

Freshwater Fisheries Monthly Report – May 2019

Stock Assessment

Qualitative Electrofishing Surveys - Conducted four qualitative electrofishing surveys in the Little Gunpowder River and two in tributaries to the Little Gunpowder River (Monkton, Baltimore County) with assistance from the Maryland Conservation Corps. The surveys were conducted on property where a stream restoration project is proposed. Fifteen fish species were found, including sea lamprey -- no trout were detected.

Habitat and Water Quality

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

- Casselman Deep Mine site review. Staff from the Environmental Review Program, Wildlife and Heritage Service, and Fishing and Boating Services met onsite with Maryland Department of the Environment Mining Program and Industrial Permits Division, and private coal industry representatives to review the design and address any concerns related to water quality from the treated mine discharge and discharges from stormwater management ponds. We requested strict sediment and erosion controls and monitoring be enforced as well as monitoring for temperature and pH in the outfalls to the receiving stream.
- Reviewed proposals submitted for funding to the Chesapeake & Atlantic Coastal Bays Trust Fund for eight reforestation projects and a stream bank stabilization project in Allegany County. Fishing and Boating Services fully supports these projects in Allegany County as they will provide for long-term water quality and aquatic habitat protection in the Potomac River watershed.
- Eastern Region staff completed site visits and provided comments on three potential stream restoration projects in Cecil County. Staff also submitted comments to the Forest Service on three upcoming trail projects on the lower Eastern Shore.
- Nine environmental review projects were evaluated for McGill Run, Minebank Run, Little Gunpowder Falls, East Branch and North Branch Patapsco River, Morgan Run, Great Seneca Creek, Severn Run and Thomas Run in Central Region.
- Reviewed repair of an existing wing wall for a residential bridge damaged by high flows.
- Potomac Edison Ringgold-Catoctin Rebuild Project to upgrade existing transmission lines. The transmission line path includes several coldwater watersheds that support trout.
- A utility crossing at Deep Creek Lake to connect the McHenry and Thayerville water distribution systems. Comments were made on project timing and protecting shoreline habitat to protect spawning walleye and reduce impact to a popular shore fishing location.
- Replacing a deteriorated culvert that conveys Wilson Run, a tributary to Little Youghiogheny River in Oakland.

- Frederick County Office of Highway Operations to replace a failing culvert on the headwaters of an unnamed tributary to Catoctin Creek.
- Construction of three temporary bridges to cross tributaries of Buffalo Run to harvest timber. Buffalo Run and its tributaries are Use III coldwater streams supporting both brook trout and coldwater obligate macroinvertebrates (*Swelltsa*) indicative of both a cold water temperature regime and quality physical habitat.
- MDE Mining Program for emergency stabilization and drainage following a landslide on an unnamed tributary to Georges Creek in Allegany County.

Western Region Land Stewardship Committee - Provided supportive comments for potential land acquisitions for:

- A 275 acre parcel in the Big Laurel Run sub-basin of the Casselman River watershed. Big Laurel Run supports a high quality brook trout population as well as other native stream fish species.
- A 92 acre parcel within the Poplar Lick sub-basin of the Savage River watershed - Maryland's stronghold brook trout watershed. Poplar Lick is managed as part of the zero creel limit brook trout fishing area. Along with its exceptional brook trout population, Poplar Lick also supports native coldwater stream fish species including blacknose dace, Blue Ridge sculpin, central stoneroller, creek chub, longnose dace, rosieside dace and white sucker.

The Freshwater Fisheries Program of the Fishing and Boating Services fully supports these potential acquisitions. A major goal of the Maryland Department of Natural Resources 2006 Brook Trout Fisheries Management Plan is to increase public ownership of lands within watersheds supporting brook trout. Acquisition of these parcels will provide long term water quality and aquatic habitat protection in the Casselman River and Savage River watersheds.

