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LEGISLATIVE CONTROL OF THE MENHADEN FISHERY

Nicole M. Rovner & Matthew G. Curtis*

I. ONE SPECIES OF FISH, NUMEROUS PIECES OF LEGISLATION

The menhaden is a bony, oil-rich fish that serves as the primary source of food for a number of predator fish species along the East Coast.¹ For a number of years, there have been recurring legislative attempts to change the way the menhaden fishery is managed in Virginia.² Recent landings data and anecdotal evidence both point to a decline in observed menhaden schools in the Chesapeake Bay.³ As one scholar noted, “[o]nly Virginia and, to a lesser degree, North Carolina continue to allow the industrialized taking of menhaden on the Atlantic coast.”⁴ In Virginia, “menhaden are the only saltwater

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¹ See, e.g., H. Bruce Franklin, The Most Important Fish in the Sea, 26–27 (Island Press 2007); see also id. at 8. (“Filter feeders that live primarily on tiny or even microscopic plants and suspended matter, much of it indigestible or toxic to most other aquatic animals. [S]chools of menhaden pour through these waters . . . [where] each adult fish filters about four gallons of water a minute.”)


fish not regulated by the Virginia Marine Resources Commission [hereinafter VMRC]. Instead, part-time legislators have chosen to oversee the industry themselves.\(^5\) Senator Ralph Northam’s (D – Dist. 6) Senate Bill 765 would have amended the Virginia Code to transfer management of the menhaden fishery from the General Assembly to the VMRC.\(^6\) Giving the VMRC authority to regulate the menhaden fishery, the same authority the agency exercises over other Atlantic fish species that inhabit Virginia waters,\(^7\) would place decisions regarding any quota cap within the purview of scientific consensus instead of the legislative process.

By 1956, the Atlantic commercial menhaden fishery takings reached two billion pounds.\(^8\) The vast majority of menhaden are caught by the “reduction industry,” which harvests menhaden through the use of a fishing method known as purse seining. It uses extracted menhaden oil for health supplements and industrial applications, and the carcasses to make fertilizer and livestock feed.\(^9\) For instance, Omega Protein Corporation, the industry leader, uses spotter planes that contact fishing boats ashore, which rush out to encircle the schools with purse seines, and by tightening the looped thread at the bottom of the large nets, essentially bag up entire schools of fish.\(^10\) The practice has been in use since the 1860s,\(^11\) but it now faces challenges. Most Atlantic states, except for Virginia, have banned commercial menhaden harvesting in their waters.\(^12\) Every year, legislators reject efforts to change the menhaden fishery control structure.

\(^8\) Franklin supra, note 2, at 6.
\(^9\) Id.
\(^10\) Id. at 5–6. (explaining that net-tightening has evolved from manual to steam-powered donkey engines, eventually replaced by power blocks and hydraulic winches. Now gigantic power tubes suck and pump the fish from the purse seine to the hold of “refrigerated ships capable of holding more than a million fish.”)
\(^11\) Franklin, supra note 2, at 99.
\(^12\) Fish Finds Friends North of Potomac, supra note 5; see also Patrick Connolly, Saving Fish to Save the Bay: Public Trust Doctrine Protection for Menhaden’s Foundational Ecosystem Services in the Chesapeake Bay, 36 B.C. Envtl. Aff. L. Rev. 135, 145 (2009).
causing some observers to conclude that reduction industry interests are being put before the kind of legislation that would assure a comprehensive, ecosystem-based management model that others feel is necessary.\textsuperscript{13}

This year, six menhaden-related bills were introduced in the Virginia General Assembly.\textsuperscript{14} Delegate John Cosgrove (R-Chesapeake) introduced legislation in the House of Delegates that was identical to Senate Bill 765, a bill that proposed to shift oversight of the menhaden fishery to the VMRC.\textsuperscript{15} This article aims to highlight the unique stance taken by Virginia’s legislature and explain why this management is better left to the commission responsible for managing every other fishery in the Commonwealth. While there may not be a conclusive link between reduction industry practices and a decline in water quality,\textsuperscript{16} Virginia’s legislators should recognize the shift towards an ecosystem-based model as the most effective way to sustainably manage fisheries and all natural resources.

