

Menhaden: 42 Stakeholders tell ASMFC a rushed decision could trump scientific facts

Forty two individuals from Maine to North Carolina, who are involved in the menhaden reduction industry or who rely on menhaden to sell as bait to crabbers and lobstermen have written to the chair of the Atlantic States Marine Fisheries Commission (ASMFC) in advance of a scheduled meeting next week to express concern that a rushed decision by the commission could trump careful consideration of scientific facts regarding the status of the fishery.

WASHINGTON (Saving Seafood) July 29 2011 -- As much of the country is focused on next week as the deadline for Congress to come to an agreement regarding our nation's debt crisis, a smaller segment of the population is anxious for another reason: it's when the Atlantic States Marine Fisheries Commission (ASMFC), a group from 15 states that oversees fishery resources management, is scheduled to discuss potential policy changes that could dramatically affect the commercial reduction and bait fishing for Atlantic menhaden.

Most Americans know little about menhaden, a small fish prized as one of the main sources for fish oil and fish meal, which provides ingredients for hundreds of household products from margarine to pet food, and is an excellent bait fish for crabbers and lobstermen. They're also not likely to know that industries based on menhaden support thousands of jobs -- directly and indirectly -- and generate hundreds of millions of dollars annually, in effect, helping to improve the country's dour economic circumstances.

But, economics aside, industry insiders, along with many fisheries scientists, are worried that a rushed decision will trump careful consideration of scientific facts regarding the status of the menhaden fishery.

These concerns were expressed in a letter sent to the chair of ASMFC's Atlantic Menhaden Board and signed by 42 different individuals, from Maine to North Carolina, who are involved in the reduction industry or who rely on menhaden to sell as bait to crabbers and lobstermen.

"It seems like they may be making a hasty decision without knowing completely what's going on," says Jennie Bichrest, a signatory who owns a lobster bait business in Maine and serves on an advisory panel, appointed by the Board to offer feedback. "There's been no communication between the Board and their advisors. We've been offered no formal communication about what may happen."

The main concerns expressed in the letter stem from an onslaught of unproven and unfounded conclusions thought to be pressuring the Board to enact management changes. For years, ad hoc environmental coalitions have been claiming that Atlantic menhaden are dangerously overfished, that their populations are disappearing.

Yet, in ten years of assessments (from 1999 to 2008), overfishing was found to have occurred only in the last year -- and then, by a very small amount -- 0.004 over what is known as the fishing mortality threshold. To put this in perspective, it means that the industry was estimated to have overfished the threshold by 0.4 percent during the 2008 season. Statistically, the finding is not significantly different than if the estimate were exactly on the mortality threshold. While it is understood that action must be considered when the estimate is above the threshold, it is not a call for immediate or burdensome action.

The ASMFC's guidelines dictate that in a case like this, the Board is to evaluate the risk involved under the current status to determine if appropriate action is required. No such exercise has yet been conducted.

Assessments consider two major factors with menhaden: fishing mortality, which is the ratio of fish harvested to the total estimated population size; and biomass, which is expressed as the number of mature eggs produced by the population. As reference points, fisheries assessments use targets (to represent the ideal level) and limits (to represent levels not to exceed). Scientists found the fishing mortality estimate for 2008 was just barely over the limit. The biomass/egg reference point was right on target (198% above the threshold), suggesting that plenty of eggs were produced. This is not surprising

considering that one female menhaden can produce as many as 350,000 eggs. Since 2008, while catches and catch rates have climbed without breaching fishing mortality threshold limits, anecdotal reports suggest strong recruitment. Put simply, more fish have appear to have been caught without affecting the health of the fishery.

A potential red flag in the assessments is that in the year when marginal overfishing was reported to have occurred, in 2008, it coincided with the lowest year for landings on record. In the menhaden fishery, stock assessments heavily depend on numbers of fish caught in the fishery because there is no stock-wide survey. In 2008, production issues at the Omega Protein plant in Reedville, Virginia caused the firm to instruct its commercial fleet to reduce landings so as not to bring in more fish than could be processed. "It is possible that these artificially low landings impacted the assessment," the letter states.

The signatories of the letter to the ASMFC worry that a catch limit based on unusual and extenuating circumstances may be unfairly held as a guideline for the future - a worry that is not unfounded considering the Board's motion to establish an addendum to its management plan that was passed earlier this year. The addendum would, among other things, implement an interim reference point of 15 percent [maximum spawning potential] MSP level, which means that at least 15 percent of an unfished stock must be left in the water to spawn. The 2008 stock assessment estimated the MSP in 2008 to be at around 9 percent. In March, several members of the board suggested that the reduction in catch in order to reach MSP 15 percent would be between 5 and 10 percent. However, because of the low catches in 2008, the reductions required to meet the new threshold are now much higher at between 23 and 45 percent, the strictest possible management measure in the addendum.

While no actual stock-wide surveys are conducted to determine the fishery's health, industry insiders and fisheries scientists alike think it is imperative that the Board considers, not just the calculations and numbers coming from the stock assessment, but also the unique life history characteristics of this particular fish. One of the phenomena with the menhaden fishery that several marine biologists have noted is the fact that the success of the fish is far more dependent on environmental conditions -- weather, water quality and atmospheric pressure - than on anything else, including restrictions on commercial fishing.

"Intuitively, it makes sense that less fishing means more menhaden," says National Marine Fisheries Services biologist Joseph Smith. "But it doesn't work that way. Based on years of data, there doesn't seem to be a very good relationship between the number of spawners and the number of juveniles."

A number of other complexities surrounding the fish demand further investigation. Next year, a new menhaden assessment will provide updates on recruitment and the status of the fishery. And later this summer, the industry will sponsor an aerial survey and biological sampling program designed to measure the abundance of older fish outside the range of the fishery.

"The survey is very important as the Board considers stock-wide menhaden management," the letter to the ASMFC states. "For instance, the menhaden stock assessment model essentially assumes--because it has no information [to the contrary] -there are no age-three or older menhaden in existence outside the range of the reduction fishery in the Mid-Atlantic. This gaping hole in the data drives down both population and fecundity estimates (even though fecundity is at target levels) and drives up fishing mortality estimates."

While the letter goes on to outline other concerns, it essentially makes the point that management decisions should not heed calls to "rush forward precipitously" in the face of exaggerated claims about a collapsing menhaden fishery. "We respectfully request that the Board stick to its plan to conduct a careful, open, and inclusive process before developing any new coast-wide menhaden management system," the letter states. Unlike the deadline to raise the nation's debt ceiling, the sense of urgency here has been largely manufactured by agenda-driven motives. As always, careful consideration of all of the complexities surrounding menhaden will serve best to inform any significant policy decisions.

[Read the letter from the 42 signers to the Atlantic States Marine Fisheries Commission](#)