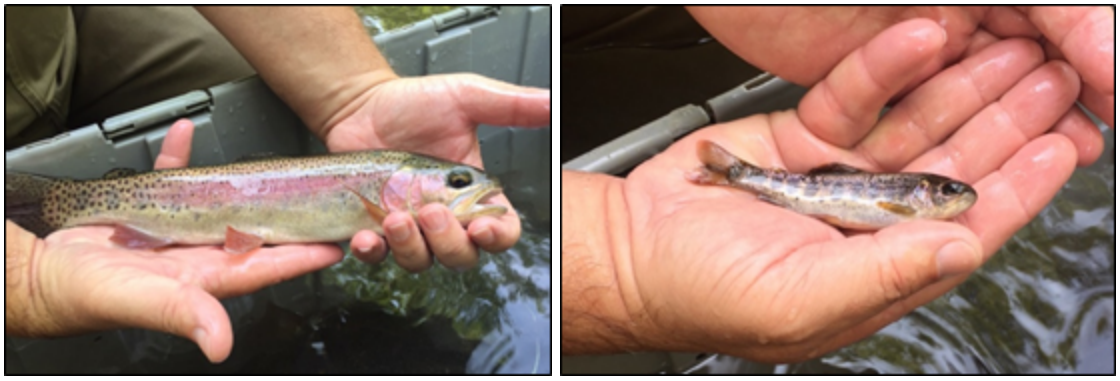
Freshwater Fisheries Monthly Report – August 2020

Stock Assessment

Black Bass Survey - Performed young-of-year (YOY) black bass surveys in the North Branch Potomac River catch-and-return bass fishing area. A backpack electrofishing unit was used to survey three 30.5-meter stations at Black Oak, Cumberland, Keyser, McCoole, and Pinto areas of the river. Reproductive success was considered “fair” for smallmouth bass averaging 1.7 YOY per 30.5 meter station. Largemouth bass reproductive success was considered “poor” averaging 0.46 YOY per 30.5-meter station. Associated fish species were abundant throughout the river with thirteen additional fish species recorded during the survey.

Smallmouth Bass Surveys - Smallmouth bass juvenile surveys were completed for Conococheague Creek. A shoreline seine was used to monitor annual recruitment to the fishery. An average seining score of 2.0 fish/seine haul was recorded for this year. This is slightly below the long-term median of 2.2 fish/seine haul. This year’s successful spawn will help with maintaining the smallmouth bass fishery in the watershed. A small sample of juvenile smallmouth bass were provided to the U. S. Geological Survey Leetown Science Center for additional fish health testing.

Little Antietam Creek Rainbow Trout - Little Antietam Creek in Washington County supports one of the few wild rainbow trout populations in the state. Recent survey results showed high adult densities at 336 fish/kilometer (km). Hatchery produced juvenile trout are not stocked in this system. The fishery is entirely supported by natural reproduction. Juvenile densities for 2020 were also high at 260 fish/km. The coldwater conditions resulting from the limestone springs in the watershed are a key factor in maintaining this population.



(L to R) Wild adult and juvenile rainbow trout from Little Antietam Creek in Washington County

Beaver Creek Trout Survey - Trout surveys were completed in the catch-and-release section of Beaver Creek in Washington County. Wild brown trout densities looked very good with an average of 523 adult trout/km. Recruitment for 2020 was also good with juvenile brown trout densities averaging 292 fish/km. Beaver Creek is one of the most productive trout streams in central Maryland. Fishing in both the catch-and-release and put-and-take sections should be very good.

