Freshwater Fisheries Monthly Report – September 2021

Stock Assessment

Trout Sampling - Assisted staff from Trout Unlimited and AmeriCorps in completing their yearly monitoring sites. Multiple locations were sampled at the following locations: Jennings Run, Monroe Run, Maple Lick Run, North Fork of Crabtree, Wolfden Run, and an unnamed tributary to Mudlick Run.

Largemouth Bass - Completed young-of-year (YOY) largemouth bass collections for the University of Maryland, Center for Environmental Science as part of an ongoing study to assess year-to-year and long term trends in methylmercury (MeHg) bioaccumulation.

Black Bass Seining Survey - Conducted the annual YOY black bass seining survey on Deep Creek Lake. Twenty established stations, 30.5 meters in length, were seined to determine black bass reproduction success.

Catfish Survey - Started catfish monitoring work on the upper Potomac River. Nighttime boat electrofishing surveys are being conducted at locations from Whites Ferry upstream to McCoy's Ferry. Both channel catfish and invasive flathead catfish have been collected. So far, flathead catfish catch rates are higher than those observed in the previous 2016 survey. At the Shepherdstown, West Virginia section of the river, 2021 flathead catfish catch rates were 38 fish/hour compared to 30 fish/hour in 2016. Flathead catfish continue to increase in abundance and expand their distribution in the river.



Forty-inch flathead catfish collected from the upper Potomac River near Shepherdstown, WV

Habitat and Water Quality

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

- Annual work plan for Potomac Garrett State Forest FY23. No comments or recommendations were given as the work plan was clearly laid out with a descriptive management plan that protected water resources where timber harvest will occur.
- Application regarding a culvert replacement on Welch Hill Road, Frostburg, MD. Comments were provided for time of year restrictions, to prevent passage issues for aquatic life, and to cause minimal disturbance by using best management practices (BMP).
- An application for the installation of a temporary logging bridge on an unnamed tributary to Buffalo Run. Recommendations for time of year restrictions and BMP for sediment and erosion control were provided.
- A culvert installation permit application by a private landowner seeking approval of the installation to gain access to their property on Murley Branch in Flintstone. Recommendations were made to protect the coldwater resource with time of year restrictions, BMP for sediment and erosion control, along with strict monitoring and enforcement.
- A bridge rehabilitation project to take place for a bridge over Glade Run in Friendsville. Comments were provided for time of year restrictions, minimal disturbance, and extra precautions during concrete work to prevent contact with the stream.
- Application by Maryland Department of Transportation, State Highway Administration for a bridge resurfacing and armoring project for a bridge that spans the North Branch Jennings Run. Due to the complexity of the project, multiple recommendations were given for: time of year restrictions, brook trout protection, angler access, BMP for waterway construction, minimal disturbance, and material storage.
- Application for the construction of a residential driveway. Driveway construction would be re-aligning a small stream by adding a culvert to divert water under the proposed driveway. Strict sediment and erosion control measures were recommended.
- Three stone revetments to be constructed on the shores of Deep Creek Lake.
- Two Project Open Space properties one in Garrett County, the other in Frederick County. .
- Comments were provided to Maryland Department of the Environment regarding the post-construction conditions at a culvert replacement on Big Run at Savage River Road. Changes to the channel morphology from construction and significant rainfall from Hurricane Ida have created conditions that are not conducive to aquatic organism passage or brook trout occupancy.
- Construction of a residential driveway in the floodplain of Fishing Creek in Frederick County.
- Culvert replacement on Middle Creek in Frederick County. Recommendations were made to protect the coldwater resource with time of year restrictions, BMP for sediment and erosion control along with strict monitoring and enforcement.

Temperature Loggers - Retrieved Onset StowAway® temperature loggers from the Youghiogheny River (13 loggers from Swallow Falls to Sang Run Bridge) and North Branch Potomac River (six loggers from Bloomington to Pinto). Temperature data are used to monitor the effectiveness of temperature enhancement releases and overall river temperature to help make management decisions.

Western Region II began retrieving temperature loggers deployed in trout and coldwater streams in Frederick and Washington counties. Loggers were initially deployed in the spring to collect water

temperature through the summer index period (June 1 - August 31). Data from the loggers will be used to look at long-term trends in trout watersheds and nominate streams for Use Class redesignation, affording them additional thermal protection.

Stocking and Population Management

Trout -The Youghiogheny River catch-and-return management area, and the North Branch Potomac River zero creel limit area both received maintenance stocking with brown trout from Cushwa Hatchery.

