

Freshwater Fisheries Monthly Report – July 2023

Freshwater Fisheries - Stock Assessment

Seining Surveys - Annual seine surveys have started on the Monocacy River, Conococheague Creek, and upper Potomac River to assess smallmouth bass juvenile recruitment. Monocacy River results were very encouraging with a seine score of 4.1 fish/seine haul. This is well above the long-term median score of 1.5 fish/seine haul. Similarly, on Conococheague Creek, the smallmouth bass seine score of 2.5 fish/seine haul was above the long-term median score of 2 fish/seine haul. Both systems appear to have had a successful spring smallmouth bass spawn. Seining efforts have started on the mainstem upper Potomac River. In contrast, initial results have been poor with very few smallmouth juveniles being collected or observed in the river. Seining work will continue through the next few weeks.

Smallmouth Bass Health Study - Fish and water samples have been collected for a smallmouth bass juvenile health study on the upper Potomac River. A sample of smallmouth bass juveniles were collected from the Williamsport section of the river. They, along with a similar sample of hatchery produced smallmouth bass, will be examined by researchers with the USGS Leetown Science Center to look for differences in fish health. Weekly water samples from both the river and hatchery will also be analyzed to look for specific compounds that may be negatively impacting juvenile bass health in the wild.

Trout Surveys - Western Region staff have been conducting brook trout surveys in Garrett County to support statewide brook trout population assessments. Central Region staff have also continued their trout sampling efforts during the summer index period.



Brook trout from unnamed tributary to Little Gunpowder Falls

Creel Data - Western Region staff continues to collect and enter Deep Creek Lake creel data as part of an ongoing creel survey.

Electrofishing Surveys - Freshwater Fisheries new raft-mounted electrofishing unit made its way to the Eastern Region this month. The portion of the Susquehanna River from Conowingo Dam to Lapidum supports a popular smallmouth bass fishery; however, not much is known about the population. Traditional boat mounted electrofishing is not feasible in that reach of the river due to rocks, dangerous currents, and shallow water. Staff used the raft to float from the dam downstream and electrofish segments of the river, hoping to collect smallmouth bass. Results of the effort were poor and resulted in few bass being collected. Although this experimental survey was unproductive, the raft spent extra time in the Eastern Region while improvements to the trailer were completed which will make loading and unloading safer and easier for staff.

Coldwater surveys were completed in three small Cecil County streams to document the survival of wild brown trout populations. Adult and juvenile trout were collected from both branches of one stream while one adult was collected in another. Trout are persisting in these streams despite the large commercial development of the Bainbridge property, which is located at the top of their watersheds. This is promising news. While in the area, staff attended a site visit to several potential fish passage mitigation project sites for the Susquehanna River Railroad Bridge Removal Project.



A juvenile brown trout from a Cecil County stream and a long culvert which is currently preventing fish passage

Freshwater Fisheries - Habitat and Water Quality

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

- A landslide project to take place in Lonaconing, Allegany County, Maryland. The sliding hillside is the result of a failing pond embankment of an alkaline treatment pond that has potential to cause harm to life and property in the town of Lonaconing. Comments were provided for minimal disturbance, material storage, pump around procedures for draining the pond, and site reclamation.
- A stone revetment to be constructed along the shoreline of Deep Creek Lake.

Comments were provided for time of year restrictions, minimal disturbance during construction, onsite material usage, and providing fish habitat.

- The Abandoned Mine Lands Division submitted a list of special projects they intend to complete to address various projects from old coal mines. The projects were reviewed and the main concerns for the projects were sediment and erosion control measures - comments were provided accordingly to each specific project.
- On two proposed Project Open Space property acquisitions in Garrett County. These properties would provide additional access to the North Branch Potomac River (NBPR) and become additional assets of the NBPR Fishery Management Area.
- A bridge replacement project on Friends Creek in Frederick County. Friends Creek is a Use Class III stream (nontidal, coldwater) that is stocked with hatchery trout as part of the Put-and-Take Program. Comments were made to adhere to the in-stream construction time of year restriction and for measures to protect against pH spikes that can occur from curing grout/cement.
- A State Highway project to pave and fill voids with grout for a culvert on an unnamed tributary to Big Pipe Creek. Coldwater aquatics resources have been documented in the unnamed tributary and stringent measures to protect the sensitive resources were recommended.
- A NPDES permit (# MD0023680) renewal application for the SHA I-70 South Mountain Rest Area WWTP to discharge treated wastewater into an unnamed tributary to Grindstone Run in Frederick County. Although designated as a Use III Coldwater Stream, trout resources are not present in the receiving stream and an on-stream pond occurs just downstream of the discharge point. The permit conditions are protective of the existing aquatic resources.

