

## Freshwater Fisheries Monthly Report – October 2022

Freshwater Fisheries and Hatcheries staff participated in a staff meeting which provided important updates regarding the recently merged programs, welcomed new staff members to the department, and celebrated the retirements of Ken Booth (photo left below) and Todd Heard (photo right below).



### Stock Assessment

Freshwater Fisheries staff have started the annual fall electrofishing surveys on the upper Potomac River. In addition to gamefish data, staff are assisting researchers from the USGS Leetown Science Center with a Per- and Polyfluorinated Substances (PFAS) study. Blood samples were collected from adult smallmouth collected by boat electrofishing at multiple survey sites. These samples will be analyzed to determine PFAS concentrations from different sections of the river. Following the bloodwork, all smallmouth bass were safely released back into the water.



*Blood collection from an adult smallmouth bass for PFAS analysis*

Tidal bass and impoundment sampling has been in high gear in Eastern Region this month. Tidal bass surveys have been completed in the Northeast River, Wicomico River, and Marshyhope Creek. If weather allows, an additional survey will be completed in the Sassafras River. An interesting note was the abundance of threadfin shad seen during the surveys. Maryland is traditionally on the northern end of their range, and participating staff have never seen them in such abundance during the tidal bass survey.

Smithville Lake and Johnsons Pond were surveyed to assess the largemouth bass populations. Large numbers of quality-sized bass were collected from both impoundments. Smithville Lake currently also has a very robust black crappie population, most of which are between 8-12 inches which should provide excellent fishing opportunities. The number of larger bass collected from Johnsons Pond was truly exceptional this year and it should be providing great fishing for bass anglers.



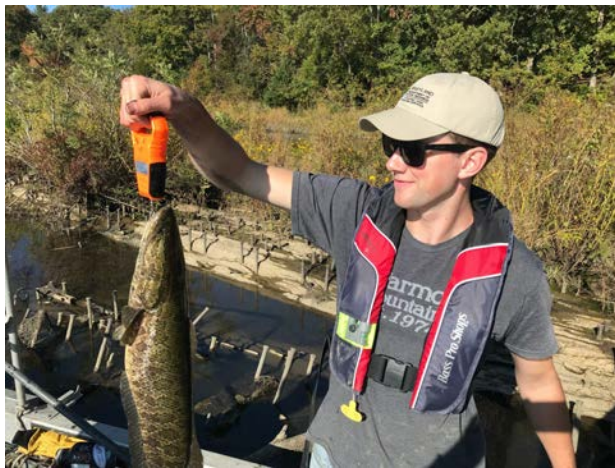
Left- A young-of-year threadfin shad. Right- A live well full of big bass from Johnsons Pond





Left- A trophy-sized largemouth bass collected from an Eastern Region impoundment. Right- Black crappie collected from Smithville Lake

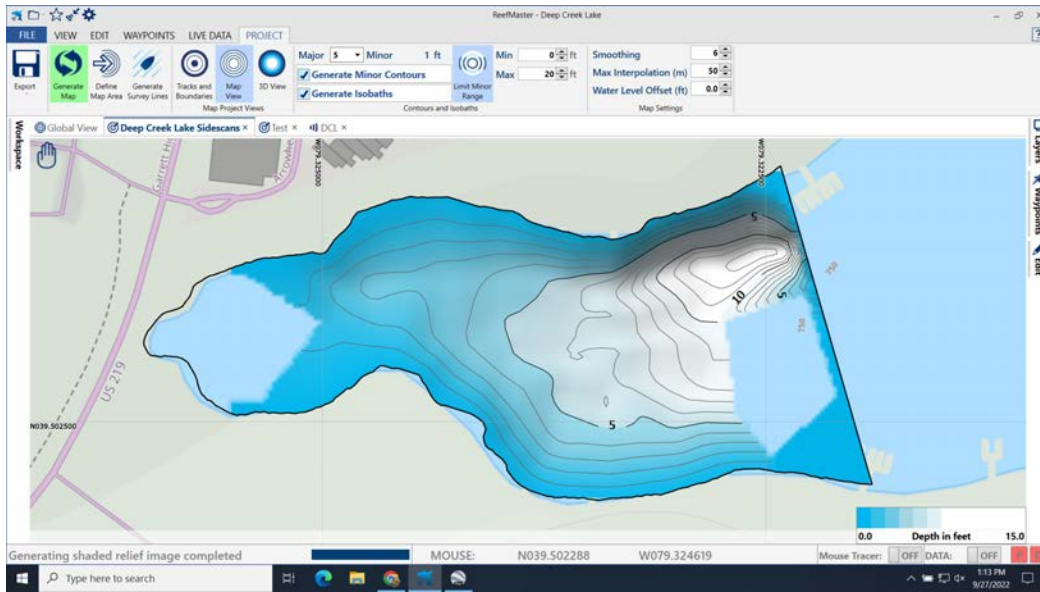
Completed 54 electrofishing sites on the Potomac River for the Tidal Bass project. Sites within the Mallows Bay shipwrecks area were productive for both largemouth bass and snakehead. Photo below showing a biologist weighing a snakehead captured among the wooden hull timbers and ancient steel spikes of one of the ships. This area has been highlighted in both print and film as the “Ghost Ships of Mallows Bay” and is now a stop on the canoe tour of the southern Potomac River.