Deep Creek Lake Hydro Station Water Appropriation Permit - Attended stakeholder meeting regarding renewal of the water appropriation permit for the Deep Creek Lake Hydro Station. The stakeholder groups involve fishing, whitewater, and lake recreation interests. The power company has done an extremely good job at balancing lake levels to provide recreational opportunities for all stakeholder groups. Western Region I Manager showed a presentation on the Deep Creek Lake fisheries as well as the Youghiogheny River catch-and-return trout fishery. Dr. Scott Knoche (Morgan State University) also provided a presentation highlighting the economic value of both the Deep Creek Lake and Youghiogheny River fisheries.



A happy angler with a trophy rainbow trout from the Youghiogheny River catch and return trout fishing area. The trout fishery is made possible from coldwater temperature enhancement releases from the Deep Creek Lake Hydrostation during the critical summer period.

Brook Trout Stronghold Watersheds Temperature Monitoring - Continuous temperature recorders were deployed in the north prong of Lostland Run, south prong of Lostland Run, upper Lostland Run, Folly Run, and Alexander Run to obtain baseline temperature data on these streams that support high density brook trout populations. Also assisted Statewide Operations staff with benthic macroinvertebrate collections in Mill Run tributary and Deep Hollow Run in Dan's Mountain Wildlife Management Area to assess coldwater fisheries potential.

Wolfden Run - Trout Unlimited staff biologist, Wolfden State Park Manager, and Freshwater Fisheries Western I conducted an on-site meeting for the Wolfden Run fish passage project within Wolfden State Park. An old logging bridge is supported by three failing metal culverts and soon will become a stream blockage as the culverts further deteriorate. Trout Unlimited has secured funding, and additional funding and in-kind services will come from the Park Service to remove the bridge and culverts. A single span bridge will then be constructed at the site, which will allow for complete fish passage.



Wolfden Run at the deteriorating culvert bridge within Wolfden State Park. A funded project will restore the natural stream environment and provide better brook trout habitat at this site.

Little Laurel Run Riparian Zone Restoration Project - Freshwater Fisheries staff and Garrett County Watershed Specialist conducted annual tree planting inspection and tree tube maintenance along Little Laurel Run. This project was funded by the National Fish and Wildlife Foundation – Appalachian Forest Renewal Initiative in 2016. The project included cattle exclusion fencing along 1,612 feet of Little Laurel Run. A total of 1,100 tree seedlings and shrub species were planted within the riparian zone. Most of the trees are now at least six feet tall and are providing shade cover along the stream in the former pasture area. A concrete livestock stream crossing funded by Trout Unlimited is planned to be installed this summer.

Water Temperature Loggers - Calibrated, launched and delivered 17 Water TempPro loggers for the Maryland Chapter of Trout Unlimited. The loggers will be deployed into upper Gunpowder River watershed streams to monitor water temperatures for the fourth consecutive year.

Calibrated and deployed Water TempPro temperature loggers into left and right forks of Jabez Branch (Anne Arundel County), Good Hope tributary at Hobbs Drive, Little Seneca Creek above and below Clopper Road (Montgomery County), unnamed tributary (UT) to Big Pipe Creek and UT to UT to Big Pipe Creek, Morgan Run (four locations), Alesia Road tributary, Muddy Creek (Carroll County), Gunpowder River above Prettyboy Reservoir, Walker Run, Silver Run, Cotter Road West tributary, Springhouse Run (Baltimore County) in preparation for the June 1 through September 30 monitoring period to collect stream temperatures throughout the warmest summer months. Sixteen to 20 more loggers will be deployed by the end of May in Central Region streams.

Temperature loggers were deployed in Beaver Creek and Black Rock Creek in Washington County. Loggers were placed upstream and downstream of stormwater discharge to Black Rock

Creek and upstream and downstream of submerged gravel wetland stormwater management facility discharge to Beaver Creek to determine if this design can reduce the temperature of stormwater reaching this productive wild brown trout fishery.

Stocking and Population Management

Trout - Assisted hatchery staff with stocking 1,800 rainbow trout in the North Branch Potomac River delayed harvest trout fishing area by rail-truck. We also float-stocked the Youghiogheny River catch-and-return trout fishing area with 1,500 brown trout and rainbow trout.