\textsuperscript{13}See e.g., Bills on Menhaden Fishing Fall Short Once Again, supra note 5, (“‘I’d like to know one legislator smart enough to make scientific decision about this fish species,’ [Delegate] Cosgrove said Friday after his bill’s defeat Thursday night in a subcommittee. ‘It’s stupid that we do it this way.’”); see also Joanne Kimberline, Va. Assembly Panel Rejects Changes to Menhaden Regulation, PilotOnline.com (Jan. 31, 2011), available at http://hamptonroads.com/2011/01/bills-menhaden-fishing-fall-short-once-again.


A. Why Menhaden Matter

Menhaden play a critically “important ecological role in [the] Chesapeake Bay both as prey for large predators such as striped bass and as filter feeders that can potentially help clear nutrient-polluted Bay waters.”17 Filter feeders like menhaden provide critical filtration and detoxification services to bodies of water like the Chesapeake Bay.18 In addition to their role as filter feeders, menhaden are perhaps the most essential link in the Chesapeake Bay's complex food web and serve as “the dominant prey species for many predatory fish and mammals such as striped bass, bluefish, weakfish, Spanish mackerel, seals and whales . . . .”19 Many sport fishermen and bird watchers believe that a dwindling menhaden population in the Chesapeake Bay is a driving factor in the inability of their favorite species to rebound from diminished levels.20 Others believe that wasting disease in Chesapeake Bay striped bass, a popular target for recreational anglers, may be attributable to malnutrition from a lack of menhaden on which to feed.21 The link between single species takings and the overall health of the bay and its natural resources has given marine and environmental scientists cause for concern.22 “While spawning occurs mainly at sea, menhaden larvae are transported by ocean currents into the estuaries. They use the bay as a nursery during the first year of life.”23 This is why maintaining the

18 See Franklin, supra note 2, at 7–8.
21 See Ken Hinman, Menhaden Netters Threaten Chesapeake, Salt Water Sportsman, Dec. 2003, at 3, available at http://www.ceibacounseling.org/sws_menhaden_article.pdf (Fish infected with myobacteria, a chronic “wasting disease,” may have skin lesions, and often exhibit damage to internal organs.); see also Gottlieb, supra note 21, at 83.
22 See Gottlieb, supra note 21, at 3–4.
23 Russell, supra note 21, at 33.
health of menhaden within Chesapeake Bay is important to ensuring the population’s continued viability along the entire Atlantic coast.

Menhaden’s “essential role in the bay's complex food web are foundational services, crucial to the diverse species who inhabit the bay ecosystem and to the people who rely on that ecosystem for its commercial, recreational, and aesthetic bounties.” Congress has named the Chesapeake Bay a ‘national treasure and resource of worldwide significance.’ Likewise, economists have calculated that the value of the Bay is over one trillion dollars, attributed to fishing and tourism revenues, property values, and shipping activities. “Hence, the protection and restoration of the Chesapeake Bay is essential for a healthy and vibrant regional economy.”

A healthy menhaden population is integral to a healthy Chesapeake Bay ecosystem, an ecosystem that supports various local economies and industries. For instance, the economic benefits of saltwater recreational fishing have reportedly contributed $1.6 billion in sales “that in turn contributed more than $800 million of additional economic activity and roughly 13,000 jobs.” The majority of the commercial and recreational saltwater landings in the Mid-Atlantic region come from the Chesapeake Bay. “The 2008 Fisheries Economics of the U.S. report by the National Oceanic and Atmospheric Administration [hereinafter NOAA] indicates that the commercial seafood industry in Maryland and Virginia contributed $2 billion in sales, $1 billion in income, and more than 41,000 jobs to the local economy.” It is uncertain what the future holds for the overall Chesapeake Bay ecosystem, but management by scientific consensus is

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24 Connolly, supra note 13, at 141–142.
27 Id.
28 Id. at 2.
30 The Economic Argument for Cleaning up the Bay and its Rivers, supra note 27, at 2.
the best way to minimize unintended, negative consequences to this valuable ecosystem.

