

**From:** [Phil Zalesak](#)  
**To:** [Comments](#)  
**Cc:** [PHILIP ZALESAK](#); [David Reed](#); [Steve and Carole Zalesak](#); [MICHAEL ACADEMIA](#); [Noah Bressman](#); [bdwatt@wm.edu](#)  
**Subject:** [External] Public Comments for the Atlantic Menhaden Management Board - Wednesday, February 1, 2023  
**Date:** Thursday, January 26, 2023 2:30:02 PM  
**Attachments:** [2023-0118 Virginia House of Delegates Testimony.pdf](#)  
[2023-0119 VMRC Legal Action Presentation - SMRFO Meeting.pdf](#)

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Chairman Bell,

My name is Phil Zalesak and I am president of the Southern Maryland Recreational Fishing Organization (<https://www.smrfo.org/menhaden>)

First, I would like to publicly thank the following people who provided me information regarding the history of how and why the Atlantic menhaden reduction fishery ended in their state waters.

Dr. David Justin	Connecticut
John Clark	Delaware
Jessica McCawley	Florida
Doug Haymans	Georgia
Patrick Keliher	Maine
Bucky Luffman	Maryland
Dan McKiernan	Massachusetts
Joseph Cimino	New Jersey
Jim Gilmore	New York
Kathy Rawls	North Carolina
Kristopher Kuhn	Pennsylvania
Dr. M. Conor McManus	Rhode Island
Mel Bell	South Carolina

Your information will be used in legal action being taken by the Southern Maryland Recreational Fishing Organization shortly.

Second, I respectfully request that “Localized Depletion of Atlantic Menhaden in the Chesapeake Bay” be put on agenda for the next meeting of this Board.

Finally, I have attached the latest scientific and economic data to be reviewed by your technical committee in preparation for that meeting.

I thank you for your time.

Phil Zalesak  
Testimony Before the Virginia House of Delegates  
Agriculture Chesapeake and Natural Resources meeting  
January 18, 2023

My name is Phil Zalesak and I am president of the Southern Maryland Recreational Fishing Organization with membership from both Virginia and Maryland.

I fully support both HB 1381 and HB 1383.

Atlantic menhaden are not overfished in the Atlantic Ocean.

However, based on the latest scientific, biological, and economic information, the Atlantic menhaden reduction fishery is causing localized depletion of Atlantic menhaden in the Chesapeake Bay to the detriment of fish, birds, and mammals dependent on Atlantic menhaden for their survival.

According to a 2019 study co-authored by Dr. Michael Wilberg of the Chesapeake Biological Laboratory, Atlantic Menhaden largely remained within the same coastal region from June to October. This is the principal time of intense reduction harvesting in the Chesapeake Bay. This combination facilitates localized depletion of Atlantic menhaden in the Chesapeake Bay.

Based on 50 years of research, Dr. Bryan Watts of William and Mary has stated that reductions in menhaden stocks have caused osprey productivity to decline to below DDT-era rates. These rates are insufficient to support the osprey population within the main stem of the Bay.

Dr. Noah Bressman of Salisbury University has stated that Virginia based menhaden fishery is overfishing the stock in and around the Chesapeake Bay, which is preventing the important forage fish from making its way into the Bay and its tributaries.

Based on this latest science, Virginia needs to limit the Atlantic menhaden reduction fishery to federal waters east of the western boundary of the Exclusive Economic Zone.

Further, the current fishing policy of the Virginia Marine Resources Commission is in violation of the Code of Virginia. The time to act is now. See the uploaded presentation for details.

I thank you for your time.

**Virginia Marine Resources Commission  
Violations of  
Code of Virginia § 28.2-203  
Fishery Management Plans**

**January 19, 2023**



<https://www.smrfo.org/menhaden>

**Phil Zalesak, President of SMRFO  
David Reed, Executive Director of the Chesapeake Legal Alliance**

# Summary

## Conclusion

**Based on the latest scientific, biological, and economic information, the Atlantic menhaden reduction fishery is causing localized depletion of Atlantic menhaden in the Chesapeake Bay to the detriment of fish, birds, and mammals dependent on Atlantic menhaden for their survival.**

## Recommendation

**Limit the Atlantic menhaden reduction fishery to federal waters east of the western boundary of the Exclusive Economic Zone.**

**Virginia Marine Resources Commission**  
**Violations of the Code of Virginia 28.2-203**  
**Regarding Atlantic Menhaden**

1. Conservation and management measures shall prevent overfishing while achieving the optimum yield from each fishery. The "optimum yield" of a fishery means the amount of fish or shellfish which will provide the greatest overall benefit to the Commonwealth, with particular reference to commercial fishing for food production and to recreational fishing;
2. Conservation and management measures shall be based upon the best scientific, economic, biological and sociological information available;
3. To the extent practicable, an individual stock of fish shall be managed as a unit throughout the territorial waters of the Commonwealth, and interrelated stocks of fish shall be managed as a unit or in close coordination;
4. Conservation and management measures shall not discriminate among user groups. If it becomes necessary to allocate or assign fishing privileges among various user groups, such allocation shall be (i) fair and equitable to all fishermen; (ii) reasonably calculated to promote conservation; and (iii) carried out in such manner that no person acquires an excessive share of such privileges;

# Standard 1

Conservation and management measures shall prevent overfishing while achieving the optimum yield from each fishery. The "optimum yield" of a fishery means the amount of fish or shellfish which will provide the greatest overall benefit to the Commonwealth, with particular reference to commercial fishing for food production and to recreational fishing

- The mortality rate of striped bass in the Chesapeake Bay, a commercially and recreationally important fish tied to food production, is directly impacted by the mortality rate of Atlantic menhaden in the Chesapeake Bay.
- The reduction fishery is a Canadian owned company with the profits going to Canada not the Commonwealth of Virginia

## Predator Fish Dependent on Atlantic Menhaden

**“A suite of five key predator and prey species were identified from diet data and other considerations (referred to as ERP focal species). Atlantic striped bass, bluefish, spiny dogfish, and weakfish were identified as key predator species of Atlantic menhaden.”**

**Ref: SEDAR 69 Ecological Reference Points Stock Assessment Report Atlantic Menhaden, January 2020, page iii**



### Equilibrium Striped Bass Bratio @ Ftarget over range of Menhaden F

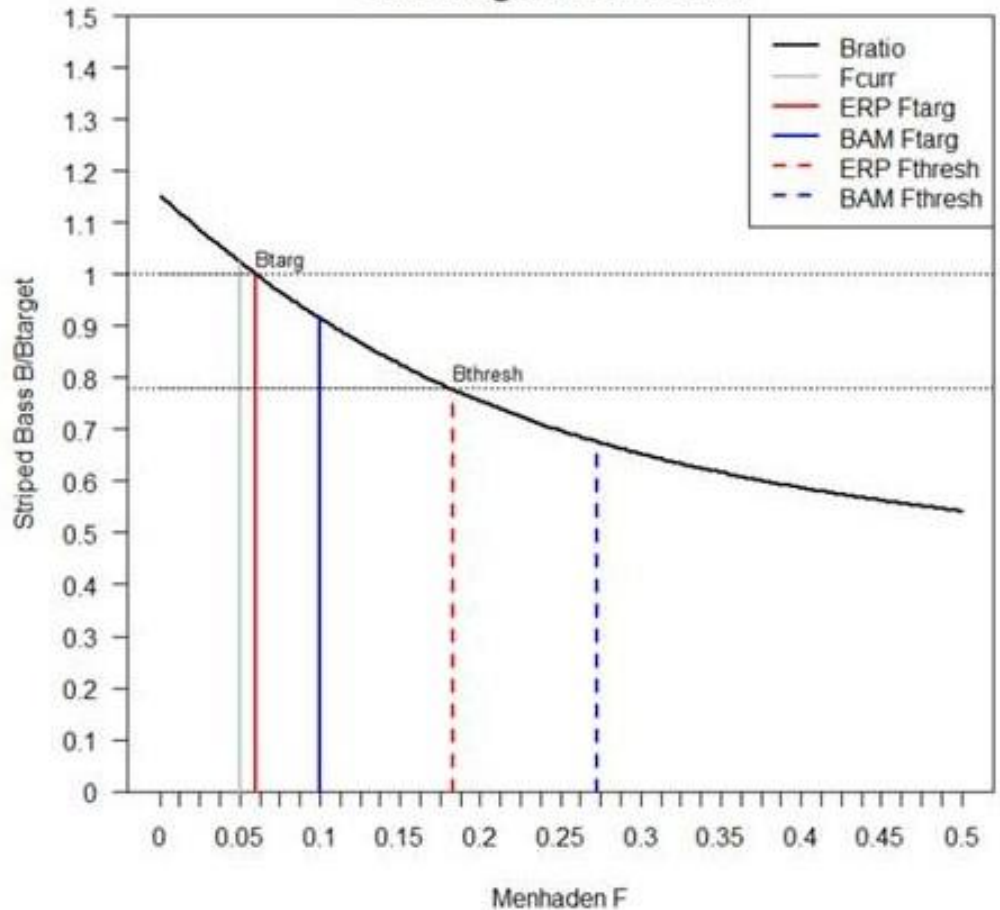
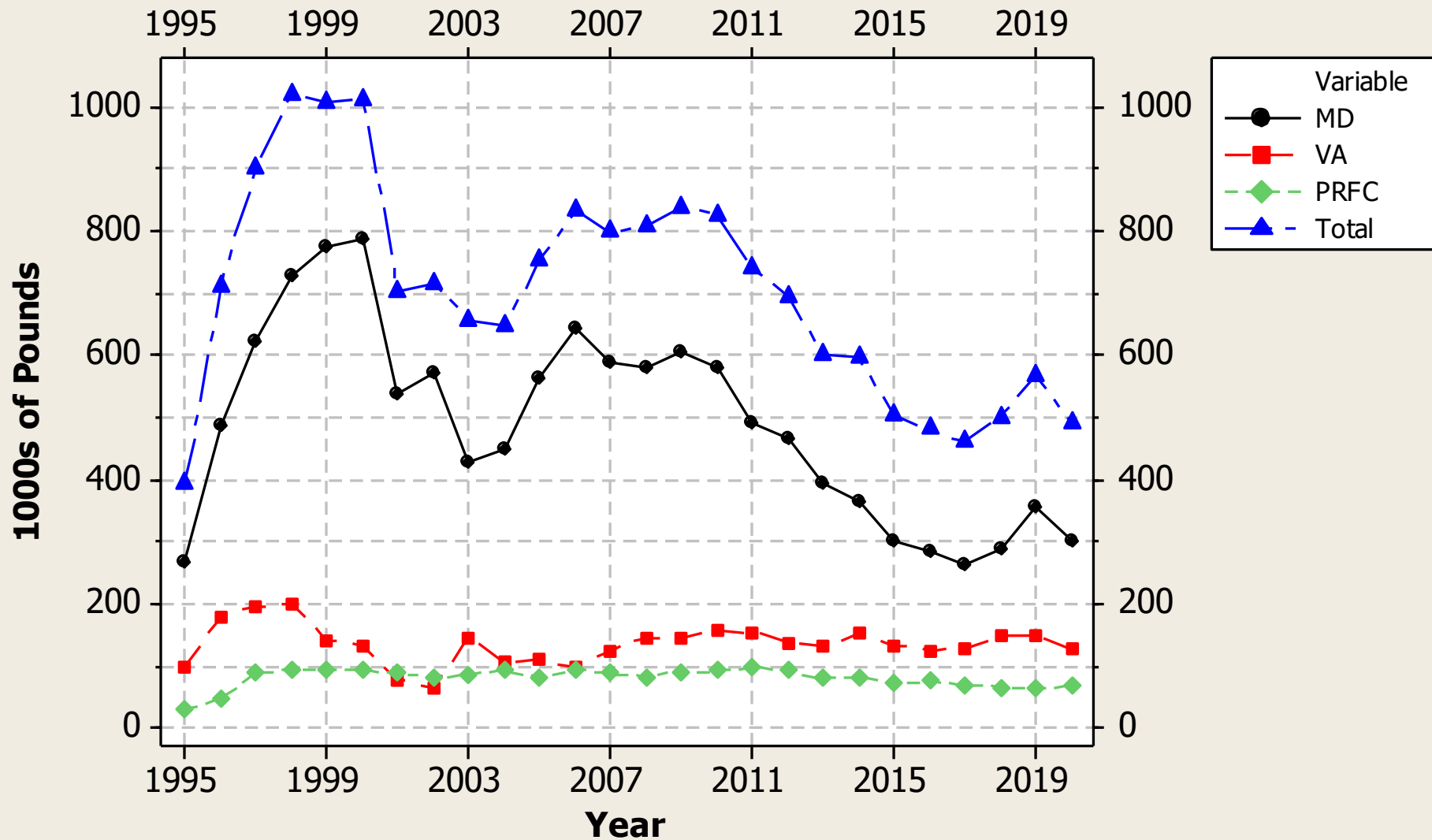


