Freshwater Fisheries Monthly Report – August 2023

Freshwater Fisheries - Stock Assessment

Brook Trout Surveys - completed brook trout surveys for the 2023 summer sampling period. Trout surveys were done on Casselman River, Little Laurel Run, Lostland Run, Puzzley Run, South Branch Casselman River, Spiker Run, and Steyer Run.

Largemouth Bass Study- Began young-of-year (YOY) largemouth bass collection 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 Frostburg Reservoir (Piney), Savage River Reservoir and Deep Creek Lake have been collected.

Seining Surveys - Conducted seining surveys on Deep Creek Lake, Piney Reservoir, and Savage River Reservoir to assess recruitment of popular gamefish and panfish species.

St. Mary's River - Searched for flier (*Centrarchus macropterus*) using backpack electrofishing at two locations in St, Mary's River. No flier were found, but the presence of northern snakehead below the dam at St. Mary's Lake was confirmed.

Regional staff continues to collect and enter Deep Creek Lake creel data from angler interviews.

Continued processing and analyzing data from Rocky Gorge night surveys and Triadelphia net surveys.

Freshwater Fisheries - Habitat and Water Quality

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

- For a Columbia Gas utility line replacement to take place in Rawlings, Allegany County, Maryland. Comments were provided for minimal floodplain disturbance and site restoration at the completion of the project.
- An application was reviewed for the cleaning and restoration of a passive acid mine drainage treatment system located in Lonaconing, Allegany County, Maryland. Comments were provided for strict sediment and erosion control, minimal disturbance, sludge disposal site being in an upland area, best management practices for pumping procedures, proper filter bag usage, and site restoration at the completion of the project.
- Participated in a Land Reclamation Committee field review for phase two bond releases. Eight reclamation sites were reviewed with seven being approved where vegetation coverage met requirements.
- Reviewed the Potomac-Garrett State Forest work plan for FY2025. No comments were provided for aquatic resources, as the proposed timber harvests had no direct impacts to waterways in the harvest areas.
- On three proposed Project Open Space properties. Properties are located in Allegany, Washington, and Frederick counties.

- A mine water discharge event in the headwater of Moores Run. While conducting a trout survey, a significant volume of overland water flow was observed. The flow of water was followed back to a mining operation that was discharging mine water through a stormwater management pond. The Maryland Department of the Environment, Bureau of Mines was contacted and compliance staff visited the site. The mine water discharge activity was halted and the site was inspected. The department will follow up with Bureau of Mines staff to confirm that the incident has been corrected and to request actions to avoid similar incidents in the future.
- Revisions to wastewater treatment plant upgrades at New Germany State Park. A site visit to the location had been conducted earlier in the year, but changes to the design plans were needed. Recommendations were made to limit the expansion of an existing road, reduce the number of trees that would be removed from the limit of disturbance, and reduce the footprint of stormwater management facilities. Additional information about the wastewater treatment process was requested and additional comments will be provided when that information is available.

Site Visit – Made a visit to Broadford Lake after reports of the water being off color. Upon arrival it was determined that there was an algae bloom discoloring the water. Staff walked the shoreline and found no evidence of dead fish and were able to see multiple fish swimming in the lake.

North Branch Potomac River - Conducted a meeting with representatives from the U.S. Army Corps of Engineers to discuss artificially varied flows on the North Branch of the Potomac River tailwater. Staff also met with representatives from the Interstate Commission on the Potomac River Basin (ICPRB) to discuss future research/management needs for the North Branch of the Potomac River tailwater from Jennings-Randolph Lake downstream to Cumberland.

St. Mary's Lake - Surveyed around various habitat structures that Fisheries has installed in St. Mary's Lake over the years. Most forms of structure did attract or hold fish with the exception of one site that was always marginal due to the exposure to prevailing winds and little shoreline brush.

Fish Habitat - Concrete reef ball forms and other supplies were taken to Merkle Natural Resource Management Area where park staff volunteered to construct reef balls for use in the Southern Region.