- Youghiogheny River- 2,000 at 3.5/pound
- North Branch Potomac River- 1,000 at 3.5/pound

Stocking Permits – Eleven permits were processed in September. A stocking application was approved for a landowner to stock 1,000 rainbow trout in a private pond. Trout are being supplied by Laurel Hill Trout Farm.

Outreach

Provided customer service information for inquiries regarding:

- Deep Creek Lake fishing
- Fishing licenses
- Boating on Deep Creek Lake.
- Guidance on aquatic vegetation removal for a private pond.

Conducted an electrofishing demonstration for Forestry students at Allegany Community College. Topics covered how to properly setup and operate electrofishing gear, fish collection and identification and information about Maryland's fisheries.

Collected approximately 115 pounds of invasive blue catfish for a Maryland Park Service event to honor participants of the Maryland Conservations Corps at Patapsco State Park (Baltimore and Howard counties). Providing fish for such events highlights the issue of invasive fishes and promotes their harvest and consumption.

Angler Access

Fishery Management Areas - Continued to monitor and maintain the Black Oak, Evitts Creek, and McCoole fishery management areas. Trash cleanup and lawn maintenance have been completed.

Invasive Species

Provided blue catfish and northern snakehead specimens for display at the Maryland State Fair (Baltimore County). The display allowed fair-goers the opportunity to see these invasive fish in-person. Brief presentations were provided about these invasive fish, their biology and management efforts, and how to fillet and cook each of the species.

Developed a "How to Harvest a Snakehead" flyer that is now available online and in Spanish.

Submitted paperwork to hire a new technician whose duties will include transporting invasive fish from Conowingo Dam to fish processors or department regional labs to document life history traits, such as egg counts and diet habits.

Provided materials in support of invasive fish initiatives (e.g., harvest, consumption) for the department's Hispanic Heritage Festival on October 2 at Sandy Point State Park.

Submitted the final report on blue catfish movement, habitat use, diet and abundance in the tidal Patuxent River to the Atlantic States Marine Fisheries Commission; tracking data have been published on U.S. Geological Survey Tagged Animal Movement Explorer website.

Brook Trout Program

With assistance from regional staff, continued the annual brook trout population monitoring within the Savage River Watershed.

Continued geographic information system (GIS) work on temperature and land use in brook trout watersheds.

Attended a virtual two day Science and Technical Advisory Committee Brook Trout Genetics Workshop. This workshop presented the latest tools, techniques, and science related to brook trout genetics and management implications.

Provided a presentation on status, trends, and threats to brook trout in Maryland and the program's management goals at the South Mountain Land Stewardship Meeting at Ole Mink Farm Campground.

Tidal Bass Program

Attended Major League Fishing's Northern Division bass tournament held on the Potomac River (Smallwood State Park, Charles County). The tournament was the last leg of the series and hosted over 200 anglers. Fishing was good and the winning angler totaled 45 pounds and 2 ounces of bass over three days. Two more anglers caught and weighed over 40 pounds of black bass during the event. Of note, several anglers caught bass tagged as part of a cooperative management effort between the department, Virginia Department of Wildlife Resources, and Washington, D.C. Department of Energy and Environment.

Submitted paperwork to hire a new creel technician who will talk with anglers fishing tidal portions of Potomac River and collect data about their fishing day as well as whether they have caught a tagged largemouth bass. Data will be used to help support an inter-jurisdictional cooperative aiming to monitor abundance of largemouth bass in the tidal Potomac River.

Worked two black bass tournaments to monitor conditions of release, examine largemouth bass for tags, and talk with anglers about fishing conditions on tidal Potomac River.

Began the tidal bass survey that will include the tidal Potomac River, Middle River, Gunpowder River, Bush River, the upper Chesapeake Bay, Chester River, and Choptank River.

Completed the tidal black bass survey on the upper Chester River. Bass of all sizes were abundant in the upper reaches of the river near Millington. One extraordinary largemouth bass was collected - it measured almost 24 inches and weighed 8.5 pounds! Two snakeheads were collected as well, including one large individual that was over 12 pounds. It had a large yellow perch in its stomach.



Other

Staff continued work on Federal Aid Reports for: Deep Creek Lake, Broadford Lake, Frostburg Reservoir (Piney), North Branch Potomac River, Lower Savage River, and the statewide trout population statistics.

Staff attended the two-day Chesapeake Bay Program Scientific and Technical Advisory Committee (STAC) workshop on brook trout genetics and implications for management.

Freshwater Fisheries Service participated in a University of Missouri survey on how the department responds to requests for data from its Geographic Inland Fisheries Survey System (GIFS) and other databases to help in their effort to identify 'best practices' to respond to data requests nationwide.