Freshwater FisheriesMonthly Report – May 2026

Freshwater Fisheries: Regional Operations

1. Stock Assessment

Monitoring and Assessment – The following work was conducted in support of assessing the health and quality of fish populations or stocks in Maryland:

- Southern Region fully updated the QR-code VAS creel survey's Spanish version so it now fully mirrors the English. Assistance with translations was provided by Wildlife and Heritage and Watershed and Climate Services employees with the department.
- Eastern Regional staff conducted an assessment of Galestown Lake, a public impoundment in Dorchester County. Survey results were excellent. Largemouth bass of all sizes were abundant, as were large bluegill and redear sunfish. Anglers should have excellent fishing.

Eastern Regional staff surveying Galestown Lake.

- West I Region staff conducted a daytime electrofishing survey on Piney Reservoir in Garrett County. Staff conducted a general fish population survey where the entire lake perimeter was electrofished to determine fish species composition, relative abundance, traditional and incremental size structure indices, and relative weight of gamefish/panfish. During sampling efforts, staff collected several saugeye, two of which were over twenty inches long. Saugeye stocking began in 2023 to provide a predatory species to help manage the panfish population and offer anglers a new desirable gamefish.

Saugeye (left) and largemouth bass collected during electrofishing survey of Piney Reservoir in Garrett County.

- West I Region staff conducted a nighttime electrofishing survey on Savage Reservoir in Garrett County. Over the course of one night, staff conducted a general fish population survey at seven sampling locations to determine fish species composition, relative abundance, traditional and incremental size structure indices, and relative weight of gamefish/panfish populations.
- West I Region staff conducted a nighttime electrofishing survey on Deep Creek Lake in Garrett County. Over the course of one night, staff conducted a general fish population survey at twenty sampling locations to determine fish species composition, relative abundance, traditional and incremental size structure indices, and relative weight of gamefish/panfish populations.

Trophy largemouth bass collected by electrofishing during a survey of Deep Creek Lake in Garrett County.

- West I Region staff conducted a nighttime electrofishing survey on Lake Habeeb in Allegany County. Over the course of one night, staff conducted a general fish population survey at ten sampling locations to determine fish species composition, relative abundance, traditional and

incremental size structure indices, and relative weight of gamefish/panfish populations.

