

Menhaden ERPs: A Watershed For Forage Fish Management?

by CHARLES WITEK



Last month, the Atlantic States Marine Fisheries Commission's **Atlantic Menhaden Management Board** agreed to adopt "**environmental reference points**" (ERP) to govern menhaden management. Those actions are arguably the conclusion of a twenty-five year long battle to wrest menhaden management away from the industrial menhaden fishery and hand it over to professional fishery managers who will now manage menhaden primarily as a forage fish, emphasizing its role in coastal ecosystems, rather than as feed stock for a reduction industry that converts menhaden into fish meal, oils and other products.

Congratulations go out to the many conservation groups, angling organizations, and private citizens who gritted it out and saw this fight through to what will hopefully be its desired end. I got involved with menhaden in the late 1990s and know that there were people already engaged in the debate for years before that.

Thanks go out to the professional fishery managers and others who sit on the Management Board and made this happen, to the scientists on the ASMFC's staff and elsewhere who prepared the stock assessments and other analysis, and to everyone else who contributed their time and their knowledge to the effort.

That includes **Secretary of Commerce Wilbur Ross** and his staff, who refused to let the Virginia Legislature look the other way while Omega Protein exceeded the ASMFC's cap on menhaden in the Chesapeake Bay, and to **Virginia Governor Ralph Northam** and his natural resources staff, who looked beyond Virginia's parochial interests in the reduction fishery to menhaden's importance to all of the states on the coast.

Having said that, **what does last week's menhaden decision really mean**, and what does it portend for the management of other forage species?

That is an interesting question.

The ecological reference points adopted for menhaden tie the target menhaden biomass, and target fishing mortality rate for menhaden, to the biomass of menhaden that will maintain striped bass at its target females spawning stock biomass.

Studies indicated that striped bass, along with certain birds, were the species most sensitive to menhaden abundance, so biologists believe that a menhaden biomass that will support the striped bass will also be adequate to support bluefish, weakfish and spiny dogfish at their target levels.

In some ways, the Atlantic Menhaden Management Board's actions were notable, because Atlantic menhaden support one of the largest commercial fisheries in the nation; ecological reference points have the potential of limiting that fishery's landings.

But at the same time, the current estimated fishing mortality rate for Atlantic menhaden is slightly below the environmental reference points' fishing mortality target, so no cuts in menhaden landings would currently be required (that could

change in October, when managers will set the 2021 annual catch limit, although there is no reason to believe that a harvest reduction is currently on the table).

Another factor that probably militated in favor of the environmental reference points was that most of the commercial Atlantic menhaden fishery is concentrated in Virginia. There are menhaden fisheries in other states, but Virginia gets nearly 80 percent of the quota; New Jersey, which receives slightly less than 11 percent of the quota, sits in a very distant second place. The other 9 percent or so is shared by fourteen different jurisdictions, making it very easy for the representatives of those jurisdictions to listen to the science and their constituents' comments, and vote for ecological reference points. They could do so with the confidence that their local fishermen probably wouldn't be hurt by such vote and, if a few more menhaden were needed, they could probably shave them off Virginia's quota.

That's not necessarily true of other forage species, and in that regard, the debate leading up to the Mid-Atlantic Fishery Management Council's Unmanaged Forage Omnibus Amendment is instructive.

In preparing that amendment, the Mid-Atlantic Council recognized that "Forage fish are small fish and invertebrates that feed on smaller marine organisms such as plankton and are in turn eaten by many species of fish, sea birds, and marine mammals. Forage species play an important role in sustaining the productivity and structure of marine ecosystems by facilitating the transfer of energy from the lowest level of the food chain to higher levels."

That all sounds good, but it should be noted that the Unmanaged Forage amendment, both as it was adopted and as it exists today, largely protects only unfished, as well as unmanaged, forage species.

There was considerable debate over including chub mackerel, a species that only began to see significant Mid-Atlantic landings in 2013.

Even though the mackerel weren't a traditional commercial target in the region, the fact that a fishery was beginning to develop was enough to make their inclusion in the Unmanaged Forage amendment a temporary one; a recent amendment has included chub mackerel as a species covered by the Atlantic Mackerel, Squid, and Butterfish Fishery Management Plan.

So chub mackerel are forage fish, and Atlantic mackerel, squid, and butterfish are forage fish too, but all of them support lucrative commercial fisheries that operate out of a number of different states, so you probably won't see any of them being managed for their value as forage at any time soon.

Instead, what you'll probably see, in the case of forage fish that support significant fisheries, are occasional measures to avoid localized depletion of particular forage species, when fishermen become convinced that a lack of forage is contributing to a lack of larger, more valuable fish. **(to page 9)**

