Freshwater Fisheries Monthly Report - April 2023

Freshwater Fisheries - Stock Assessment

Deep Creek Lake - Conducted our triannual northern pike survey on Deep Creek Lake to assess the population abundance and size distribution.



Electrofishing Deep Creek Lake for northern pike.

Walleye Data - Collected data at the Garrett Bassers Walleye Tournament on Saturday, April 22. Twenty-nine boats were entered into the tournament with a total of 83 walleye being weighed in. After anglers got their official tournament weights, fish were given to fisheries staff for data collection then released.

Triadelphia Reservoir - Set hoop and fyke nets in Triadelphia Reservoir on a weekly basis through the end of April looking to identify spawning locations for yellow perch and other species. Narrowing down the best conditions for yellow perch to spawn was important. The best catches of yellow perch were on March 23 and they had deposited eggs in the hoop nets. White perch catches peaked on April 5 with over 600 perch collected in one day. A large walleye, over 9 pounds, was captured in a net that



was among the largest caught in 20 years for our group.

Freshwater Fisheries - Habitat and Water Quality

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

- A site visit was conducted for a road realignment project set to take place on Garrett Highway, south of Oakland Maryland. Discussion occurred regarding the new road and bridge location along with plans for mitigation and a stream channel realignment.
- A culvert replacement project on US 220. Recommendations were given for sediment and erosion control, equipment usage, and material storage and stabilization
- A culvert installation project in Zihlman, Allegany County Maryland. Recommendations were given for sediment and erosion control, installation timing, equipment usage, material storage, and stabilization.
- A Maryland Forest Service project was reviewed for maintenance on the Piney Mountain snowmobile trail. Recommendations were given to re-route the current trail which would remove it from a wetland buffer. The relocated trail would help place it in a dryer, more suitable area and would help with the reduction of future maintenance costs.
- An application for proposed upgrades to the Fishing Creek Water Treatment plant on Fishing Creek in Frederick County. Fishing Creek is a Use Class III waterbody that supports a high quality wild brook trout population. Comments were made to protect the floodplain and riparian vegetation during construction.
- A stream project on the Eastern Shore that proposes the use of beaver dam analogs to raise the stream channel to reconnect the stream with its floodplain. Concerns were expressed that the number of structures would result in too much impounded water/habitat.
- Two wastewater treatment plant discharge permit renewals for plants that discharge into watersheds that support trout resources. Comments were made to protect the thermal regime of the receiving waters and monitoring to determine that discharges meet state water quality standards.

Broadford Lake Habitat - Placed Christmas trees in Broadford Lake for their annual habitat enhancement project. Locations were picked using side scan sonar to identify areas with a depth of fifteen feet where the lake was void of any habitat.

Freshwater Fisheries - Stocking and Population Management

Put-and-Take Trout Stocking - Assisted Bear Creek Hatchery staff with stocking recreational trout waters in Garrett and Allegany County in the second "burst" stocking during the first two weeks of April.

Assisted Albert Powell and Unicorn hatcheries to stock over 25,000 brown, golden, and rainbow trout throughout Baltimore, Carroll, Harford, Howard, and Montgomery counties. Biologists have heard multiple reports from satisfied anglers about the quality and numbers of fish stocked. Twenty four separate areas were stocked with trout in the Central Region including a new location, Little Pipe Creek, in the Town of Union Bridge. This area is currently managed as a 2-trout per day fishery and hopefully will become an

official Put-and-Take trout fishing area in 2024. The last day of trout stocking in the region was April 25.



Stocking Little Pipe Creek

Final trout stocking in Cecil County was completed in Big Elk Creek, Principio Creek, and Rising Sun Pond.

Float Stocking - Coordinated with multiple Maryland Conservation Corps (MCC) crews to float stock trout in the region. Over 15 separate MCC members have assisted with float stocking at Morgan Run and South Branch Patapsco River Delayed Harvest area.

Rainbow Trout - The North Branch Potomac River catch-and-return trout fishing area was stocked with juvenile rainbow trout provided by the State of West Virginia, Petersburg Hatchery.

Saugeye - Piney Reservoir was stocked with juvenile saugeye for the first time to help control and maintain a balanced panfish population within the lake. Saugeye is a hybrid created in the hatchery by spawning female walleye with male sauger. The hybrid generally performs better than walleye in warmer, eutrophic water bodies. Saugeye should provide anglers with an additional gamefish opportunity as well. The stocking of saugeye is new to Maryland and pending the success of the stocking, it will create the first saugeye fishery in Maryland.



Stocking saugeye in Piney Reservoir

Walleye - Approximately 45,000 juvenile walleye produced at the department's Joseph Manning Hatchery were stocked in the upper Potomac River at Shepherdstown, Taylors Landing, Slackwater, and Williamsport. Natural reproduction supplemented by hatchery produced walleye stocking helps support a high-quality walleye fishery in the Washington County section of the river.





Walleye fingerlings being stocked in the upper Potomac River

Largemouth Bass - Stocked 760 largemouth bass (4-6 inch) by boat into the upper Marshyhope.

