



Despite Public Acknowledgment from Scientists on Strengths of 2015 Menhaden Assessment, Environmental Groups Ignore Key Facts and Findings

Earlier this year the Atlantic States Marine Fisheries Commission (ASMFC) presented the 2015 Atlantic Menhaden Benchmark Stock Assessment -- the most thorough, accurate, and complete evaluation of the species in the Commission's history. Since its release, the assessment has come under fire from several environmental groups for allegedly not considering ecosystem needs. However, as acknowledged by the assessment's peer reviewers, the assessment *does* factor interactions with predator species into its estimates, something mostly ignored by critics. These facts are publicly available and have been for months, calling into question whether such omissions of fact are unfortunate, yet critical oversights or intentionally ignored and thus misinforming.

Also missing from these criticisms – despite public recognition by the ASMFC – is any acknowledgement of the many challenges and hurdles that need to be cleared before the implementation of true ecosystem-based management can become a reality. This is particularly true when it comes to the practicability of setting Ecological Reference Points (ERPs), fishing levels that may better take into account not just the health of the menhaden stock, but also menhaden's role as a food source for predator species.

In a January release on the assessment, for example, the [Chesapeake Bay Foundation \(CBF\)](#) criticized the current assessment, stating, "it is important to recognize that this is a 'single-species assessment' that does not account for the critical role menhaden play as a food source." [The Pew Charitable Trusts](#) struck a similar note when it announced, "we can't ignore that this new assessment still relies on a limited, single-species method of counting fish populations."

While the [most recent menhaden assessment](#), like virtually all assessments used for management purposes in the U.S., uses a single-species model, it is erroneous to claim that it fails to account for predator interactions. The new, peer-reviewed menhaden assessment model factors in estimates of natural mortality, which includes deaths from causes such as age and disease, but more importantly, includes mortality as a result of predation. The ASMFC has documented the fact that the 2015 assessment estimates predation mortality, as detailed in pages 29-32 of the assessment, even if the ASMFC's conclusions are not so well documented by the assessment's critics.

More importantly, the current mortality estimates were determined to be the best method available to account for predation mortality during the assessment's development. They were reviewed and accepted during the assessment peer review process, and are thus the best estimates we currently have on how menhaden interact with predator species. It makes sense that managers would use this data, the best available science on menhaden natural mortality, to guide management decisions and shape reference points at this May's meeting.

Moving toward as precisely a determinable level of fishing mortality as possible for menhaden—and fisheries management in general—is a constant mission of fisheries managers. But there is currently not enough information available to successfully develop an ecosystem-based assessment and enact an ERP; it is presently more of an aspirational goal than an immediately achievable policy. The ASMFC highlighted these difficulties [during a presentation](#) given at its February 2015 meeting, stating in a slide under the section “Proposed Methodology to Identify Potential Ecological Reference Points” that “additional technical work and additional peer review of that work will be necessary before ERPs will be available for management use.” The ASMFC has considered some proposed ERPs for management use, including reference points derived from the work of the Lenfest Ocean Program's Forage Fish Task Force (Pikitch et al., 2012) and endorsed by many environmental groups. The Commission's scientific experts [ultimately rejected](#) these reference points, as the criteria they established did not adequately apply to menhaden.

Does this mean that regulators should forgo managing menhaden until an agreed-upon ERP can be developed and implemented? While groups like Pew and CBF have been quick to argue that a move to full ecosystem-based management should be a prerequisite for any future regulatory reforms, [they have previously](#) [advocated for management actions](#)—which resulted in substantial job loss and economic hardship—that were rooted in the conclusions of single species stock assessments. If the single species model was considered robust enough in 2012 to institute deep harvest cuts, so too should it be considered fit for management now that the current assessment says harvest increases are scientifically supportable. This is especially true given that the current assessment is the most thorough and accurate stock assessment of Atlantic menhaden in recorded history. These groups' positions seem hypocritical and indicate that sound fisheries management may not be at the top of these organizations' agendas.

The development, approval, and enactment of an ERP for the menhaden fishery are likely years away. In the interim, managing the species according to the reference points established by the ASMFC's Menhaden Technical Committee, and based on the results of the 2015 assessment, is the best available science for the fishery. In fact, it is the best information that managers have had on the fishery in its history. Setting catch advice based on this science is both consistent with how the fishery has been managed in the past, and a supportable, sustainable option as the fishery transitions to ecosystem-based management in the future.