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ASMFC
FISHERIES focus
*Vision: Sustainable and Cooperative Management of Atlantic Coastal Fisheries*

## INSIDE THIS ISSUE



# ASMFC Horseshoe Crab Board Approves Coastwide Stock Assessment for Management Use and Responds to Delaware Bay Management External Criticism

The Commission's Horseshoe Crab Management Board reviewed the 2024 Horseshoe Crab Stock Assessment Update, which indicates improvements in stock status from the 2019 assessment. The Board also received a response by the Adaptive Resource Management (ARM) Subcommittee to an external review of the ARM Framework.

The 2024 Horseshoe Crab Stock Assessment Update evaluated the stock status of the resource by region, finding the coastwide population to be in a good condition. Regionally, the Delaware Bay and Southeast regions were also in good condition, the Northeast was considered neutral, and the New York region remains in poor condition. While the Southeast region stock status remains good, there are some indices that are trending down in recent years and trends in the Southeast should be monitored in addition to those in the New York region, which has not improved substantially since the last assessment.

*Horseshoe crab with tag and telemetry tag, Mispillion Harbor, Delaware (c) Gregory Breese (USFWS)*

The Board also received a report from the ARM Subcommittee responding to the critique of the revised ARM Framework produced by Earthjustice. After conducting a thorough review and technical evaluation of the specific issues raised in the critique, the ARM Subcommittee maintains the red knot and horseshoe crab population models used in the ARM Framework represent the best use of the available data. Further, the trawl surveys and egg density data all indicate an increase in horseshoe crab populations in the region, a result consistent with the stock assessment update. The Subcommittee concluded that the Earthjustice critique was largely unfounded and failed to offer any alternative management approaches. As science and modeling approaches evolve, the Subcommittee will continue to revise and improve the ARM Framework for managing the Delaware Bay horseshoe crab fishery.

More details can be found in the Stock Assessment Overview and 2024 Stock Assessment Update on the Hiorseshoe Crab weboage under Stock Assessment Reports. The ARM Subcommittee's response to Earthjustice's critique at https://asmfc.org/uploads/file/663d2d84ARM_ResponseToDr.Shoemaker_April2024.pdf.

# Upcoming Meetings

*The Atlantic States Marine Fisheries Commission was formed by the 15 Atlantic coastal states in 1942 for the promotion and protection of coastal fishery resources. The Commission serves as the deliberative body of the Atlantic coastal states, coordinating the conservation and management of nearshore fishery resources, including marine, shell and diadromous species. The fifteen member states of the Commission are: Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, and Florida.*




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***June 10 - 14***
South Atlantic Fishery Management Council, Daytona Beach Shores, FL; visit https://safmc.net/events/june-2024-council-meeting/ for more information

***June 18 (9 AM - Noon)***
Recreational Measures Setting Process FMAT and PDT; visit https://asmfc.org/calendar/6/2024/recreational-measures-setting-process-framework-%7C-addenda-fmat-%7C-pdt/2324 for more information

***June 20 ( 1 - 3 PM)***
Northern Shrimp Section; visit https://asmfc.org/calendar/6/2024/northern-shrimp-section/2341 for more information

***June 25 ( 1 - 3 PM)***
American Lobster Plan Development Team; visit https://asmfc.org/calendar/6/2024/american-lobster-plan-development-team/2340 for more information

***June 25 (1 - 3:30 PM)***
Red Drum Technical Committee and Stock Assessment Subcommittee; visit https://asmfc.org/calendar/6/2024/red-drum-technical-committee-and-stock-assessment-subcommittee/2343 for more information

***June 25 - 27***
New England Fishery Management Council, Hilton Garden Inn, Freeport, ME; visit https://www.nefmc.org/calendar/june-2024-council-meeting for more details

***June 27 (1 - 3 PM)***
Atlantic Croaker and Spot Technical Committee; visit https://asmfc.org/calendar/6/2024/atlantic-croaker-and-spot-technical-committee/2332 for more information

***July 9 (begins at 1 PM) - 10 (ends at 1 PM)***
NEAMAP Maturity Workshop, VIMS, Gloucester Point, VA; visit https://asmfc.org/calendar/7/2024/NEAMAP-Maturity-Workshop/2318 for more information

