

Freshwater Fisheries Monthly Report – November 2022

Freshwater Fisheries - Stock Assessment

Upper Potomac River Survey - The fall electrofishing surveys for the upper Potomac River are in the process of being completed. Low flow conditions through the fall made boat access difficult in multiple sections of the river. Overall smallmouth bass densities looked good with an average catch rate of 35 fish/hour for quality size fish (>11 inches). All smallmouth bass appeared healthy and in good condition. Catch rates for smallmouth bass in the 8-11 inch range was also good, showing an improvement in recruitment. Invasive flathead catfish continue to be collected and tagged during the surveys, the largest was 36 inches.



18-inch smallmouth bass from the upper Potomac River

Coldwater Surveys - Completed coldwater electrofishing sampling for the calendar year. During the index period (June 1 to September 30), 82 sites were sampled covering over 34 miles of stream in Baltimore, Carroll, Harford, Howard, and Montgomery counties. The survey documents and monitors native brook trout populations, as well as wild brown trout populations in the Central Region.

Impoundment Surveys - Completed large impoundment gamefish surveys for the calendar year. Clopper Lake, Liberty Reservoir, and Piney Run Reservoir (Baltimore, Carroll, and Montgomery counties) were sampled in 2022. Data are not yet analyzed, but preliminary findings indicate robust populations of largemouth bass and sunfishes in each location.

Rocky Gorge Reservoir - Completed a night electrofishing survey of Rocky Gorge Reservoir. Largemouth bass were abundant and many large individuals were in the weight range of 4-5-pounds. Other large fish collected were tiger muskie, northern pike, and striped bass.

Freshwater Fisheries - Habitat and Water Quality

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

- A project that would place three stormwater management facilities near two unnamed tributaries to Deep Creek Lake. The facilities included a small forebay and a bioretention area with an underdrain. The bioretention area would allow for some infiltration and discharge excess runoff through the underdrain. All available information for the affected aquatic resources was considered as part of the review. It was determined that the bioretention treatment with underdrain was sufficient to minimize impacts to aquatic resources.
- A stormwater management facility in the headwaters of the South Branch Gunpowder Falls. The facility would include a lined submerged gravel wetland that would treat and discharge stormwater runoff to surface waters. The South Branch Gunpowder Falls supports a brook trout population and requires maximum protection for coldwater resources. Discussions are currently ongoing with appropriate regulatory agencies to improve coldwater protection for this important resource.
- A stormwater management pond proposed near an unnamed tributary to Carroll Creek. The plan would place a wet pond in a Use III (nontidal, coldwater) watershed. The stream does not currently support coldwater fisheries resources, so minimal impacts are expected. A brief site visit was conducted to follow up discussions with project planners. Comments were submitted to enhance riparian planting downstream of the stormwater management pond to provide some limited thermal protection.
- Central Region staff visited three sites in Baltimore and Harford counties to evaluate habitat improvement/restoration projects.
- Provided comments for a trail construction project to take place on Garrett State Forest.
- Comments were submitted for an application submitted by Columbia Gas for a utility replacement. Minimal disturbance and site restoration were recommended for the project.
- An application for the refurbishment of an acid mine drainage treatment system was reviewed. Comments were provided for sediment catchment devices, pumping procedures, and site restoration were recommended.

Sonar - Completed sonar recordings on Broadford Lake. Recordings will now be processed to make bathymetric maps for Broadford Lake and Piney Reservoir.

Temperature Loggers

- Western Region I staff placed temperature loggers in the North Branch Potomac River. The loggers were deployed early to take advantage of low flows to ensure they were placed in the river before June 1 (beginning of the monitoring period). Occasional high flows in the spring have prevented the placement of the loggers in years past.
- Central Region recovered all 46 water temperature loggers that were deployed in the region during the summer index period (June 1- August 31). The loggers monitor in-stream temperatures to assess habitat suitability for coldwater species. Data from the loggers were downloaded and analyzed.

Freshwater Fisheries – Fish Health

Conferred with several biologists about a blue catfish phenomenon on the Patuxent River in which thousands of the fish were swimming on the surface together at night. Video footage was shared with the Southern Region Office and the consensus was that most likely the concentration of fish was in such great densities that local oxygen levels were depleted causing them to come to the surface all at once.

Gave an oral presentation on fish health indices at the Southeastern Association of Fish and Wildlife Agencies annual conference in Charleston, West Virginia

Assisted Oxford Lab with the striped bass mycobacteria survey. A chartered boat was used to fish the mouth of the Little Choptank and five staff members from the Southern Region reeled in more than a hundred striped bass, which were checked by lab personnel.

