Freshwater Fisheries Monthly Report – March 2021

Stock Assessment

Deep Creek Lake Northern Pike - Completed a northern pike mark and recapture study on Deep Creek Lake. A total of 21 pike ranging from 20.6 to 37.7 inches were collected during the first night of electrofishing. Data will be compiled to calculate population dynamics of the northern pike population in Deep Creek Lake.

Upper Potomac Walleye - Conducted the annual spring walleye survey on the Upper Potomac River at Taylor's Landing. More than 80 walleye were collected by boat electrofishing during their spring spawning run up to Dam 4. Fish ranged in size from 10 to 25 inches. Roughly 75 percent of the collected fish were in the 15 to 20 inch slot size range. Thirty adult fish were transported to Manning Hatchery. They will serve as broodfish for this year's statewide juvenile production. Supplemental stocking of hatchery produced juvenile walleye is important to maintain this popular fishery on the Potomac River.

Muskellunge Tagging - Staff tagged 19 muskellunge as part of a radio tracking study on the Upper Potomac River. Fish were collected in the section of river downstream from Dam 5. Each fish was surgically implanted with a small internal radio transmitter. This project is part of ongoing work looking at the movement and survival of muskie post-angling. Fish were also tagged with an external yellow dart tag. Anglers who catch a tagged muskie are asked to report the four digit number by calling the phone number on the tag.



Upper Potomac River muskie being tagged with internal radio transmitter

Habitat and Water Quality

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

- Application submitted to construct a private pond used for irrigation for a turf farm located in Oakland. Information was provided on stream characteristics and species composition in order to help with the design of the pond and guidelines to protect the adjacent waterway.
- An application for a water withdrawal permit from Deep Creek Lake was submitted by Thousand Acres Golf Course to renew their current permit. Through discussion, screen size comments will be recommended for the pump intake to protect smaller fish in the lake.

Eastern Regional staff reviewed and provided comments on the following projects:

- Five scientific collection permits
- Infrastructure improvements at State Parks
- Five State Highway Administration (SHA) highway projects
- Proposed harvest area at Chesapeake State Forest

Land Acquisition:

- Comments were provided for land acquisition for a property adjoining Gambrill State Park. This land purchase would be an additional two acres of public property for the state park.
- Acquired information for a possible land acquisition of thirty-one acres in Westernport Maryland.

Habitat Enhancement - Secured materials to complete the habitat enhancement project taking place on Jennings Randolph Lake. The remaining trees will be deployed by boat at predetermined locations throughout the lake where shore access is not available.

Stocking and Population Management

Put-and-Take Trout Stocking - Regional staff assisted hatchery staff with stocking brown, golden, and rainbow trout for the spring put-and-take trout fishery prior to opening day on March 27. In March, approximately 130,000 fish were stocked at popular locations statewide.



Stocking Calvert Cliffs Pond in Calvert County.

Stocking Permits – A total of 24 stocking permits were issued in March.

Outreach

Provided customer service information for inquiries regarding:

- Tips for fishing Deep Creek Lake and Broadford Lake.
- Regulation information for bass catch-and-release regulations on the North Branch Potomac River.
- Regulation information on the use of dip nets for harvesting fish.
- How to obtain an off road vehicle (ORV) permit. Directed caller to Deep Creek Lake Management for correct information.
- Questions on trout stocking.
- Tournament information on Deep Creek Lake.
- Firewood cutting on state lands. Referred caller to proper personnel.
- Gear and regulation information for fishing the Casselman River.
- Regulations and advice for fishing the Lower Savage River.
- A stream crossing on Hoyes Run. Referred caller to proper personnel.
- Recommendations for algae control on a private pond.

Staff participated in the second Chesapeake Watershed Smallmouth Bass Health Symposium hosted by the Potomac Riverkeeper Network. Virtual presentations were provided by the Pennsylvania Fish and Boat Commission, Virginia Department of Wildlife Resources, West Virginia Division of Natural Resources, Maryland Fishing and Boating Services, and the United States Geological Survey, Leetown Science Center. The presentations covered current status of riverine smallmouth bass fisheries, climate change impacts on river temperatures and flow, management approaches, and fish health issues. Persistent high flows during the spring have resulted in lower recruitment and catch rates of adult bass in several mid-Atlantic rivers.

Western Region I staff conducted angler interviews on the North Branch Potomac River as part of a new angler preference survey. Information from this survey will be compiled to provide data on angling pressure, user groups, economic value of the river, and to provide data for possible future management decisions pertaining to the river.

