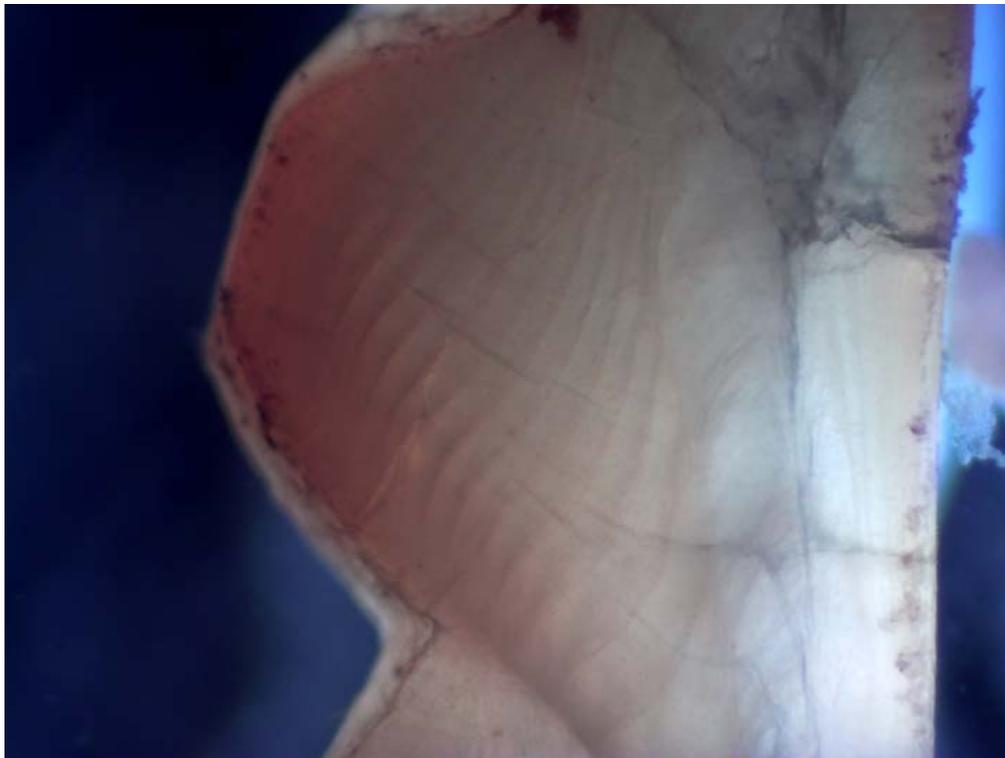


Freshwater Fisheries and Hatcheries Monthly Report – July 2022

Freshwater Fisheries - Stock Assessment

Smallmouth Bass - Sampled for young-of-year (YOY) smallmouth bass in the North Branch Potomac River at the Cumberland Fairgrounds for age and growth analysis, primarily for YOY fish. This effort, combined with previous age data, showed that smallmouth bass in this section of the river take, on average, seven years to reach 12 inches in length.

Deep Creek Walleye - Aged otoliths from walleye collected from Deep Creek Lake to determine more precise estimates of growth rates. The photo below is of an otolith taken from a 519 mm (20.4-inch) male walleye and was aged at 17 years! Very impressive, given the extremely high harvest rates of walleye from Deep Creek Lake.



Continued to interview anglers and hand out postcards to Deep Creek Lake anglers to gain more information and better assess the lake walleye fishery.

Smallmouth Bass Surveys - Began annual smallmouth seining surveys to assess smallmouth bass spawning success. The Monocacy River and Conococheague Creek surveys are complete. Eight sites were sampled on the Monocacy with an average seine index of 2.2 fish/haul. This is above the long-term median score of 1.5 fish/haul. Four sites were sampled on Conococheague Creek with an average score of 2.4 fish/haul. This is also above the long-term median of 2

fish/haul for this watershed. The 2022 spawn looks to have been good for both of these rivers. Sites are currently being sampled on the upper Potomac River. So far abundance also looks good for this system. Several juveniles were observed with visible skin lesions/fin erosion. These fish have been retained for additional health testing in collaboration with researchers from the US Geological Survey, Leetown Science Center.

Gunpowder Tailwater - Conducted an electrofishing raft survey on the Gunpowder Tailwater from Masemore Road downstream to Loch Raven Reservoir. Staff surveyed a 16 mile stretch of the river over three days. The catch-and-release, two-trout per day, and put and take areas were all sampled during the survey. Close to 1,000 brown trout were observed during the survey and multiple brown trout over 20 inches were encountered. One northern snakehead was captured and removed from the catch-and-release section of the Gunpowder Tailwater during the survey.



Raft electrofishing on the Gunpowder, collecting brown trout data; snakehead.



Savage River tailwater electrofishing survey; wild brown trout.