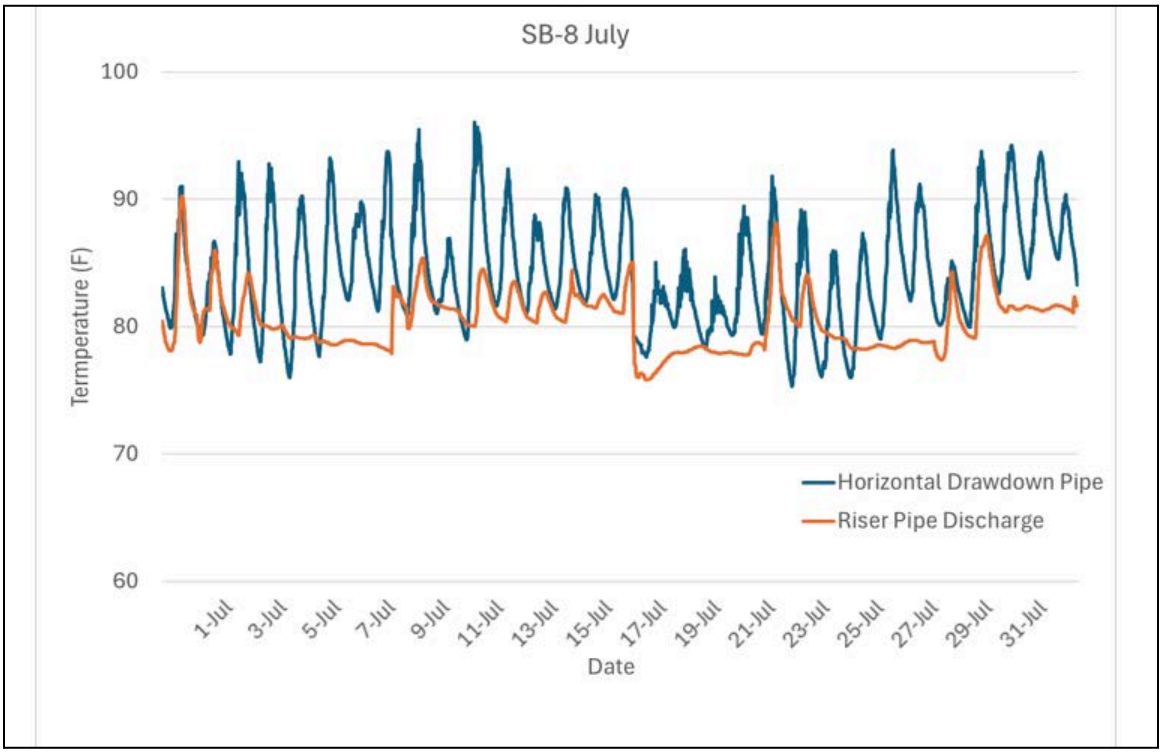
2. Habitat and Water Quality

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

- In April, Central Region staff observed a landowner actively constructing a pond in the headwaters of a brown trout stream in Howard County. After multiple phone calls and emails with the Maryland Department of Environment, it was determined that this work was not permitted. An inspector with the Maryland Department of Environment visited the site in May and determined that not one, but two ponds were constructed without a permit on the property. The inspector will continue to visit the site and will formulate a restoration plan.
- Central Region staff calibrated and deployed over 50 water temperature loggers in May. These loggers monitor stream temperatures during the summer index period in trout streams throughout the region.
- West I Region staff placed Hobo temperature data loggers at various locations throughout the North Branch Potomac River, Youghiogheny River, and at 2026 coldwater sampling locations. Data loggers will be deployed through the monitoring period of June 1 through August 31 for recording daily water temperatures.
- West I Region staff reviewed an application submitted for a stream channel realignment project to take place on Winebrenner Run located in Allegany County.
- West I Region staff reviewed an application for the installation of a new solar array to be constructed in Oakland Maryland.
- Central Region staff participated in a field visit to a potential stream restoration site on First Mine Branch in Baltimore County with staff from Baltimore County Department of Environmental Protection and Sustainability.
- Staff visited the Eccleston restoration site on Jones Falls in Baltimore County with restoration practitioners.
- Central Region staff participated in a meeting with a youth camp landowner, Gunpowder Conservancy staff, and Maryland Chapter Trout Unlimited members to discuss a potential restoration project on the camp property.
- Eastern Regional staff continues to support Maryland Department of Environment's investigations and enforcement of water pollution originating from a dairy farm in Cecil County. Manure, silage leachate, and other pollutants are being illegally discharged into Basin Run, a Use Class III stream, which supports wild trout populations. The reach where the discharges are occurring is located within a Tier II reach of stream, which is designated as high quality. Legal proceedings are ongoing.
- Eastern Regional staff presented the efficacy of rock lined trenches to mitigate the thermal impacts of sediment basins constructed in construction projects. Three by three foot rock lined trenches were designed into the sediment basin's structure,

receiving water from the basin. As the water flows through the below-grade trench, it cools down, reducing thermal impacts. The novel concept and design worked very well, resulting in significantly cooler water being discharged into receiving waters. Temperature monitoring at both the inflow (Horizontal Drawdown Pipe) and outflow (Riser Pipe) are provided below for July 2025.

- Eastern Regional staff deployed temperature loggers into several Cecil County streams to assess summertime temperatures.
- Staff reviewed a bridge replacement on Kellogg Branch in Harford County. Kellogg Branch supports brook trout. Comments were made for working in the dry, adherence to the Use III time of year restrictions, and strict sediment and erosion control measures.
- West II staff reviewed a development proposal in the Antietam Creek watershed, Washington County. Comments were made to ensure all stormwater runoff is treated through subsurface practices to ensure maximum cooling to prevent thermal impacts to the trout fishery. Comments were also made for strict sediment and erosion control, minimizing loss to riparian areas, and protection of existing groundwater springs that supply Antietam Creek with cold water during the summer.



July 2025 temperature monitoring for inflow (Horizontal Drawdown Pipe) and downstream of the rock trench (Riser Pipe).