### **Habitat and Water Quality**

Western 1 staff retrieved temperature loggers from the Youghiogheny River tailwater. Data from the loggers will be used to monitor the effectiveness of the temperature enhancement releases that allow a four-mile stretch of the river to be managed as a Put-and-Grow trout fishery from the Deep Creek Lake hydro station outfall, downstream to the Sang Run bridge.

Western 1 Staff has taken sonar recordings from Broadford Lake and Piney Reservoir in order to build lake bathymetry maps. Recordings were taken with a Humminbird Helix 12 sonar unit and processed with the ReefMaster software package to create maps for each lake. These maps will be made available to anglers through our Western Region I website and will include both bathymetry and the approximate location of any fish habitat improvement structures placed into the impoundments.



*Example of a shaded relief map created of Arrowhead Cove on Deep Creek Lake using ReefMaster software*

Staff participated in the Broadford Lake Watershed Committee meeting and shared information on fishery management projects in the lake as well as an update on the collection of bathymetric data for the lake.

Hughesville Pond was cleared of a major duckweed and Azolla (water fern) infestation prior to the scheduled stocking day for rainbow trout. The one acre pond was completely covered at 9:30 am and by 4:00 pm it was cleared. Biologists used floating booms to corral the weeds down to one end and then net them out into large composting piles. This is an annual (or more) activity at Hughesville Pond. The pond has been the site of illegal disposal of unwanted aquarium and pond plants. The removed matter makes great garden compost and will be available to those who are willing to haul it away.



Central Region Staff recovered nearly 30 water temperature loggers that were deployed in the spring. These temperature loggers monitor temperatures in trout streams and streams that may be candidates for use class redesignation.

### **Environmental review**

- Staff biologist in Western 1 attended a meeting with the Interdisciplinary Review Team (ID team) at Potomac Garrett State Forest Headquarters regarding a proposed 6-mile trail that will impact a large portion of Garrett State Forest. ID team members are assembled to review annual work plans submitted from state forest managers to ensure that land use practices do not impact natural resources in a negative way with the ultimate goal of protecting and enhancing them. At the meeting, members of the ID team unanimously agreed that the proposed trail should be moved to a designated recreation area in another part of the forest where impacts to other user groups would be minimized.
- Comments were provided for an application submitted by Allegany Department of Public Works for a proposed recreation complex to be constructed at Allegany College of Maryland. The recreation complex is planned to include two playing fields, walking trails, and a fishing pier constructed along the bank of Evitts Creek.
- Comments were provided for an access road project submitted by the US Army Corps of Engineers (USACE) in order to replace the tainter gates at the spillway located on Jennings Randolph Lake. Comments were provided for strict sediment and erosion control measures and site restoration during and after construction.
- The Swallow Falls Road bridge project. Garrett County is developing designs to replace a temporary bridge with a single span bridge across the Youghiogheny River. Recommendations were submitted to minimize impacts to the riparian buffer, limit disturbance by placing the new bridge in the footprint of the old bridge, avoid directing untreated stormwater to the river, adhere to the Use Class III closure period, and use sediment and erosion control best management practices.
- Central Region staff reviewed a stream restoration project in Baltimore County.

### **Stocking and Population Management**

- West 1 staff assisted hatchery staff in stocking 4,000 trout in Garrett County.
- Youghiogheny River Catch and Release – 3,000 advanced fingerlings and 500 adult brown trout.
- North Branch Potomac River Delayed Harvest – 500 rainbow trout.
- Stocked trout at 13 ponds in the Southern Region for fall season. Trout from Albert Powell Hatchery were of good quality and size and anglers were happy to see the trout going into the ponds. Some children out for a stroll were given a chance to look at a trout up close in a bucket of water at Greenbelt Lake prior to being released into the lake and were very appreciative.
- Central Region and hatchery staff, with a handful of steadfast volunteers, stocked over 5,000 hatchery-raised brown and rainbow trout to select streams and ponds in Baltimore, Carroll, Harford, Howard, and Montgomery counties. Many anglers were amazed at the size and quality of the fish produced. The stocking program is a popular program that offers anglers a unique opportunity to catch and consume these sportfish.