Savage River Tailwater - Regional and Brook Trout Program staff assisted the West I Region with a survey of the trout populations in the Savage River tailwater at two established sites. Natural reproduction of brook and brown trout was considered good. Quite a few adult brown trout between 14 and 17 inches were also documented. The Savage River tailwater continues to provide anglers with an outstanding fishery for wild trout.

Freshwater Fisheries - Habitat and Water Quality

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

- A dam repair project for a small pond that is located adjacent to an unnamed tributary to Beaver Run in Carroll County. The dam is in poor condition and has seepage at the outfall and burrows throughout the dam. Recommendations to place a flow splitter at the intake for the pond to limit the amount of inflow and increase the natural flow of the stream. Adding a downstream thermal treatment with riparian vegetation for shading was also suggested. Additional comments recommended Best Management Practices (BMPs) for drawdown and construction work within the floodplain.
- The Bloomington water withdrawal permit and intake structure located in the Savage River Tailwater. The permit requires a feasibility study for an intake screen that will limit impingement/entrainment of fish larvae and other aquatic organisms. Concerns have been expressed about the need for the screen and the additional expenses associated with cleaning and maintaining the screen. A site visit to determine the location, intake flow velocity, and risk to aquatic organisms will be conducted.
- A fish and plant collection request by an individual that wanted to collect a large range of species across the State in order to propagate his own fish and vegetation in his garage with the possibility of the project becoming a commercial venture. Because of the wide scope of this request, a meeting was conducted among State employees representing various departments to discuss the proposal. Several fish species were removed from the list immediately because they were included on our list of species of concern. This permit request is still under review.
- Western Region I participated in discussions about Minnow Creek – a tributary to the Youghiogheny River near Friendsville – for a proposed in-stream dredging project.

- Provided comments for a stone revetment to be constructed at the Will O' Wisp Prestige Condominiums located at Deep Creek Lake. Time of year restrictions were applied along with comments for disturbance and inspection during the construction process.
- An application was submitted by New Germany State Park for the construction of a new bridge that will span Poplar Lick. Time of year restrictions were applied along with comments for disturbance and restoration of the site, precautions when pouring concrete and recommendations for tree planting to restore riparian habitat.
- Provided comments for an application submitted by the Town of Oakland for the installation of a new sewer line that is to be placed below the streambed of the Little Youghiogheny River. Time of year restrictions were applied along with comments for disturbance and restoration of the site, diversions and pumping procedures, precautions when pouring concrete, and recommendations for tree planting to restore riparian habitat to mitigate for non-tidal wetland disturbance.
- An application was submitted for the installation of three temporary bridges for a timber harvest near Grantsville Maryland. Recommendations were made for sediment and erosion control and monitoring, proper installation to prevent runoff from being channeled into the waterbody, and site restoration after bridge removal.
- An application to replace a culvert that conveys an unnamed tributary to Herrington Run on the Blue Trail in Herrington Manor State Park. Time of year restrictions were applied along with comments for disturbance and restoration of the site.
- An application for a bank stabilization project on St James Run in Washington County to reduce bank erosion and flooding of crop fields. Comments were made to protect the unique coldwater spring habitat.
- Provided comments regarding the development of a stream restoration mitigation bank on McGill Run in the Western Run watershed, both supporting naturalized populations of brown trout. Recommendations were made to maximize retention of existing forest canopy and incorporate habitat elements consistent with the U.S.Fish and Wildlife Service brown trout habitat suitability index into the design.
- Greenbrier State Park to repair an existing shoreline bulkhead, install an ADA walkway, and extend a floating pier.
- Repair of several existing residential ponds that drain to Dipping Pond Run, a Use III trout stream. Design recommendations were made to capture upstream spring flow and direct to Dipping Pond Run bypassing the small impoundments.

Sonar Side Scan - Recorded side scan imagery from ten Savage River Reservoir spring sampling locations. Recording will later be processed and viewed using georeferencing software.

Met with employees of the Rocky Gap Veterans Cemetery to provide comments on ways to ensure the health of a small fish pond on the property.

Tested the water quality parameters and vegetation status of two ponds that are part of Fisheries put-and-take trout stocking program. A complaint was submitted by a citizen who was concerned that no fish were alive in one of the ponds and felt the standpipe was clogged. The pond did suffer from an overabundance of algae and duckweed, but the water quality was fine. No issues were found with the drainage mechanism in the pond.

Freshwater Fisheries - Stocking and Population Management

Cutthroat Trout - Approximately 15,000 Yellowstone cutthroat trout were stocked in the North Branch of the Potomac River to provide additional and unique trout angling opportunities to anglers.