3. Stocking and Population Management

- Central Region staff completed trout stocking in early May. Biologists and hatchery staff stocked over 75,000 hatchery raised rainbow and brown trout and conducted over 80 separate stockings.

Staff celebrating the final net of the Put and Take trout stocking season in the Central Region.

- Southern Region staff used electrofishing gear to collect brood bluegill and golden shiners for the Joseph Manning Hatchery.
- West I Region staff assisted Bear Creek Hatchery staff with daily operations and final trout stocking efforts for the 2026 spring trout stocking season.
- Largemouth bass raised at Unicorn Lake Fish Hatchery were stocked into Adkins Mill Pond, Allen Pond, Chambers Lake, and Urieville Lake by Eastern Regional staff and Unicorn Hatchery staff to enhance fishing opportunities.
- Walleye raised at Joseph Manning and Unicorn Lake hatcheries were stocked into the Susquehanna River.

4. Outreach

Central Region Creel Survey

- The Central Region creel survey of the Gunpowder Tailwater and Liberty Reservoir ramped up in May. The Central Region creel clerk conducted creel surveys on 18 separate days. Preliminary results indicate that Liberty Reservoir and the Gunpowder Falls are extremely popular and productive fisheries in the region.

Customer Service - Provided customer service information for inquiries regarding:

- Southern Region responded to an angler's comment on the QR-code survey regarding concerns about bass in one of the impoundments.
- Responded to an angler's concern that Charles County was planning to drain a pond containing impressive and sizable largemouth bass. Upon inquiry, Charles County confirmed no plans were imminent but stated they will notify us if any

action to rescue fish is needed.

Additional Outreach Events

- A Southern Regional biologist presented a course on fish to the Maryland Master Naturalist, Tawes Cohort. Fish biology, ecology, and environmental issues were presented through lecture. Then, each pair of participants dissected and fileted five to 10 pound blue catfish as the biologist demonstrated on a 50 pound fish. It was a sight to behold there in the Tawes C-1 conference room!

Blue Catfish dissection and filleting at Maryland Master Naturalist class.

- Southern Region personnel assisted with a youth angling camp hosted at Merkle Wildlife Sanctuary, collaborating with the William S. Schmidt Outdoor Education Center and Prince George's County Public Schools. Students engaged in two primary educational modules: an instructional pond fishing session and a Patuxent River shoreline survey utilizing beach seines and dip nets to observe local aquatic biodiversity. Various specimens were collected and displayed in an aquarium for comparative identification and biology lessons.
- Central Region staff presented a talk on Trout Streams of the Valleys Planning Council Area to the Valleys Planning Council general meeting. The Valleys Planning Council is active in land conservation in central Baltimore County and their area of influence contains many wild trout streams.

5. Angler Access

- Mowing and trash pickup at Hughesville Pond were completed. While performing these tasks, staff observed multiple northern snakeheads along the pond's edges and are now hatching a plan to survey the pond soon.
- West II staff conducted monthly mowing and maintenance at Brownsville and Frank Bentz Pond.
- West I Region staff visited the McCoole and Gary Yoder FMA's for trash cleanup.
- West I Region staff visited multiple managed fisheries throughout Garrett County to check and replace regulation signs.

6. Fish Health

- Southern Region staff procured and installed an ice machine to begin producing ice on site. This will be useful for preserving fish specimens.

Freshwater Fisheries: Statewide Operations

1. Invasive Fishes Program

Staff completed environmental DNA (eDNA) sampling of select locations above and below fish blockages (e.g., Patapsco River, Daniels Dam) for the presence of anadromous fishes (e.g., shad and herrings) and invasive fishes (e.g., northern snakehead) during spring. Samples were collected through May, when fishes are moving upstream and may be congregated at dams and other blockages. Samples will be sent to a laboratory for testing, and results are expected in fall 2026.

