

Fisheries Ecosystem Assessment Division

Last Month

Larval Striped Bass Feeding Study – Staff finished examining larval striped bass and white perch for stomach contents. Data were entered and checked. Staff will begin data analysis for this work for the federal aid report. In total, over 7,000 larvae were collected and sorted from the Choptank River, about 1,800 of which were feeding Striped Bass larvae. The gut contents of 414 “first-feeding” Striped Bass larvae (5-7mm TL) were examined; preliminary estimates indicate that these larvae fed well overall (79% with gut contents), especially on cladoceran zooplankton (60%), but less successfully on copepods (40%) than in 2023 (65%). Feeding incidences in 2023-2024 met criteria for successful feeding developed from associations of feeding with larval growth and mortality estimated from studies in the 1980s.

Stomach Content Analysis for Striped Bass – Staff worked with Cooperative Oxford Laboratory (COL) to collect Striped Bass stomachs for forage analysis. Striped Bass were caught via hook and line and brought back to COL. Staff cut open stomachs to determine forage eaten by these fish. Approximately 150 Striped Bass were examined for stomach content analysis in December. Most prey items were Atlantic Menhaden and Spot, with the occasional Atlantic Croaker, Gizzard Shad, Atlantic Thread Herring, and a Skilletfish found in the stomachs.

Beyond 25 Chesapeake Bay Program – Staff attended the Forage and Fish Habitat Workgroup meeting for the Chesapeake Bay Program. The purpose of the meeting was to discuss the forage fish and fish habitat outcomes in the Chesapeake Bay Agreement. Further work will be done to determine the extent to which these outcomes are changed and updated. It’s very unclear what direction these workgroups will take.

Atlantic States Marine Fisheries Commission – Staff virtually attended the ASMFC Striped Bass Management Board special meeting.

St. Michaels Comprehensive Plan – Staff reviewed the St. Michaels Comprehensive Plan and prepared comments on the plan. These comments will be submitted before the deadline.

Standard Operating Procedures – Staff reviewed and updated SOPs for the Fisheries Ecosystem Assessment Division. These SOPs were standardized, and data quality control checks were added into the procedures. These SOPs are currently under division review.

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

Comments and Such - Staff provided comments and FEAD man-day estimates for the FABS strategic plan.

Corsica River - Staff attended the Corsica River Implementers meeting and a meeting with MDE and consultants for the town of Centreville. For the former, FEAD watershed impervious surface concerns and the effect of the outfall for the proposed wastewater treatment plant on anadromous fish movement

and spawning were of interest. For the latter, the location of the proposed outlet for the plant and its potential to form a thermal barrier for Yellow Perch spawning movement during February to early March was discussed. The consultants will run a two dimensional mixing model to see what portion of the subestuary will be impacted by increased temperatures.

Maryland Menhaden Traffic Light Index (TLI) - Written comments from the peer-review were received and incorporated into the TLI. The report is being reviewed internally one final time before proceeding to the next step.

Mattawoman Creek Monitoring in 2025 - FEAD and Oxford Cooperative Lab staff had a preliminary discussion about incorporating eDNA sampling into next spring's presence-absence monitoring of anadromous fish stream spawning in Mattawoman Creek. Adding eDNA would provide more resolution of what anadromous species were using the stream for spawning and their spatial and temporal distribution. Currently, we cannot reasonably differentiate among herring species.

Cooperative Oxford Lab meeting about Striped Bass research - Staff met with the federal director about some ideas for federal research ideas that could be connected to Striped Bass recruitment. The idea primarily had to do with the impact of marsh migration and the importance (or unimportance of the small tributaries that feed through the marshes into the spawning ground). The Nature Conservancy was interested in this as well. FEAD felt it had little bearing on the current recruitment shortfall but was of some long-term interest.

Looking Forward

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

Staff will continue creating master Access datasets.

Staff will meet with MDE on 1/6.