Striped Bass Brood Collection - Southern region collected brood striped bass from the Patuxent River for the Joseph Manning Hatchery. The crew carefully check each potential brood fish to identify gravid females that will spawn within a day or two. The fish spawn inside large tanks. The fry produced will be reared at the hatchery for some time before stocking.



Largemouth Bass Brood Collection -Eastern Regional Freshwater Fisheries staff collected 20 largemouth bass from the Sassafras River to be used as brood stock at the Unicorn Hatchery. Many

stock at the Unicorn Hatchery. Many snakeheads were encountered and euthanized during the collection efforts. Southern Region staff collected largemouth bass to be used as brood at the Joseph Manning Hatchery in Cedarville. The juvenile bass will be stocked later in the year in appropriate waters to supplement natural reproduction.

Smallmouth Brood Collection - Two bass tournaments held on the upper Potomac River assisted with the collection of adult smallmouth bass broodfish for the department's Joseph Manning Hatchery. The first event was held on April 1 at Brunswick and the second was on April 8 at Four Locks. Both tournaments were successful in collecting all of the smallmouth broodfish needed by the hatchery. Adult fish were placed into three hatchery ponds prepared with gravel spawning boxes. Big thanks to all tournament anglers who participated in the events. All smallmouth bass broodfish will be returned to the river following

spawning.





Smallmouth bass from upper Potomac River tournaments

Freshwater Fisheries - Outreach

Provided customer service information for inquiries regarding:

- Trout stocking in Maryland
- Reporting walleye tags for fish caught on Deep Creek Lake
- Walleye regulations for Deep Creek Lake
- Perch fishing regulations for the Youghiogheny River Lake
- Fishing regulations on the Casselman River Delayed Harvest management area
- Fishing the Youghiogheny River Lake

Master Naturalist Program – Provided an Aquatic Ecosystems/Freshwater Fish training for the Maryland Master Naturalist Program hosted at Lake Roland in Baltimore County. The aquatic presentation covers different aquatic ecosystems in Maryland, the threats to the stream ecosystems (e.g., invasive species, land use, stormwater runoff) and the importance of the riparian buffers for protection of the resource. A powerpoint presentation on the Fishes of Maryland with focus on fish found in their region was also provided. Participants were able to do hands-on fish identification (with preserved fish samples) and learn to use a key to identify fish family/species.

Envirothon - The Envirothon is an environmental competition for high school students. Teams are tested on their knowledge in aquatics, forestry, soils, wildlife, and a fifth issue. This year the fifth issue was "Adapting to a Changing Climate".

Freshwater staff supports the Envirothon by preparing and administering the aquatics test for the Allegany, Garrett, Eastern Shore, and Frederick counties. Winning county teams will compete in the 2023 Maryland Envirothon at the Western Maryland 4-H Center in

Garrett County held in June and that winning team will represent Maryland at the National Competition in New Brunswick, Canada in July.



The first place Frederick County team from Urbana High School.

Youth Fishing Event - Provided the Mobile Fish Trailer to Gambrill State Park Youth Fishing Rodeo. Some die-hard anglers braved the rain and caught some nice rainbow trout that were stocked for the event. Each participant received a free tackle box courtesy of Friends of Gambrill/Cunningham State Park and were instructed on fishing basics, knot tying, and fish ID.



Youth anglers were not bothered by the rain at Gambrill Youth Rodeo

Adaptive Fishing Program – Provided the Mobile Fish Trailer and rods for the Friends of Patapsco Valley State Park Adaptive Fishing Program. This was the first adaptive fishing program hosted by the "Friends of" group in the Daniels area of Patapsco. The event consisted of two 2-hour fishing sessions of 15 participants each. Many volunteers

and partners were on hand to assist each participant catch fish (even if they were only small minnows). The Free State Fly Anglers provide fly-tying demonstrations as well as volunteer to assist with fishing.









Stream Demonstration -Assisted with an event for Sabillasville Elementary School students at Cunningham Falls State Park in Frederick County. Fifth and sixth graders participated in a stream side demonstration. They were eager to get in the water and search for aquatic insects, crayfish, and amphibians.

Blue Catfish Tracking - Received three more tag returns from the 2021 blue catfish tracking project on the Patuxent River. To date, 32 anglers have received a certificate of appreciation which is sent to anyone with a tag return. The certificate gives the angler information such as tagging date, location of fish, length, weight and, if available, fish movement since initial tagging.

Podcast - Participated in a podcast focused on informing the public of issues and information related to invasive fish species such as northern snakehead, flathead catfish and blue catfish in Maryland. Airing live on April 20, 2023, "A Chesapeake Perspective,

Opportunities and Impacts of Invasive Fish" on the Podcast "Rudows Fish Talk" is a local Chesapeake podcast that covers all aspects of fishing in the region. The podcast allowed listeners to send in questions which were answered by a three person panel. So far, the podcast has garnered over 500 views.