Invasive fishes, like northern snakehead and blue catfish, have started coming to the fish lift at Conowingo Dam. The lifts operate each spring to allow the passage of anadromous shad and herring species. A project to remove invasive fishes is conducted in cooperation with Constellation Energy, Normandeau and Associates, J.J. McDonnell seafood processor, and the department. Fish lifts will begin running in April and operate no later than mid-June. The first pick-ups by J.J. McDonnell were made in the month of May. A portion of fish are donated to the public around Maryland (e.g., local food banks, etc.) and others are given to J.J. McDonnell to cover pick up/transportation costs. Several northern snakeheads were used this month by invasive fish staff to practice surgical procedures for the insertion of acoustic transmitters and refining electronarcosis parameters on varying sized northern snakeheads.

Staff continued the high-reward tagging project of northern snakehead with USFWS Maryland Fish and Wildlife Conservation Office (MFWCO). Tags ($10 - yellow and $200 - blue) will expire at the end of 2026. Lengths and weights are being collected at initial tagging of fish. The project aims to incentivize harvest and helps to estimate movement and harvest rates.

Fish surveys and northern snakehead tagged with USFWS.

Staff deployed acoustic receivers in the lower Susquehanna River for a northern snakehead telemetry project with USFWS MFWCO. The project aims to monitor where these fish go once they encounter a blockage to movement (i.e., Conowingo Dam). Ten fish will be implanted with acoustic transmitters, small devices that emit a coded signal specific to each fish. Acoustic receivers stationed throughout the lower Susquehanna detect and record signals from nearby transmitters. The project aims to examine fish residence time and movements in relation to blockages.

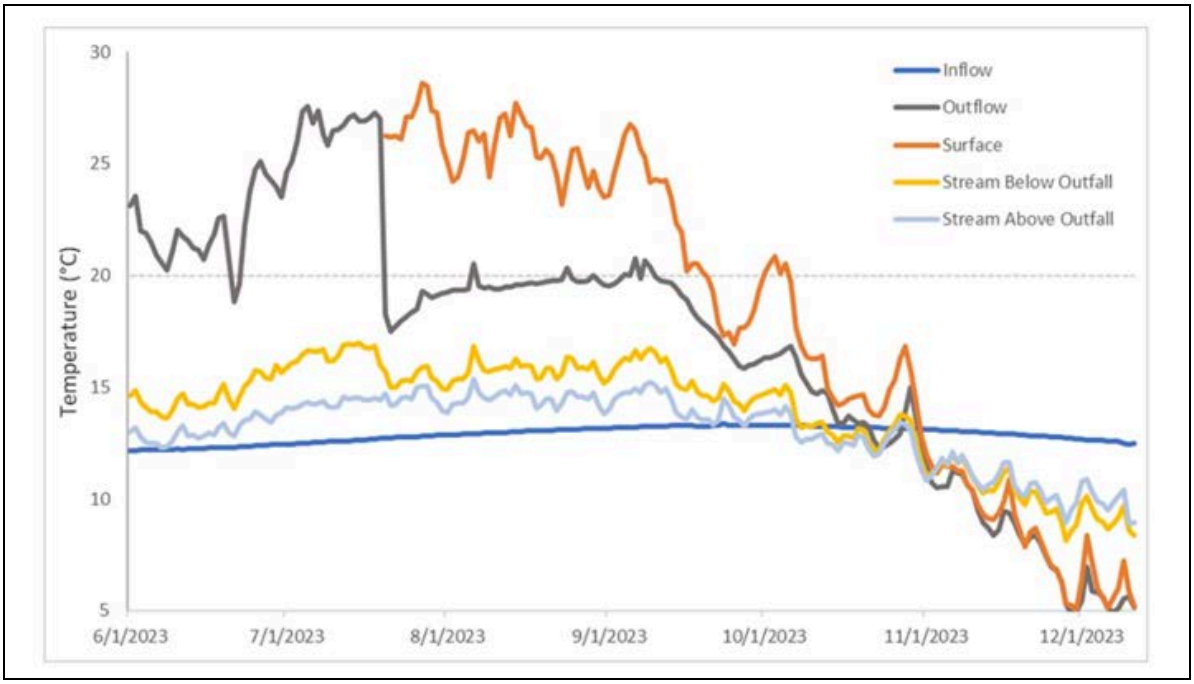
In collaboration with the Maryland Department of Environment, World Wildlife Fund Sustainable Feed Program, and the Maryland Zoo, the department continues work to explore the efficacy of using small, invasive blue catfish to augment diets of piscivores in zoos. The Maryland Department of Natural Resources received results on the palatability of the blue catfish samples that were picked up by the Maryland Zoo in March of 2026. They have observed acceptance with all their animals that it was offered to, see below. Zoo staff noted, "... our lion engaged with the catfish much longer than normal when eating offered fish. She licked it quite a bit almost like an ice treat and then consumed all of it." Tests will continue for new animals, including grizzly bears, in the near future.