Freshwater Fisheries - Stocking and Population Management

Tucker Pond – Conducted a fish survey on Tucker Pond in Prince George's County. Tucker Pond is always plagued with some form of vegetation covering it every year. Both the department and the Maryland National Capital Park and Planning Commission (MNCPPC) have explored various methods of removal. Tucker Pond still suffers from unauthorized plant releases and the public feeding of wildlife (the same as Hughesville). Vegetation, especially watermeal and duckweed can effectively shut down a pond if not attended to continually. Although severely hampered by the vegetation, several sunfish

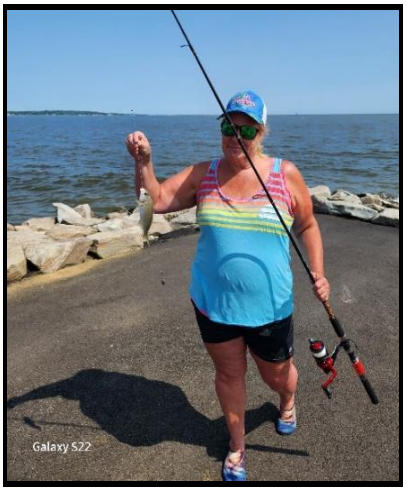
species, young largemouth bass, brown bullhead, eel, and black crappie were found in the pond.

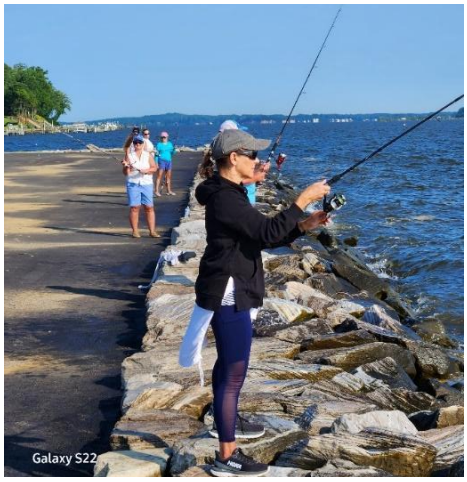
Freshwater Fisheries - Outreach

Customer Service - Provided customer service information for inquiries regarding:

- Fishing license information
- Referral to proper personnel for licensing watercraft
- Directions for setting up and scheduling a bass tournament on Deep Creek Lake
- Trout fishing in Western Maryland reservoirs
- Trout fishing the North Branch Potomac River
- Private pond fish stocking permits and recommendations
- Beaver Creek fishkill and monitoring results.

Ladies Fishing Day – Partnered with Angler's Sport Center to host a Ladies Day of Fishing at Podickory Point. After learning the basics of knot tying, tackle type and casting practice, participants had the opportunity to fish from both the shoreline and a boat. Most of the fish caught were spot and croaker, and a few stripers were caught from the boats. The staff from Angler's fileted the fish for the participants to take home provided each participant with a complimentary, new fishing rod.





Warfield Pond Park Fishing Event – Collaborated with Howard County Recreation and Parks to host the annual Backyard Fishing event targeting new anglers, after the initial storm rolled through, the evening turned out perfect. Participants were given some basic fishing training prior to heading to the pond. Most of the first time anglers caught fish including a few largemouth bass.

The Maryland Becoming an Outdoors-Woman (BOW) program hosted its summer workshop on August 11-13. One hundred women attended the three-day event at the 4-H Center in Garrett County and participated in outdoor classes, which included hunting, shooting sports, fishing, and outdoor recreation. Staff from multiple units within the department coordinate the BOW program including Fishing and Boating Services, Maryland Park Service, Natural Resources Police, and Wildlife and Heritage Service. BOW enables women to learn about a wide variety of outdoor recreational opportunities in a casual, non-threatening environment. Classes are designed to be as hands-on as possible, giving participants enough knowledge to further pursue their interests once the workshop is over.

Merkle Wildlife Kids Day - Conducted an electrofishing demonstration and talked about how fish populations are monitored at the Merkle Wildlife Kids Day at Merkle Wildlife Sanctuary. Staff also supplied some invasive northern snakehead and blue catfish for a fish fry for staff and kids.

Freshwater Fisheries – Fish Health

Beaver Creek Fish Kill - A fish kill occurred on Beaver Creek in Washington County on August 7-8. A major storm event on the afternoon of August 7 produced large amounts of storm runoff that entered the stream. On the morning of August 8, numerous dead and dying fish were observed in the stream. The Maryland Department of the Environment was contacted and responded to the stream to collect both fish and water samples. Freshwater Fisheries conducted additional monitoring surveys along the length of Beaver Creek. The most severely impacted area was a 1.5-mile section from I-70 downstream. Sections of Beaver Creek downstream from Route 40 were not impacted by the storm event. Unfortunately, trout and large suckers were some of the hardest hit species. A temperature logger deployed downstream from I-70 clearly showed that stream temperature was not a factor in the fish kill. Fish tissues and water chemistry results are still pending.

