

Freshwater Fisheries – May 2024

Freshwater Fisheries - Stock Assessment

Broadford Lake - Conducted an electrofishing survey on Broadford Lake as part of the



Electrofishing Broadford Lake (left) and tagged largemouth bass (right).

routine monitoring and management of the fishery. In addition, largemouth bass were checked for tags as part of a stocking effort to increase recruitment and balance the size structure of the fishery.

Piney Reservoir - Western Region I staff made two attempts at collecting crappie from Piney Reservoir in an effort to obtain growth and mortality data on the crappie population. Given the water temperatures and timing, relatively few crappies were collected. Future efforts will be made and may include trap netting to obtain the necessary data.

Deep Creek Lake - Conducted the first of two nights of electrofishing on Deep Creek Lake as part of the annual monitoring and management efforts. In addition to regular monitoring, bluegill, smallmouth bass, and yellow perch were collected in order to determine age and growth and to be assessed for fish health. Further, specific locations were sampled as part of an ongoing mercury study with the University of Maryland.

Greenbrier Lake - Conducted night electrofishing surveys on Greenbrier Lake in Washington County. Black crappie, largemouth bass, and sunfish (redeer and bluegill) were collected during the surveys. With high numbers of largemouth bass in the 8-11 inch size range, a management action was taken to move roughly 200 of these size bass to the Patapsco River in Baltimore County. Fish tested negative for pathogens of concern prior to release. This removal should help promote growth for the remaining largemouth bass and improve the size distribution of the Greenbrier Lake population, while also bolstering the fishery in Patapsco River.



Monocacy River - Started boat electrofishing surveys on the Monocacy River in Frederick County. Smallmouth bass densities looked

good with multiple size-classes of fish present, with the longest smallmouth bass coming in at 17 inches. One walleye and an invasive flathead catfish were also collected during the surveys. Additional sampling will be conducted in early June.



(top to bottom) Walleye and smallmouth bass collected from the Monocacy River

Loch Raven Reservoir -Followed up the April fyke netting for crappie in Loch Raven Reservoir with one day of electrofishing. Between the fyke nets and the electrofishing survey, 39 crappie were collected and otoliths were collected for aging.

Freshwater Fisheries - Habitat and Water Quality

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

- A facility rehabilitation project to take place along Muddy Creek in Oakland, Maryland. Comments were provided for strict sediment and erosion control, minimal disturbance, and reclamation at the completion of the project.
- Attended a Land Reclamation Committee meeting to review reclaimed mine sites for vegetation approval. Eight sites were reviewed and approved.
- The “Ferndale Baptist Church” property, Garrett County. The property was reviewed for Program Open Space.
- A stormwater pond retrofit on an unnamed tributary to High Run in Frederick County. High Run is a Use III coldwater stream that supports a brook trout population. A site visit was conducted by Maryland Department of the Environment (MDE), U.S. Army Corps of Engineers (USACE), and the consulting firm in charge of design. The purpose of the retrofit is for MS4 credits. The department expressed concerns about the design that included a wet pond in a coldwater drainage, riparian buffer clearing, and unnecessary in-stream work. Alternative stormwater management methods, such as infiltration, were suggested if possible. A follow up meeting will be held to discuss the department’s concerns and comments from other agencies.
- Attended a virtual meeting with representatives from MDE to discuss an ongoing enforcement issue in Spooners Creek (Harford County). Spooners Creek supports a healthy brook trout population.



Sampling Loch Raven Reservoir

Temperature Loggers:

- Western Region I staff deployed temperature loggers on the Youghiogheny River, North Branch Potomac River and several coldwater streams to monitor water temperature for the critical monitoring period of June 1 through August 31.
- Central Region staff deployed 25 HOBO water temperature loggers in trout streams around the region.
- Coldwater Program deployed temperature loggers in targeted streams prior to the start of the thermally critical period of June through August. Approximately 75 loggers were deployed throughout the state. The units will be retrieved in the fall for data download and analysis. The data collected from the loggers will be used to monitor temperatures in streams that support coldwater fisheries and to identify streams with coldwater potential.

Staff worked with the USACE and Interstate Commission of Potomac River Basin (ICPRB) to move forward with the acquisition of new real-time temperature monitoring equipment for the North Branch of the Potomac River.

Freshwater Fisheries - Stocking and Population Management

Western Region I staff assisted Bear Creek Hatchery in stocking the Delayed Harvest area on the North Branch Potomac River.

Brown Trout - Stocked 10,800 brown trout juveniles from Cushwa Hatchery. The brown trout juveniles were stocked in the North Branch Potomac River near Barnum, WV.

Walleye - A total of 50,000 walleye juveniles were stocked in the upper Potomac River. Fish were released at multiple boat ramps in Washington County. Supplemental juvenile stocking is important to help maintain this popular fishery in the river.



(l to r) Juvenile walleye being stocked in the upper Potomac River

Stocking Permits - Regional staff reviewed and approved one stocking application submitted for a fishing rodeo in Westernport, Maryland.

Freshwater Fisheries - Access

Fishery Management Areas (FMAs) – Western Region II staff conducted maintenance work at a number of FMAs and ponds in Frederick and Washington counties. Brownsville Pond, Burkittsville Pond, and Brunswick Pond were treated for nuisance aquatic vegetation. Staff also assisted with the construction of a wooden footbridge over Beaver Creek.

Freshwater Fisheries - Outreach

Customer Service - Provided customer service information for inquiries regarding:

- Provided anglers with information for the new walleye regulation that went into effect for Deep Creek Lake.
- Trout stocking/fishing information
- Yellow perch fishing on Deep Creek Lake

Brook Trout Partnership - Central Region staff organized a meeting with the Upper Gunpowder Brook Trout Partnership and discussed plans for brook trout conservation in the Upper Gunpowder watershed. Volunteers from the partnership coordinated with staff to deploy water temperature loggers in select streams in the watershed. This is the seventh year staff have worked with volunteers to collect water temperature data in brook trout streams.

