

Freshwater Fisheries Monthly Report – March 2019

Freshwater Fisheries - Stock Assessment

Potomac River Walleye Brood - Collected adult walleye broodstock from the upper Potomac River downstream of Dam 4. Nine female and 12 male fish were collected using boat electrofishing before being transferred to Manning Hatchery in southern Maryland. The resulting hatchery produced juvenile walleye will be used to stock sections of the upper Potomac River and multiple impoundments throughout the state. Monitoring has shown that the supplemental stocking of juvenile walleye contributes greatly to the fishery in the upper Potomac River. After the walleye were spawned, hatchery staff returned the brood walleye to the Potomac River on March 30.

Deep Creek Lake Northern Pike Survey - Conducted a mark-recapture study of northern pike in Deep Creek Lake. The outcome of this work should provide the department with a population estimate of northern pike in the lake. This information, combined with life history data, length at age and mortality estimates can be used to model various management actions and determine the potential impacts of those actions to the population.



Collecting northern pike in Deep Creek Lake by electrofishing.

Freshwater Fisheries - Habitat and Water Quality

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

- An instream construction time of year waiver request for the Meadow Run stream restoration project by the State Highway Administration. Meadow Run has a Use I stream designation and no gamefish species are in the immediate vicinity of the project. There was no objection to the request as the project could be restored with riparian vegetation earlier in the growing season.
- Scientific collection permit review for a Frostburg State University student's benthic macroinvertebrate study in Murley Run (Garrett State Forest). The study will focus on the acidic stream's benthic community in the absence of a fish population. The final report will be available upon completion of the study.

- Scientific collection permit for All Star Ecology for the Wolf Den Run monitoring study. Requested report upon completion.
- An instream construction time of year waiver request to stabilize a rock face just downstream of the Paw Paw Tunnel on the Chesapeake and Ohio Canal. There was no objection to this request due to safety concerns and a very limited warmwater fish resource in the canal at this location.
- Several permit applications to construct shoreline revetments at Deep Creek Lake to reduce shoreline erosion. Boulder clusters are required for each 50 feet of revetment to mitigate the loss of shoreline fish habitat.
- A failing dam on a headwater stream in Frederick County. Supported actions include a controlled breach of the dam and stabilization of the site to reduce erosion and mobilization of sediment.
- Construction of a retaining wall at the entrance to the Albert Powell State Trout Hatchery to stabilize an eroding stream bank that supports the access road to the hatchery. An instream construction time of year restriction, April 30 to October 1, to protect spawning pearl dace (*Margariscus margarita*) was recommended. The large hatchery spring that supports the Beaver Creek trout fishery influences stream temperatures downstream of the project site.
- The removal and replacement of a deteriorated bridge crossing the headwaters of Poplar Lick in New Germany State Park that provides access to a large portion of the park. The popular brook trout stream will be spanned by a larger bridge with the support structure for the old bridge left in place preventing any instream work and disturbance.

Western Region Land Stewardship Committee - Provided comments for two potential land acquisitions in the upper Youghiogheny River watershed. Acquisitions of these properties could provide about seven miles of boating and float fishing access to the river.

Deep Creek Lake Hydro Station Water Appropriation Permit - Staff attended the stakeholder meeting regarding the 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. A third meeting is scheduled in April to further discuss potential permit conditions.

Lands Reclamation Committee - Western Region District I Manager participated in the monthly meeting with discussion of the following mining projects: JX5 Energy, LLC, OPA-18-26, New Permit, 446 acres located in the Koontz Run and Squirrel Neck Run sub basins of the Georges Creek Watershed; Tri-Star Mining, Inc. OPA 18-09, new permit, 50 acres located in the Mill Run sub basin and the George's Creek watershed. Post land use for both sites were undeveloped with grasses, however the committee voted to have locust tree seeds incorporated into the grass seed mix to replace forestlands lost due to the strip mining. Also discussed was the Maryland Energy Resources LLC, OPA-17-43, Amendment to DM-09-113, for 14 acres for

treatment ponds for Casselman Deep Mine. The ponds will be located along Casselman River near Grantsville, and post land use will be forested.

Route 39 Bridge Replacement Stream/Wetland Mitigation - Met with personnel from the U.S. Army Corps of Engineers, State Highway Administration, U.S. Fish and Wildlife Service and a private engineering firm to discuss wetland and stream mitigation at the project site. The bridge replacement will have permanent impacts to a small roadside stream at the project location along the Youghiogheny River. Topics discussed included bio swales, native tree, shrub, and wetland herbaceous plant plantings at the project location. The group then visited another site in the Youghiogheny River watershed that could be a candidate for a fish passage project as part of the mitigation or a separate stream restoration project.

