

2017 Antietam Creek Summary

Most often associated with the American Civil War, Antietam Creek also offers a prime fishing resource for anglers interested in catching a variety of gamefish species. Antietam Creek runs 40 miles through Washington County before entering the upper Potomac River south of Sharpsburg. The watershed encompasses 290 square miles with agriculture and increasing urbanization being the primary land uses. Water chemistry is influenced by the surrounding limestone geology, which provides a good buffering capacity and numerous ground springs and seeps that are essential in maintaining cooler temperatures during the summer months.

Recreational activities such as fishing, canoeing, kayaking and tubing have become increasingly popular on Antietam Creek. Since the majority of the creek exists on private property, local governmental agencies and partnerships have worked with landowners to create access and form the Antietam Creek Water Trail. Several local businesses offer canoe rentals and guided trips to enjoy the scenic and historical significance of Antietam Creek.

The Fishery

Antietam Creek is a unique freshwater resource. Typical of heavily influenced limestone spring creeks, it supports a productive aquatic ecosystem that is capable of growing and supporting trophy size fish. The creek is primarily managed for brown and rainbow trout but also supports a healthy population of smallmouth bass, channel catfish, common carp and the occasional walleye and muskellunge in the lower section below Devil's Backbone County Park. The Maryland Department of Natural Resources, Freshwater Fisheries Program monitors the status of these sportfish populations using barge mounted electrofishing equipment. Single pass surveys are conducted at various sites throughout the creek during the fall when flows are low and water temperatures are less stressful on the fish. Measures of relative abundance (catch per effort) and gamefish size distribution are used to compare trends in the fishery over time.



Adult brown trout collected during 2017 barge electrofishing survey from the upper sections Antietam Creek

Put-and-take

This fishery involves the annual stocking of hatchery raised adult rainbow trout. Put-and-take fishing regulations are in effect from the upper boundary of Devil's Backbone Park downstream to the mouth of Beaver Creek. Five thousand adult rainbow trout were stocked into this very popular section of creek in spring 2017. All trout are raised by Albert Powell Trout Hatchery in Smithsburg and funded by the sale of non-tidal fishing licenses, trout stamps and Federal Sportfish Restoration Program funds.

Put-and-grow

The majority of the Antietam is managed as a put-and-grow trout fishery. This involves stocking 2-5 inch fingerling trout and allowing them to naturally grow to harvestable size. The creek maintains suitable temperatures to support trout throughout the year but is heavily impacted by sedimentation. Excessive sediment severely limits natural reproduction. Fingerling brown and rainbow trout are stocked annually to supplement limited natural reproduction. On average 25,000 rainbow trout and 5,000 brown trout fingerlings are stocked from the Pennsylvania border downstream to Sharpsburg each year. To monitor the success of the stocking efforts multiple year classes of trout have been physically marked by removing the adipose fin prior to stocking. Recapture data from these marked fish indicate growth ranging from 0.5 to 1 pound per year.



Fingerling brown trout (left) and rainbow trout (right) stocked into the Antietam as part of the Put-and-grow trout management program

Although trophy sized trout can be found throughout Antietam Creek, the highest densities of large trout can be found upstream from Hagerstown in the upper sections of the river (Figure 1). Results from the 2017 electrofishing surveys indicated over half of the catch to be greater than twelve inches and over 35 percent to be fifteen inches or larger. Anglers should expect higher numbers of brown trout compared to rainbow trout. This shift in species abundance has occurred over the past decade (Figure 2). It is believed that stream temperatures and shifts in the benthic macroinvertebrate population may be influencing this change. Antietam Creek continues to offer an attractive trout fishery for anglers to enjoy.