Women on the Water - Provided the Mobile First Catch Fish Trailer for an introductory Fishing and Boating Clinic for women. The event was held at Seneca Creek State Park. This Recruitment-Retention-Reactivation (R3) workshop was geared toward teaching women basic boating and fishing skills. A seminar on “How to get Started in Boating” was given and discussion about boating safety, boat types and where to go for boat rentals. Participants also learned basic fishing skills (knot tying, tackle selection, rigging, and casting) before heading to the water to fish. Staff from the Aquatic Education and Stewardship Unit provided kayak fishing for participants who wanted to try fishing from a kayak.

Master Naturalist Program– Provided an Aquatic Ecosystems/Freshwater Fishes of Maryland presentation for the Maryland Master Naturalist Program hosted by Lake Roland in Baltimore County. The aquatic presentation covers different aquatic ecosystems in Maryland, the threats to the stream ecosystems (i.e. invasive species, land use, stormwater runoff) and the importance of the riparian buffers for protection of the resource. A powerpoint presentation on the Fishes of Maryland with focus on fish found in their region was also provided. Participants also had some hand-on experience with fish specimens to key fish and learn fish anatomy.

Maryland Becoming an Outdoors-Woman (BOW) - Provided a Beyond BOW Foraging Workshop at Patapsco Valley State Park. This workshop allowed participants to gather plants and learn their uses and then make an elixir with the plants gathered.



Photos from the BOW Foraging Workshop

Angler's Combo for Kids Day - Participated in the Fishing Field day at Ruth Parker Eason School in Anne Arundel County. The Ruth Eason School provides a special education program for students ages 3 through 21 with moderate to severe disabilities. Angler's worked with the Millersville Fire Department to set up a temporary fish trough to allow the students to fish. Several boat captains also provided boats for the students to climb aboard. Other partners included Coastal Conservation Association (CCA), and Maryland Fishing and Boating Services. The weather was beautiful and all the kids had an opportunity to "see and touch" visual displays.



L to R - Students fishing in the trough; the CCA "Reef Ball" Mascot entertains the students

Freshwater Fisheries - Invasive Fishes Program

Invasive Fishes staff continued their work facilitating and coordinating removals and processing of invasive fishes collected at the Conowingo Dam fish lifts. To date, more than 2,000 northern snakehead and nearly 700 flathead catfish have been collected and utilized in beneficial ways through the cooperative efforts of Constellation Energy, Normandeau Associates, J.J. McDonnell and Co, Inc., and the department.



Northern snakehead removed from Conowingo dam.

Invasive Fishes staff worked with Stakeholder Outreach and Services Division to design printed brochures to distribute at the June 8 event, Snakes on the Dundee III. The event is a community based fishing derby that educates the public about invasive fishes and

focuses on recreational removals of snakehead from Maryland waters. Maryland Park Service is working with US Fish and Wildlife Service, Maryland Fish and Wildlife Conservation Office, Freshwater Fisheries and Hatcheries Division, and others to host the event. Details can be found [here](#).

The Invasive Fishes Control Grant period closed and seven awardees from nearly 600 applicants were selected. The project aimed to incentivize members of the community to remove invasive fishes. Successful applicants represent members of the commercial and recreational sectors, as well as communities.

Invasive Fishes Program staff was interviewed by several members of the media and community about blue catfish and northern snakehead threats the species pose in the Bay watershed, and mitigation efforts undertaken by the state.

Freshwater Fisheries - Coldwater Program

Attended the Southern Division of the American Fisheries Society Trout Committee Annual Meeting in Pipestem, West Virginia. Coldwater fisheries biologists from around the region gathered to discuss various issues, including trout stocking practices, efforts to expand brook trout occupancy, and initial planning for the next East Coast Trout meeting. In addition to several other action items, Maryland representation volunteered to participate on the planning committee for the East Coast Trout meeting, planned for 2027.

Participated in several meetings with Maryland Department of the Environment (MDE) staff to discuss various issues that affect water quality in coldwater streams and rivers. These meetings included a discussion about MDE's Existing Use Determination Policy and related data collection and submission procedures, a meeting with the Bureau of Mines to gather information about tree clearing on a mining property in the Lower Savage River watershed, and an update from MDE compliance staff for instream work and riparian buffer clearing violations that occurred in Spooners Creek in Harford County. Collaboration and communication is on-going for all of these issues.

Efforts continued to find small pond standpipes that release surface water and modify them to release deeper water. The modifications are being studied to determine if the thermal influence of small ponds in coldwater drainages can be reduced. Water temperatures are being monitored above and below the pond discharge. The desired outcome of the project is to develop an economical standpipe modification that landowners could potentially use to limit the thermal influence on receiving waters while maintaining their ponds.

Met with Maryland Forest Service staff at a property on Frozen Camp Run to discuss a tree planting project. Frozen Camp Run is a tributary to Cherry Creek, which supports a brook trout population. The desired outcome of the project will expand the riparian buffer of the stream and increase forest land in the watershed. Fishing and Boating Services will coordinate stream community and water quality monitoring with the tree planting activities.

Freshwater Fisheries - Tidal Bass Program

Staff worked two Major League Fishing tournaments to collect data from tagged largemouth bass caught during the tournament and to survey anglers on the number of culled fish during their fishing day.

Staff discussed a regulatory idea with haul seiners to minimize mortality of largemouth bass caught and held in staked nets for any length of time.

Staff welcomed the new Tidal Bass Program Manager, Ryan Gary who started May 29. Ryan can be reached via email at ryan.gary@maryland.gov.