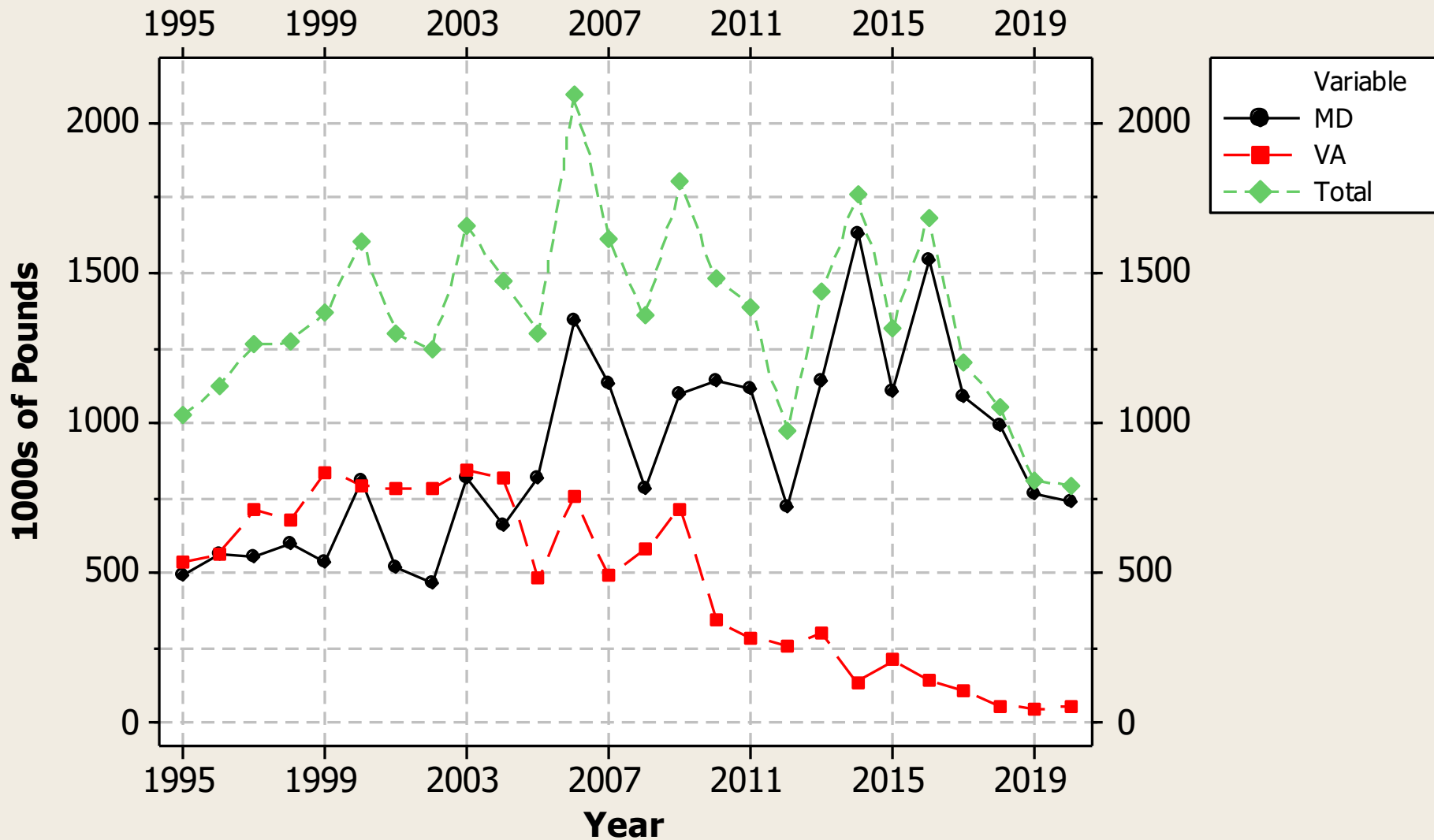
Figure 148. Terminal year biomass ratio ( $B/B_{TARGET}$ ) from the NWACS-MICE model for age 6+ striped bass over a range of Atlantic menhaden  $F$  with striped bass fished at their  $F$  target. Vertical solid and dotted lines indicate the BAM single-species target and threshold  $F$  as well as the current  $F$  and the proposed ERP target and threshold  $F$  for Atlantic menhaden.

# Striped Bass Commercial Harvest in the Chesapeake Bay



Ref: ASMFC Draft Amendment 7 to the Interstate Fishery Management Plan for Atlantic Striped Bass, 2/2022, Table 15, page 132

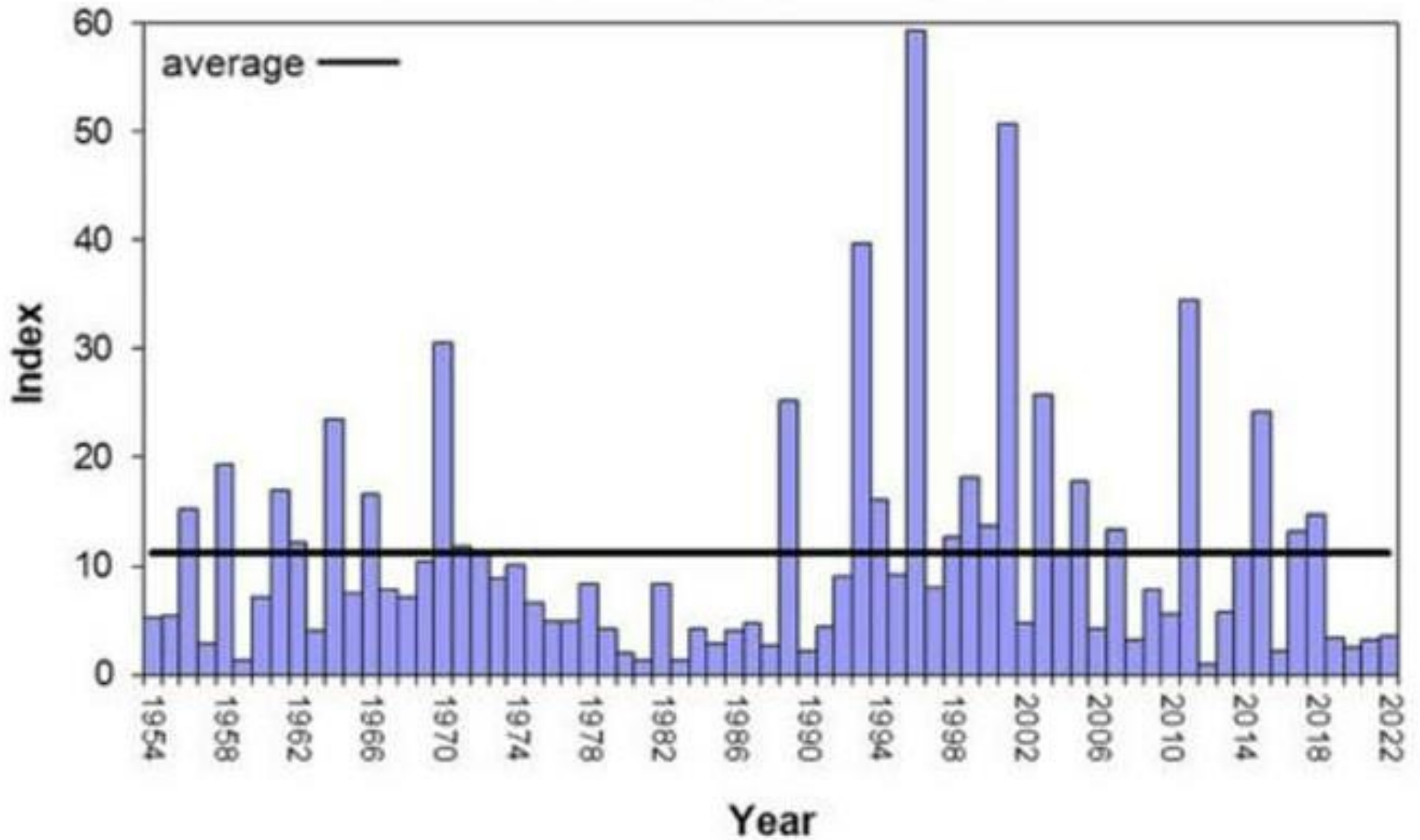
# Striped Bass Recreational Harvest in the Chesapeake Bay



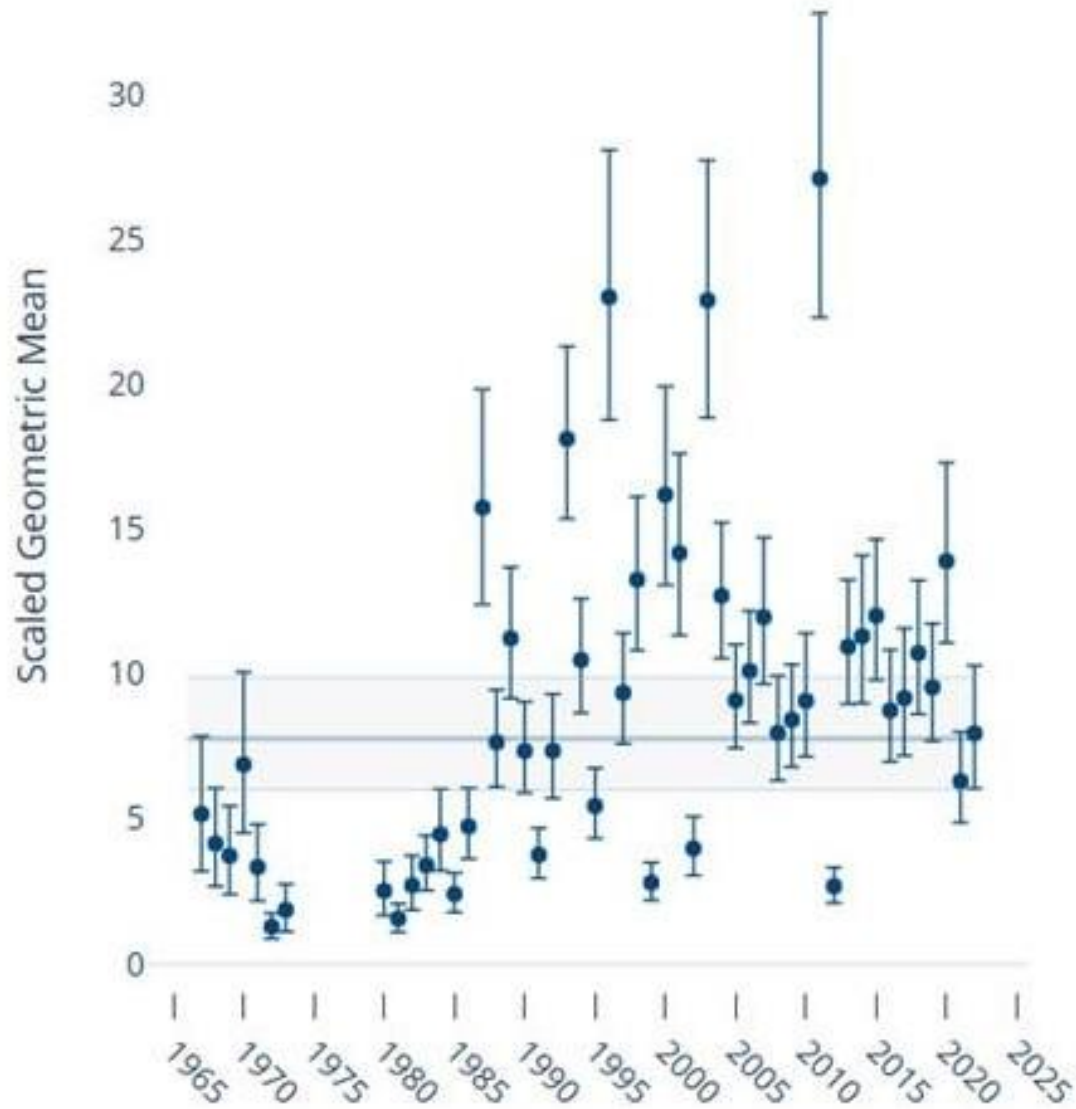
Ref: ASMFC Draft Amendment 7 to the Interstate Fishery Management Plan for Atlantic Striped Bass, 2/2022, Table 18, page 135