At the North Branch Potomac River Advisory Committee spring meeting in Luke, MD, staff presented FY19 (to date) trout stocking record in the North Branch Potomac River downstream of Jennings Randolph Dam. To date, a total of 110,145 trout have been stocked since July 1, 2018. Put-and-take trout fishing areas received 21,852 adult trout; catch-and-return trout fishing areas received 18,000 fingerling cutthroat trout and 500 adult rainbow trout; and zero creel limit trout fishing area received 69,793 combined brown and rainbow trout fingerlings.

Concluded the spring trout stocking season by assisting Albert Powell and Unicorn Hatchery personnel with stocking of rainbow and golden rainbow trout into Central and Eastern Region lakes, ponds and streams. Excellent production from the Albert Powell Hatchery allowed for additional fish to be stocked in Rising Sun Pond and Big Elk Creek. Both are very popular fishing areas. Maryland Public Television spent a rainy day filming the stocking of Little Falls and upper Gunpowder Falls for a segment to be aired on Outdoors Maryland in the fall.

Walleye - Approximately 50,000 juvenile walleye (source – Manning Hatchery) were stocked into the Savage River Reservoir. An additional 50,000 juvenile walleye were stocked in the upper Potomac River. Fish were released at various boat ramps from Dargan upstream to Hancock. Supplemental stocking of juvenile walleye into the river has shown to contribute significantly to this popular fishery.

Eastern Region staff also assisted with culture and stocking of approximately 30,000 juvenile walleye from Unicorn Lake Fish Hatchery to the Susquehanna River.

Processed and issued eight pond stocking permits for private pond owners.

Aquaculture in Action - Northern Garrett High School environmental science class partnered with the University of Maryland Sea Grant Extension Program to conduct an Aquaculture in Action project. The students constructed a recirculating tank system complete with a bio-filter to raise yellow perch from fingerling stage to an average size of six inches. This project provided a meaningful watershed educational experience centered on the management of native fish species in Maryland.



Aquaculture in Action: Northern Garrett High School Environmental Science teacher Mrs. Kenyon-Sisler, daughter Violet, and student project leader James Dean stocking 27 yellow perch into Deep Creek Lake.

Outreach

Fish Anatomy - Western Region I staff conducted a fish anatomy lesson for fifth grade students at Friendsville Elementary School. The students enjoyed a “hands on” dissection of a rainbow trout and were able to view the internal anatomy of the fish. The students participate in the Trout In The Classroom program, and learned it is necessary to know about the external and internal anatomy of the fish in order to detect and diagnose fish diseases.

Fishing Opportunities - Responded to public inquiries regarding fish resources and angling opportunities at the Youghiogheny catch and return trout fishing area, smallmouth bass and walleye in the Potomac River, and trout fishing access at put and take trout fishing areas.

Monocacy River - Western Region II staff participated in a Monocacy River panel discussion hosted by Hood College in Frederick. Staff provided an overview of the river fish community and gamefish species monitoring. Other participants in the panel included researchers from the U.S. Geological Survey, Frederick County Government and Hood College.

Reviewed and approved eight scientific collection permits.

Invasive Species

Participated in *What's on the Line* podcast by Coastal Conservation Association to address snakehead problems in the state and promote the Snakehead Monster Hunt hosted by Angler's of Annapolis, MD.

Finalized details for the Freedom and Fishing Derby to be held at Harriet Tubman Underground Railroad State Park on June 8. More details, [here](#).

Finished a year-long project with U.S. Fish and Wildlife Service to examine impacts of northern snakehead on freshwater fish communities in Blackwater River and Little Blackwater River.

Completed a four-year long research project to examine prey preferences and consumption levels of northern snakehead and a report reviewing the findings is currently being written.

Eastern Region staff collected several invasive northern snakeheads for an ongoing diet study in the Fishing Bay/Blackwater River watershed.

