

## Fisheries Ecosystem Assessment Division

### *Last Month*

**Mattawoman Creek Monitoring in 2025** – Staff began monitoring Mattawoman Creek for the spring of 2025. A Yellow Perch larvae presence/absence survey on the tidal portion of Mattawoman Creek was started on 3/12. The first Yellow Perch larvae were encountered on 3/26.

Staff began monitoring the nontidal portion of Mattawoman Creek on 3/5. Staff are collecting ichthyoplankton samples and eDNA samples for this monitoring. The eDNA sampling will be incorporated into this spring's presence/absence monitoring of anadromous fish nontidal stream spawning in Mattawoman Creek. Adding eDNA will provide more resolution of which herring species are using the stream for spawning and their spatial and temporal distribution. Currently, we cannot reasonably differentiate among herring species. Staff will also use this to evaluate the possibility of using eDNA as a rapid assessment tool to determine the presence of anadromous fish in Mattawoman Creek.

Staff also observed Yellow Perch eggs on the nontidal portion of Mattawoman Creek on 3/18 and 3/26.



Yellow Perch eggs in Mattawoman Creek, IP sample collection, and eDNA sampling

**Choptank River Monitoring in 2025** – Staff are sampling the Choptank River twice a week for the presence/absence of Yellow Perch larvae and Striped Bass eggs. Later in the season, staff will also set a midwater trawl to collect Striped Bass larvae to assess for feeding success.

Staff began sampling the Choptank River on 3/13. The first Yellow Perch larvae were collected in samples on 3/17. Yellow Perch larvae were present in sampling on 3/24 and observed at all sample sites on 3/27 and 3/31.

Striped Bass eggs were first observed on 3/24. All eggs were non-viable due to low water temperatures. Striped Bass eggs were found at all sites on 3/31 and appeared to be viable. The water temperature was 15°C.



Examining a sample from the Choptank River and Yellow Perch larvae from a sample.

**FISH GIT meeting** – Staff attended the spring 2025 GIT. The primary task was to finalize the fish habitat outcome draft language and align/add outputs (actions) to the revised outcome. Time was insufficient to complete review of the indicators (metrics) for the outputs.

**Paperwork** - Staff prepared our federal aid proposal in TRACS and paperwork for a purchase order to have eDNA samples processed.

**Seasonal 2025** – Staff have interviewed candidates for the seasonal position and have selected a candidate. Staff will start the paperwork process to have them start 5/7.

**Access Databases** – Staff are working on compiling data sets into Access databases for each sampling project. These data sets will incorporate all historical data collected. Staff began digital collection of data with an iPad. This should streamline data checks and entry in the Access databases.

**Federal Aid Report** – Staff are working on data analysis and editing for the 2024 Federal Aid Report.

**NOAA Seminar** – Staff attended virtual seminars on “eDNA Monitoring in the National Estuarine Research Reserves, Lessons on Standardization, Communication and Implementation”, management strategy evaluation, and fish on the move due to climate change.

**Atlantic Coastal Fish Habitat Partnership** - Staff attended the Steering Committee meeting to review recommended projects for FY26 funding. Project rankings were reviewed with and

without scores directly related to DEIJ and climate change resiliency; a request made by federal partners. The rescoring resulted in two of the top five projects swapping spots. The projects have been submitted to the National Fish Habitat Action Plan ( NFHAP) for approval and funding.

**AFS 2025 Annual Meeting** - Staff submitted an abstract for an oral presentation to be given at the AFS 2025 Annual Meeting in San Antonio, Texas this August. The presentation, entitled “Exploring the Role of Zooplankton Abundance in Recent Striped Bass Year-Class Failures”, corresponds to a recently submitted manuscript ("Influence of feeding on zooplankton on Striped Bass postlarval mortality, growth, and year-class success in Choptank River, Maryland, during the 1980s and 2023-2024") and will be presented as part of the “Connectivity and Management of Estuarine-Dependent Species” symposium.

### *Looking Forward*

Staff will continue data analysis and report editing for the 2024 Federal Aid Report.

Staff will continue assembling master Access datasets.

Staff will continue spring sampling once a week on Mattawoman Creek and twice a week on the Choptank River.

Staff will review a comprehensive plan for the Town of Charlestown and submit comments by the deadline.