# Maryland's Juvenile Striped Bass Index

## Arithmetic Mean (AM) Catch per Haul

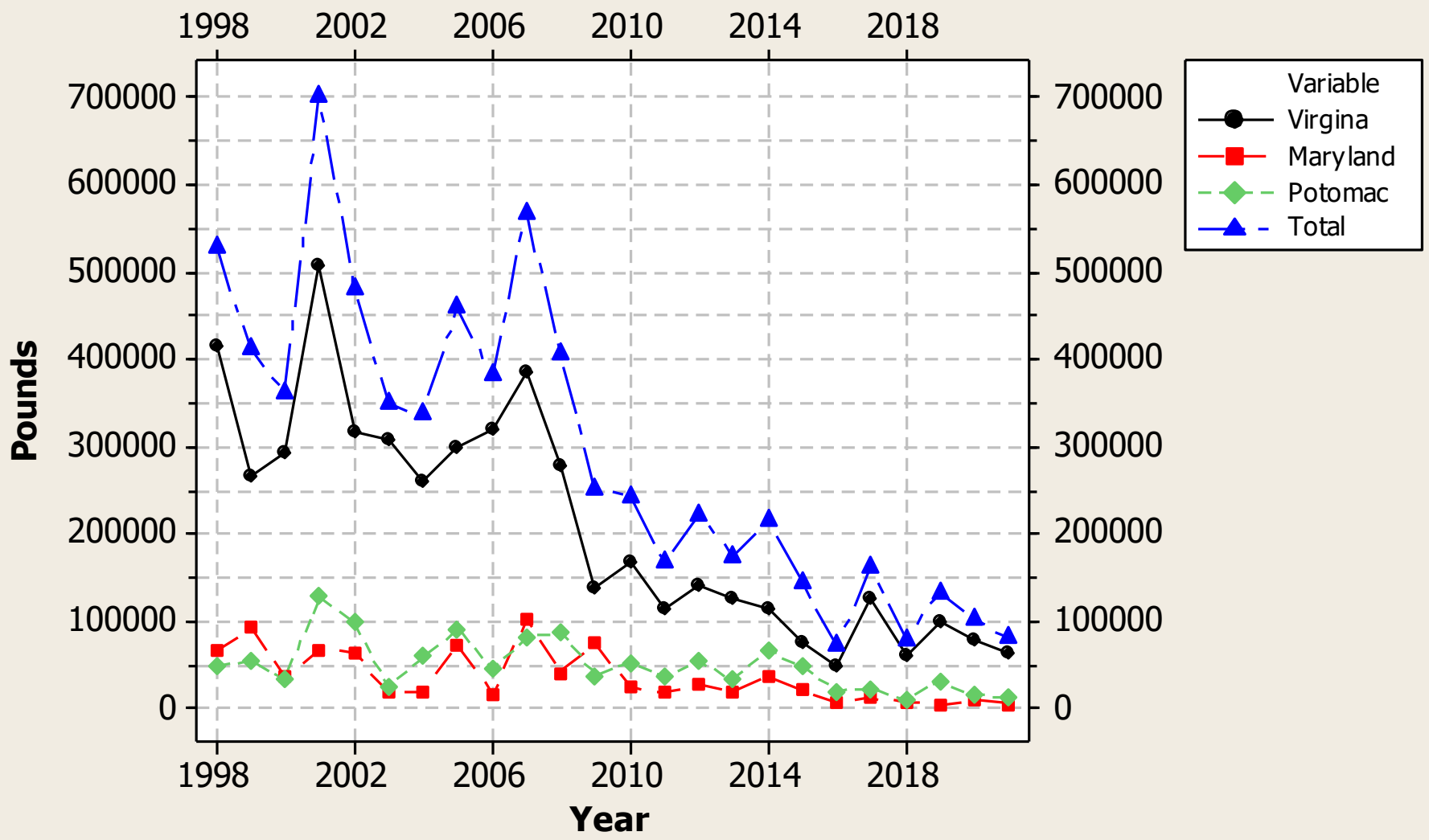


# Virginia Striped Bass Recruitment Index for 2022



[Ref: Juvenile striped bass abundance remains steady in Virginia waters | Virginia Institute of Marine Science \(vims.edu\)](https://www.vims.edu/news/2022/05/juvenile-striped-bass-abundance-remains-steady-in-virginia-waters/)

# Bluefish Commercial Harvest in the Chesapeake Bay

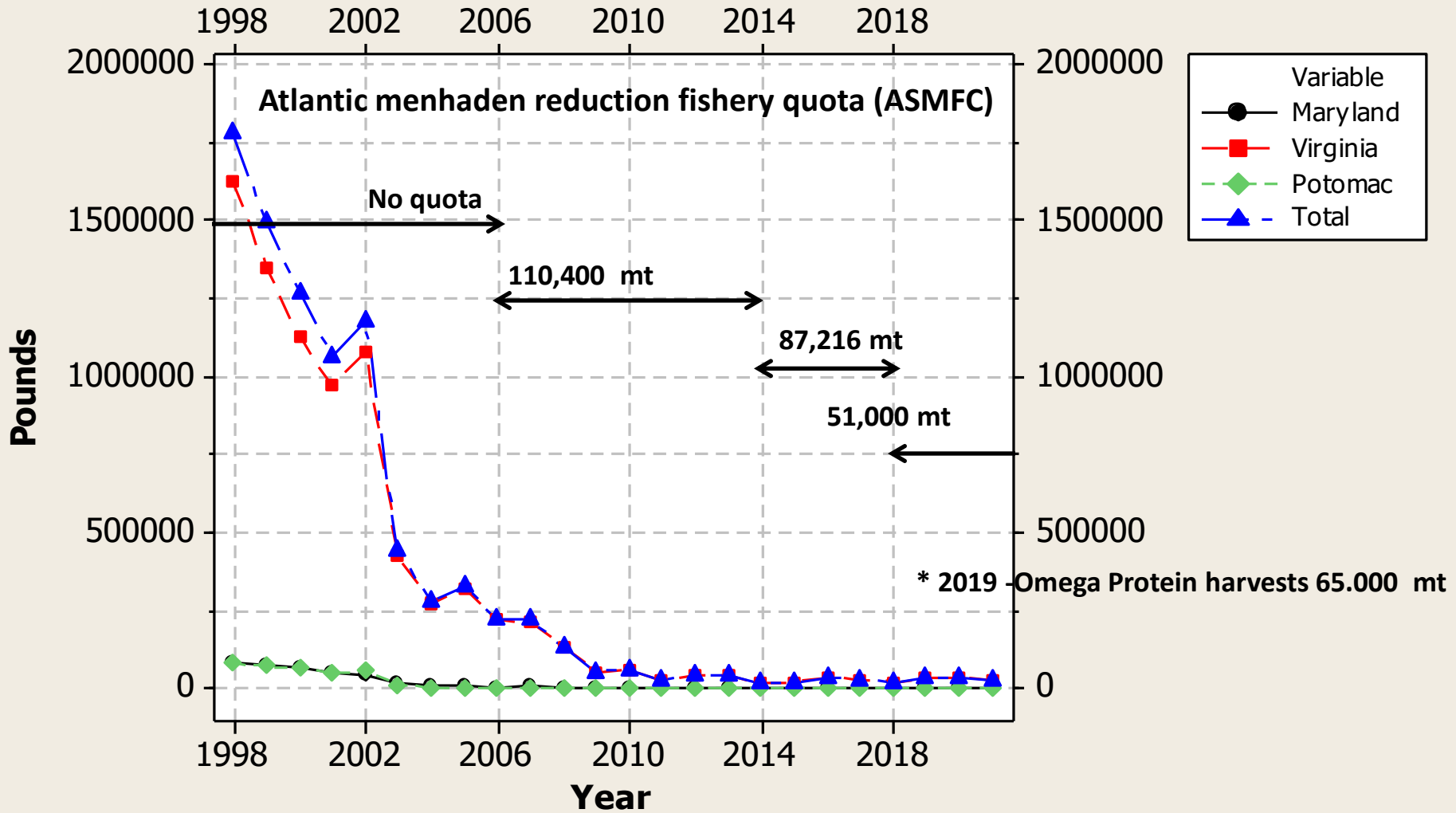


References: MD DNR, VMRC, PRFC

# Bluefish 36 inches (1983)



# Weakfish Commercial Harvest in the Chesapeake Bay



References: MD DNR, VMRC, PRFC, ASMFC



# **Economic Impact of the Striped Bass Fishery**

# Chesapeake Bay Contribution to Coastal Stock (>60%)

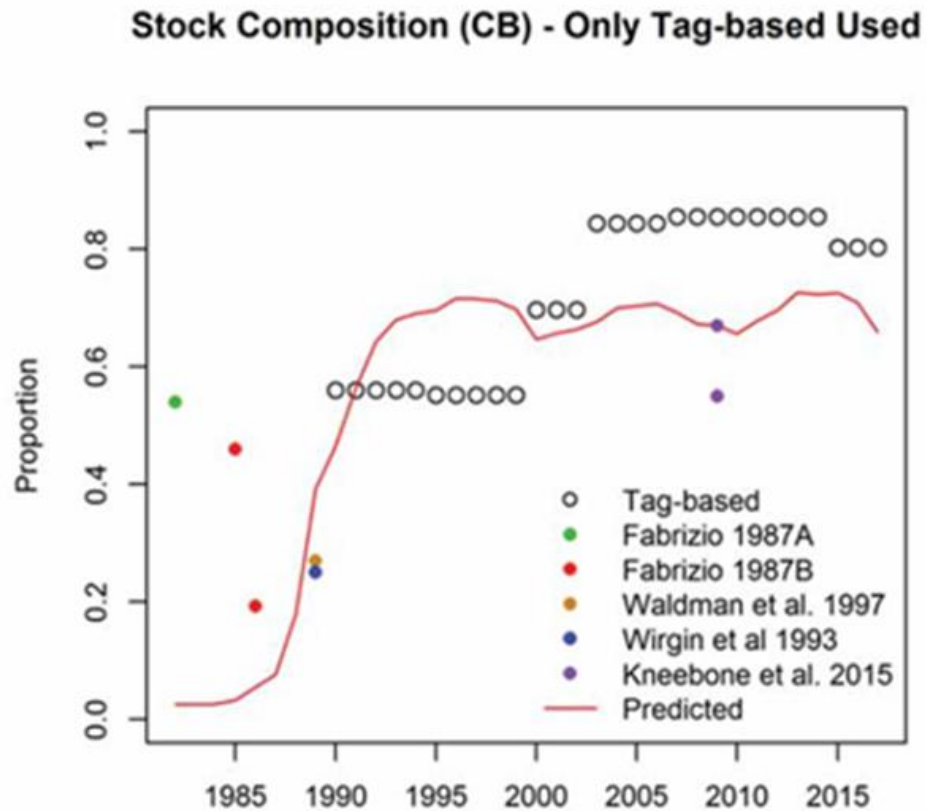


Figure B7.9. Observed versus predicted stock composition for the Chesapeake Bay stock. Literature values not used in the model fitting are indicated by the solid circles for comparison.

Reference: 66<sup>th</sup> Northeast Regional Stock Assessment Workshop, April 2019

# Atlantic Coast Economic Impact of Striped Bass (2016)

**Commercial GDP: \$103,200,000**  
**Commercial Jobs 2,664**

**Recreational GDP: \$7,731,600,000**  
**Recreational Jobs 104,867**

## Comparisons Between the Fisheries

Table R-7. 2016 Comparison of commercial and recreational impacts: North Carolina to Maine

	Commercial Fishery	Recreational Fishery	Total	Commercial Fishery	Recreational Fishery	Total
Pounds landed (000s)	4,978.3	43,731.9	48,710.2	10%	90%	100%
Jobs supported	2,664	104,867	107,531	2%	98%	100%
Income (\$millions)	\$72.7	4,726.0	\$4,726.1	< 1%	>99%	100%
GDP (\$millions)	\$103.2	7,731.6	\$7,731.7	< 1%	>99%	100%

Ref: The Economic Contributions of Recreational and Commercial Striped Bass Fishing, Southwick Associates, 4/12/19

# Striped Bass Economic Impact to Maryland (2016)

**Commercial GDP: \$10,919,100**

**Commercial Jobs 584**

**Recreational GDP: \$802,791,200**

**Recreational Jobs 10,193**

## Comparisons Between the Fisheries

Table MD-8. Comparison of commercial and recreational impacts: Maryland 2016

	Commercial Fishery	Recreational Fishery	Total	Commercial Fishery	Recreational Fishery	Total
Pounds landed (000s)	1,709.4	10,919.1	12628.5	14%	86%	100%
Jobs supported	584	10,193	10,777	5%	95%	100%
Income (\$000s)	\$12,569.6	\$496,859.8	\$509,429.7	2%	98%	100%
GDP (\$000s)	\$17,109.7	\$802,791.2	\$819,900.9	2%	98%	100%

Ref: The Economic Contributions of Recreational and Commercial Striped Bass Fishing, Southwick Associates, 4/12/19

# Striped Bass Economic Impact to Virginia (2016)

**Commercial GDP: \$12,198,100**  
**Commercial Jobs 384**

**Recreational GDP: \$106,623,300**  
**Recreational Jobs 1,444**

## Comparisons Between the Fisheries

Table VA-7. Comparison of commercial and recreational impacts: Virginia

	Commercial Fishery	Recreational Fishery	Total	Commercial Fishery	Recreational Fishery	Total
Pounds landed (000s)	1,333.6	1,024.4	2358.0	57%	43%	100%
Jobs supported	384	1,444	1828	21%	79%	100%
Income (\$000s)	\$9,016.0	\$67,550.7	\$76,566.7	12%	88%	100%
GDP (\$000s)	\$12,198.1	\$106,623.3	\$118,821.4	10%	90%	100%

Ref: The Economic Contributions of Recreational and Commercial Striped Bass Fishing, Southwick Associates, 4/12/19

# Omega Protein (Reedville, VA)

**Payroll**

**\$25 million dollars**

**Jobs**

**250**

[Virginia Mercury, 10/27/22](#)

<https://www.virginiamercury.com/2022/10/27/sportfishing-group-presents-petition-to-move-omega-protein-out-of-chesapeake-bay/>

## Standard 2

Conservation and management measures shall be based upon the **best scientific, economic, biological and sociological information available**

- The Commission's fundamental violation of the Code of Virginia is **ignoring the science of "localized depletion" of Atlantic menhaden in the Chesapeake Bay.** Report on the evaluation (see reference below).
- Localized depletion is a reduction in menhaden population below the level of abundance that is sufficient to maintain its basic ecological, economic and social/cultural functions.
- In 2023 the **Virginia reduction fishery is allocated over 2/3 of the total allowable catch for the entire Atlantic Coast which is over 158,000 metric tons or ¾ of a billion fish.** That allocation is based on history not science. There is absolutely no science which supports allocating 75.20% of the total allowable catch for the entire Atlantic Coast to Virginia.