Assisted at the First Annual Do It for Roper Catfish Tournament, held on the tidal Patuxent River (Calvert County). Roughly 350 anglers participated in the event and the winning team boated 80 pounds of fish. Staff gave a presentation about invasive blue catfish, filleted fish for donations, and served as Weighmaster for the event. Anglers were encouraged to take blue catfish home. The remainder, over 200 pounds, was donated to the St. John Vianney Catholic Church food pantry (Calvert County) for local families in need. Organizers are already planning to hold the event again in 2022.



Angler holds up one of many blue catfish caught during the "Do it for Roper" tournament.

Angler Access

Signage - Began to check and replace regulation signs in management areas to ensure anglers are aware of the regulations that apply to each specific waterbody. In addition to general regulation signs, new brook trout catch-and-release signs were placed in appropriate put-and-take and statewide trout waters.

New Angler Access Areas - In cooperation with Savage Forest LLC and Westernport Properties LLC, Western Region I staff have agreed to maintain new angler access areas on the North Branch Potomac River and Lower Savage River. Freshwater Fisheries staff will monitor access areas for misuse, littering, and be responsible for posting proper signage for regulations to each waterbody.

Fishery Management Area (FMA) Maintenance - Two problem trees were taken down and removed by a licensed professional at Rising Sun Pond FMA. One posed a threat to the water control structure, the other was a dead ash tree whose falling limbs posed a threat to visiting anglers.



Invasive Species

Environmental DNA (e-DNA) - Staff was granted approval by American Fisheries Society (AFS) to host a symposium on using e-DNA to detect aquatic invasive species occurrences at the upcoming 151st AFS national meeting in Baltimore, MD. In preparation for that symposium, staff sent a survey on use of e-DNA by other state agencies across the United States.

Northern Snakehead - Finalized edits for a recently accepted manuscript: *Using Published Information to Predict Consumption of Northern Snakehead Channa argus in Maryland*. The manuscript will be published in Transactions of the American Fisheries Society.

Blue Catfish - Continued tracking radio and acoustic tagged blue catfish in the tidal, freshwater Patuxent River (Anne Arundel, Calvert, Charles, Prince George's counties). The work is a portion of a collaborative project with the department, United States Geological Survey Leetown Science Center (West Virginia), and other partners. During March 2021, 31 of 38 tagged fish were detected by either an array of fixed radio receivers or active radio and/or acoustic tracking by biologists. Staff are expected to tag another 40 fish during April 2021 and continue monitoring movements through the spring.

Brook Trout Program

Assisted with the collection of creel survey data on the North Branch of the Potomac River tailwater trout fishery.

Completed the field component of a State Wildlife Grant that will determine whether a simple surface water grab sample can be used to determine presence or absence of brook trout of varying densities at varying distances.

Assisted regional operations in the collection and radio tagging of muskellunge in the Potomac River. The study aims to build on the understanding of this popular fishery.

Received and distributed new brook trout catch and release signs. The signs were installed by regional staff, along with volunteers from the Native Fish Coalition.



Participated in the Eastern Brook Trout Joint Venture Steering Committee quarterly meeting.

Tidal Bass Program

Developed a new video script to help emphasize the importance of energy (battery) management when operating live wells, the use of rubber nets for landing fish, and live well maintenance during summer time fishing, when water temperatures exceed 80 degrees Fahrenheit. The Black Bass Advisory Committee recommended new actions be taken to address live well management; this video is one of the department's actions.

Issued the <u>Black Bass Annual Review (Volume 13)</u> to over 165,000 black bass anglers licensed with the Maryland Department of Natural Resources.

Began tagging largemouth bass on Potomac River as part of cooperative monitoring of the largemouth bass population by Maryland, Virginia, Washington D.C., and the Potomac River Fisheries Commission, who all share jurisdiction of the tidal fishery.



Largemouth bass collected and tagged during electrofishing.

Purchased supplies in support of a conservation award to Tim Shaw, director of Fishers of Men, who will be hosting his first catch-photo-release tournament on St. Mary's Lake in June.

Finalized an agenda for the April 5 Black Bass Advisory Committee meeting.

Other

Fabricated three wooden kiosk stands to hold new signs for creel survey stations on the North Branch Potomac River. Stands with signs will be placed on days that creel clerks are on shift to make anglers aware of the ongoing survey.