Angler Access

Fishery Management Areas (FMAs) - Staff has been busy with maintenance and improvement work at multiple FMAs in Frederick and Washington counties. With help from Forest and Park Services, heavy equipment was brought in to make improvements to the Urbana Lake FMA. Several loads of crushed stone were spread to improve driving access and parking for the lake. Maintenance work at the Brownsville Pond FMA included re-installation of the aerator system, spraying to control vegetation/algae, and lawn work. Tree plantings were completed at the Jackson/Beaver Creek FMA on Beaver Creek in Washington County. Native trees and shrubs donated by the Chesapeake Bay Foundation were planted on the property following the recent demolition and removal of two old structures. The former residential parcel is being converted back to a more natural environment.

Accessibility - An Outdoor Accessibility Enhancement Projects meeting was held at the Deep Creek Lake Discovery Center - participants included Ryan Savage, representing disabled outdoor recreationalists, Sen. George Edwards and his staff Kim McMillan, and staff from the Maryland Department of Natural Resources Wildlife and Heritage Service, Park Service, and Fishing and Boating Services. We discussed potential hunting and fishing access areas at Deep Creek State Park, Mt. Nebo Wildlife Management Area and Sang Run State Park. We then

conducted a field review at Sang Run State Park where a bank stabilization project on the Youghiogheny River is proposed. We will explore the possibility of including a wheelchair accessible platform at this location as part of the project. The river at this location is within the Youghiogheny River Catch-and-Return trout fishing area.



Mr. Ryan Savage fishing in the Youghiogheny River catch and return trout fishing area at the proposed Outdoor Accessibility Project location. Ryan caught a rainbow trout on his second cast!

Brook Trout Program

Continued to prepare for the upcoming East Coast Trout Management and Culture workshop being hosted at Frostburg State University. This is the sixth workshop and the focus will be biosecurity issues impacting trout management. Currently there are registrants from 22 states, New Zealand and Nova Scotia.

Staff had several days of meetings with consultants, conservation groups, and other department agencies to discuss potential brook trout restoration projects in the Savage River watershed. This work would include reconnecting seasonal blockages between the Upper Savage River mainstem and tributary streams, removing blockages and in line ponds, and potential brook trout reintroductions.

Gave a presentation on brook trout life history, fishing and management information at the Potomac Valley Fly Fishers group meeting.

Began seasonal field work, including deploying water temperature loggers in western Maryland streams and habitat reviews in candidate streams for brook trout reintroduction.

Tidal Bass Program

Finalized plans to present information pertaining to black bass diseases online via a map. The Tidal Bass Program already conveys information on largemouth bass virus testing in the state through their [customer resources webpage](#). However, data collected during the tidal bass survey will be coalesced within a map being created to convey disease testing for multiple species across the state.

Published a paper in an international magazine, *Fisheries*, published by the world's oldest organization dedicated to fisheries science. The paper discusses catch-and-release fishing and its impact on largemouth bass populations from Potomac River. *The Wisdom of Thanos in Fishery Science: Why Manage Catch-and-Release Fisheries* can be read, [here](#). Copies can also be requested from [Joseph W. Love](#).

Met with Scott Sewell, Conservation Director of Maryland Bass Nation, and biologists from Tetra Tech and program manager from Lockheed Martin to discuss restoration of Cowpen Creek in the Middle River area. The Tidal Bass Program and Scott Sewell are drafting plans to deploy submerged wood structures to deeper parts of Cowpen Creek, which had its headwater canopy cut back to allow for the massive restoration of the stream.

Worked with Resources Assessment Service to begin their gear impact study on the Potomac River. The purpose of the project is to determine if different types of gear affect submerged grass bed development or reduces the density or diversity of submerged grasses, which could affect growth and survival of young largemouth bass.

Other

Positively identified a yellow bullhead for certification as the new Maryland state record for bullhead catfish.



Nick Palese of Baltimore City holds his 4.94 pound state record bullhead catfish.