Ref: Report on the evaluation of the Chesapeake Bay Fisheries Science Program: Atlantic Menhaden Research Program, Laurel, MD, April 22-24, 2009, page 4

# Omega Protein Purse Seine Settings





## **Localized Depletion**

**Atlantic menhaden are not overfished in the Atlantic Ocean.**

**However, according to a 2019 study co-authored by Dr. Michael Wilberg of the Chesapeake Biological Laboratory, Atlantic Menhaden largely remained within the same coastal region from June to October.**

**This is the principal time of intense reduction harvesting in the Chesapeake Bay.**

**This combination facilitates localized depletion of Atlantic menhaden in the Chesapeake Bay.**

# Atlantic Menhaden Migration Pattern By Region



According to a 2019 study co-authored by Dr. Michael Wilberg of the Chesapeake Biological Laboratory:

“Atlantic Menhaden largely remained within the same coastal region from June to October.”

This is the principal time of intense reduction harvesting.”

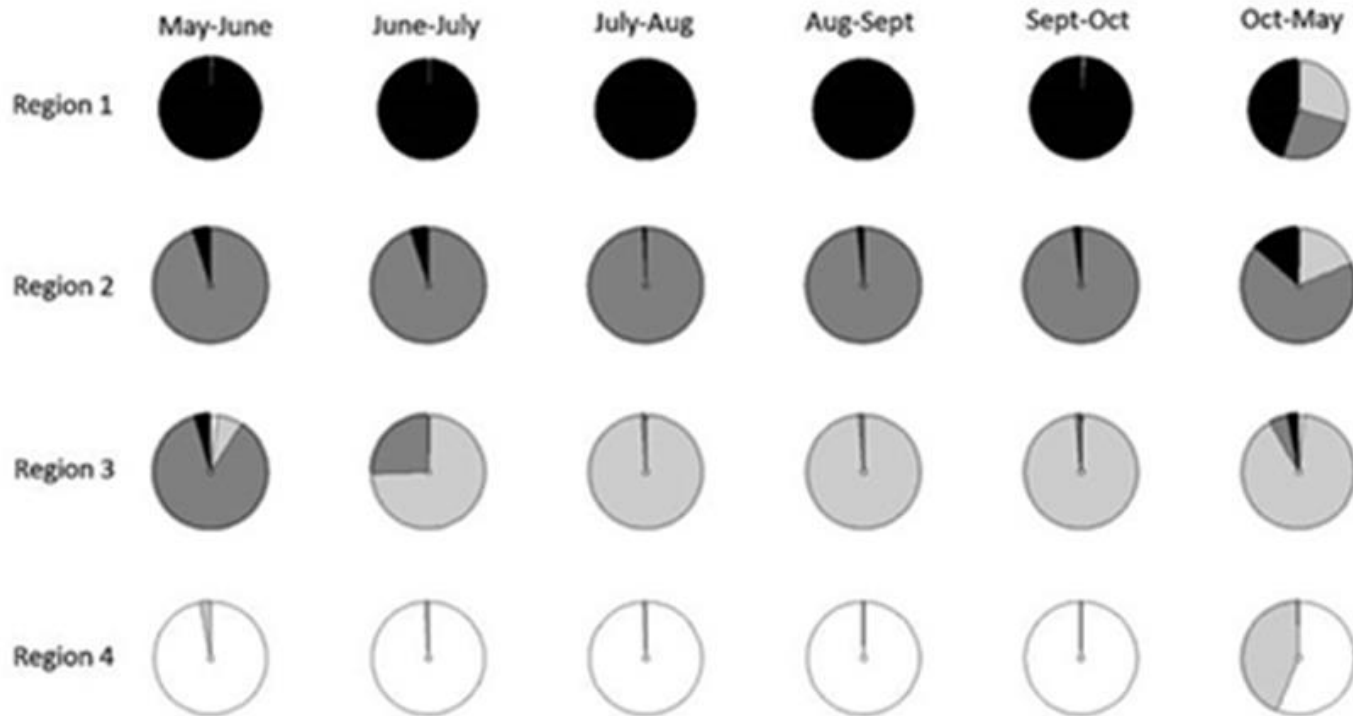
This combination facilitates localized depletion.

## Reference:

Estimation of movement and mortality of Atlantic menhaden during 1966–1969 using a Bayesian multi-state mark-recovery model Emily M. Liljestrand,\*, Michael J. Wilberg, Amy M. Schueller, Published online 2/2019

# Atlantic Menhaden Migration Pattern By Region

*E.M. Liljestrand et al.*



Ref: Estimation of movement and mortality of Atlantic menhaden during 1966–1969 using a Bayesian multi-state mark-recovery model Emily M. Liljestrand,\*, Michael J. Wilberg, Amy M. Schueller, page 210, published online 2/2019

## Atlantic States Marine Fisheries Commission Allocation of Atlantic Menhaden for 2023

Allocation	Percentage	Metric Tons	Pounds
Atlantic Coast	100.00%	233,550	514,884,330
Virginia	75.20%	175,630	387,193,016
Reduction Fishery	67.71%	158,137	348,628,592
Chesapeake Bay	21.84%	51,000	112,434,600
Atlantic Ocean	45.87%	107,137	236,200,420
Other States	24.80%	57,920	127,691,314

Ref: ASMFC Addendum 1 to Amendment 3 of the Atlantic Menhaden Interstate Fisheries Management Plan, 11/2022

# **You Can't Manage What You Can't Measure!**

- **Neither the Atlantic States Marine Fisheries Commission (ASMC) nor the Virginia Marine Resources Commission (VMRC) knows what the Atlantic menhaden abundance (biomass) is in the Chesapeake Bay during the reduction fishery harvest.**
- **And it will take 5 – 7 years to determine the validity of the methodology which will provide only qualitative not quantitative data (see reference below).**

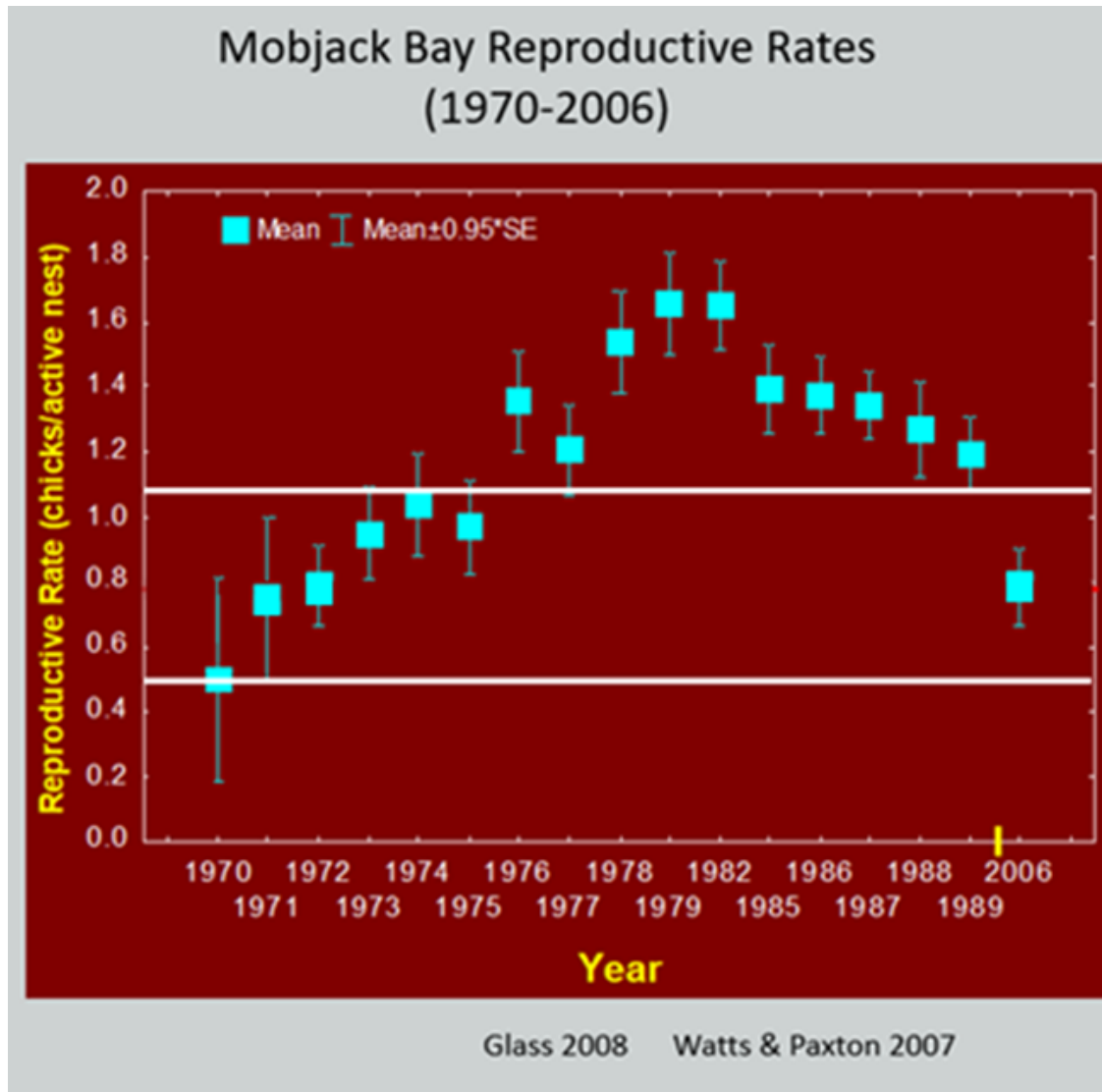
**Ref: Memorandum from the Ecological Reference Point Work Group and Atlantic Menhaden Technical Committee to the Atlantic Menhaden Management Board, 4/26/2021**

**Dr. Bryan Watts**  
**College of William and Mary**

**“Reductions in menhaden stocks have caused osprey productivity to decline to below DDT-era rates. These rates are insufficient to support the osprey population within the main stem of the Bay.”**

**Ref: Letter to Virginia Governor Ralph Northam, 8/20/2020**

# Osprey Reproductive Rate (Chicks/Active Nest)



# Osprey Latest Science (2021)

**Michael Academia**, a graduate assistant at the College of William and Mary, updated this data set in 2021 and documented his findings in a paper he presented at the International Raptor Research Foundation Conference. This paper was **awarded the prestigious Andersen Memorial Award** at that meeting.

The slide is titled "Food Supplementation Increases Reproductive Performance of Ospreys in the Lower Chesapeake Bay". It features a central photograph of an osprey in flight over a nest of sticks on a wooden pier. The slide includes the logo for "The CENTER for CONSERVATION BIOLOGY" and the name "Michael Academia | M.Sc Biology Candidate | macademia@wm.edu | William and Mary".



# Osprey Reproductive Performance Data



## Food Supplementation Increases Reproductive Performance of Ospreys



Introduction | Methods | Results | Discussion | Acknowledgements | Works Cited

### Food Addition Group



**13** of the 16 nests succeeded at 81%.

**3** nests failed during the first **1.38** weeks.

Productivity rate - **1.13** young per active nest.

### Control Group



**5** of 15 nests succeeded at 33%.

**10** nests failed during the first **2.2** weeks.

Productivity rate - **0.47** young per active nest.

Ref: Food Supplementation Increases Reproductive Performance of Ospreys in the Lower Chesapeake Bay, Michael Academia of the College of William & Mary, October 6, 2022

**Dr. Noah Bressman Assessment  
Salisbury University**

**“Virginia based menhaden fishery is overfishing the stock in and around the Chesapeake Bay, which is preventing the important forage fish from making its way into the Bay and its tributaries.”**

**Ref: Dr. Noah Bressman email to Secretary Jeannie Riccio, Maryland Department of Natural Resources, 10/21/2021**

**Bunky Luffman**  
**Director of Legislative and Constituent Services**  
**Maryland Department of Natural Resources**

**“That said, if Virginia were to prohibit purse seining in their waters, it is likely that the unharvested Atlantic menhaden would contribute the larger stocks of menhaden, which would provide forage for species such as striped bass, bluefish, dophins, and osprey.”**

**Ref: Testimony submitted before the Maryland Senate (Committee for Health, Education, and Environment) regarding Joint Resolution 6 - 3/1/2022**

## Standard 3

To the extent practicable, an individual stock of fish shall be managed as a unit throughout the territorial waters of the Commonwealth, and interrelated stocks of fish shall be managed as a unit or in close coordination

There is no evidence that the VMRC is managing Atlantic menhaden and striped bass as a single unit within the context of localized depletion in the Chesapeake Bay.