Savage River Reservoir - A fish habitat enhancement project was conducted in the upper portion of the Savage River Reservoir using 40 Christmas trees obtained from the Garrett County landfill. The trees were attached to concrete blocks and will provide good cover and nursery areas for the lake's warmwater fish species once the water level reaches full pool.



Fish habitat enhancement project in the Savage River Reservoir.

Fish Habitat - Initiated a project to construct miniature reef balls and woody debris to increase habitat and structure for several impoundments that have little cover for fish. These reef balls will be much smaller than those deployed in Smoots Bay, Potomac River (Charles County) and can be constructed off-site and installed by a work boat. The smaller reef balls are advantageous because they don't require special equipment and vessels to transport them to the deployment site due to their weight.

In cooperation with Kent County Public Works, recycled Christmas trees were recently sunk into Unicorn Lake and Smithville Lake by the Freshwater Fisheries Program. The purpose of these structures are to improve habitat for both juvenile and adult fish and attract fish to public access areas to improve angler success. Electrofishing surveys have shown that popular species like largemouth bass, black crappie, chain pickerel and bluegill have a high affinity to these structures.

Water Quality Checks for Trout Stocking - Conducted water quality checks on several put-and-take trout ponds in preparation for spring stocking. Checked water quality and physical condition of a community pond that an angler suggested be added to the stocking program. Bowie Town Center Pond (Prince George's County) had poor water quality in the past and experienced several minor fish kills. Local parks personnel have installed aerators and have corrected runoff issues but the pond hosts a large goose population. Waterfowl waste, when washed into the pond, may degrade water quality conditions. Park staff have invested a great deal of time and money trying to address this issue with little success. Park staff are currently looking into additional methods for removing the geese. Once this is achieved, the department will reassess the pond for possible trout stocking. Fox Hill Pond in Bowie (Prince George's County) has also been suggested as a location to provide put-and-take fishing as well, but the pond's water quality and habitat will not support this type of fishery.

Freshwater Fisheries – Stocking and Population Management

Trout - The Town Creek delayed harvest trout fishing area was float stocked in both the upper Wagner Road and lower Bull Ring Ranch areas. A total of 2,700 rainbow and golden trout were released throughout the management areas providing great fishing opportunities for anglers.

The North Branch Potomac River zero creel limit trout fishing area received 20,000 (250/lb) brown trout fingerlings (Plymouth Rock strain) from Cushwa Hatchery.

To diversify and improve spring angling on the eastern shore, rainbow trout were stocked into Big Elk Creek, Howards Pond, Principio Creek, Rising Sun Pond and Unicorn Branch.

Potomac River Smallmouth Bass - A smallmouth bass tournament was held at Brunswick on Saturday March 30 to help with the collection of adult fish for the 2019 [supplemental stocking project](#). Nineteen boats entered the event and were successful in catching over 70 smallmouth bass from that section of the upper Potomac River. Following the tournament weigh-in, Maryland Department of Natural Resources staff selected a portion of the catch for use in the hatchery. A total of 40 adult smallmouth bass (15 females, 25 males) were transported to Manning Hatchery in southern Maryland to serve as broodstock for the project.



Anglers catching smallmouth bass for Potomac River supplemental stocking program.

Freshwater Fisheries – Outreach

Customer service - Requests included: brook trout fishing in the Casselman River watershed; brook trout fishing in the zero creel limit area within the Savage River State Forest and Youghiogheny River put-and-take trout fishing area stocking locations.

Responded to constituent concerns regarding water quality in Schoolhouse Pond prior to trout stocking. Water quality was found to be acceptable. However, water levels were below normal. The stocking allocation for Schoolhouse Pond was reduced with the extra trout diverted to other put-and-take ponds in the area.

Provided information on current status of tiger muskie fisheries in Maryland and available waters: Rocky Gorge and Triadelphia Reservoirs, Little Seneca Lake and Piney Reservoir (Garrett County).

Responded to inquiries regarding walleye fishing opportunities and conditions on the nontidal Potomac River. Provided an [Angler's Log](#) entry highlighting the excellent walleye fishing available on the upper Potomac River.

Provided upper Potomac River conditions and muskie fishing information.

Hoyes Run - Presented the Hoyes Run Riparian Zone Restoration Project to members of the Nemascolin Chapter of Trout Unlimited. The Nemascolin Chapter will be conducting a similar project on the North Fork of Crabtree Creek using funds from the Trout Unlimited Embrace A Stream grant program.