Freshwater Fisheries - Outreach

Provided customer service information for inquiries regarding:

- When the docks would be pulled from the state park boat launch
- Fishing access and stocking information
- Potomac River fishing conditions, access, and fishing for muskellunge
- Flow conditions and trout fishing on the North Branch Potomac River tailwater

Provided a presentation to Garrett College students on what fisheries biologists do as part of their job responsibilities. A general job description was discussed as well as some species-specific sampling taking place within the Western Region.

A display was set up at the Greater Baden Aquasco Citizens Association holiday social event. A few printed materials were available for visitors to the tank and photos of invasive species were shown.

Provided a presentation titled “Trout Resources in Frederick and Washington counties” to members of the Potomac-Patuxent Chapter of Trout Unlimited. The in-person/virtual meeting discussed coldwater management projects underway and details on trout fishing opportunities in the region.

Freshwater Fisheries - Angler Access

Removed a fallen tree from the Gary Yoder Fishery Management Area along the North Branch Potomac River.

Lions Community Pond - Met with officials from the Town of Smithsburg in Washington County to discuss plans to improve fishing access for the pond at the Lions Community Park. The town is working to renovate the pond by clearing brush along the bank and refilling it with water. Freshwater Fisheries will assist with stocking the pond with bluegill and largemouth bass in 2023.

The **Urieville Lake** dredging project began November 1. The contractor wasted no time and completed excavation of most of the material in two weeks. After that, the department's survey crews met with Freshwater Fisheries staff and the contractor onsite to verify that the benchmarks

set for the project were met. A new boat dock is currently being installed. When final grading, stabilization and cleanup are complete, the turbidity curtain will be removed, and the facility will be reopened. A notice will be posted on the Fishing and Boating website and social media accounts when that occurs.



Urieville Lake dredging project



Urieville Lake dredging project

Freshwater Fisheries - Invasive Species

Submitted a new grant proposal that forms a basis of agreement with U.S. Fish and Wildlife Service on work to incentivize harvest of northern snakehead and blue catfish in Maryland.

Met to discuss a long-term strategy that will begin in 2023 to broaden outreach and marketing of invasive fishes for the purposes of both preventing new introductions and reducing biomass of existing invasive species.

The final collection of blue catfish from the Nanticoke River was completed for the diet study being conducted by a Salisbury University graduate student. Maryland Public Television (MPT) was there to film and interview Eastern Region Freshwater Fisheries staff about the history, biology and potential impacts of blue catfish. MPT is producing a documentary for the Maryland Department of Agriculture to educate the public about blue catfish.

Freshwater Fisheries - Coldwater Program

Worked with Resource Assessment Services to identify coldwater streams that flow through potential Irreplaceable Natural Areas. This is an ongoing project that may provide additional protection for drainages that support brook trout populations and other coldwater resources.

Continued ongoing discussions with the City of Frederick about road maintenance in the Frederick City watershed. Neglect of roads in the watershed has resulted in increased sedimentation in Fishing Creek and possible impacts to the brook trout population. Managers of

the watershed have agreed that improved road maintenance is needed and will ask for additional fiscal resources to address the problem areas. Fishing and Boating Services will submit a letter to the City of Frederick that expresses support for increasing the road maintenance budget.

Freshwater Fisheries - Tidal Bass Program

Nearly completed the process of entering data from the Tidal Bass Survey to the program's database, while also performing Quality Assurance/Quality Control checks on the data to ensure completion and accuracy. The Central region was responsible for surveying over 50 sites in the Bush, Gunpowder, and Middle rivers, as well as sites within the Upper Chesapeake Bay flats area.

Completed aging approximately 100 largemouth bass that died during bass tournaments in 2021 and 2022 in order to continue building the program's length-at-age key that predicts age from size of the fish.

Began issuing permits for tournament directors for the 2023 fishing season.

Freshwater Fisheries – Other

Accompanied students from Stevenson University and volunteers from Trout Unlimited to test the efficacy of artificial redds in a tributary to the South Branch Patapsco River. Rainbow trout eggs were implanted into the gravel and spring monitoring will be conducted to assess the success of the project.

Western Region I staff continues to work on redesigning and developing new content for the “Western Region I” webpage. This will be a more streamlined page that will provide anglers with pertinent information to each specific waterbody managed in the region.