Fish Kill - Conducted a site visit to the Cumberland Outdoor Club for a reported fish kill. During the visit staff were able to locate dead fish as well as numerous fish still alive. Staff determined that the pond had an algal bloom resulting in the small fish kill.

Temperature Probes - Staff have been actively working with YSI, Inc. to repair malfunctioning temperature probes on the North Branch of the Potomac River and the lower Savage River tailwater trout fisheries.

Pond Outfall - Central Region staff worked with our Brook Trout Program staff to modify two pond outfall structures in the Upper Gunpowder watershed. Initial results indicate that siphoning subsurface water from these ponds can reduce outflow temperatures by several degrees without changing the water level.



Central Region and Brook Trout Program staff setting up subsurface siphon to discharge cooler pond water

Patuxent - Continued to support Trout Unlimited efforts to monitor water quality in the Patuxent Tailwater below Brighton Dam.

Pond Assessment - Central Region staff seined four ponds to assess fish populations and provided technical guidance to multiple pond owners.

Morgan Run - Attended a field visit to assess the construction progress at the Morgan Run Fishing Platform off of Klees Mill Road. The project will result in more parking, enhanced fish habitat, and will make the fishing platform ADA accessible.



Stream/fish habitat enhancement construction at the Morgan Run Fishing Platform

Freshwater Fisheries - Outreach

Provided customer service information for inquiries regarding:

- Trout stocking in Maryland
- Fishing license information
- Koi fishing question in the North Branch Potomac River
- Trout fishing the North Branch Potomac River
- Bass fishing the Youghiogheny River Lake
- Directed callers to appropriate personnel for registering watercraft
- Commenting procedure for scoped regulatory ideas
- Catfish identification

Es Mi Parque – Provided the Mobile Fishing Trailer, loaner rods, and a fish casting game for the Es Mi Parque event at Patapsco Valley State Park. The Es Mi Parque program was launched by the Maryland Department of Natural Resources in 2016 as a pilot project to improve customer service and reduce access barriers for the Hispanic community. It has since evolved to be the umbrella term for all Spanish bilingual programs and events at parks, such as our annual summer events at different state parks, the bilingual Junior Ranger camp held at Patapsco Valley State Park, the Hispanic Heritage Month celebrations, and much more!

Women in the Outdoors (WITO) – Provided the Mobile Fishing Trailer and a Basic Fishing Station for the WITO Workshop. This was a free event hosted by the National Wild Turkey Federation and Maryland Department of Natural Resources. The workshop was held at the Thurmont Conservation and Sportsman’s Club and was open to 50

participants. Each participant got hands-on experience at angling, archery, firearm safety and shotgun shooting, turkey 101, along with butchering/cooking and scent tracking dog demonstrations.



Maryland Conservation Job Corps Fishing Days – Conducted three basic fishing seminars for the corps members. Events were held at Patapsco State Park- Lost Lake, Gunpowder State Park – Dundee Creek, and Seneca Creek State Park. The Maryland Conservation Job Corps members work hard in the parks (in the heat) doing maintenance and trail work, so it is nice to have a free fun day. The majority of the corps members were first time anglers. Although the fishing was a little slow, especially at Dundee Creek; the groups were appreciative of the opportunity to go fishing.



Freshwater Fisheries - Angler Access

Fishery Management Areas (FMAs) - Performed routine checks and maintenance at the McCoolle, Black Oak, and Evitts Creek FMAs. Staff recently conducted road maintenance at the McCoolle and Black Oak FMAs. Staff also checked the soft launch area in Crellin along the Youghiogheny River.

Eastern Region staff removed dead ash trees at Rising Sun Pond that posed a danger to the public using the area. Several other dangerous trees remain; however, they are located on private property. Staff are working with the adjacent landowner to have the remaining trees removed safely. Until that occurs, staff closed a small portion of the property to public use. Staff clearly posted and flagged the closed area.