2. Coldwater Fisheries Program

The Coldwater Fisheries Program staff continued spring field work and data collection, which included the deployment of continuous temperature loggers in advance of the summer index period and the processing of benthic macroinvertebrate samples. High resolution temperature data and benthic macroinvertebrate community analysis provide important information that guides fisheries management decisions. The observation of coldwater obligate stoneflies that share similar temperature requirements with trout provides important information when determining if a stream has suitable habitat for a coldwater fishery.

Continuous temperature recorder deployed to a coldwater stream in Washington County (Left). Tallaperla maria, a coldwater obligate stonefly, documented in a benthic macroinvertebrate sample collected from a stream in Garrett County (Right). This observation suggests that the stream may be a candidate for coldwater fishery establishment. Furthermore, the coldwater obligate data will be submitted with temperature data to Maryland Department of the Environment for a possible reclassification from a Use Class I, warmwater stream to a Use Class III, coldwater stream.

Staff met with the Maryland Department of the Environment to discuss the results of a small pond standpipe modification project. Small ponds typically discharge warm surface water to receiving streams, which can have substantial thermal impacts. This project modified pond standpipes to draw and discharge cooler, deeper pond water rather than warmer surface water. The results of the project documented reductions in pond discharge temperatures following the application of the modifications. The use of these standpipe modifications may limit small pond thermal impacts, which is particularly important for coldwater streams. Fishing and Boating Services recommended the development of this concept as a potential best management practice in watersheds that receive a temperature total maximum daily load (TMDL).



Mean daily water temperatures (°C) for a pond and the stream that receives its discharge. The gray line displays pond outflow temperatures. The outflow temperatures dropped substantially following standpipe modifications that discharged cooler deeper water rather than warm surface water. The modifications were made on July 20, 2023.

Staff participated in the spring meeting of the Chesapeake Bay Program, Brook Trout Action Team. The team discussed the new Chesapeake Bay Watershed Agreement outcomes, long-term brook trout monitoring sites and data collection, and range-wide occupancy assessments conducted by the Eastern Brook Trout Joint Venture and Trout Unlimited. In addition, state, federal, and non-governmental partners provided updates for brook trout projects and activities.

Staff attended the County Engineers Association of Maryland (CEAM) Spring 2026 conference and presented on collaborative partnerships that lead to positive outcomes for both local infrastructure and coldwater communities. The presentation highlighted several completed stream crossing projects that improved the flood resilience of county road networks and aquatic organism passage by replacing aging culverts with larger bridge structures. The Fishing and Boating Services will continue to identify opportunities to work with county governments on projects that improve aquatic resource habitat.

Fish passage friendly bridge constructed over Wolfden Run in 2024.

Staff attended site visits at completed stream restoration projects in Jones Falls and Piney Run (Baltimore County). Both project sites are in stream reaches that support brown trout populations. The site visits highlighted positive outcomes for restoration projects when low impact approaches that minimize riparian buffer clearing are used and when sufficient groundwater is available. Site monitoring will continue and the lessons learned from these projects will be considered during the review of future stream restoration proposals.

Provided presentations for brook trout conservation and on-going coldwater management projects at several events. Brook trout conservation and watershed protection presentations were provided for the Allegany Center of Lifelong Learning and for Seneca Valley Trout Unlimited. Additionally, a presentation to the Central Maryland Fly Fishing Council provided updates on Coldwater Fisheries Advisory Committee activities, a potential stream use class redesignation for North Branch Potomac River, and several brook trout conservation projects.

Met with the United States Geological Survey to discuss potential sites for a study that will investigate the influence of tire wear particulates (6PPD and 6PPD-q) on Maryland brook trout populations. The project will target brook trout streams that are located near heavily traveled roads. Brook trout and other salmonids are sensitive to 6PPD-q, which is a contaminant derived from tire wear particulates. The contaminant is introduced to streams through stormwater runoff.