## **Outreach**

Staff provided customer service information for multiple inquiries regarding:

- Provided callers with information on fishing Deep Creek Lake
- Gathered information from callers reporting tagged walleye from Deep Creek Lake (DCL)
- Provided information on when the docks would be pulled from the DCL state park boat launch
- Provided information on tiger trout in the lower Savage River
- Potomac River conditions and options for targeting muskellunge
- Fishing opportunities for beginning anglers in Washington and Frederick counties
- Added regulation designation column on daily trout stocking webpage table to inform anglers of regulations before going afield.

Staff handed out postcard surveys to angler at Deep Creek Lake as part of the ongoing walleye tagging study to estimate tag reporting rates.

Staff checked and replaced special management area fishing regulation signs throughout Garrett County.

Western Region 1 staff performed a stream ecology/shocking demonstration for Allegany College Forestry students. Students participated in electrofishing, benthic macroinvertebrate sampling, along with discussion on proper forestry practices to protect water resources.

Staff participated in the fall meeting of the North Branch of the Potomac River Advisory Commission and presented on fishery management projects on the North Branch of the Potomac River and the Savage River tailwater during 2022.

Staff completed updating the Western Region I website to be more user-friendly and provide more specific information to anglers about the fisheries in Western Region I.

**Hispanic Heritage Event** – Took the Mobile First Catch Trailer to Sandy Point State Park for a Hispanic Heritage Event. Several families took advantage of the loaner rods and fished along the beach. Participants could also sign-up to receive the New Angler Newsletter that was recently developed to provide new anglers with fishing information, promote fishing opportunities, and encourage them to continue fishing.





### **Angler Access**

Western I staff continues to mow grass and conduct trash clean ups at the Evitts Creek, Black Oak, and McCoole Fishery Management Areas (FMAs). Overhanging limbs were removed from Evitts Creek FMA at the access road and along the pond edges in order to clear areas for stocking and fishing access. A fallen tree was also removed from the lawn area at the Black Oak FMA.

### **Invasive Species**

Staff tagged a number of northern snakehead as part of a collaborative tagging project between Maryland DNR and U.S. Fish and Wildlife Service. The program offers anglers a monetary reward for reporting tagged fish. The project aims to estimate fishing effort, mortality, and movement in waters of the upper Chesapeake Bay. Northern snakeheads were tagged in conjunction with the Tidal Black Bass Survey.

### **Coldwater Fisheries Program**

Held the October meeting of the Coldwater Fisheries Advisory Committee. Agenda items included updates on Maryland Department of the Environment’s 2019 Triennial Review and a possible re-class or existing use determination for the North Branch Potomac River below the Savage River confluence. The committee also discussed recommendations for the coldwater fisheries management plan. The next committee meeting will be held in January of 2023.

The 2021 Brook Trout Fishery Management Plan Report was completed and submitted for review. The fishery management plan was updated and action items completed during 2021 were documented. After review, the report will be posted on the Fishing and Boating Services webpage.

Attended a site visit with representatives from Patapsco Valley Trout Unlimited, Eastern Brook Trout Joint Venture, and Canaan Valley Institute to discuss the road improvement project in the Frederick City Watershed. Trout Unlimited is pursuing a project that will mitigate the impacts of stormwater runoff to Fishing Creek. Previous site visits identified locations of significant instream habitat degradation and opportunities for road stabilization. The October site visit

attempted to secure additional partners and discuss potential funding opportunities to support the project to completion.

Attended a meeting with staff from the department's Chesapeake and Coastal Service and the Environmental Review Program to discuss methods for screening projects that are proposed in sensitive watersheds. Various tools, including the coldwater mapping tool and the aquatic resources mapping tool, were identified as resources that could be used for project screening. A successful outcome will optimize project planning and screening for streams with sensitive resources.

### **Tidal Bass Program**

Regional staff conducted work towards completion of the Tidal Bass Survey. Using boat electrofishing, staff collected and measured largemouth bass, smallmouth bass, and northern snakehead from over 200 sites within tidal rivers of Chesapeake Bay. Teams also measured water quality, habitat characteristics, and noted all fish species that were observed during the survey.

Central Region staff completed the annual fall black bass survey of tidal, freshwater rivers of central Maryland. Sampled areas included portions of the Upper Chesapeake Bay, as well as the Bush, Gunpowder, and Middle Rivers. In total, 52 Tidal Bass sites were sampled by the Central Region. Data will be analyzed later in the fall.