Dead ash trees at Rising Sun Pond

Placed regulation signs in special management areas throughout Garrett County to help inform anglers of fishing regulations for specific management areas.

Freshwater Fisheries - Invasive Species

Attended the “Nanticoke River Invasive Fishing Derby” held by Salisbury University, assisting with the weigh-in process and answering questions from the public.

Completed a risk assessment for freshwater drum that has been caught in the upper Chesapeake Bay and poses a potential threat to mussel restoration activities of lower Susquehanna River.

Participated with several charter boat bowfishing trips aimed at harvesting blue catfish and northern snakehead; the objective is to learn more about the role and efficacy of bowfishing in the harvesting of northern snakehead; at times bowfishing is quite effective!



Bowfishing for Northern snakehead

Freshwater Fisheries - Coldwater Program

Quantitative surveys were conducted at over 12 stations that ranged from the Monocacy River watershed to the Savage River watershed. Fin clips were collected for genetic analysis at two locations in the North Branch Potomac River watershed above Jennings Randolph Reservoir. Most of the surveyed locations are part of the statewide brook trout monitoring network, though several streams were targeted to address data gaps in the 2020 brook trout patch assessment. Quantitative surveys will continue through the summer index period and will be completed by the end of August.

Quantitative surveys were conducted above culvert removal project locations in Sand Spring Run and an unnamed tributary to Blue Lick Run to monitor brook trout occupancy. The culverts at both locations were recently removed and replaced with single span bridges. Brook trout were observed above the bridges, suggesting that both projects were successful in removing the blockages.

Site visits were conducted at stream blockages in High Run and Bear Branch in Frederick County and Warner Hollow Run in Washington County. The blockages were reviewed for total impacts to passage and potential for removal. When all aspects of the blockage have been considered, landowner consent and grant funding for removal projects will be pursued.

Limestone sand was delivered to Wolf Den Run State Park to initiate a water quality treatment project. Brook trout occupancy in Wolfden Run is limited in part by episodes of low pH caused by acid mine drainage. The limestone sand treatment will limit low pH events, allowing for water quality conditions that are more suitable for brook trout occupancy. Additional projects in the stream that will remove blockages and restore connectivity are also being pursued.

Organized and convened the July meeting of the Coldwater Fisheries Advisory Committee (CFAC). Committee members were updated on data collection efforts in the North Branch Potomac River and were informed of the department's Environmental Review Program. The Sport Fisheries Advisory Commission (SFAC) has expressed interest in becoming more involved with the environmental review process. CFAC had a lengthy discussion about how the committee could participate and support efforts that lead to improved water quality and resource protection. Several committee members volunteered to work with SFAC towards this effort. The department also laid out the challenges for the environmental review process and asked the committee to consider innovative approaches towards project design and review in Maryland. These discussions will continue in future CFAC meetings. The next committee meeting will be held in October.

Continued to work with Eastern Brook Trout Joint Venture (EBTJV) to improve and update their website. The website is a valuable source of information for brook trout and provides access to range-wide news and data. The website team will work towards developing a more accessible and user-friendly product that continues to be highly informative.

Freshwater Fisheries - Tidal Bass Program

Submitted a report to Potomac River Fisheries Commission relaying results of the Potomac River Interagency Cooperative Monitoring Project for Largemouth Bass. Results are available on the [Tidal Bass Program webpage](#).

Participated in a podcast with Fishing the DMV with Thomas Arens to talk about largemouth bass fishing in Potomac River and other tidal rivers in Chesapeake Bay watershed; the podcast will be released in the second week of August and shared with the department's social media.

Hosted the Black Bass Advisory Committee meeting on July 10th to discuss issues related to illegal harvest of black bass during the spawning season and potential regulatory ideas to address problems with discard mortality following haul seine activity on Chicamuxen Creek.

Staff have been busy on weekends this month attending bass fishing tournaments on Conowingo Reservoir. Although all the tournaments intend to release their bass after weigh-in, high water temperatures increase the mortality rates of the fish in their livewells. Staff are collecting the moribund fish to collect age and growth data on smallmouth and largemouth bass populations within the reservoir.

Freshwater Fisheries - Other

Western Region I staff verified the second state record fallfish caught on the North Branch of the Potomac River during 2023. The fish weighed just over 3 pounds.