The menhaden industry is also considered an important “economic engine” on Virginia’s Northern Neck, where the last remaining menhaden processing plant on the East Coast continues to operate.31 Advancements in technology over the last century have drastically increased fishing efficiency, helping Virginia’s commercial menhaden industry to become a thriving business by the start of the twentieth century at ports along the eastern seaboard.32 The reduction industry is concentrated in Reedville, Virginia, which still serves as the hub of the Virginia menhaden reduction industry.33

B. What Senate Bill 765 Proposed

Under Virginia law, VMRC is required to balance a number of factors in preparing and implementing fishery management plans.34 By contrast, the General Assembly has prescribed very limited circumstances under which the menhaden fishery may be regulated. The VMRC first needs a proclamation from the Governor in order to implement emergency menhaden catch restrictions established by the Atlantic States Marine Fisheries Commission.35 Otherwise, a statutory cap, adopted by the General Assembly itself, applies to the taking of menhaden.36

Senate Bill 765 would have given authority to the VMRC to implement menhaden catch restrictions, allowing the Commission to take action without the necessary proclamation from the Governor.37 Senate Bill 765 is the only menhaden bill to have received a committee hearing in the Virginia Senate during the 2011 General Assembly, and was heard by the Senate Committee on Agriculture, Conservation and Natural Resources on January 31st.38 The bill would have

32 See Connolly, supra note 13, at 143.
33 See Carroll, supra note 17.
38 See S.B. 765 Menhaden Fishery; Directs MRC to Adopt Regulations to Implement Interstate Fishery Management Plan, Legislative Information System, avail-
changed the Virginia Code to direct the VMRC to adopt regulations to implement a menhaden interstate fishery management plan.  

The Atlantic States Marines Fisheries Commission [hereinafter ASMFC] is a congressionally authorized multi-state body that monitors and regulates the catch of fish species through management plans developed using the best available science. Virginia and all other Eastern Seaboard states have one vote on the ASMFC, cast according to the determination of the state’s three members with the support of an expert staff. When the ASMFC adopts a management plan that includes a harvest quota for a species of fish, it is up to the various states to decide how best to ensure that the quota is not exceeded in their waters. Under federal law, the US Secretary of Commerce has the power to impose a fishing ban on any species within a state that has failed to follow the limits set in an ASMFC management plan.  

Should the ASMFC determine that an emergency management action is necessary to protect a stock of any species other than menhaden, Senate Bill 765 would have empowered the VMRC with authority to move quickly and efficiently to implement whatever protection measures are called for in the ASMFC plan. The current system, which relies on action by the legislature or Governor, relies on politics alone to do what is best for the species.

The statutory cap on menhaden takings was enacted by Virginia’s legislature in 2007. “The measure allow[ed] the reduction industry to catch 109,000 metric tons annually through 2010, and up to 122,740 metric tons . . . in a year, as long as it shaves the excess off the following year’s cap. The 109,020 metric ton limit was de-
terminated by averaging the reduction industry’s most recent landing data. Similar legislation was enacted during the 2010 session to extend the cap for another three years. Adoption of the cap on menhaden harvest was brokered in part by the governors of Virginia and Maryland four years ago.

Those in favor of keeping menhaden control in the dominion of legislators point out that the 2010 stock assessment by the ASMFC included a mistaken calculation that may suggest a greater stock of menhaden than has been reported. But the three most recent ASMFC management goals aim to increase abundance and spawning stock biomass of menhaden for the benefit of the stock (using a “single-species focus”); increase recruitment of menhaden for the benefit of the stock (“single-species focus”); and to increase forage base for predators of menhaden (an “ecosystem approach”). These goals indicate at the very least that the Commission realizes a heightened focus on ecosystem management is necessary. The ASMFC’s Menhaden Technical Committee and the Multi Species Technical Committee met in September 2011 to consider the issue of abundance with regard to predator needs. The committees also discussed how to determine appropriate reference points, or spawning potential, of the existing menhaden stock in the bay in order to develop menhaden

