size (12 inches), though none were creel by diarists. The average length of bass reported in 2020 (10.0 inches) was larger than in the last three diary programs (9.28 inches in 2010 and 2014, 8.84 inches in 2017). Based on this diary program and the generally high and stable catch rates, it appears the Genesee River continues to provide a very good fishery for stocked trout and for smallmouth bass for experienced anglers.

*Table 1. Number of angler trips, hours and angler diarist catch rates (fish/hour) for smallmouth bass, by anglers targeting bass, for the 2010, 2014, 2017 and 2020 angler diary programs on the Genesee River.*

<b>Year</b>	<b>Angling trips</b>	<b>Number of hours fishing</b>	<b>Catch rate</b>
2010	12	30	0.66 (±0.19)
2014	39	109	2.01 (±0.55)
2017	58	130	2.06 (±0.32)
2020	59	146	2.04 (±0.44)