Freshwater Fisheries - Angler Access

Fishery Management Areas (FMA)

- Participated in a pre-bid meeting for a road resurfacing project at the Gary Yoder and McCoole boat launches along the North Branch Potomac River. Each location will receive upgrades with road resurfacing and stone being added to parking areas.
- Perform routine checks and maintenance at the McCoole, Black Oak, and Evitts Creek FMAs. Staff recently conducted road maintenance at the McCoole and Black Oak FMAs.
- Met with Engineering and Construction staff to get recommendations on how best to repair the unstable shoreline and beaver erosion damage at Hughesville Pond. Installing three to five fishing docks around the pond in lieu of a very expensive shoreline armoring or reconstruction of the shoreline was suggested. These may also encourage folks to spread out around the pond as well.

Met with Park Service staff to discuss the development of an ADA access project along the Youghiogheny River in Sang Run State Park.

Investigated public access and parking availability for a five acre private community pond in Anne Arundel County. The community is thinking about making the pond available to the public in exchange for management of the fisheries by the department. The pond is almost wholly surrounded by private property which could result in conflicts between homeowners and anglers.

Biologists were contacted by MNCPPC to determine the most effective way to remove excessive Azolla (an aquatic fern) from Melwood Pond so anglers could use the pond. Our experience has been to mechanically remove it instead of using chemicals. Floating booms are usually deployed to 'drag' the Azolla to the shore and remove it. It's very labor-intensive work but the pond is currently mostly clear of aquatic fern that can cover a fairly large pond in short order.

Freshwater Fisheries - Invasive Species

Gave a presentation at the Northwest Fishing Club on the issues and how to fish for invasive fishes.

Staff was awarded funding to support the United States Geological Survey in planning methods that deter invasive fish passage at Conowingo Dam.

Staff completed a risk assessment for freshwater drum, which has been caught by anglers in the upper Chesapeake Bay. The risk assessment is currently being reviewed by the Office of Communications and will be posted online.

Northern snakehead and blue catfish were collected from the Patuxent River by southern region staff for tissue contaminant analysis by the MDE.

Staff received a new Smith-Root eDNA backpack sampler and began work on a northern snakehead project looking at the efficacy of eDNA sampling to detect northern snakehead in some of our impoundments. Little Seneca lake was surveyed with plans to sample Loch Raven in the coming weeks. Filtered eDNA samples will be sent to the U.S. Fish and Wildlife Service Northeast Fisheries Science Center in Lamar, PA for processing and analysis.

Freshwater Fisheries - Coldwater Program

Quantitative trout surveys were conducted at over five stations that are part of the new brook trout monitoring network. Brook trout fin clips were collected in one stream for genetic analysis. In addition, approximately 10 qualitative trout surveys were conducted and support was provided for surveys on regionally managed coldwater resources. Of particular interest was the Murley Branch qualitative survey, which extended the known range of brown trout and rainbow trout occupancy in the stream.

Brown trout collected during the Murley Branch Survey

Met with officials from the City of Frostburg at the Frostburg Pond Restoration site in the headwaters of the Savage River. City officials were informed about the importance of the brook trout population in the Savage River and the department's efforts to monitor and protect the resource. The importance of water quality and the coldwater influence of Savage Springs to the brook trout resource was also discussed. A qualitative trout survey was performed to give city officials hands-on experience.

Met with students from the Gunston School in Centreville to discuss headwater aquatic resources as part of their Chesapeake Bay Watershed Semester. An electrofishing demonstration was provided and students were given the opportunity to observe common freshwater fish and collect benthic macroinvertebrates. The importance of healthy freshwater streams and rivers and how that relates to downstream resources was also discussed.

Students from The Gunston School observe freshwater fish species collected during an electrofishing survey.

Freshwater Fisheries - Tidal Bass Program

Staff held their annual meeting to discuss the upcoming tidal bass survey, survey design, an updated Standard Operating Procedure, as well as other matters.

Finalized a date (Sept. 14) to present to Potomac River Fisheries Commission the findings from cooperative monitoring of the largemouth bass population from Potomac River.

The Black Bass Advisory Committee seeks new members for their committee and staff opened an application period through September 30. For additional information about applying, visit the DNR website.