Staff participated in a site visit to Coleman Run with Maryland Department of the Environment, Abandoned Mine Lands Division. The goal of the site visit was to determine if Coleman Run is impaired by acid mine draining (AMD) and to identify opportunities for treatment and restoration. Water sample analyses suggested that impairment resulting from AMD was minimal. Data collection in the stream will continue to determine suitability for coldwater resource development.

Staff attended a meeting for a stream restoration project planned in Beaver Creek near Smithsburg (Washington County). The concept plan included considerable grading to reconnect the stream to the flood plain, removal of in-stream log jams, and stabilization of eroding banks. While the project is not planned in a stream reach that supports a coldwater fishery, there may be impacts for downstream coldwater fisheries and for coldwater resource development. The Fishing and Boating Services recommended considerable changes to the plan and the use of a less invasive approach. The maintenance of the existing riparian buffer was requested, as well as reconsideration for the removal of instream woody debris. The debris provides habitat for fish and other aquatic organisms. Project planners will address these requests through changes to the design plans.

3. Tidal Bass Program

In May, staff attended three tournaments with field sizes ranging from 15 to 93 boats. We observed consistently low fish mortality across all events. As summer temperatures rise, staff will continue collaborating with tournament directors and maintaining a presence at tournaments to ensure best management practices are being used and the continued mitigation of tournament mortality.

Staff met with representatives from Maryland BASS Nation and Gunpowder Falls State Park to develop a restoration plan for the weigh station at Dundee Creek Marina. The facility remains operable but the infrastructure is aging and showing signs of deterioration. Private funds from Constellation Energy will be used through Maryland BASS Nation to hire contractors to replace the roofing, splintered wooden planks, and other failing structural components.

A release chute and recuperation tank being used at Smallwood State Park

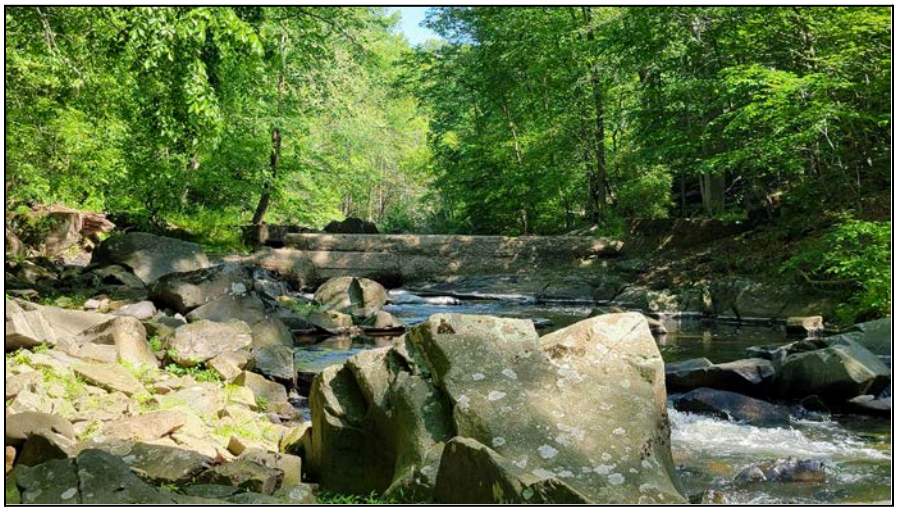
Splintering and ageing weigh in station at Dundee Creek Marina

4. Fish Passage Program

The spring field season is wrapping up as staff concluded our last eDNA sampling. Staff will cease maintaining fishladders on a weekly basis. Maryland's newest dam removal has been completed - the "Girl Scout Dam" on Conowingo Creek (tributary to Susquehanna - Cecil County) was removed by the U.S. Fish and Wildlife Service crews. Prior to the removal, Fish Passage Program staff coordinated with U.S. Fish and Wildlife Service staff to sample for Chesapeake logperch using eDNA water samplers. Logperch have been detected in the stream in the past by Maryland Biological Stream Survey.