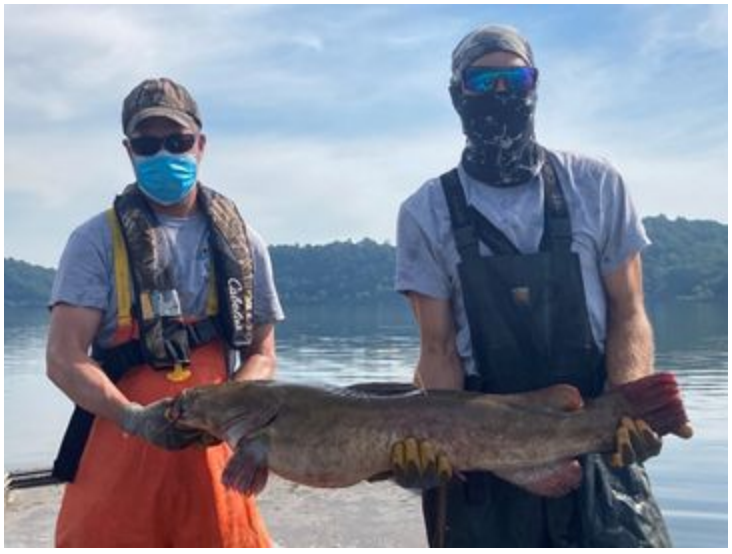
Qualitative Electrofishing Trout Surveys - Conducted qualitative electrofishing surveys in an unnamed tributary to Little Falls (Baltimore County), Cabbage Springs Branch, an unnamed tributary to Gillis Falls, an unnamed tributary to Middle Run, Middle Run (Carroll County), Little Deer Creek and Cattail Creek (Harford County). Multiple year classes of brown trout were found in all sites except the unnamed tributary to Middle Run and Cattail Creek where no trout were detected.

Completed multiple 1,200 second qualitative electrofishing surveys in Baisman Run (Baltimore County). Surveys were conducted on June 16 and August 20. A total of 11 continuous sites were electrofished from Ivy Hill Road upstream to the headwaters just below Falls Road. Results indicated very good brook trout recruitment in 2020. Baisman Run contains brook and brown trout and is the last known brook trout stream in the Western Run watershed.

Multiple Pass Electrofishing Surveys - Multiple pass Zippin electrofishing surveys were conducted in the upper station of Bee Tree Run and Piney Creek above I-83 (Baltimore County). An excellent population of brown trout was found in both survey sites. A few brook trout were also found in the Piney Creek site.

Piney Creek Brook Trout - Permission was granted on a property in the headwaters of Piney Creek (Baltimore County) where Fishing and Boating Services staff have never surveyed. Staff were attempting to collect and remove adipose fins from 50 brook trout for genetics research. Piney Creek was once a brook trout stream until the development of the Gunpowder tailwater in the late 1980s which became a predominantly brown trout resource. Since then, brown trout have moved into all the coldwater tributaries to the tailwater including Piney Creek and have replaced or significantly outnumbered the brook trout in these tributaries. The headwater survey provided staff with a pleasant surprise as more than the 50 brook trout of multiple year classes needed for the genetics study were collected and the brook trout outnumbered the brown trout in the headwater site surveyed.

Susquehanna River Flathead Catfish Study – Eastern Region conducted annual flathead catfish investigations in Conowingo Reservoir and the Susquehanna River. This project is in cooperation with Pennsylvania Fish and Boat Commission's flathead study, and provides data for Maryland's portion of the Susquehanna River. The goal is to gather life history information and determine relative abundance of this invasive species to help determine their current and future impacts to the ecosystem. Four sets of baited hoop nets tied in series were deployed in both the reservoir and the river for three days. Catch-per-unit-effort (CPUE) averaged about one flathead catfish per net, which is similar to previous years. The flatheads varied in size, with the largest individual measuring over 36 inches in length and weighing 35 pounds. All flatheads were removed from the system for age and diet analyses. Other species collected in the nets included white crappie, quillback, channel catfish, common carp, bluegill, and white perch. Thanks to the Freshwater staff from Central, Western II, and Statewide Operations who masked up and assisted on the project, and to the Shad and Herring Program who lent us the perfect boat to complete our work.