## Standard 4

Conservation and management measures shall not discriminate among user groups. If it becomes necessary to allocate or assign fishing privileges among various user groups, such allocation shall be (i) fair and equitable to all fishermen; (ii) reasonably calculated to promote conservation; and (iii) carried out in such manner that no person acquires an excessive share of such privileges;

**Allocating over 90% of the Atlantic menhaden quota to one company is not a fair and equitable allocation and is a clear violation of the Code of Virginia.**

# VMRC Complaint / Incident Reports 2016 - 2022



[Ref: Menhaden Still Making a Stink | Salt Water Sportsman, 12/21/22](#)

# Red Drum Bycatch (12,000 pounds)



[Fly Fishing](#) [Conservation](#) [Current Events](#) [News](#)

## Omega Protein Spills Menhaden Haul, Large Red Drum Wash Ashore Dead

By [Flylords](#) - August 15, 2022

# VMRC Complaint / Incident Reports

## 2021 - 2022

06/14/21	One mile west of Cape Charles	2021-293	Boat-accident/incident	Recreational fisherman's boat became tangled in nets of fishing vessel and began to sink
06/24/21	West of Pungoteague Creek	2021-309	Fish Kill - Menhaden	Omega air stated that all fish sank, net started dragging and collecting sand
06/25/21	West of Nandua and Pungoteague Creek	2021-312	Fish Kill - Menhaden	Many fish dead occupying about 50 acres
07/26/21	Atlantic Ocean	21000415 and 2021-415	Fish Kill - Menhaden	Omega fish spotter stated that all of the fish sank
08/31/21	Back River Reef	2021-519	Finfish Violation - Recreational	Claim by Omega that recreational vessels were blocking their ability to fish the area
09/08/21	East of Buckroe Beach	2021-540	Fish Kill - Menhaden	Omega Protein fish kill of 250,000 fish in a mass about 4 1/2 miles long & 1/4 mile wide, 1000s of fish washed up on Buckroe Beach
07/05/22	Windmill Point	2022-432	Fish Kill - Menhaden	Units responding to menhaden spill at Windmill Point from Omega Protein
07/05/22	Silver Beach	2022-433	Fish Kill - Menhaden	Complaint of fish kill. Dead menhaden washing up. Omega Protein contacted for cleanup.



# Testimony Before the VMRC / VA Legislature

## VMRC Meeting – 10/25/22

- Dr. Steven Zalesak      Violations of the Code of Virginia / Localized Depletion
- Phil Zalesak              Localized Depletion / Violations of Virginia Code
- Michael Academia      Osprey Reproductive Degradation in the Chesapeake Bay

## Menhaden Management Advisory Committee Meeting – 11/28/22

- No agenda items regarding Localized Depletion or Violations of Virginia Code

## VMRC Meeting – 12/6/22

- Phil Zalesak              Localized Depletion and Violations of Virginia Code

## Virginia House of Delegates Meeting – 1/18/23

- Phil Zalesak              Localized Depletion and Violations of Virginia Code

## VMRC Commissioner and Board Members

<b>Mr. Jamie Green</b>	<b>Commissioner of Marine Resources</b>
<b>Mrs. Lynn Kellum</b>	<b>President of the Ampro Shipyard &amp; Diesel</b>
<b>Mr. Will Bransom</b>	<b>Avid saltwater angler, recreational diver, technical diver, and Commercial Captain.</b>
<b>Mr. Spencer Headley</b>	<b>Avid recreational angler and commercial fisherman on the Chesapeake Bay and its tributaries for over 35 years from Reedville, Virginia</b>
<b>Heather Lusk</b>	<b>Ms. Lusk is Vice President of H.M. Terry Co., Inc., a fourth-generation shellfish aquaculture company on the Eastern Shore.</b>
<b>James E. "J.J." Minor</b>	<b>Project Analyst for both Richmond's Department of Public Utilities and the Department of Economic and Community Development</b>
<b>Glen W. "Wayne" France</b>	<b>Active in Virginia commercial fisheries since the 1980's, holding commercial licenses for crab pots, peeler pots, oysters by tong and scrape and finfish.</b>
<b>John E. "Ed" Tankard III</b>	<b>President of Tankard Nurseries on Virginia's Eastern Shore familiar with the shellfish, finfish and aquaculture industries</b>

# VMRC

## Menhaden Management Advisory Committee



CHAIRMAN	CITY	SEAT
Dr. Rob Latour	Gloucester Pt	At-large
<b>COMMITTEE MEMBERS</b>		
Monty Diehl	Reedville	Reduction
AJ Erskine	Kinsale	Bait
Craig Freeman	York	Recreational Angler
Daniel Knott	Gloucester	At-Large
Mike Leonard	Fredericksburg	Sportfishing Industry
Shanna Madsen	Hampton	ASMFC TC
Chris Moore	Virginia Beach	Conservation
Ken Pinkard	Reedville	Labor
Ken Schultz	Accomac	At-Large

Director of  
Omega Protein  
Fishing  
Operations



Omega  
Protein  
Worker



# Summary

## Conclusion

**Based on the latest scientific, biological, and economic information, the Atlantic menhaden reduction fishery is causing localized depletion of Atlantic menhaden in the Chesapeake Bay to the detriment of fish, birds, and mammals dependent on Atlantic menhaden for their survival.**

## Recommendation

**Limit the Atlantic menhaden reduction fishery to federal waters east of the western boundary of the Exclusive Economic Zone.**

**Donate to:**

**Chesapeake Legal Alliance**

**<https://www.chesapeakelegal.org/>**

**David Reed**  
**Executive Director**  
**Chesapeake Legal Alliance**

## Tina Berger

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**Sent:** Friday, January 27, 2023 10:31 AM  
**Subject:** FW: [External] Re: Public comment for menhaden board  
**Attachments:** CBF Press release.pdf; YOY DNR.pdf; 2020-08-10\_100013 Katie Drew.pdf; DNR 06 TWO.pdf; TRCP Mail.pdf; Caucus- Noah B..pdf; Sierra-Shore Rivers.pdf; ERP Press.pdf

On Jan 26, 2023, at 8:13 PM, Tom Lilly <[foragematters@aol.com](mailto:foragematters@aol.com)> wrote:

Tina and Madeline will you please post this comment to the menhaden board, the committee on socio-economics and the technical committee Thanks best personal regards Tom Lilly

To the menhaden board please give these two mails thought....what we said here to the Maryland delegates applies across the board FYI Hillary Falk is the president of Chesapeake Bay Foundation

Subject: Fwd: Menhaden reality Please read

Allison, Lynn and Russell ..Hillary and Allen this is for your attention.....I sincerely hope you delegates and CBF will stop supporting Omega Protein. Years ago I looked forward to the return of our ospreys to the two nests on our property....we have watched them catch menhaden and feed growing chicks for almost 50 years,,,,,now the babies are starving Summer after Summer ....our blue herons and ibises are gone to....as are the nesting eagles. This year I fear for the ospreys. Our river and the sound has had the life sucked out of it. This is what happens when menhaden and nature face off with factory fishing and fishery management and politics in two states that support exploitation of the people's natural resources and ruin of all the social and economic quality of life of Chesapeake Bay once enjoyed by millions of people and children. There will be another menhaden meeting Wednesday and we will have three delegate there but none of you will stand up for the millions of ordinary Marylanders and their children that love a days fishing on the bay or simply taking a walk on a beach or getting out enjoying bay wildlife. There will be no one there representing the more than ten thousand small businesses and charter captains that depend on bay resources for their livelihood and most importantly there will be no one there protecting the ospreys or the thousands of schools of menhaden that are an awesome part of the cycle of life itself in the Bay. Thousands of schools of menhaden that are trying to migrate to the Maryland bay to nourish our precious fish and wildlife that are being taken in Virginia every year and ground up for animal and fish

food. A tragic waste of the people's natural resources. If any of you delegates actually cared for these things you would have moved the purse seine fishing out of Virginia waters many years ago. That's what I feel and what I know. Thomas Lilly

Subject: Menhaden agenda Feb 1st REQUEST

Hillary Questions are being raised right now about CBF's policy on the factory fishing in Virginia on the Facebook group site "Little fish, big deal!". John Page Williams just posted something that refers the reader to a CBF site where CBF talks about how important menhaden are and how important the ASMFC Environmental Reference Point study is in protecting menhaden. He implies CBF acts to support menhaden conservation in the bay, not the factory fishing. We will know on Feb 1st whether this is correct.

The ERP study, (that was to value menhaden as a forage fish in the ecology) concluded.

" Atlantic striped bass was the focal point for the ERP definitions because it was the most sensitive predator fish to Atlantic menhaden harvest...." (scan press release 8/20/20)

This means when menhaden are overharvested striped bass are the first species to suffer the consequences. CBF has been very aware of the poor condition of striped bass in the bay for a long time. In CBF's press release 9/5/20 (scan) they said " the rockfish population of the Chesapeake Bay is showing signs of malnutrition and increased mortality" ... menhaden in the diet had declined from 70% to 8%. During the time from that release, the most critical metric in the condition of our iconic striped bass, is that they were (and are) in reproductive failure. Four straight years of the lowest Juvenile production ever. (scan) CBF is also aware the mantra the industry touts "menhaden are not overfished" has no application to the bay (scan K.Drew ) and that the bay cap does not protect the migration of menhaden into the bay in the spring when the large spawning fish and our nesting ospreys need menhaden the most. Therefore, the ERP project proves the negative consequences our striped bass are suffering is due to menhaden overharvesting. We do not need to know how much menhaden is there. We only need to know it is not enough. A Maryland DNR says a more abundant and diverse bay ecosystem would result from eliminating purse seining in Virginia (scan) No further research is necessary. The Bay needs action not more words.

The most effective way to ensure there is a completely adequate menhaden forage base in Chesapeake Bay is to have the purse seine fishing just take place in the US Atlantic zone. No lost jobs or quota for the



industry. This would ensure bay wildlife get at least 100,000 tons of menhaden forage (food) instead of having that food wasted. For the interested public I posted the following comment in response to John Page William's comment.

"CBF has new leadership. Hillary Falk. Hopefully she will see that CBF has talked the talk but has not walked the walk on menhaden. There are many examples. We will know if there has been any change at CBF at the ASMFC menhaden board meeting on Feb 1st as Allison Colden, the CBF scientist that is the MD delegate has been asked to propose an evaluation of the benefits/impacts of moving the factory fishing into the US Atlantic. We will see if she does that or not and that will answer your question about CBF."

The requested motion is " That the menhaden board refer to the appropriate committees the following requests. That they determine the environmental, social and economic consequences of continuing purse seine fishing in Chesapeake Bay and Virginia Coastal waters compared to the same consequences if the fishing is only allowed in the US Atlantic zone based on the information now available."

I know you are aware of the TRCP/ VSSA/ ASA/ CCA etc and 10,000 signers on the Petition to the Governor in Virginia (scan). They want the factory fishing moved. Also last year MD Senate Resolution 06 was supported by the Legislative Sportsmen's Caucus (scan) representing a million Marylanders, state wide fishing clubs representing the interests hundreds of thousands of Maryland anglers, their families and children, by the Maryland Sierra Club and Shore Rivers (scan) with over 73,000 Maryland members and by our charter captains representing the hundreds of thousands of Marylanders that go striped bass fishing. However, we were advised by the Legislature's representative to the menhaden board, whose proxy is Allison Colden that she opposed the Resolution, and it was tabled in Committee. I have asked her again to propose this action next Thursday (scan) as more and more evidence and support has emerged, but she has not responded. I can only hope CBF and Allison Colden will join with all the individuals, businesses and conservation organization in both states that want the Commission to consider this matter in a public forum with input from the public stakeholders and this will only happen if Allison Colden and the Maryland delegation begins that process on Feb 1st... I thought you should be aware of this and hope that you will intervene in this before it's too late. Sincerely Tom Lilly 443 235 4465

From: Katie Drew [kdrew@asmfc.org](mailto:kdrew@asmfc.org)  
Subject: FW: [External] Our discussion  
Date: Mar 3, 2020 at 8:25:22 AM  
To: THOMAS LILLY [foragematters@aol.com](mailto:foragematters@aol.com)  
Cc: PHILIP ZALESK [flypax@md.metrocast.net](mailto:flypax@md.metrocast.net)

---

Hi, Tom--

Must be some e-mail problems! Can you confirm that you get this?

Best,  
Katie

**From:** Katie Drew  
**Sent:** Thursday, February 27, 2020 12:03 PM  
**To:** THOMAS LILLY <[foragematters@aol.com](mailto:foragematters@aol.com)>  
**Cc:** PHILIP ZALESK <[flypax@md.metrocast.net](mailto:flypax@md.metrocast.net)>  
**Subject:** Re: [External] Our discussion

Hi, Tom--

Per our phone discussion:

1.) Yes, ASMFC has access to fairly timely reporting for reduction fishery landings in Chesapeake Bay (generally speaking, landings from the bait fishery in Chesapeake Bay are not finalized until the following year). We do not know how many menhaden are left in the water in Chesapeake Bay specifically. We can estimate how many menhaden will be left after a fishing season on a coastwide level (Bay and ocean combined) based on our model projections, but the model projections and the stock assessment do not have the spatial structure to calculate how many menhaden are in the Bay vs. the coast.

2.) We do not have the ability to measure or calculate the number of menhaden in the Maryland portion of Chesapeake Bay on a daily/weekly/monthly level.