Staff are excited to report the eel ladder on Deer Creek at Eden Mill Dam passed its first ever American eel on Tuesday, May 19. The following day, 31 eels were captured and 101 were caught on Thursday. Deer Creek has among the highest populations of

American eel in the State and staff expect thousands of eels to pass this year at Eden Mill Dam. Finally, selection is wrapping up to determine the contractor who will perform a volitional fish passage prefeasibility study that will help increase passage of target fish at Conowingo Dam while simultaneously reducing or eliminating passage of invasive fishes using Artificial Intelligence sorting technology.



"Girl Scout Dam" on Conowingo Creek - 5.18.26.

Girl Scout Dam removal. 5.20.26 Photo by Alex Vidal.

eDNA sampling on Conowingo Creek.

First American eels at Eden Mill eel ladder - photo by Angie Hoover

5. Organized Freshwater Fishing

The after-school fishing club for Edgewood Middle School wrapped up this month after a very successful year. Over 20 students had joined the final session, and more are interested in joining the club next school year. Species caught included smallmouth and largemouth bass, sunfish species, and one student caught a nice channel catfish on the final day!

After-school fishing club participant with a channel catfish! Photo by Eric Mosely.

The final session of the Aquatic R3 Matrix team's fly fishing skills training took place at Patapsco Valley State Park on May 6. The group spent over four hours putting their skills to the test in the water and luckily, it paid off! Every participant caught a fish, and many caught multiple throughout the day, including sunfish, some largemouth bass, and a white sucker!

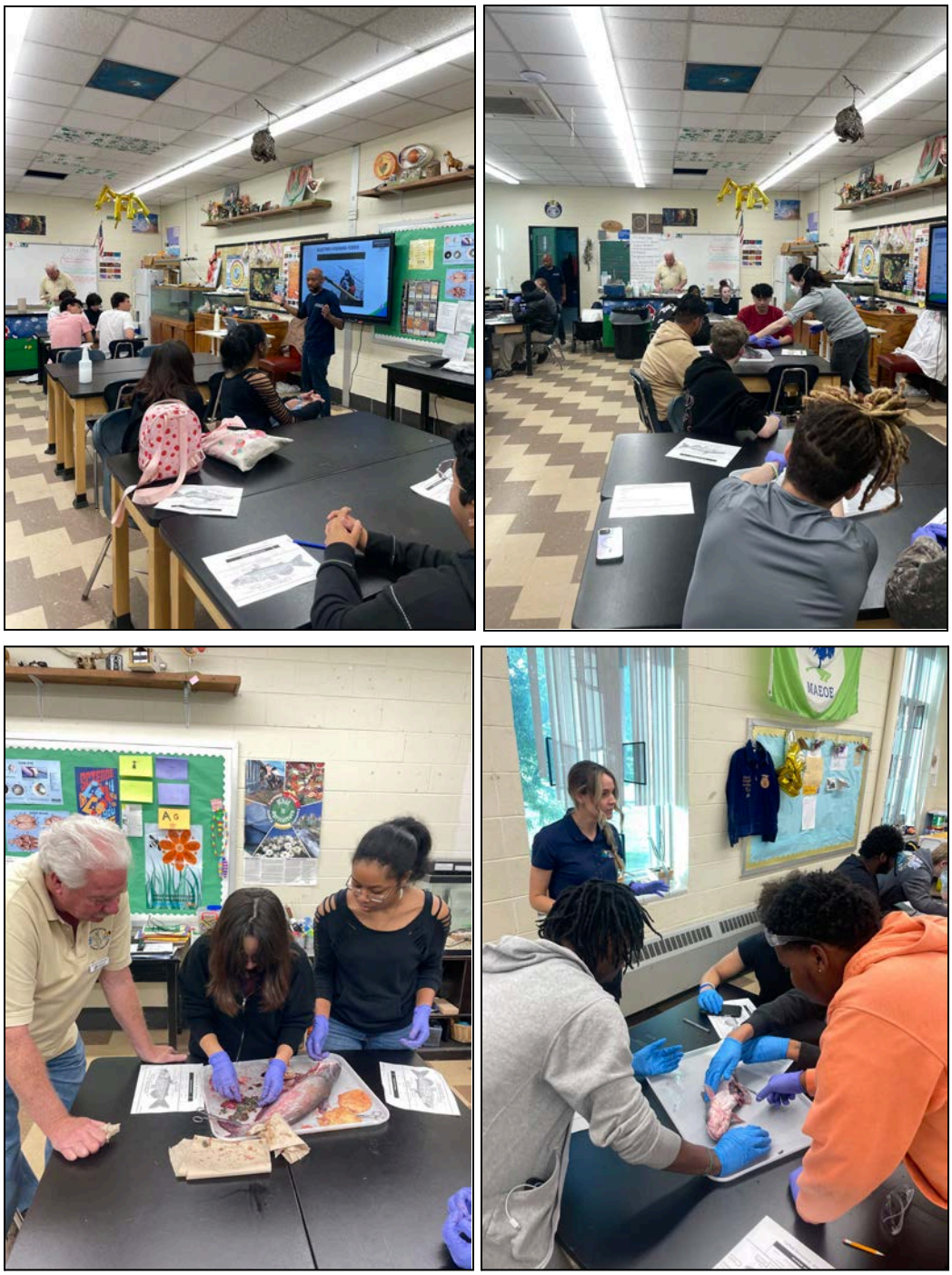
Final session of the Aquatic R3 Matrix team's fly fishing skills training.