Large flathead catfish collected from Conowingo Reservoir

Habitat and Water Quality

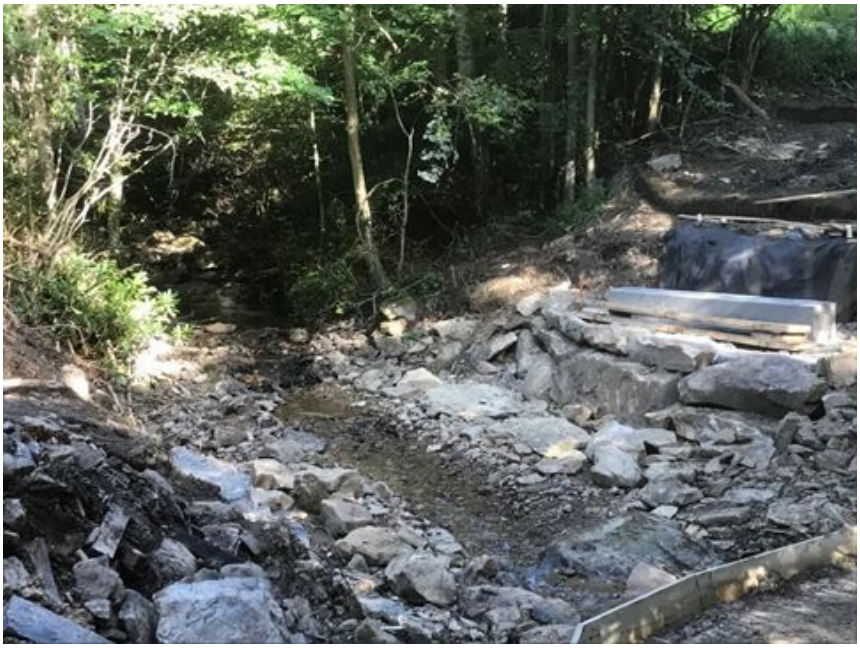
Environmental Review - Provided aquatic resource information for the following environmental review projects:

- Several State Highway Administration projects involving ditch clearing adjacent to Use-III streams in Garrett and Allegany Counties. In addition to using best management practices for sediment control, the projects were recommended to be completed during the dry period western Maryland is experiencing.
- A stone revetment application along Deep Creek Lake shoreline. Freshwater Fisheries Program staff had no further comments on the application due to the construction outline following standard procedure for the project type.
- New Germany State Park beach area drainage project. This project was located at the beach area and is intended to catch excess water that is seeping from a retaining wall to be caught in a drainpipe and re-routed. Recommendations were made on proper best management practices for sediment control during the construction phase.
- An application for the installation of four temporary bridges to be installed over small streams for a timber harvest located at Ore Banks Road, Lavale. Recommendations were made on guidelines for bridge installation and mitigation after removal.
- An application submitted by Maryland Department of the Environment's Mining Program for a drainage improvement project in Lonaconing. The project is designed to properly drain water from the foundations of residential structures to prevent excess moisture and flooding. It was recommended to cause minimal disturbance during the construction phase and to restore areas of disturbance within the floodplain to a natural state.
- Bridge repair at Deer Creek
- Culvert replacement on Morgan Run
- McGill Run time of year waiver request
- Chevy Chase Lake stormwater management pond
- Jabez Branch watershed stream restoration
- Deer Creek bank stabilization at Rocks State Park

Land Stewardship Committee

- Prepared property description for a potential state acquisition of a 24.25 acre property that borders about 1,400 feet of the upper Savage River and about 325 feet of Elk Lick, a tributary to the Savage River. If acquired, the Fishing and Boating Services will manage the property as a fishery management area (FMA). The intent of this property as a fishery management area would be primarily to provide habitat protection to the high quality brook trout resource found in the upper Savage River and Elk Lick.
- Provided supportive comments for a 13.12 acre property along the Youghiogheny River near Oakland. This potential acquisition is within the put-and-take trout fishing area and can provide about 800 feet of angler access to the river. The Freshwater Fisheries Program fully supports this potential acquisition as it will provide for riparian and water quality protection in the Youghiogheny River as well as provide for increased recreational fishing opportunities.
- Provided stream protection recommendations for a conservation easement along the North Branch Casselman River.