Katie

---

**From:** Tom <[foragematters@aol.com](mailto:foragematters@aol.com)>  
**Sent:** Wednesday, February 26, 2020 4:25 PM  
**To:** Katie Drew  
**Cc:** PHILIP ZALESK  
**Subject:** [External] Our discussion

Senate Chair  
**JACK BAILEY**  
Legislative District 29  
Calvert & St. Mary's Counties

Maryland Legislative Sportsmen's Caucus  
James Senate Office Building, Room 402  
410-841-3673 or 301-858-3673  
1-800-492-7122 Ext. 3673

Senate Co-Chair  
**KATIE FRY HESTER**  
Legislative District 9



House Chair  
**NED CAREY**  
Legislative District 31A  
Anne Arundel County

Maryland Legislative Sportsmen's Caucus  
Lowe House Office Building, Room 161  
410-841-3047 or 301-858-3047  
1-800-492-7122 Ext. 3047

House Co-Chair  
**WENDELL BEITZEL**  
Legislative District 1A

## The Maryland Legislative Sportsmen's Caucus

*The Sportsmen's Best Friend in Annapolis*

October 21, 2021

Steven G. Bowman  
VMRC Chairman  
Building 96, 380 Fenwick Road  
Ft. Monroe, Virginia 23651

**RE: "The Most Important Fish in the Sea" – IMMEDIATE ACTION**

Mr. Bowman:

Each year the number of menhaden surviving the Virginia netting gauntlet to successfully reach Maryland's portion of the Chesapeake Bay is declining. This scientifically documented fact is detrimental to both avian and marine species dependent upon the "Most Important Fish in the Sea". This must change.

On October 15, 2021, a fishery biology professor from Salisbury University (Dr. Noah Bressman, PhD) formally addressed the dire menhaden issue in a statement to Maryland's DNR Secretary, et al. For the record, the Maryland's Legislative Sportsmen's Caucus within the Maryland General Assembly fully supports the position taken by Dr. Bressman and urges time-sensitive compliance by the Virginia Marine Resources Commission.

Here's what Dr. Bressman stated:

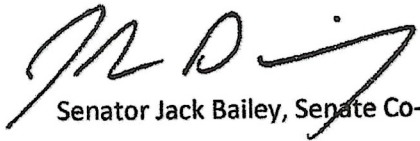
"Currently, the Virginia-based menhaden fishery is overfishing the stock of Atlantic Menhaden in and around the Chesapeake Bay, which is preventing this important forage fish from making its way into the bay and its tributaries. As an important prey item for many important species in the bay, such as Striped Bass and Osprey, the disappearance of most of the menhaden from the bay is contributing to the disappearance of many species that rely on menhaden.

Virginia has been allotted about 75% of the entire Atlantic Coast's quota, which is a drastically disproportionate amount relative to its coastline. Additionally, much of their harvesting occurs as menhaden migrate into the bay, where they enter Maryland's waters. What this essentially means is 75% of the quota for the entire Atlantic Coast is being taken in the bay or just before they enter the bay. While this may not be causing overfishing for the entire Atlantic Coast based on quotas, because all of these fish are being taken from essentially just the bay, it is having locally drastic effects on the ecosystem.

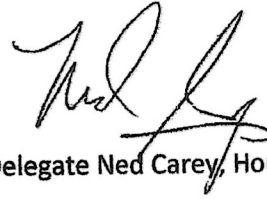
Therefore, I strongly suggest either delaying the start of the menhaden commercial season until after a significant amount of menhaden have migrated north along the Virginia coast into the Chesapeake bay (which occurs in spring/early summer), by pushing these factory fishing efforts at least 3 miles offshore into federal waters instead of along the coastline in state waters (as the fish in the state waters are most likely to migrate along the coast into the bay), pushing the commercial menhaden fishery north of the entrance to the Chesapeake bay during their migration, and/or significantly reducing the quotas of menhaden in and around the mouth of the Chesapeake bay.

These actions are necessary to ensure the long-term health of the Chesapeake Bay ecosystem and the associated fisheries and ecotourism."

What is happening to the "Most Important Fish in the Sea" is intolerable. VMRC must stand up and do what's right.



Senator Jack Bailey, Senate Co-Chair



Delegate Ned Carey, House Co-Chair



Cc:

Members, Virginia Marine Resources Commission  
Dr. Noah Bressman, Salisbury University  
Senator Emmett Hanger, Senate Co-Chair, Virginia Legislative Sportsmen's Caucus  
Delegate James Easily Edmunds II, House Co-Chair, Virginia Legislative Sportsmen's Caucus  
Jeff Crane, President, Congressional Sportsmen's Foundation  
The Honorable Ann Jennings, Virginia Secretary of Natural Resources  
The Honorable Jeannie H. Riccio, Maryland Secretary of Natural Resources

From: Noah Bressman noahbressman@gmail.com  
Subject: Support for Action on Menhaden  
Date: Oct 15, 2021 at 10:36:49 AM  
To: jeannie.riccio@maryland.gov, bill.anderson@maryland.gov,  
lynn.fegley@maryland.gov  
Bcc: foragematters@aol.com

---

Dear Secretary Riccio and DNR Menhaden Delegates,

As a Fish Biology Professor at Salisbury University with multiple collaborations with the MD DNR, former nominee to the Mid-Atlantic Fisheries Management Council, an avid angler, science communicator, and concerned citizen of Maryland, I write to offer my support for action on menhaden in and around the Chesapeake Bay. Currently, the Virginia-based menhaden fishery is overfishing the stock of Atlantic Menhaden in and around the Chesapeake Bay, which is preventing this important forage fish from making its way into the bay and its tributaries. As an important prey item for many important species in the bay, such as Striped Bass and Osprey, the disappearance of most of the menhaden from the bay is contributing to the disappearance of the many species that rely on menhaden.

Currently, Virginia has been allotted about 75% of the entire Atlantic Coast's quota, which is a drastically disproportionate amount relative to its coastline. Additionally, much of their harvesting occurs as menhaden migrate into the bay, where they enter Maryland's waters. What this essentially means is 75% of the quota for the entire Atlantic coast is being taken in the bay or just before they enter the bay. While this may not be causing overfishing for the entire Atlantic coast based on quotas, because all of these fish are being taken from essentially just the bay, it is having locally drastic effects on the ecosystem.

Therefore, I strongly suggest either delaying the start of the menhaden commercial season until after a significant amount of menhaden have migrated north along the Virginia coast into the Chesapeake bay (which occurs in spring/early summer), pushing these factory fishing efforts at least 3 miles offshore into federal waters instead of along the coastline in state waters (as the fish in the state waters are most likely to migrate along the coast into the bay), pushing the commercial menhaden fishery north of the entrance to the Chesapeake bay during their migration, and/or significantly reducing to quotas of menhaden in and around the mouth for the Chesapeake Bay. These actions are necessary to ensure the long-term health of the Chesapeake Bay ecosystem and the associated fisheries and ecotourism.

Sincerely,

Dr. Noah Bressman, PhD  
Assistant Professor of Physiology  
Salisbury University

Dr. Noah Bressman, PhD  
Assistant Professor of Physiology  
Salisbury University  
Fish Biology, Biomechanics, Functional Morphology, and Behavior  
Noahbressman.wixsite.com/noah  
He/him/his

Begin forwarded message:

**From:** Noah Bressman <noahbressman@gmail.com>  
**Date:** October 18, 2021 at 9:54:57 AM EDT  
**To:** Tina Berger <tberger@asmfc.org>  
**Subject:** Re: FW: Final Supplemental Materials for ASMFC 2021 Fall Meeting

Thanks, Tina! I want to clarify that the most important thing I recommend is that the board take action now to evaluate the options to increase menhaden in Chesapeake Bay. If action was started at Tuesday's board meeting, some or all of the measures could be in effect for the 2022 season. This can be accomplished using qualitative management methods, such as seasonal and area closures without additional research. It can also be accomplished by moving the fishing into the US federal zone as every state except Virginia has seen the necessity for doing. While I am always in support of more research for any topic (because I am a scientist), waiting for additional research on this issue that is already clear will likely lead to menhaden continuing to plummet in the bay, which will further reduce the capacity for striped bass to recover in the bay, especially after the recent report showing their abysmal recruitment over the last 3 years. A delay in action, such as a several years-long stock and recruitment reassessment of the bay before action, will lead to the problem getting worse before it gets better.

Sincerely,  
Dr. Noah Bressman, PhD  
Assistant Professor of Physiology  
Department of Biology  
Salisbury University

On Fri, Oct 15, 2021 at 2:47 PM Tina Berger <tberger@asmfc.org> wrote:

Dr. Bressman – Thank you for your public comment on Atlantic menhaden management. It was sent to the Atlantic Menhaden Board today for its consideration. – Tina

**Tina Berger**

If you enjoy feeling the tug of a big rockfish on the end of your line (and savoring the taste of it at dinner) or watching osprey snatch a silvery fish from the water, you have menhaden to thank! These small fish are the unsung heroes of the Chesapeake Bay, providing a rich food source for many of our favorite critters.

[of-menhaden-conservation.html](http://www.cbf.org/about-the-bay/more-than-just-the-bay/chesapeake-wildlife/northern-green-frog-at-home-in-the-bog.html)

**Northern Green Frog**  
<http://www.cbf.org/about-the-bay/more-than-just-the-bay/chesapeake-wildlife/northern-green-frog-at-home-in-the-bog.html>

**Ospreys**  
<http://www.cbf.org/about-the-bay/more-than-just-the-bay/chesapeake-wildlife/ospreys/>

**Pelicans**  
<http://www.cbf.org/about-the-bay/more-than-just-the-bay/chesapeake-wildlife/moving-on-up-pelicans-are-at-home-on-the-bay.html>

**River Otters**  
<http://www.cbf.org/about-the-bay/more-than-just-the-bay/chesapeake-wildlife/aquatic-ambassadors-river-otters-are-poster-pups-for-conservation.html>

**Rockfish**  
<http://www.cbf.org/about-the-bay/more-than-just-the-bay/chesapeake-wildlife/rockfish/>

**Sea Nettles**  
<http://www.cbf.org/about-the-bay/more-than-just-the-bay/chesapeake-wildlife/sea-nettles.html>

**Smallmouth Bass**  
<http://www.cbf.org/about-the-bay/more-than-just-the-bay/chesapeake-wildlife/smallmouth-bass.html>

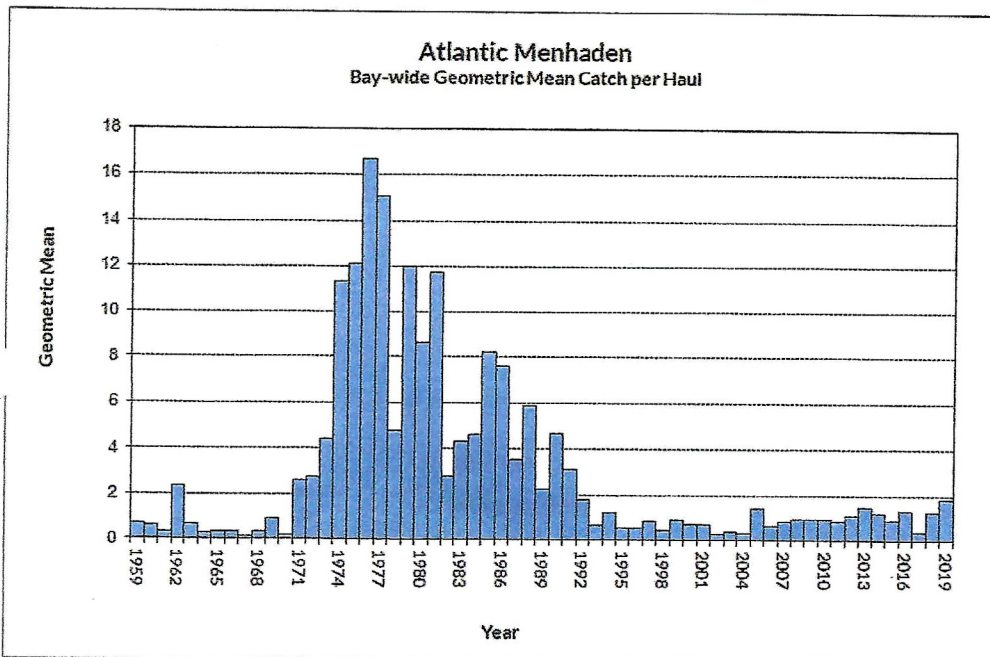
**Sturgeon**  
<http://www.cbf.org/about-the-bay/more-than-just-the-bay/chesapeake-wildlife/sturgeon.html>

**Terrapins**  
<http://www.cbf.org/about-the-bay/more-than-just-the-bay/chesapeake-wildlife/terrapins-swimming-for-shore.html>

**Tundra Swans**  
<http://www.cbf.org/about-the-bay/more-than-just-the-bay/chesapeake-wildlife/tundra-swans-a-fading-winter-chorus-in-the-chesapeake.html>

## What are the threats facing menhaden?

The Bay is one of the most important nurseries for menhaden, helping to sustain the population along the Atlantic coast. Menhaden eggs hatch in the open ocean before drifting on currents into the Bay, where juvenile fish live and grow for their first year of life. But long-running scientific surveys show the number of young menhaden in the Chesapeake Bay dropped dramatically in the early 1990s and remains low.



This graph represents the average number of juvenile menhaden available ("abundance"), which has a direct impact for predators like striped bass and osprey. Unfortunately, the number of young menhaden produced in the Bay each year has been poor for the last 20 years.

DURELL, E.Q., AND WEEDON, C. 2019. STRIPED BASS SEINE SURVEY JUVENILE INDEX WEB PAGE. DNR.MARYLAND.GOV/FISHERIES/PAGES/JUVENILE-INDEX.ASPX. MARYLAND DEPARTMENT OF NATURAL RESOURCES, FISHERIES SERVICE

At the same time, almost three-quarters of all menhaden caught on the East Coast are harvested by the Omega Protein Corporation—a Canadian-owned company that fishes largely in or near the mouth of the Bay. Omega operates the sole remaining menhaden reduction facility on the U.S. East Coast in Reedville, Virginia. The plant reduces (cooks and grinds up) the fish for a variety of uses, such as nutritional supplements, food additives, and feed for livestock and fish farms.