Staff led the ichthyology portion of the Maryland Master Naturalist class at Lake Roland on May 4. Participants learned about Go Fish Maryland, our statewide fishing education program, in addition to watersheds and fish species throughout Maryland. Staff wrapped it up with fish identification using dichotomous keys and gave out some goodies - Go Fish MD stickers!

Freshwater fishing specialist Taylor Anderson discussing Go Fish Maryland at the Master Naturalist class at Lake Roland.

Freshwater fisheries staff with Maryland Department of Natural Resources teamed up with ShoreRivers to lead an invasive fishes-focused program for Environmental Science classes from Kent County High School. ShoreRivers began with an invasive fishes game, then staff led a blue catfish dissection in the classroom. This gave students an opportunity to learn both internal and external anatomy, and why blue catfish are so successful at invading Maryland waters.

Staff and ShoreRivers followed up the classroom dissection with a fishing field trip to Turner's Creek on May 14. Staff discussed electrofishing practices for invasive fish like blue catfish and northern snakehead. The Mobile Fishing Trailer was provided so students could borrow fishing gear to try their hand at catching an invasive species. Fish caught included white perch, channel catfish, and multiple sunfish species.



Staff from Maryland Department of Natural Resources and ShoreRivers led a blue catfish dissection for Kent County High School's Environmental Science classes. Photos by ShoreRivers staff.

Maryland Department of Natural Resources and ShoreRivers led the field trip portion of Kent County High school's Environmental Science Class at Turner's Creek. Photos by ShoreRivers staff.

The Maryland Department of Natural Resources assisted ShoreRivers' staff with a second field trip on May 21 for Easton High School Environmental Science Advanced Placement students. The Mobile Fishing Trailer was provided for students to borrow gear and practice their fishing skills, in addition to learning how to kayak at Martinak State Park. Species caught included: bluegill, channel catfish, flathead catfish, and a banded killifish.

Maryland Department of Natural Resources leading the fishing portion of Easton High School's field trip (Left). Two channel catfish caught from Easton High School Students (Below).

Friends of Patapsco Valley State Park utilized fishing rods from Maryland Department of Natural Resource's Mobile Fishing Trailer for their Adaptive Fishing Event on May 16. There were 13 people who attended and were excited to have the opportunity to fish in a safe and educating environment.

The weather was perfect for water safety and canoe training at Tuckahoe State Park on May 18 and 19. Participants received hands-on instruction in canoeing techniques and water safety procedures, including paddling strokes, canoe flipping, and self-rescue methods for getting back into a canoe after capsizing.

Staff participated in the Maryland Biological Stream Survey training from May 26 - 29 at Bowie State University. Participants were trained and tested on a variety of subjects including physical habitat assessment, mussel taxonomy, crayfish taxonomy, as well as fish sampling and taxonomy.

Water Safety and Canoe Training at Tuckahoe State Park. Photos by Maryland Park Service staff.