Wolfden Run Fish Passage Removal - The Wolfden Run collapsed culvert removal project is almost completed, with a single span bridge planned to be constructed by September. The Freshwater Fisheries Program, Trout Unlimited, and U.S. Fish and Wildlife Service staff conducted a field visit to the site and were pleased with the results of the culvert removal and subsequent stream restoration. Two additional stream blockages in Wolfden Run were toured and plans are being made for potential removal projects.



Wolfden Run at the collapsed culvert bridge removal site, August 20, 2020.

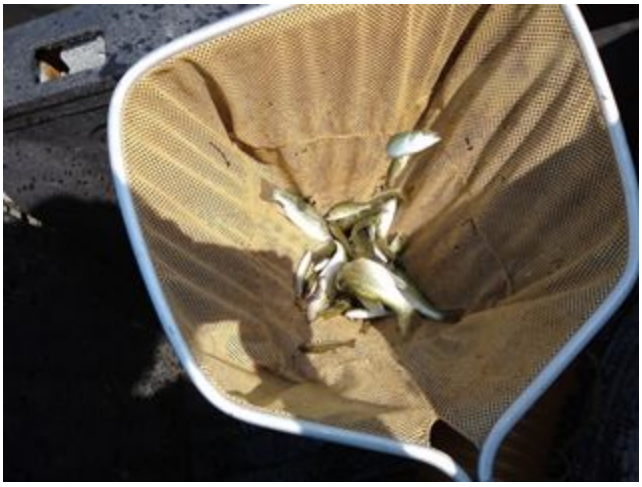
Fish Habitat Enhancement - Started cutting and collecting tree posts from the Mt. Nebo wildlife management area timber cuts to use in a fish habitat project on Broadford Lake. The posts are cut into eight to ten foot lengths and will be pounded vertically into the lake bottom to improve fish habitat.

State Lake Fund Projects - Attended a meeting at Deep Creek Lake State Park to discuss and start planning for the constructing and deployment of reef ball fish habitat structures that will start this fall. Staff also coordinated with Rocky Gap State Park staff and Eastern Region Fisheries Manager on continued planning and placement of reef balls fish habitat structures to be deployed in Lake Habeeb.

Stocking and Population Management

Golden Shiner - Stocked approximately 10,000 golden shiner into Governor's Bridge Pond (Prince George's County). The fish were produced at Manning Hatchery and will improve available forage for game and sportfish in the pond.

Largemouth Bass - Approximately 5,000 largemouth bass juveniles were stocked in the tidal Potomac River (Charles and Prince George's counties). Fish were "bonus fish" produced at Manning Hatchery. In a couple of years, these fish should recruit to the very popular Potomac River black bass fishery.



Juvenile largemouth bass ready for stocking

Stocking Permits – There were 11 additional stocking permits in July, and three in August.

Outreach

Customer Service - Provided information for inquiries regarding:

- Angler access to the Youghiogheny River catch-and-return trout fishing area.
- Use of natural bait in the North Branch Potomac River zero creel limit trout fishing area.
- Savage River zero creel limit brook trout fishing area regulations.
- Status of trout populations in the North Branch Potomac River zero creel limit trout fishing area.
- Stocking information in the North Branch Potomac River upper catch-and-return trout fishing area.
- Savage River Reservoir trout fishing tips.
- Deep Creek Lake bluegill fishing tips.
- Recreational boaters on cleaning their boat while going from one waterbody to another to prevent the spread of aquatic invasive species.
- Boat launch locations on the North Branch Potomac River.
- Processing of five scientific collection permits.

Participated in a conference call on proposed changes to largemouth bass management in freshwater impoundments.

Certified Weigh Station - Continued to work with Deep Creek Lake State Park on moving forward to become a certified scale location. This service will be a great asset to lake users by providing a scale at the boat ramp where anglers will be able to weigh award size fish for the FishMaryland recreational fishing award program.

