

Freshwater Fisheries Monthly Report – September 2022

Trout Surveys -Completed an additional seven coldwater trout sites in Baltimore and Carroll Counties during September. The surveys document brook and brown trout presence and abundance in coldwater streams in the Central Region. During the 2022 summer index period (June 1 - September 30), 78 sites were sampled. This included, for the first time ever, a 15-mile raft survey of the Gunpowder Tailwater Blue Ribbon Trout Fishery.



Electrofishing raft survey of the Gunpowder Tailwater (above) and a large brown trout collected during the survey (left).

Gillis Falls - Central Region assisted the Carroll County Government Environmental Program with sampling three sites on Gillis Falls. Brown trout were encountered at all three sites.

Freshwater Fisheries - Habitat and Water Quality

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

- Reviewed final plans for dredging in Arrowhead Cove on Deep Creek Lake.
- An application by Herrington Manor State Park for a bridge installation project. Comments were provided for time of year closure, equipment use and material storage, sediment/erosion control and pump around procedures, and site restoration.
- A bridge installation project that is to take place in Lonaconing Maryland. Comments were provided for time of year closure, equipment use and material storage, sediment/erosion control and pump around procedures, and site restoration.
- Performed a site visit for a bridge replacement project on Buffalo Run located in Friendsville to see if needs were met after an application was modified. The original application for the project stated that the entire stream bottom of the project area would be lined with rip rap. When commenting on the project, it was stated that it is better to

obtain natural stream bottom substrate rather than lining with rip rap. The project design was then modified to fit the needs to maintain a natural stream bottom.

- Reviewed and conducted site visits to five proposed strip mines that are to be located in Garrett and Allegany Counties. A review and site visit for each project enabled staff to get a better understanding of upcoming operations in order to provide appropriate comments to better protect aquatic resources.
- A request to waive the Use Class III time of year closure period for a culvert replacement project in an unnamed tributary to Wolfden Run. The confluence of the unnamed tributary is just upstream of a brook trout survey station in the mainstem of Wolfden Run. Due to logistical challenges, project planners requested the waiver so project activities could commence in October or November of 2022. The project will remove an aquatic organism passage barrier in the unnamed tributary and is generally supported. However, staff recommended that work should be completed outside of the closure period to avoid any impacts to brook trout during spawning and early development. After correspondence with planners, it was determined that delaying the project until after the closure period would not put the project at risk. Project activities will be completed in 2023.
- A beaver dam analog project planned for Oxbow Lake Wildlife Management Area. The project proposes to construct beaver dam analogs in a tributary to the Little Patuxent River that has been historically impounded by beaver activity. The design of the beaver dam analog structures raised concerns about the impoundment of the stream and aquatic organism passage. After consideration, staff did not oppose the project because of the historic impoundment of the stream. However, comments were submitted to state that similar projects may be opposed in coldwater resources and where aquatic organism passage is a greater concern.
- Reviewed stream restoration projects in Carroll Branch and the Little Gunpowder River in Baltimore County.

Savage River Site Visit - Met on-site with Garrett County Department of Public Works representatives to discuss the feasibility of screening a water intake structure for the town of Bloomington located in the lower Savage River. The intake is buried in the substrate and screening was deemed unnecessary in the current state. If changes to the channel morphology or intake structure occur, the feasibility of screening the intake is to be re-evaluated.

Land Reclamation - Participated in a Land Reclamation committee meeting to conduct field visits at three reclaimed mines in Garrett and Allegany Counties. All sites met the phase two requirement for vegetation as specified in the reclamation plan for each site.

Temperature Loggers

- Made a routine check on the Youghiogheny River and North Branch Potomac River to monitor placement of temperature loggers that were deployed before the June 1 monitoring period. One temperature logger on the Youghiogheny River had been tampered with and was found dewatered on a rock. It was placed back in the river and hidden to record water temperature data.
- Retrieved temperature loggers from coldwater streams in Anne Arundel, Baltimore, Carroll, and Harford Counties. Data will be downloaded and analyzed later in the year.

Fish Kill - Investigated a fish kill at North Keys Pond, Prince George's County. Multiple coolers of dead fish were removed from the bank, and water quality parameters were recorded. Dissolved oxygen (DO) levels in the water were extremely low and likely caused the fish mortality. It is suspected that a recent die off of submerged aquatic vegetation (SAV) caused the DO crash in the pond. North Keys usually has an overabundance of hydrilla but little to no live vegetation was observed at the time of the fish kill. The trigger for this event was investigated by the Maryland Department of Environment but nothing out of the ordinary was found. The owner of the pond, the Maryland National Capital Park and Planning Commission, was also contacted and confirmed they had not treated the pond to control vegetation.