## Menhaden by the Numbers

70%

The amount of an adult rockfish's diet historically filled by menhaden.

8%

The amount of an adult rockfish's diet currently Filled by menhaden

Stay up to date about the Bay!

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index.html

9/5/20, 10:30 AM  
Page 3 of 6

The rockfish population in the Chesapeake Bay is showing signs of malnutrition and increasing mortality

75%

The amount of an osprey nestling's diet filled by Menhaden in the 1980s

28%

The amount of a nestling's diet filled by menhaden today. Though the number of nests through out the bay has improved, nesting mortality is as high as it was in the DDT era.

65%

The annual removal of adult menhaden from East Coast waters.

2,500

The number of jobs supported by menhaden-dependent species in Virginia alone.

\$236

In millions, the total amount fishing for menhaden-dependent species contributes to Virginia's economy.

8%

The current Atlantic menhaden population compared against historical levels.

## Why is there a harvest cap for menhaden in the Bay?

Menhaden migrate along the Atlantic coast from Florida to Maine. An interstate governing body—the Atlantic States Marine Fisheries Commission (ASMFC)—manages the fishery for the 15 states that share the coastline.

Over the past two decades, fishery managers have raised concerns that the concentration of fishing effort in Bay waters could disrupt the Bay's food chain, harming populations of rockfish and other predator species. As a precaution, the ASMFC first set a cap for Omega's industrial menhaden harvest in the Bay in 2006. In 2017, the ASMFC voted to update the cap to reflect more recent menhaden harvest levels in the Bay.

In blatant disregard for the fishery management process, Omega knowingly exceeded the cap in 2019 (<http://www.cbf.org/news-media/newsroom/2019/virginia/cbf-expresses-deep-concern-with-omega-proteins-announcement-it-will-violate-the-bay-menhaden-cap.html>). The violation resulted in a unanimous ASMFC vote (<http://www.cbf.org/news-media/newsroom/2019/virginia/fisheries-board-finds-virginia-out-of-compliance-with-menhaden-harvest-cap.html>) referring Virginia to the U.S. Department of Commerce for noncompliance with interstate fishery rules. The Secretary of Commerce decided to uphold the ASMFC decision (<http://www.cbf.org/news-media/newsroom/2019/virginia/us-commerce-department-takes-action-after-virginia-menhaden-limit-exceeded.html>). The new harvest cap approved by the VMRC in April 2020 lowers the amount of menhaden that

<https://www.cbf.org/about-the-bay/more-than-just-the-bay/chesapeake-wildlife/menhaden/index.html>

**SIGN UP  
([HTTP://WWW.  
US/STAY-UP-  
TO-DATE-  
ABOUT-THE-  
BAY.HTML](http://www.us-stay-up-to-date-about-the-bay.html))**

## In the News

08/05/20: ASMFC Adopts Groundbreaking Change to Menhaden Fishery Management (<http://www.cbf.org/news-media/newsroom/2020/all/asmfc-adopts-groundbreaking-change-to-menhaden-fishery-management.html>)

04/28/20: New Menhaden Limits Approved by VMRC, Preventing Fishery Shutdown (<http://www.cbf.org/news-media/newsroom/2020/virginia/r-menhaden-limits-approved-by-vmrc-preventing-fishery-shutdown.html>)

02/27/20: Menhaden Legislation Approved by Virginia House And Senate (<http://www.cbf.org/news-media/newsroom/2020/virginia/r-legislation-approved-by-virginia-house-and-senate.html>)

01/29/20: Menhaden Legislation Approved by Virginia House and Senate Committees (<http://www.cbf.org/news-media/newsroom/2020/virginia/r-legislation-approved-by-virginia-house-and-senate-committees.html>)

12/19/19: U.S. Commerce Department Takes Action after Virginia Menhaden Limit Exceeded (<http://www.cbf.org/news-media/newsroom/2019/virginia/l-commerce-department-takes-action-after-virginia-menhaden-limit-exceeded.html>)

11/21/19: CBF Statement on Gov. Northam's Call for Action on Menhaden (<http://www.cbf.org/news-media/newsroom/2019/virginia/c>





*Larry Hogan, Governor*  
*Boyd K. Rutherford, Lt. Governor*  
*Jeannie Haddaway-Riccio, Secretary*  
*Allan Fisher, Deputy Secretary*

**Bill Number:** Senate Joint Resolution 6

**Short Title:** Atlantic States Marine Fisheries Commission – Atlantic Menhaden –  
Prohibition on Commercial Reduction Fishing

**Department's Position:** Letter of Information

**Explanation of Department's Position**

The Maryland Department of Natural Resources (DNR) provides the following information on SJ 6.

This bill is a resolution to urge the Atlantic States Marine Fisheries Commission (ASMFC) to evaluate the population of Atlantic menhaden in the Chesapeake Bay and end the practice of purse seining for harvesting Atlantic menhaden in the Chesapeake Bay.

DNR agrees that menhaden, which are managed under the framework of the ASMFC, are an important species to the health of the Chesapeake Bay. As such, purse seining is already prohibited in Maryland waters.

Management of Atlantic menhaden in Virginia's portion of the Bay also occurs under the framework of the ASMFC. Primary responsibility for management was recently transitioned from Virginia's legislature to the Virginia Marine Resource Commission in 2020. Since this transition has taken place, Virginia has commenced a process of engaging a broad array of stakeholders in the scientific management of these fish.

According to ASMFC, the menhaden stock is currently healthy.

Maryland is a leader in working with ASMFC to develop conservative ecosystem reference points that were just adopted for the fishery summer 2020. This was both a major undertaking and accomplishment, and is key to ensuring a balanced approach to managing menhaden as both important for the commercial fishery and forage fish.

DNR believes that fishery management decisions should be rooted in science and within established frameworks and authorities like ASMFC. There is little precedent for ASMFC to direct a state on how to manage its quota (e.g., dictating particular gears, seasons, operating practices) so ASMFC is unlikely to support any action to prohibit a specific business from engaging in an established fishery. Initiating an action requiring specific management measures in other states through ASMFC may ultimately result in other states pursuing specific

Contact: Bunky Luffman, Director, Legislative and Constituent Services  
Bunky.luffman1@maryland.gov ♦ 410-689-9165

3/01/22

DNR R06

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management measures in Maryland that are counter to our state's management goals and objectives.

That said, if Virginia were to prohibit purse seining in their waters, it is likely that the unharvested Atlantic menhaden would contribute to larger stocks of menhaden, which would provide forage for species such as striped bass, bluefish, dolphins, and osprey. A larger forage base of menhaden could provide for a more diverse and abundant Bay ecosystem, which could lead to positive fiscal impacts although these connections have not yet been scientifically quantified.

For any additional information, please feel free to contact our Legislative and Constituent Services Director, Bunky Luffman.

**ASMFC Atlantic Menhaden Board Adopts Ecological Reference Points****From:** Tina Berger <tberger@asmfc.org>**Cc:** ALL ARLINGTON STAFF <allarlingtonstaff@asmfc.org>**Date:** Thu, Aug 6, 2020 5:42 pmOR IMMEDIATE RELEASE, AUGUST 6, 2020  
PRESS CONTACT, TINA BERGER, 703.842.0740**ASMFC Atlantic Menhaden Board Adopts Ecological Reference Points**

Arlington, VA – The Atlantic States Marine Fisheries Commission's Atlantic Menhaden Management Board approved the use of ecological reference points (ERPs) in the management of Atlantic menhaden. By adopting ERPs, the Board will be accounting for the species' role as an important forage fish. The 2020 Atlantic menhaden benchmark assessments, which were endorsed by an independent panel of fisheries scientists, used the Northwest Atlantic Coastal Shelf Model of Intermediate Complexity for Ecosystems (NWACS-MICE) in combination with the single-species model (Beaufort Assessment Model or BAM) to develop Atlantic menhaden ERPs by evaluating trade-offs between menhaden harvest and predator biomass.

"The Board took another important step in managing Atlantic menhaden in a broader ecosystem context," stated Board Chair Spud Woodward of Georgia. "It's the culmination of more than a decade of effort by state, federal, and academic scientists to develop ERPs that reflect menhaden's role as a key food source for several fish species. These ERPs are not a silver bullet to resolve all our fisheries management issues, and the models on which they are based will continue to evolve. However, the use of ERPs for menhaden management will enhance the success of predator management by providing a more abundant forage base for rebuilding predator fish populations. It is important for us to keep those rebuilding efforts on track through the use of proven management tools such as controls on fishing mortality."

In February and May, the Board tasked the ERP Work Group with additional analyses to explore the ERPs sensitivity to a range of ecosystem scenarios (different assumptions about fishing mortality for other key predator and prey species) and Atlantic herring biomass. These analyses suggested the original scenario (ERP target and threshold outlined below) most closely approximates short-term conditions for the ecosystem. As a result, the ERP Work Group recommended using the original scenario ERPs presented in the assessment report. Moving forward, the ERPs for Atlantic menhaden are:

**ERP target:** the maximum fishing mortality rate ( $F$ ) on Atlantic menhaden that sustains Atlantic striped bass at their biomass target when striped bass are fished at their  $F$  target

**ERP threshold:** the maximum  $F$  on Atlantic menhaden that keeps Atlantic striped bass at their biomass threshold when striped bass are fished at their  $F$  target

Atlantic striped bass was the focal species for the ERP definitions because it was the most sensitive predator fish species to Atlantic menhaden harvest in the model, so an ERP target and threshold that sustained striped bass would likely provide sufficient forage for other predators under current ecosystem conditions. For the development of the ERPs, all other focal species in the model (bluefish, weakfish, spiny dogfish, and Atlantic herring) were assumed to be fished at 2017 levels.

In addition to adopting ERPs, the Board discussed setting fishery specifications for 2021-2022. In 2017, the Board set the total allowable catch (TAC) at 216,000 metric tons for 2018-2019, and then maintained that TAC for 2020 with the expectation that it would be set in future years using ERPs. With the adoption of ERPs, the Board tasked the Atlantic Menhaden Technical Committee to run a projection analysis to provide a variety of TAC scenarios and their risk of exceeding the ERP  $F$  target to compare in setting specifications for 2021-2022. The Board will review the projection analysis at the Annual Meeting in October and then determine a TAC for 2021-2022. As stated in Amendment 3, if a TAC is not set at the Annual Meeting, the TAC from the previous year will be maintained.

For more information, please contact Kirby Rootes-Murdy, Fishery Management Plan Coordinator, at [krootes-murdy@asmfc.org](mailto:krootes-murdy@asmfc.org) or 703.842.0740.

###

PR20-15

The press release can also be found here - [http://www.asmfc.org/uploads/file/5f2c7891pr15AtlMenhadenERP\\_Adoption.pdf](http://www.asmfc.org/uploads/file/5f2c7891pr15AtlMenhadenERP_Adoption.pdf)

Tina Berger  
Director of Communications  
Atlantic States Marine Fisheries Commission  
1050 N. Highland Street, Suite 200A-N  
Arlington, VA 22201  
703.842.0740  
[www.asmfc.org](http://www.asmfc.org)

*Sustainable and Cooperative Management of Atlantic Coastal Fisheries*



P.O. Box 278  
Riverdale, MD 20738

**Committee: Education, Health, and Environmental Affairs**

**Testimony on: SJ6 "Atlantic States Marine Fisheries Commission – Atlantic Menhaden – Prohibition on Commercial Reduction Fishing"**

**Position: Support**

**Hearing Date: March 1, 2022**

The Maryland Chapter of the Sierra Club urges a favorable report on SJ6. This resolution asks the Atlantic States Marine Fisheries Commission to exercise its authority regarding the management of the menhaden fishery to consider prohibiting commercial reduction fishing of Atlantic menhaden, including the use of purse seines and spotter planes, in the Chesapeake Bay.

Atlantic menhaden are a keystone species for the Chesapeake Bay. As noted by this resolution, Atlantic menhaden form a critical connection between the bottom and the top of the food chain. Menhaden are filter feeders, eating plankton and rotifers and helping clear the water of nutrient-pollution.<sup>1</sup> They are also a vital source of food to predators, including predatory fish, dolphins, whales, osprey, and bald eagles. While this is incredibly important to the ecosystem of the Bay, it is also important to the fishing industry. Many species of fish that we harvest from the Bay rely on the menhaden as a food source, including rockfish (striped bass), bluefish, and weakfish.

The Chesapeake Bay is an important nursery for the menhaden that helps sustain the population along the entire Atlantic coast. It is deeply concerning that the number of menhaden juveniles have decreased significantly since 1976 and has stayed low in the last 20 years.<sup>2</sup>

In order to protect the natural wonders of the Chesapeake Bay, it is important that action be taken now. We urge the Committee to issue a favorable report.

Marc Imlay  
Endangered Species Workgroup Coordinator  
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Josh Tulkin  
Chapter Director  
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<sup>1</sup> <https://www.vims.edu/research/units/projects/menhaden/research/modeling.php>

<sup>2</sup> Durrell, E. Q. & Weedon, C. (2019). Striped Bass Seine Survey Juvenile Index Web Page. DNR.Maryland.gov/Fisheries/Pages/Juvenile-Index.ASPX. Maryland Department of Natural Resources, Fisheries Service.