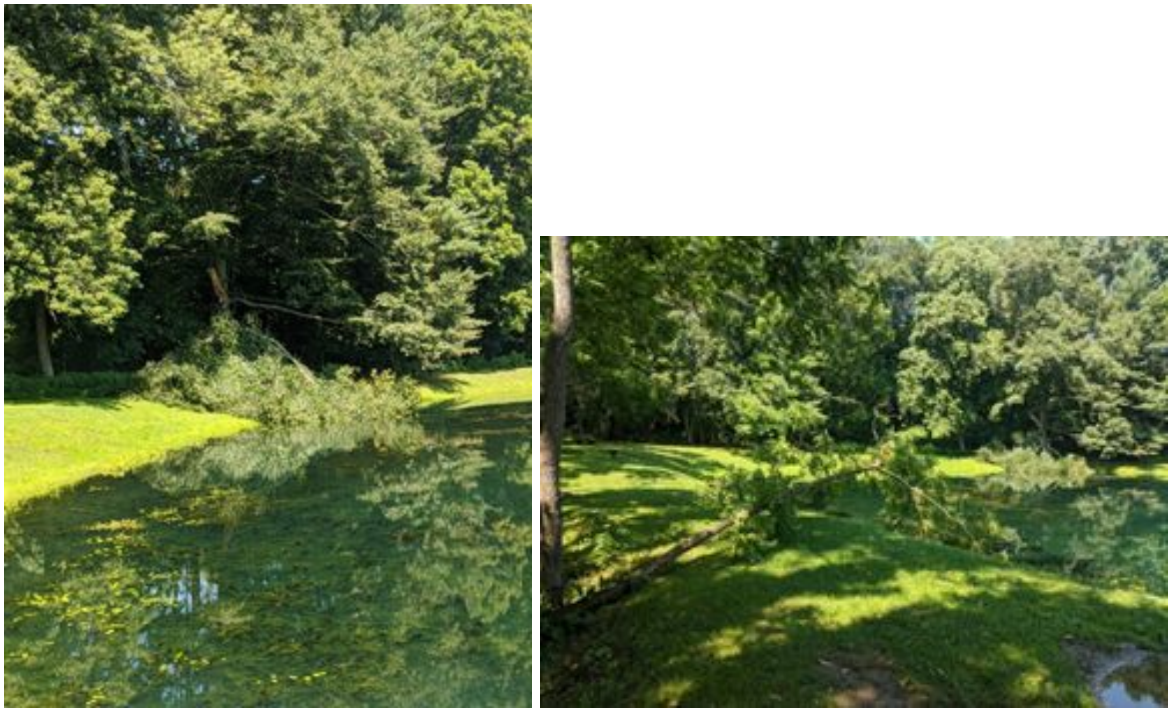
Fish Health

Largemouth Bass Virus - Forty samples of tissue from largemouth bass were collected to calculate the prevalence of largemouth bass virus in the tidal Potomac River and upper Chesapeake Bay. The virus may weaken fish and make them more susceptible to death after stressors (e.g. handling stress).

Angler Access

Fishery Management Area Maintenance - Worked at the fishery management areas conducting maintenance to provide angler access. The Gary A. Yoder, McCoole, and Evitts Creek Ponds FMAs continue to be mowed and cleared of trash to make these areas presentable for anglers and recreational boaters.

Regional staff assisted Unicorn Hatchery staff with cleanup of storm damage from tropical storm Isaias at the various eastern FMAs. Despite widespread flooding and strong winds, the infrastructure held up very well, and effects were largely limited to fallen trees and limbs.



Damaged trees at Rising Sun Fishery Management Area.

Participated in a meeting with U.S. Fish and Wildlife Service and the department's Engineering and Construction staff to discuss repair and upgrade of the handicap accessible fishing platform at Morgan Run (Carroll County).

Staff traveled to special fishing management areas to post informational signs so anglers are informed of proper fishing regulations.

Invasive Species

Blue Catfish - Continued examining stomachs of invasive blue catfish from the tidal, freshwater Patuxent River (Anne Arundel, Calvert, Charles, and Prince George's counties). During August, over 200 additional fish for diet work were examined, bringing the total for the study to roughly 1400 fish thus far. Common food items discovered in fish guts included detritus and submerged aquatic vegetation, but other notable items included Atlantic menhaden, blue crab, and white perch. Numerous samples were saved for DNA analysis, as many items were too digested to identify.