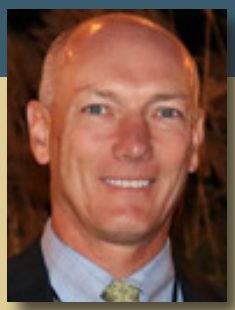
***July 9 (1 - 4 PM)***
Recreational Measures Setting Process FMAT and PDT; visit https://asmfc.org/calendar/7/2024/Recreational-Measures-Setting-Process-Framework-%7C-Addenda-FMAT-%7C-PDT/2325 for more information

***July 15 & 16***
ASMFC Horseshoe Crab Management Objectives Workshop, Delaware Department of Natural Resources & Environmental Control, Lewes Field Office, 901 Pilottown Road, Lewes, DE; visit https://asmfc.org/calendar/7/2024/Horseshoe-Crab-Management-Objectives-Workshop/2344 for more information

***July 16 (9 AM - Noon)***
Recreational Measures Setting Process FMAT and PDT; visit https://asmfc.org/calendar/7/2024/Recreational-Measures-Setting-Process-Framework-%7C-Addenda-FMAT-%7C-PDT/2326 for more information

***July 30 (1 - 4 PM)***
Recreational Measures Setting Process FMAT and PDT; visit https://asmfc.org/calendar/7/2024/Recreational-Measures-Setting-Process-Framework-%7C-Addenda-FMAT-%7C-PDT/2327 for more information

***August 6 - 8***
ASMFC Summer Meeting, Westin Crystal City, 1800 Richmond Highway, Arlington, VA; visit https://asmfc.org/calendar/8/2024/2024-ASMFC-Summer-Meeting/2192 for more details



## Honoring the Best: 2024 Captain David H. Hart and Annual Awards of Excellence Recipients

At our Spring Meeting, we had the privilege of honoring five individuals for their contributions to the Commission's vision of Sustainable and Cooperative Atlantic Coastal Fisheries. The Commission's highest honor, the Captain David H. Hart Award, was bestowed on Dr. Michael P. Armstrong, Deputy Director of the Massachusetts Division of Marine Fisheries (MA DMF) for his many notable scientific and management contributions to the betterment of the fisheries of the Atlantic coast. Additionally, this year's Annual Awards of Excellence were presented to Phil Edwards and Nicole Lengyel Costa with the Rhode Island Department of Environmental Management (RI DEM); Laura Lee with the US Fish and Wildlife Service (USFWS) and formerly with the North Carolina Division of Marine Fisheries (NC DMF); and Deputy Chief Jason Snellbaker with the New Jersey Department of Environmental Protection's (NJ DEP) Bureau of Law Enforcement.

### Captain David H. Hart Award Recipient

***Mike Armstrong, Deputy Director at MA DMF***

I've known Mike Armstrong for about as long as I have been at the Commission. I don't exactly recall our first conversation but more than likely it was after a long day of meetings, each of us with a beer in hand talking about fish. Since then, we've had many, many long talks about fisheries research, science, and management and I can confidently say that Mike is a wealth of knowledge and as passionate today about fish as he was over 25 years ago.


*ASMFC Chair Joe Cimino (NJ), ASMFC Executive Director Bob Beal, Award Recipient Mike Armstrong and ASMFC Vice-Chair Dan McKiernan (MA)*

Mike started as part of the technical staff at MA DMF and, in that role, he actively contributed to numerous Commission technical and stock assessment committees, including Atlantic striped bass, northern shrimp, and shad and river herring. As he advanced in his career, he became increasingly involved in the Commission's Management and Science Committee, and ultimately serving as a state representative, and more than a few times as chair, on several species management boards. Throughout it all, Mike has drawn upon his background in fish biology, marine ecology, data analysis, and stock assessments as a foundation for sound management. He's been willing to make the hard, sometimes unpopular decisions to safeguard the health of the resource, as evidenced by his leadership in the management of northern shrimp, striped bass, and river herring.

Mike's passion for applied research to address fisheries management questions is evident in a long list of publications in fisheries science and his endless initiatives to tackle knowledge gaps. In recent years, he has set into motion plans to investigate cod stock structure and site fidelity, understand and assess striped bass release mortality, examine black sea bass spawning behavior, and research winter flounder maturity and habitat use, among others. Mike was personally responsible for the creation of the Division's Age & Growth Lab that provides state staff, as well as state and federal partners, fish ageing data that are critical to stock assessments. This lab has been a major contributor to standardizing and advancing ageing techniques to improve regional stock assessments.

