

# Susquehanna River Smallmouth bass surveillance (Survey #:719017)

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From its origin at Otsego Lake in Cooperstown, New York, the Susquehanna River flows for over 440 miles, making it the longest river on the American east coast. It eventually empties into the Chesapeake Bay in Maryland. In New York the Susquehanna flows through a mix of rural and urban environments within Otsego, Chenango, Broome, and Tioga counties, supporting a diverse warmwater sportfish community of which smallmouth bass and walleye are the most popular with anglers. There are numerous hand and hard surface launches throughout the length of the river, providing access for boat anglers. Numerous public parks provide access for shore anglers. Management concerns range from periodic flooding of local communities to pollution from urban stormwater runoff, untreated wastewater, migration barriers at lowhead dams, suspected incidences of largemouth bass virus, and *Columnaris* infections, and invasive species. Specific fisheries management concerns prompting this survey relate to suspected declines in the river's smallmouth bass population since the early 2000's.

To assess young-of-year (YOY) smallmouth bass production shoreline electrofishing surveys are routinely conducted in late July when river flows are conducive to sampling and to be comparable with sampling that has occurred since 2009. Six locations were surveyed in 2019, between Kirkwood and Owego. Daytime backpack electrofishing was conducted at similar river temperatures and flows to previous surveys. A three-hundred-foot-long section of shoreline was sampled out to about 3 feet deep at each location.

Catches of YOY smallmouth bass were again low, as they were in 2016, compared to 2012. However, only one fish showed any signs of *Columnaris* bacterial infection, a disease which has severely impacted bass recruitment in the Pennsylvania portion of the river since the early 2000's and which likely has impacted the bass population in the NY portion as well. Catch per site ranged from 0 to 12 young of year smallmouth bass. Darters, rock bass, suckers, walleye, sunfish, and minnows rounded out the catches at most sites. Oriental weatherfish were caught again at the Kirkwood location. It appears that 2019 will be a smaller but healthy year class of smallmouth bass.

Year	Electrofishing time	Number of locations	Smallmouth bass YOY caught
2009	1.15	1	74
2012	1.45	2	111
2016	1.92	7	16
2019	1.77	6	15