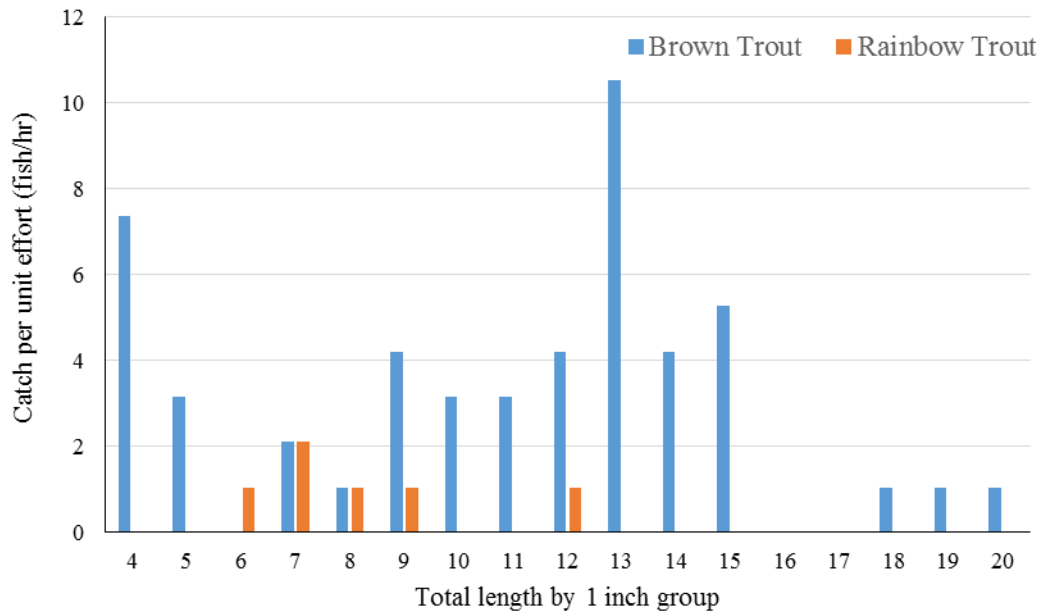


Figure 1. Upper Antietam Creek size distribution of brown and rainbow trout collected in fall 2017 electrofishing surveys

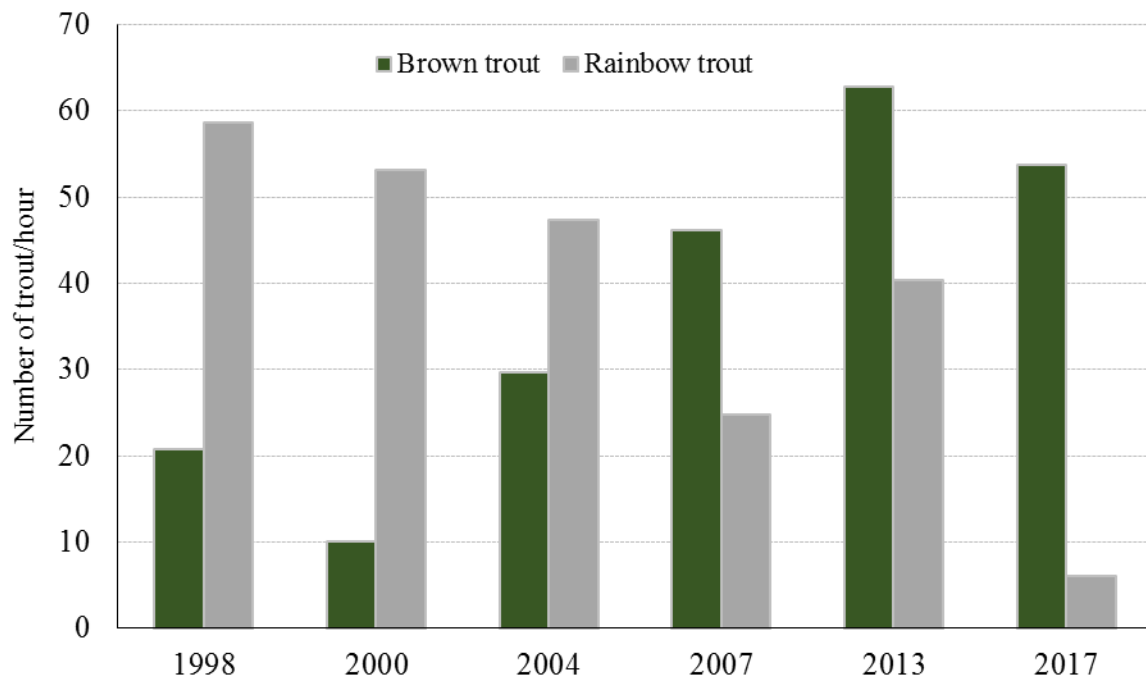


Figure 2. Barge electrofishing catch per unit of effort for brown and rainbow trout from the upper Antietam Creek (1998-2017)

For questions or more information about fishing on Antietam Creek, please contact Michael Kashiwagi (Michael.kashiwagi@maryland.gov).