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47 Id.; see also Tom Pelton, Menhaden Matter, and They’re in Trouble, Baltimore Sun., May 6, 2007, at 5F.
management plans. 53 “Recent reports from the Marine Stewardship Council suggest that the appropriate reference point for forage fish should be at least 75% of maximum spawning potential. As of the last stock assessment, the [maximum spawning potential] of Atlantic menhaden was at less than 10% . . . .” 54

“In recent years, recruitment—the number of new menhaden hatched into the fishery—has plummeted.” 55 Consider for example, “the reported landings of menhaden in Reedville: 488 million pounds in 2001, 382 million pounds in 2002, 375 million pounds in 2003.” 56 This reduction in menhaden landings equals more than “a thousand pickup truck loads of fish a day, reportedly five times the amount of seafood that the entire Maryland commercial fishery has reported landing.” 57

II. THE STAKEHOLDERS AND THEIR VIEWS

Conservation organizations and recreational fishermen prefer menhaden management to be in the hands of an executive branch agency with fisheries scientists on staff. 58 The kind of ecosystem management supported by conservation groups holistically evaluates the health of an ecosystem and all components involved. 59

Omega Protein Inc. is a Houston-based company that extracts the menhaden oil for vitamin supplements and uses the leftover carcasses for fertilizer and swine feed, and it dominates the opposition to VMRC control. 60 The 2006 cap was supported by Omega, possibly

53 See id.
54 Id.
55 Russell, supra note 21, at 33 (“Between 1975 and 1991, average recruitment was estimated at about 4.4 billion fish a year. By 2001, recruitment was calculated at some 500 million, the lowest figure ever recorded. The menhaden industry claims it’s not their operation, but overabundant striped bass that is responsible for depleting the menhaden.”).
56 Id.
57 Id. (quoting Jim Price, senior scientist at Woods Hole Oceanographic Institution).
58 See Harper, supra note 5.
60 See e.g. Investor Relations, Omega Protein, http://www.omegaproteininc.com/investors/relations.aspx (last visited June 1, 2011); see also, The Virginia Public Access Project, www.vpap.org (last visited
because it “preserved management of the menhaden reduction fishery in the industry-friendly state legislature” rather than ceding control entirely to the VMRC and the federal government.61 Omega is the last player left in the reduction industry market, and currently produces about 40,000 tons of meal from menhaden and 20,000 tons of menhaden oil a year.62 “Its fish oil sales in 2002 helped Omega boost its business by 18.5 percent, to an annual $117 million.”63

III. WHERE FISHERIES MANAGEMENT IS HEADING

The science of ecosystem management is rapidly evolving, but it is not yet certain whether it can outpace the fishery management scheme used in Virginia.64 In the case of all other managed species, the VMRC staff develops draft rules to ensure sustainable harvests.65 The Commissioners, who are appointed by the Governor to represent specific shareholder interests in fisheries management, then consider these rules for adoption.66 In contrast, in 2005 the General Assembly actually flirted with ASMFC noncompliance before finally implementing the current cap on Chesapeake Bay menhaden landings.67 Those who oppose keeping control in the legislature believe the VMRC is more likely to utilize science-based menhaden management which can benefit the industry and the Bay’s ecosystem

June 1, 2011) (State elected officials have collected $97,700 in 2009 and 2010 from Omega.).
62 See Russell, supra note 21, at 32.
63 See id. (“[A] whole new health food and nutritional supplement market has opened up.”). But see Omega Protein is a Friend of the Sea, Omega Protein, http://www.omegaproteininc.com/friend-of-the-sea.aspx (last visited June 1, 2011) (“Omega Protein was pleased to accept the 2009 Friend of the Sea Award as a result of its dedicated efforts towards sustainability and environmental stewardship at Friend of the Sea Day in Brussels, Belgium. Omega Protein was chosen as the leading sustainable organization in the fish meal and oil category from among a group of organizations meeting the rigorous standards of the certification process.”).
64 See generally Connolly, supra note 13, at 145.
65 Id. at 146.
67 T.F. Sayles, A Fish Called Menhaden, Chesapeake Boating, Nov. 11, 2008, available at http://chesapeakeboating.net (search A Fish Called Menhaden in the Quick Search box at the top left of the page).
by focusing on the menhaden’s role in overall Bay health in addition to the individual species’ catch yield.\(^{68}\)