Patuxent River Radio Receivers - Began installing an array of ten radio receivers in the tidal, freshwater Patuxent River as part of a cooperative project with U. S. Geological Survey Leetown Science Center (Leetown, WV) to monitor movements of the invasive blue catfish. Private landowner permissions have been acquired and the array should be completed within the next month.

Alabama Bass - With recent discoveries of Alabama bass in Virginia, a risk assessment of Alabama bass introduction to Maryland was completed and reviewed by peers and experts in the field of black bass biology. The assessment summarizes the problem that could threaten the state's existing black bass resources. It will be shared with the Black Bass Advisory Committee during their October meeting.

Brook Trout Program

Completed the scheduled brook trout population sampling field work. Numbers of brook trout collected in the upper Savage River system, our premier native brook trout fishery, were near historic highs over the past 13 years, with excellent reproduction once again!

Participated on Maryland Fishing Roundtable, an interactive podcast, to discuss and answer questions about angling opportunities in western Maryland.

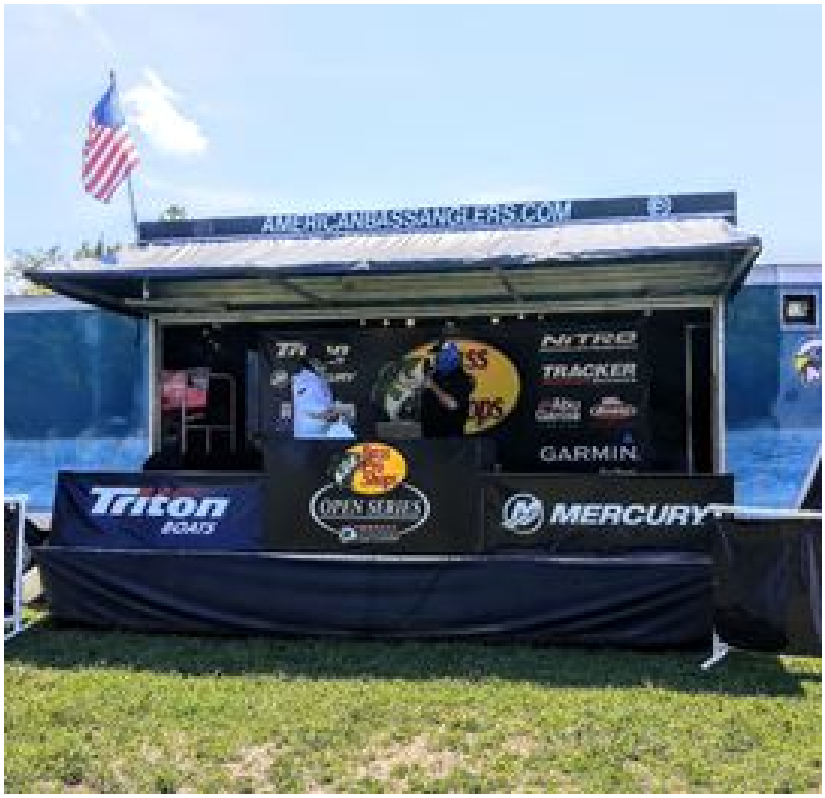
Participated with the planning committee for the upcoming brook trout genetics symposium. This effort is being funded by a Bay Program grant.

Responded to customer service inquiries about brook trout angling opportunities statewide. During the pandemic we have noticed an increase in questions about angling opportunities, and anecdotally we have noticed more anglers out fishing!

Tidal Bass Program

Bass Tournaments - Biologists attended multiple black bass tournaments at Smallwood State Park (Mattawoman Creek, Potomac River, Charles County) to monitor tournament angler fish care and to ensure guidelines for social distancing and public safety were followed (limiting

close contact and wearing masks). Staff also worked aboard release boats and with anglers to monitor conditions essential for bass survival.



Weigh-in at black bass tournament