Pond Checks - Due to the early die off of submerged aquatic vegetation in North Keys Pond, spot-checks on submerged vegetation health and water quality parameters were conducted on several ponds relatively close to North Keys. Myrtle Grove Pond and Wheatley Lake were evaluated in the Southern Region and had acceptable oxygen levels and no sign of early vegetation decline.

Melwood Pond - Biologists visited Melwood pond to check on the SAV and algae. Melwood has historically had excessive aquatic vegetation prior to stocking trout in the fall. Excessive SAV and algae has required either chemical treatment or mechanical removal (or both) each fall. Fortunately, the Maryland National Capital Park and Planning Commission treated the pond earlier this fall so the pond should be in good shape for anglers by the time trout are stocked in October.

Freshwater Fisheries - Stocking and Population Management

Freshwater Fisheries – Fish Health

Mercury Study - Collected YOY largemouth bass for University of Maryland Center for Environmental Science as part of an ongoing study looking at atmospheric mercury deposition trends in YOY fish to monitor mercury accumulation levels for a given year. Fish from Deep Creek Lake, Piney, and Savage River reservoirs were collected for the study.

Largemouth Bass - Southern Region biologists provided several largemouth bass caught from the tidal freshwater portion of the Patuxent River for a Congressional field trip scheduled with United States Geological Survey staff and members of Congress at the Patuxent Wildlife Refuge in Laurel, Maryland. These fish were used for a necropsy demonstration.

Freshwater Fisheries - Outreach

Customer Service - Provided customer service information for inquiries regarding:

- Deep Creek Lake - fishing information and tag reporting
- Conducted a phone interview with a reporter from Shore Magazine about youth fishing opportunities
- Provided an overview and update on the Deep Creek Lake walleye tagging effort to the Deep Creek Lake Property Owners Association

Hispanic Heritage Month – Kicked off Hispanic Heritage Month with an event at Patapsco State Park. Many units from the department were present including Fishing and Boating Services

with the Mobile First Catch Trailer along with the newly acquired “bling” (photo below) from Recreation Boating and Fishing Foundation (RBFF). The agreement with RBFF is that the department uses this mobile unit to provide fishing opportunities in urban/underrepresented areas. Although there was no fishing at this location, participants were provided with angling information and practiced some hands-on knot tying and casting.



Freshwater Fisheries - Angler Access

Urieville Lake - The highly anticipated Urieville Lake dredging project is nearing the November 1 start date. The lake’s boat ramp area will be closed while the work is being completed. A pre-bid meeting was held with the department, Department of General Services and the contractor to finalize plans. Letters were sent to the adjacent landowners informing them of the work. The same information was posted on the Fishing and Boating website and social media accounts. Regional staff has responded to several customer service emails from stakeholders on the project.

Freshwater Fisheries - Invasive Species

Blue Catfish - Continued to provide blue catfish samples for the ongoing study of diet and growth of blue catfish in the Nanticoke and Marshyhope watershed. The monthly collections will continue until water temperatures drop below 50°F.

Freshwater Fisheries - Coldwater Program

Completed the 2022 brook trout surveys. Quantitative surveys were conducted at stations in the mainstem of the Savage River to estimate population size. Qualitative surveys were conducted to determine the presence of brook trout in Green Spring Run, an unnamed tributary to the Conococheague Creek, Georges Creek, Jennings Run, Sand Run, and Collier Run. Staff also began to retrieve temperature loggers that had been deployed prior to the summer index period.

Attended the Eastern Brook Trout Joint Venture Steering Committee quarterly meeting. Staff participated in discussions about funding opportunities for habitat enhancement projects, planning for the annual meeting, and consideration of candidates to serve as chair. A new wild trout population was documented by Eastern Regional staff in Cecil County this month. Temperature loggers have been pulled from several streams in the county - those data will be analyzed and added to the freshwater database.

Freshwater Fisheries - Tidal Bass Program

Worked with Maryland Bass Nation and BASS to facilitate fish care during competitive bass fishing tournaments held in North East Maryland on September 8 and 9.

Began the annual Tidal Bass Survey in targeted rivers of the Chesapeake Bay watershed; in 2022, the rivers will include: Marshyhope Creek, Bush, Gunpowder, Middle, Northeast, Patuxent, Potomac, Sassafras, Susquehanna, and Wicomico Rivers. Each year, the survey assesses the populations of the state's most popular gamefish, largemouth and smallmouth bass, in tidal waters of Maryland. Data collected will be analyzed and distributed to stakeholders during winter.

Mapped out Southern Region tidal bass sites on the Potomac and Patuxent Rivers and installed the coordinates on the onboard Hummingbird side scan unit which will allow staff to efficiently navigate to sample locations and eliminate the need for a handheld GPS while on the boat.