Sound management of other fisheries in Virginia by the VMRC has had a positive economic impact in the Commonwealth, from commercial fishing, to recreational angling, to tourism.\(^{69}\) One example of a single species that had suffered from impacts of poor comprehensive ecosystem management is the rockfish.\(^{70}\) Faced with a catastrophic collapse in the rockfish fishery, Maryland banned commercial and recreational fishing of the rockfish in its portion of the Bay from 1985 until 1989, and Virginia followed suit with a one-year moratorium in 1989.\(^{71}\) The decline of the population was due to several factors, including heavy overfishing and low dissolved oxygen in many parts of the Bay.\(^{72}\) Today, the rockfish population is at its highest in decades because of stringent catch restrictions.\(^{73}\) However, scientists are still concerned about high prevalence of the usually fatal wasting disease Mycobacteriosis.\(^{74}\) The fishes’ current susceptibility to this disease appears to come from environmental stress generated by poor water quality and limited availability of preferred prey.\(^{75}\)

A. Concern about Jobs

The foremost opposition to menhaden regulation reform is that the current cap managed by the General Assembly has been successful in preventing overfishing, and that VMRC authority over catch restriction implementation could rob the industry of the already shortened fishing season, putting all Omega jobs in Reedville in jeopardy.\(^{76}\) Sen. Northam addressed the concern over job losses by remarking, “Let’s be clear . . . the intent of this bill is not to do any


\(^{69}\) See Dibble, *supra* note 29, at 21.


\(^{71}\) Id.

\(^{72}\) Id.

\(^{73}\) Id.

\(^{74}\) Id.

\(^{75}\) Id.

\(^{76}\) See Bills on Menhaden Fishing Fall Short Once Again, *supra* note 5.
harm to Omega Protein... this bill will stabilize the regulatory environment for business, and help sustain employment over time.”

Nevertheless, Senator Northam’s bill died in committee by a vote of fourteen to one. The opposition to the bill came from commercial fishing industry representatives and employees of Omega’s Reedville reduction plant. There was also opposition from the Virginia AFL-CIO, which appeared to be the nail in the coffin for Senate Bill 765.

IV. CONCLUSION

It is difficult to justify the Virginia General Assembly’s unique role in the management of menhaden as good public policy. However, the legislative process is not designed to demand ongoing justification for existing law. Rather, proponents for legislation are called upon to identify a problem and explain how the legislation they are advocating will solve or at least address that problem. In the case of menhaden, no significant problem in the short-term can be proved. From the perspective of the mechanics of government, it is unlikely that the ASMFC will require Virginia to change the current harvest cap within the next year. However, conservationists point to evidence that the coast-wide population of menhaden has declined steadily since the mid-1980s, and that numbers of young menhaden are at historic lows.

From a biological perspective, there are legitimate reasons to be concerned that current reduction industry practices are unsustainable. Nevertheless, proper management can reverse these trends, even if the General Assembly retains its current role. As the ASMFC moves towards ecosystem-based management of all species, the management of menhaden in particular is likely to become more complicated and require more agility than is possessed by any legisla-

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79 See Bills on Menhaden Fishing Fall Short Once Again, supra note 5.

80 See id.

81 See Menhaden Population at Historic Low, supra note 4.
tive body. At that point, if Omega Protein or a successor in interest is still operating in Virginia, the General Assembly will likely gladly hand over its role to the experts it has entrusted with the management of every other fishery in the Commonwealth.

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82 Largest Stockholder Puts Omega Protein Up for Sale; Potomac Cleanup a United Effort; and more..., Chesapeake Bay Journal, http://www.bayjournal.com/article.cfm?article=2737&print=yes.