Over his more than 30-year career, Mike has become a leading voice in supporting scientific advice for sound, defensible decision-making. He's able to build consensus on actions with this as his beacon. With his upcoming retirement, we are going to lose an important advocate at Commission meetings. Thank you, Mike, for your outstanding commitment to fisheries science and management within the Commonwealth of Massachusetts, regionally, and along the entire Eastern seaboard.

### Awards of Excellence Recipients

We also had the opportunity to recognize a number of individuals for their outstanding contributions to management, scientific, and law enforcement efforts along the Atlantic coast.

***Management and Policy Contributions***

**Phil Edwards (RI DEM)** has been an active and integral member on several Commission species management boards over the years, including serving as Chair of the American Eel, and Shad and River Herring Management Boards. Management of these diadromous resources is challenging due to data limitations and the various threats they face throughout their extensive range between freshwater and ocean ecosystems. Under his leadership, Phil has been able to deftly guide management of these species. As board

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*FROM THE EXECUTIVE DIRECTOR'S DESK, continued from page 1*

chair and member on other boards, Phil has brought a wealth of knowledge and policy acumen to all his Commission endeavors, and the Commission at-large has benefited from Phil's work ethic, leadership, and expertise.


*ASMFC Executive Director Bob Beal, Award Recipients Deputy Chief Jason Snellbaker, Laura Lee, Nicole Lengyel Costa and Phil Edwards, and ASMFC Chair Joe Cimino (NJ)*

### *Scientific and Technical Contributions*

For many years, **Nicole Lengyel Costa (RI DEM)** has been an engaged and important member of several Commission technical committees, fish ageing projects, and plan development teams, and has served as Chair of the Atlantic Striped Bass Technical Committee for the past few years. In her role as Chair of the Striped Bass Technical Committee, Nicole has helped the Commission develop several particularly tricky management actions for the species, including recent actions to stop overfishing and aid in stock rebuilding. These actions were structurally complex and Nicole, working closely with her colleagues at the Commission, put together well-crafted documents in order for the public to understand and comment on these complicated proposed measures. In addition to her efforts with striped bass, Nicole is a long serving member of the ACCSP Operations Committee and has been involved with age and growth work used in stock assessments across Commission species. Nicole brings to all her endeavors a strong scientific skill set and a keen understanding of fisheries management policy. Her efforts not only benefit her home state but fisheries science and management activities along the entire East Coast.

**Laura Lee (USFWS)** has been involved in Commission stock assessments for nearly 25 years, including some of the first stock assessments for species such as Atlantic croaker, American eel, and spot. She has advanced fisheries science through the development of innovative approaches to common issues faced by stock assessments and the contribution of years of expertise and mentorship to numerous stock assessment subcommittees and scientists along the Atlantic coast. There is hardly a coastal Atlantic species Laura has not worked on, having been involved with or serving as chair on technical committees or stock assessment subcommittees for a multitude of species. Despite her formal transition off Commission and NC DMF committees due to her new role at USFWS, Laura continues to show her dedication to Atlantic species by regularly participating in committee meetings and providing valuable feedback to keep science projects moving forward. Through her efforts, she has advanced stock assessment modeling and training not only in North Carolina but for the vast majority of Commission-managed species.

### *Law Enforcement Contributions*

Since becoming a member of the Commission's Law Enforcement Committee (LEC) a decade ago, **Deputy Chief Jason Snellbaker** (NJ DEP Bureau of Law Enforcement) has promoted the role of law enforcement in fisheries management. He has represented the Committee on a number of species management boards, including tautog; summer flounder, scup, and black sea bass; Atlantic sturgeon; and bluefish. He has been the voice of the LEC on critical topics such as commercial tautog tagging and the summer flounder research set aside program. Jason elected to serve in a leadership role as Vice-chair and Chair during the pandemic, a particularly challenging time for the LEC as members were drawn to other responsibilities in their home states. At the state level, his exceptional leadership has been recognized by both NOAA's Office of Law Enforcement for his efforts in support of the Cooperative Enforcement Program, and by the Commission for his work as part of a team of officers working in the New Jersey Fish and Wildlife marine region. Jason's willingness to step into a leadership role during the pandemic, his ability to work as part of an effective law enforcement team, and his dedication to sharing his knowledge and expertise along the coast and internationally, speaks volumes to his commitment to the successful management of marine resources here and abroad.