Forest and Stream Club - Attended the spring 2019 meeting of the Forest and Stream Club in Westminster, MD. The Forest and Stream Club is one of the oldest outdoor organizations in the state dating back to 1874. Staff gave a presentation on the status and trends in the smallmouth bass fisheries in the Monocacy and upper Potomac River.

Envirothon - Provided aquatic ecology training for high school students from Frederick County participating in the Envirothon, an environmental education competition. Training included: freshwater fishes, invasive species, watershed protection and water quality.

Backyard Fishing - Planning is underway for several 2019 Backyard Fishing events to be held in Cecil, Frederick, Howard and Washington counties. These events target youth, however, families and new anglers are encouraged to participate. Staff will provide educational stations on basic fishing techniques and tackle selection, casting, fish identification, habitat and knot tying.

Freshwater Fisheries - Invasive Species

Blue Catfish - Staff continued work collecting blue catfish, an invasive fish of concern in the Chesapeake Bay, from tributaries of the tidal Potomac River (Charles County), for diet analyses. Fish up to 42.5 pounds were collected. Items found in their stomachs included bluegill and other sunfishes, frogs, goldfish and adult and juvenile yellow perch. The work will be continued, as it completes our knowledge of seasonal diet habits for blue catfish in the tidal Potomac River.

Plans are being developed to tag blue catfish in the tidal Patuxent River in order to determine spawning areas and winter habitat. This information will be used to help target removal of these fish by commercial watermen and to help break up nests in an effort to control blue catfish numbers in the Patuxent River. Movement of fish will be tracked using a boat and a directional loop antenna. If the fish move out of the Patuxent, they can be tracked via stationary recorders that have been placed all throughout the Chesapeake Bay as part of a multi-species tracking program as well. The tracking program will take several years to complete.

Northern Snakehead - Staff worked with the Office of Communications to produce a series of updated videos aimed at improving general public education about northern snakehead.

Staff completed a [website](#) describing details of an upcoming snakehead fishing derby at Harriet Tubman Underground Railroad State Park. The derby will be co-hosted by the Department of Natural Resources and U.S. Fish and Wildlife Service.

Staff finalized a grant proposal to obtain funding for invasive fish control in fiscal year 2021.

Freshwater Fisheries - Angler Access

Responded to angler calls about access to private, community-owned lakes in Prince George's County and offered public alternatives nearby.

Eastern Region Freshwater Fisheries staff met with Wildlife and Heritage Service to discuss the reopening of Stemmers Run Reservoir for public fishing. Stemmers Run is one of many properties owned by the U. S. Army Corps of Engineers (USACE) along the Chesapeake and Delaware Canal which are operated as dredge disposal sites. The USACE closed Stemmers Run while active pumping of material was occurring. It has remained closed due to concerns of vandalism. Staff are researching creative solutions to allow the area to reopen to the public.

Freshwater Fisheries - Brook Trout Program

Completed the statewide 2019 brook trout population sampling schedule, which will include added sampling to investigate potential brook trout reintroduction opportunities.

Sent out final call for the upcoming East Coast Trout meeting being held at Frostburg State University this June. The meeting is garnering national interest outside the east coast - several biologists from the western U.S. are presenting papers, and a biologist from New Zealand is presenting also! Interested anglers and the general public are welcome to attend the meeting, click here for [registration information](#).

Met with researchers at the University of Maryland Center for Environmental Studies (UMCES) Appalachian Laboratory to complete a state wildlife grant proposal for funding a joint department/UMCES research project on using eDNA as a potential sampling/monitoring method for statewide brook trout populations in the future.

Began investigating a brook trout habitat connectivity project on Bear Pen Run in the Savage River watershed. Bear Pen has historically been disconnected from the Savage River during low flow conditions when fluvial brook trout are in need of thermal refuge from the mainstem river. The goal of this project is to provide brook trout year round access to a coldwater tributary to the Savage River that is occasionally isolated during critical low flow/high water temperature periods.

Completed the 2019 benthic macroinvertebrate sampling schedule that will be used to direct sampling efforts targeted towards finding candidate streams for more intensive investigation as potential brook trout reintroduction areas.

Hosted an in-house meeting at the UMCES Appalachian Laboratory for regional staff and upper management to discuss future statewide sampling plans, database issues, mapping and GIS tools and utilities, and potential management and regulation ideas, issues and needs.

Freshwater Fisheries - Tidal Bass Program

Staff finalized plans to investigate the effects of gear on submerged vegetation in coves that may be used by largemouth bass during the spawning season.

Staff presented details of fishery management and black bass conservation for students at Hood College and University of Maryland Eastern Shore.

Staff finalized agenda for the April 8 Black Bass Advisory Subcommittee meeting to discuss the status of black bass fisheries and share other departmental updates.