Founded in 1892, the Sierra Club is America's oldest and largest grassroots environmental organization. The Maryland Chapter has over 70,000 members and supporters, and the Sierra Club nationwide has over 800,000 members and nearly four million supporters.

ONE DRIVE

CRYOZZA-MAIL PDF



**Testimony in SUPPORT of SJ6 – Atlantic States Marine Fisheries Commission - Atlantic Menhaden - Prohibition on Commercial Reduction Fishing**

March 1, 2022

Dear Chairman Pinsky and Members of the Committee,

Thank you for this opportunity to submit testimony in **SUPPORT of SJ6** on behalf of ShoreRivers. ShoreRivers is a river protection group on Maryland's Eastern Shore with 3,500 members. Our mission is to protect and restore our Eastern Shore waterways through science-based advocacy, restoration, and education.

This bill sets forth a resolution by the Maryland General Assembly asking the Atlantic States Marine Fisheries Commission to take further action to prohibit the commercial reduction fishing of Atlantic Menhaden, including the use of purse seines and spotter planes in the Chesapeake Bay in order to maintain a sustainable fishery. This reduction fishery poses a major threat to many Bay species every year, and when these other fisheries suffer it increases the pressure on other fisheries, including crabs and oysters. Thus, it is of critical importance to protect a foundational species like menhaden as much as possible.

Menhaden are incredibly valuable to the Chesapeake Bay and the many other commercial and recreational fisheries that occur in the rivers of the Eastern Shore. As a vital part of the ecosystem, menhaden filter plankton from the water and help to improve water quality, and they are a necessary food source for other aquatic species like striped bass and bluefish, but also for ospreys and bald eagles. The Department of Natural Resources noted in their 2021 Striped Bass survey that while the striped bass young-of-year showed a slight increase in population from 2020, what was of note was the increased numbers of menhaden in the rivers, notable the Choptank River. When the menhaden population thrives, so do our other fisheries. And when our fisheries are healthy, we know that water quality and habitat are at healthy levels to support those populations, which means that our economies and local communities will see a benefit.

For these reasons stated above, ShoreRivers urges the Committee to adopt a **FAVORABLE** report on SJ6.

Sincerely,

Matt Pluta,  
Choptank Riverkeeper, on behalf of:

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**ShoreRivers**

Isabel Hardesty, Executive Director

Annie Richards, Chester Riverkeeper | Matt Pluta, Choptank Riverkeeper  
Elle Bassett, Miles-Wye Riverkeeper | Zack Kelleher, Sassafras Riverkeeper

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June 14, 2022

Governor Glenn Youngkin  
Office of the Governor  
P.O. Box 1475  
Richmond, VA 23218

Dear Governor Youngkin,

As members of the recreational fishing and boating community, we ask that you move menhaden reduction fishing out of the Chesapeake Bay until science demonstrates that high volume reduction fishing for menhaden can be allowed without negatively affecting the broader Bay ecosystem.

America's anglers and boaters consistently play an integral role in the stewardship of our shared natural resources by directly funding conservation and habitat restoration efforts through licensing fees and excise taxes set up through the Sport Fish Restoration and Boating Trust Fund on fishing equipment and boat fuel. In 2021 alone, \$399 million was apportioned to the states to fund fishery conservation programs.<sup>1</sup> This resulted in \$6.26 million in funds for conservation programs specifically in Virginia, funded solely by anglers and boaters.

Our recreational fishing coalition of national and Virginia-based groups is clearly dedicated to maintaining the health of the Chesapeake Bay, the region's economy, and the broader marine ecosystem in the Atlantic. A major source of our conservation ethic is the fact that saltwater recreational fishing is an economic powerhouse, especially for Virginia where fishing is enjoyed by 600,000 anglers annually, contributing \$465 million to the Commonwealth's economy and supporting 6,504 jobs.<sup>2</sup> The jobs created by these fisheries are the lifeblood of our coastal communities as more than 90 percent of the sportfishing and boating industry is made up of small businesses.

Atlantic menhaden play a vital role in maintaining the sportfishing economy and the Chesapeake Bay ecosystem by serving as the base of the food chain for many recreationally important species. Specifically, menhaden are critical to the diets of gamefish like striped bass, bluefish, weakfish, and more, that feed Americans and keep them coming to Virginia waters and spending money in our coastal communities. For example, the striped bass fishery is the largest marine recreational fishery in the U.S., driving \$166 million in recreational fishing activity in Virginia alone. However, the economic value of striped bass fishing to Virginia has declined by over 50 percent in the past decade.<sup>3</sup>

<sup>1</sup> Certificate of Apportionment For Dingell-Johnson Sport Fish Restoration, available at: [https://www.fws.gov/sites/default/files/documents/SFR%20FY22%20Certificate%20of%20Final%20Apportionment%202022Feb3\\_508.pdf](https://www.fws.gov/sites/default/files/documents/SFR%20FY22%20Certificate%20of%20Final%20Apportionment%202022Feb3_508.pdf)

<sup>2</sup> Fisheries Economics of the United States, 2021, available at: [https://media.fisheries.noaa.gov/2021-11/FEUS-2018-final-508\\_0.pdf](https://media.fisheries.noaa.gov/2021-11/FEUS-2018-final-508_0.pdf)

<sup>3</sup> The Economic Contributions of Recreational and Commercial Striped Bass Fishing, 2019, available at: <https://mcgrawconservation.org/wp-content/uploads/McGraw-Striped-Bass-Report-FINAL.pdf>

<sup>4</sup> Evaluating Ecosystem-Based Reference Points for Atlantic Menhaden, 2017, available at: <https://www.tandfonline.com/doi/full/10.1080/19425120.2017.1360420>

<sup>5</sup> ASMFC news release, 2019, available at: [http://www.asmfc.org/uploads/file/5dfbd30bpr40SecretarialSupport\\_Menhaden\\_VANoncompliance.pdf](http://www.asmfc.org/uploads/file/5dfbd30bpr40SecretarialSupport_Menhaden_VANoncompliance.pdf)

Part of the decline in the striped bass population is explained by fishing mortality being too high, and in 2014 and 2020 our coalition supported significant reductions on the striped bass fishery to address that decline. However, according to a scientific model, menhaden reduction fishing also contributes to a nearly 30 percent decline in striped bass numbers coast wide.<sup>4</sup> The scientific linkage between menhaden as prey and striped bass as a main predator is undeniable. Therefore, the industrial menhaden fishery in the Chesapeake plays a role in the ability of striped bass to rebuild to healthy population levels. By removing more than 100 million pounds of menhaden every year from the Chesapeake Bay, the most important striped bass nursery on the East Coast, reduction fishing in Virginia is undermining the sportfishing economy and small businesses throughout the Commonwealth.

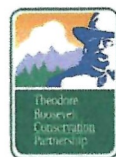
The detrimental impact of menhaden reduction fishing on the ecosystem is so pronounced that it is prohibited in every state along the East Coast except Virginia. However, each year, over 100 million pounds of menhaden are being removed from the Chesapeake Bay and "reduced" to fish meal and oil for pet food and salmon feed by a foreign-owned company—Cooke Inc. Locally known as Omega Protein, the corporation is exporting this keystone fish to other countries as a global commodity, despite repeated signs of the negative impact it is causing to the environment and other industries dependent on a healthy marine ecosystem. In fact, the Atlantic States Marine Fisheries Commission (ASMFC) found Virginia out of compliance with the Interstate Fishery Management Plan for Atlantic menhaden in 2019, after Omega Protein exceeded the Chesapeake Bay harvest cap by 33 million pounds.<sup>5</sup>

Over the past decade, recreational fishing and boating organizations, coastal businesses, and hundreds of thousands of individual anglers and conservationists have called on decisionmakers to leave enough menhaden in the water to feed the wildlife that support vibrant recreational fishing, boating and other industries that boost Virginia's coastal economy. Governor Youngkin, we urge you to use your authority to move menhaden reduction fishing out of the Bay until science demonstrates that menhaden fishing can be allowed without negatively affecting the broader Bay ecosystem. Importantly, you could put this stopgap in place and still allow Omega Protein to fish in Virginia's ocean waters.

Moving menhaden reduction fishing out of the Bay will help to protect the health of the ecosystem and help grow Virginia's outdoor recreational economy, which benefits all Virginians.

Thank you for your consideration.

**Whit Fosburgh**  
President & CEO



Theodore Roosevelt Conservation Partnership

**Glenn Hughes**  
President



American Sportfishing Association

**Frank Hugelmeyer**

President

National Marine Manufacturers Association



**Jim McDuffie**

President & CEO

Bonefish & Tarpon Trust



**Matt Gruhn**

President

Marine Retailers Association of the Americas



**Greg Jacoski**

Executive Director

Guy Harvey Ocean Foundation



**Patrick Murray**

President

Coastal Conservation Association



**Ellen Peel**

President

The Billfish Foundation



**Brett Fitzgerald**

Executive Director

Angler Action Foundation



**Jared Mott**

Conservation Director

Izaak Walton League of America



**Jason Schratwieser**

President

International Game Fish Association



**Ernie Padgette**

President

Virginia Division of the Izaak Walton League of America



### Virginia Angling Clubs

**Steve Atkinson**

President

Virginia Saltwater Sportfishing Association



**Captain Mike Ostrander**

President

Virginia Anglers Club





**Chris Schneider**

President

Virginia Beach Angler's Club



**Joe Stephenson**

President

Great Bridge Fisherman's Association



**Henry Troutner**

Vice President

Norfolk Anglers Club



**Samuel A. Graham**

President

Central Virginia Sport Fishing Association



**Ed Pacheco**

President

Virginia Coastal Fly Anglers



**Dean Carroll**

President

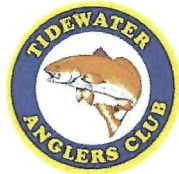
Eastern Shore Anglers Club



**Steve Jones Jr.**

President

Tidewater Anglers Club



**Danny Forehand**

President

Peninsula Salt Water Sport Fisherman's Association

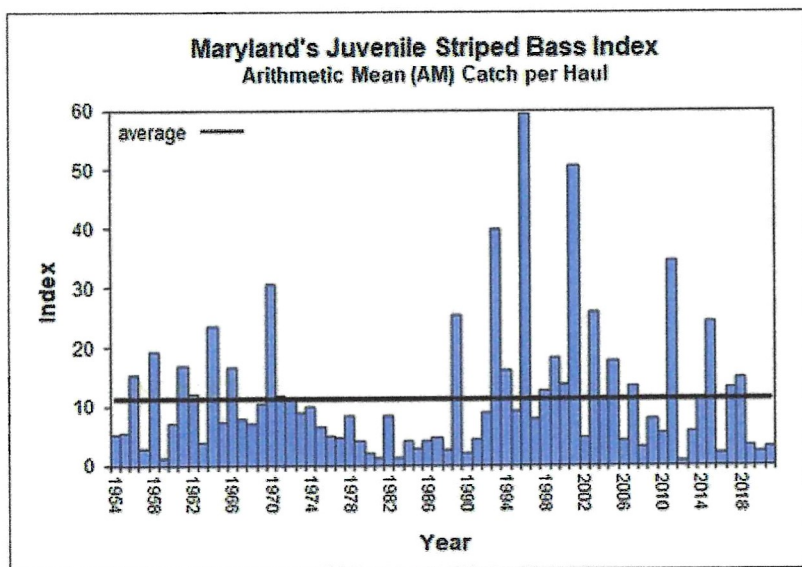


The coastal striped bass population has decreased in size, but is still capable of strong reproduction with the right environmental conditions. Variable spawning success is a well-known characteristic of the species. The index is slightly higher than 2020 but consecutive below average indices are a concern, and biologists continue to examine factors that might limit spawning success.

Atlantic Coast states enacted [responsible conservation measures](#) in recent years to reduce harvest and protect striped bass during spawning season. Maryland will work with other states in the Atlantic States Marine Fisheries Commission to develop additional measures to enhance the striped bass population through the Atlantic striped bass fishery management plan.



*The Department of Natural Resources has monitored the annual reproductive success of striped bass in Maryland's portion of Chesapeake Bay since 1954. Photo by Stephen Badger, Maryland Department of Natural Resources*



Other noteworthy observations of the survey were increased numbers of Atlantic menhaden in the Choptank River and healthy reproduction of American shad in the Potomac River. The survey also documented reproduction of invasive blue catfish in the upper Chesapeake Bay for the first time.

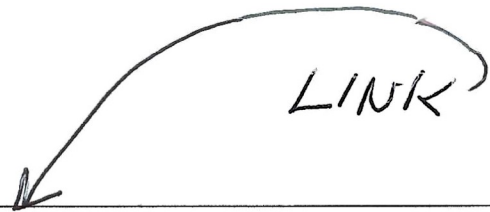
Twenty-two survey sites are located in four major spawning areas: the Choptank, Nanticoke, and Potomac rivers, and the Upper Chesapeake Bay. Biologists visit each site three times per summer, collecting fish with two sweeps of a 100-foot beach seine net. The index represents the average number of recently hatched striped bass, commonly called rockfish, captured in each sample.

The Virginia Institute of Marine Science conducts a similar survey in the southern portion of Chesapeake Bay.

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**Striped Bass Young of the Year MD DNR Reference.**

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**Date:** Fri, Feb 25, 2022 10:48 am



<https://news.maryland.gov/dnr/2021/10/15/chesapeake-bay-2021-young-of-year-survey-results-announced/>