Lastly, we had the pleasure of presenting **Tina Berger,** ASMFC Director of Communications, a piece of artwork in recognition for her 30 years of dedicated service to the Commission. Tina began at the Commission in 1994 under contract to coordinate a series of issue-driven workshops, became a full time employee the following year in the role as Public Affairs and Resource Specialist, and later was promoted to the position of Director of Communications in 2012. In that role, she has overseen the Commission's advisory panel process and spearheaded the development of many communication products, including this newsletter, the ASMFC website, youth educational materials, and supported staff on producing press releases, management documents, stock assessment reports, and numerous other communication documents. Tina is a valued and productive member of staff and we are excited to recognize Tina for reaching this impressive career milestone and thank her for decades of dedicated service.

# As Keystone Predators, Sharks Play a Critcal Role in Ocean Ecosystems

## Introduction

Members of the cartilaginous fish class Chondrichthyes, alongside rays, skates, and deepwater chimaeras, sharks are a remarkable group of fish with a complex history of management actions over the past 40 years. This is in part due to most sharks being highly migratory, meaning they routinely move across various state and federal boundaries. From nearshore to the open ocean, sharks are a vital part of marine ecosystems. Their ability to regulate populations of smaller fish makes them a keystone species with both direct and indirect impacts on other species. Due to the dynamic role sharks play in their environment, removing or reducing shark populations in an area can create an imbalance in the food web and have far reaching negative impacts. Therefore, the health of shark populations in an ecosystem is often an accurate indicator of the overall health of the system.

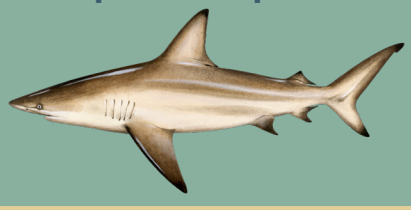
Unlike many other fish, sharks exhibit remarkably low reproductive potential, which stems from various factors such as slow growth, delayed sexual maturity, infrequent reproductive cycles spanning one to two years, small litter sizes, and specific nursery requirements. These biological factors make sharks highly vulnerable to overfishing; therefore, proactive management is needed to ensure shark populations remain at healthy levels.

With 40 species covered by the Commission's Interstate Fishery Management Plan (FMP) for Atlantic Coastal Sharks, this species profile is taking a different approach by highlighting the species or species groups with recent management activity and/or new stock assessment information. Life history, stock status, and fisheries information (where available) are provided in each of the following sections.

## Atlantic Coastal Management

Fisheries managers have been working to understand the life cycle and ecological role of sharks for decades. In the mid-1980s, sharks were considered an underutilized resource and commercial harvesters were encouraged to target them. Over the following years, fishing efforts increased considerably and the impact of unregulated harvest on some shark species became evident. In 1993, NOAA Fisheries implemented an FMP for Sharks of the Atlantic Ocean to rebuild depleted stocks and protect healthy stocks from overfishing. In 2008, the Commission adopted an Interstate FMP (and subsequently Addenda I-V) to complement federal management actions and increase protection of pregnant females and juveniles at inshore nursery areas. To ensure consistent cross-jurisdictional management, the Commission and state agencies work closely with NOAA Fisheries to set and implement complementary management measures for the 40 species of coastal sharks regulated by the Commission's FMP. Management measures usually target multiple shark species, which are classified into eight species groups (see table on next page).