Freshwater Fisheries - Angler Access Fishery Management Areas (FMAs)

- Performed routine checks and maintenance at the McCoole, Black Oak, and Evitts Creek FMAs. Staff recently conducted road maintenance at the McCoole and Black Oak FMAs. Staff had 20 tons of stone delivered to fill in large potholes and eroded areas making the areas more user friendly to vehicle traffic.
- Installed caps on posts at Hughesville Pond parking area to protect the posts from weathering over the long term and as a great final addition on the parking lot project.
- Repaired the potholes in the asphalt parking area at Wye Mills Lake FMA.

Signage - Placed regulation signs in special management areas throughout Garrett County to help inform anglers of fishing regulations for specific management areas.

Freshwater Fisheries – Fish Health

Largemouth Bass - A sample of largemouth bass were collected from Greenbrier Lake in Washington County for fish health testing. The 42-acre impoundment in Greenbrier State Park has an abundance of largemouth bass. As a result, most of the population is in the 8-11 inch size range, with very few bass larger than 12 inches. Once health testing is completed, additional collections of largemouth bass will be made at Greenbrier Lake with the fish being transported and stocked in Broadford Lake in Garrett County. Reducing the abundance of largemouth bass from Greenbrier Lake should result in improved growth and a better overall size distribution.

White Perch —Collected white perch for the department's fish health group. Fifty white perch were collected from Piscataway Creek. Blood samples were taken and centrifuged onsite for easier transport. These samples will be examined at the Oxford Laboratory for toxins that may be present in the fish.

Southern Region staff also collected 45 white perch for the division's freshwater mussel hatchery manager. White perch are necessary as a host for the mussel glochidia (microscopic larval stage of a mussel) to attach to in order to complete their transition to become an adult mussel.

Freshwater Fisheries - Invasive Species

Northern Snakehead - Staff are working with the Greenway Outdoors to film and promote the utility of bowfishing in harvesting northern snakehead; the film is part of a pilot series for the History Channel.

Selected four high school groups to fund science proposals aimed at innovative approaches of attracting and effectively catching northern snakehead.

Presented information about invasive fishes for Annapolis Cafe Scientifique.

Blue Catfish - Collected blue catfish for ongoing contaminant studies in Marshyhope Creek.

Conowingo Fish Lift - Multiple trips were made to Conowingo Dam to collect northern snakehead and flathead catfish removed from the fish lift. These invasive species are either used for a bio-contaminant study or transferred to JJ McDonnell for donation to local food banks. A total of 140 northern snakehead and 10 flathead catfish have been removed from the fish lifts as of April 23.

Freshwater Fisheries - Coldwater Program

Attended the Southern Division of the American Fisheries Society Trout Committee Annual Meeting in Bristol, Tennessee. The theme of the meeting was tailwaters. Attendees discussed the management of tailwater fisheries and provided regional trout management updates.

Organized and convened the April meeting of the Coldwater Fisheries Advisory Committee. Staff from the Maryland Department of the Environment attended and presented information about the development of a thermal total maximum daily load (TMDL). Committee members also discussed a draft of the management philosophy and guiding principles for the Coldwater Fisheries Management Plan. The next committee meeting will be held in July.

Benthic macroinvertebrate samples were collected in Moores Run, North Branch Potomac River, and Morgan Run. The samples will be identified to determine the presence of coldwater obligate taxa and to gain some insight into current water quality conditions in the surveyed resources.

Annual data collection was initiated with temperature logger deployment. Temperature loggers were deployed to streams in Garrett County, Allegany County, and Washington County. This effort will continue through May and will be completed in advance of the summer index period. The loggers will be retrieved in the fall and the data will be used to analyze the thermal regime of targeted streams.

Attended a site visit to the Eccleston stream restoration project in Jones Falls. A multidisciplinary group of attendees from the department discussed the challenges and nuances of the Eccleston project and potential impacts to the brown trout population. More broadly, stream restoration approaches and methods in coldwater resources were considered. Key aspects of the discussion included thermal impacts to streams and the importance of groundwater influence for successful outcomes.

Freshwater Fisheries - Tidal Bass Program

Black Bass Advisory Committee met and discussed an upcoming video series promoting bass conservation and bass fishing in Maryland, the smallmouth bass fishery in the non-tidal Potomac River, and problems with the Nanticoke River bass fishery.

Staff disseminated with social media, video material regarding the dangers posed by Alabama bass and encouraged anglers to be vigilant in preventing introduction into Maryland waters.

The legislation adopting the Black Bass Conservation Fund was approved by the General Assembly and will soon be signed by the Governor.

Freshwater Fisheries - Other

Western Region I staff conducted interviews for their seasonal Creel Clerk position for Deep Creek Lake and have a candidate that is to start on April 26. The position will be focused on conducting angler interviews on Deep Creek Lake in order to gather angling catch and harvest data for future management decisions.

Began conducting creel surveys on Deep Creek Lake. The survey is scheduled to run from April 16 through November 30 and will provide valuable effort, catch and harvest information for the gamefish/panfish fisheries in the lake.

A Central Region Natural Resources Technician started at the end of March. Lena Sawyers has been assisting Central Region staff with trout stocking and invasive species work.