Smallmouth Bass - The final batch of hatchery produced juvenile smallmouth bass were stocked into the upper Potomac River. Roughly, 8,000 juveniles measuring 2-3 inches in length were stocked at Williamsport. Due to hot weather, only one location was stocked to reduce handling stress on the fish. A total of 38,000 juvenile smallmouth bass have been successfully stocked into the river this year.



Juvenile smallmouth bass stocking on the upper Potomac River

Largemouth Bass - Stocked approximately 25,000 juvenile largemouth bass into Piscataway Creek from a boat with help from a Hutton Program scholar who is interning with the department. The bass were surplus from the Manning Fish Hatchery and will help supplement natural reproduction in that area which has had poorer bass reproduction in recent years.

Freshwater Fisheries – Fish Health

White Perch Testing - Assisted the Fish Health program with collecting white perch from two areas, Piscataway Creek on the Potomac and Battle Creek on the Patuxent. The samples comprising 75 fish from each area were collected efficiently.

Freshwater Fisheries - Outreach

Provided customer service information for inquiries regarding:

- Information on fishing Deep Creek Lake
- Gathered information from callers reporting tagged walleye from Deep Creek Lake
- Stocking of private ponds
- Where to obtain a Maryland fishing license
- Fishing locations accessible for elderly anglers
- Flow information for float fishing the North Branch Potomac River
- Angling reports of snakehead caught from the nontidal Potomac River near Dam 4 and Harpers Ferry, WV.

Provided two healthy snakehead fish to the Calvert Marine Museum after the original snakeheads on display in the aquarium had died. The fish were transported in a tightly enclosed tank and placed in quarantine for a period before being transferred to the permanent aquarium on display.

Backyard Fishing Event – Collaborated with the Howard County Recreation and Parks to host a Backyard Fishing Program at Warfields Pond Park. The program focuses on teaching basic fishing skills to youth and families. The participants were instructed on fish ID, rod set-up, tackle selection, knot tying and had some casting practice before heading to the pond for some fishing. Many sunfish were caught and released during the evening.



Warfields Pond Park Fishing event

Freshwater Fisheries - Angler Access

Fishery Management Areas - Continued mowing and trash clean up at the Evitts Creek, Black Oak, and McCoole FMAs. Unfortunately someone discarded old tires that were stacked on the downstream side of the bridge abutment in the North Branch Potomac River, Black Oak Access Area. Staff used a long rope and lowered a grapple anchor down where they were able to hook each tire and lift them up to the bridge. Tires were then properly disposed of at the local landfill.

Freshwater Fisheries - Invasive Species

Two tag returns were reported and letters were issued to each angler. One of the fish was a largemouth bass caught in the Potomac River and tagged in May 2017, the reported length was 180 mm larger than the initial tagging record. The other tag reported was from a blue catfish from our mark-recapture study in August 2021 on the Patuxent River and the fish was in a similar location and size since being tagged.

Collected water samples from Patuxent River as part of a research project to determine if environmental DNA can be used to help monitor for the presence and density of blue catfish. The samples were collected at three sites from both surface and bottom at each site to account for any variations in the concentration of DNA in the water column.

Freshwater Fisheries - Coldwater Program

Continued to work through the 2022 brook trout surveys. Data were collected in Big Run, Monroe Run, Crabtree Creek, and Little Savage River, as well as a number of qualitative surveys in various watersheds. Adipose fin clips were collected from brook trout in Koontz Run, Ned Run, and Rocky Gap Run. These clips will be sent to the USFWS Northeast Fishery Center in Lamar, PA for genetic analysis.

Met with Maryland Department of the Environment staff to discuss the 2019 Triennial Review and the application of existing use determinations to protect streams. This meeting was prompted by the Coldwater Fisheries Advisory Committee and Sport Fisheries Advisory Commission. Staff from both agencies discussed ways to improve thermal protection for streams through existing use determination. Maryland Department of the Environment will provide a response to the advisory committees and both agencies will work together to develop guidance materials to assist permitting agencies to improve thermal protections.

Held the July meeting of the Coldwater Fisheries Advisory Committee. Discussion topics included an update on Maryland Department of the Environment's 2019 Triennial Review, a discussion about the North Branch Potomac River use class designations, and the upcoming coldwater fisheries management plan. The next committee meeting will be held in October.

Met with Garrett County Roads Division to discuss the feasibility of pursuing funding opportunities for culvert projects. Participants considered culverts that were in need of replacement due to age and that would improve watershed connectivity if replaced with structures that would allow aquatic organism passage. Interest in moving forward was expressed by both parties and a list of potential projects will be developed.

Freshwater Fisheries - Tidal Bass Program

Black Bass Advisory Committee met on July 11 to discuss providing bass fishing video content and promoting catch-photo-release tournaments. This [link](#) will provide additional information.

Attended a black bass fishing tournament on the tidal Potomac River (Charles County). The Fishery appeared to be doing well and the winner had a five fish limit of nearly 20 pounds.