## Species Snapshot



### Coastal Sharks

**Management Unit:** Maine through North Florida

**Class:** Chondrichthyes

**Interesting Facts**

- There are more than 500 species of sharks, ranging in size from 7 inches (dwarf lantern shark) to over 60 feet (whale shark) as adults
- Sharks have no bones; their skeletons are made of cartilage. Their teeth and other hard parts are hardened with calcium phosphate.
- Thresher sharks use their unique whip-like tail fin to herd fish in tight shoals and stun them.
- Great white sharks are the largest predatory fish in the sea.
- Mako sharks are the fastest of all shark species; reaching speeds of up to 60 mph when migrating or hunting.
- The bonnethead shark (type of hammerhead) can be identified by its shovel shaped head from bird's eye view.
- Smooth dogfish, *Mustelus canis*, are one of the most common sharks along the US Atlantic coast

**Life Span**

- Most sharks live 20 to 30 years in the wild, but some species can live far longer. At the extreme end of the longevity scale are Greenland sharks, which can live at least 272 years, making them the longest-lived vertebrate in existence.

**Stock Status**

- Varies by species.

## Species Overviews

### *Smoothhound Sharks*

Smoothhound sharks include smooth dogfish and Florida smoothhound. Florida smoothhound are found on the continental shelves of the subtropical western Atlantic, from Florida and the northern Gulf of Mexico to Venezuela. Smooth dogfish are more ubiquitous, distributed from New Brunswick, Canada, to Uruguay, and inhabit the bottoms of estuaries and coastal waters out to a depth of about 650 feet. During the spring and summer, most of the sharks are found in waters less than 60 feet deep. Both species are medium-sized, reaching a maximum length of about 5 feet, although fish in the 1- to 3-foot class are more common.

Smoothhound sharks are managed under Addenda I - V to the Interstate FMP. Addendum I (2009) modified recreational possession limits for smoothhound dogfish and other species, allowed seasonal at-sea processing of smooth dogfish, and improved the efficiency of net checking for bycatch. Addenda II and III, approved in 2013, addressed federal management changes for coastal sharks. Specifically, Addendum II

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| Coastal Shark Management Groups | |
|---|---|
| **Species Group** | **Species within Group** |
| **Prohibited** | Sand tiger, bigeye sand tiger, whale, basking, while, dusky, bignose, Galapagos, night, reef, narrowtooth, Caribbean sharpnose, smalltail, Atlantic angel, longfin mako, bigeye thresher, sharpnose sevengill, bluntnose sixgill, bigeye sixgill |
| **Research** | Sandbar |
| **Non-blacknose Small Coastal** | Atlantic sharpnose, finetooth, bonnethead |
| **Blacknose** | Blacknose |
| **Aggregated Large Coastal** | Silky, tiger, blacktip, spinner, bull, lemon, nurse |
| **Hammerhead** | Scalloped hammerhead, great hammerhead, smooth hammerhead |
| **Pelagic** | Shortfin mako, porbeagle, common thresher, oceanic whitetip, blue |
| **Smoothhound** | Smooth dogfish, Florida smoothhound |

allocated state shares of the coastwide smoothhound quota, and modified the maximum fin-to-carcass ratio, consistent with the Shark Conservation Act of 2010. Addendum III created two new species groups (hammerhead and blacknose) and increased the recreational size limit for hammerheads. Addendum IV (2016) modified regulations for at-sea handling and retention of smooth dogfish fins and carcasses to remain consistent with federal management measures. Addendum V (2018) provides the Board the ability to respond to changes in stock status of coastal shark populations and adjust regulations through Board action rather than an addendum, allowing for greater consistency between state and federal shark regulations.

### *Gear Modifications & Atlantic Shortfin Mako*

In addition to FMP's addenda, the Board has taken other actions to ensure the sustainable harvest and conservation of coastal sharks and remain consistent with federal management. In 2019, the Board approved changes to the gear requirements for recreational shark fishing, consistent with federal action approved in Highly Migratory Species (HMS) Amendment 11. For recreational shark fishing in state waters, anglers are required to use non-offset, corrodible, non-stainless steel circle hooks, except when fishing with flies or artificial lures. In 2022, the Board approved a zero retention limit for Atlantic shortfin mako sharks for both recreational and commercial fisheries in state waters. These measures are consistent with those implemented by NOAA Fisheries for federal HMS permit holders based on the International Commission for the Conservation of Atlantic Tunas recommendation.

*Scalloped hammerhead (c) Terry Goss, Marine Photobank*

### *Large Coastal Sharks*

The aggregated large coastal sharks (LCS) group consists of silky, tiger, blacktip, spinner, bull, lemon, and nurse sharks. These apex predators inhabit tropical and subtropical waters worldwide, often frequenting nearshore areas, estuaries, and coral reefs. Reproductive strategies vary among species: the silky, tiger, blacktip, spinner, and bull sharks are viviparous, meaning they give birth to live young after a gestation period, while the lemon and nurse sharks are oviparous, meaning they lay eggs encased in a leathery pouch, called a "mermaid's purse" that develops externally. Despite these differences, all species have slow reproductive rates and long gestation periods, contributing to their vulnerability to overfishing and habitat degradation. For all LCS species, excluding the silky shark, anglers are permitted to harvest no more than one shark per day with a minimum size limit of 54 inches. In 2021, approximately 181,000 pounds dressed weight (dw) of LCS were commercially harvested and 62,635 LCS were taken recreationally. For the silky shark, harvest is prohibited. For this management group, stock status is currently unknown.

### *Hammerheads*

The hammerhead species group includes the scalloped, great, and smooth hammerheads. These sharks are characterized by their unique hammer-shaped heads, known as cephalofoils. They are found in tropical and temperate waters worldwide, often near coastlines and continental shelves. Hammerheads have distinct reproductive strategies, with scalloped and smooth hammerheads exhibiting viviparity (live birth) and great hammerheads exhibiting ovoviviparity, meaning embryos develop inside egg capsules within the mother and hatch out internally before they are born. Mating typically occurs in coastal areas, followed by a gestation period ranging from several months to a year or more. Hammerheads have relatively slow growth rates and long lifespans. For all three of these species, anglers are permitted to harvest no more than one shark per day with a minimum size limit of 78 inches. In this management group, the scalloped hammerhead is currently overfished and experiencing overfishing; stock status is unknown for smooth and great hammerheads.

### *Pelagic Sharks*

The oceanic or pelagic management group consists of shortfin mako, porbeagle, common thresher, oceanic whitetip, and blue sharks. These sharks typically inhabit open ocean environments, ranging from tropical to temperate seas depending on the species. Their migrations can span thousands of miles, making them vital components of marine ecosystems across various regions. These pelagic sharks employ diverse reproductive strategies. Some species, such as the shortfin mako and porbeagle, give birth to live young after a gestation period that can last for several months to over a year. In contrast, the common thresher, oceanic whitetip, and blue shark exhibit

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## American Eel Board Approves Addenda VI and VII *Addenda to Maintain Maine's Glass Eel Quota and Modify Yellow Eel Management*

*Photo (c) Brian Gratwicke*

In May, the American Eel Management Board approved Addenda VI and VII to the Interstate Fishery Management Plan for American Eel. Addendum VI maintains Maine's quota at the current level of 9,688 pounds for 2025-2027. Addendum VII reduces the coastwide cap for yellow eel commercial landings to 518,281 pounds, modifies annual young-of-year (YOY) monitoring requirements, and changes the policy for evaluating *de minimis* status.

### *Addendum VI*

Maine's glass/elver eel quota of 9,688 pounds was established by Addendum IV starting in 2015 and maintained under Addendum V through 2024. The Board initiated Addendum VI to establish a quota for 2025 and beyond. The Board will review the quota before the 2028 fishing year and can extend it via Board action.

Maine commercial glass eel landings have not exceeded the quota since its implementation. The Maine Department of Marine Resources (ME DMR) manages the quota using a program that requires dealers to enter daily landings data and enables ME DMR to analyze those data within 24 hours of receipt. The quota management program allows ME DMR to track the glass eels from initial purchase to export out of the state.

Maine will continue to maintain daily trip level reporting and require a pound-for-pound payback in the event of quota overages in its glass eel fishery. Additionally, the state will continue to conduct the fishery-independent life cycle survey covering glass, yellow, and silver eels as required by Addendum V.

### *Addendum VII*

Addendum VII responds to the findings of the 2023 Benchmark Stock Assessment and Peer Review Report, which indicated the stock is at or near historically low levels due to a multitude of factors, including historical overfishing, habitat loss, food web alterations, turbine mortality, environmental changes, contaminants, and disease. The assessment and peer review recommended reducing harvest levels of the yellow eel life stage, while also recognizing that stock status is affected by other factors. The assessment proposed a new index-based tool, called $I_{TARGET}$, for setting the yellow eel coastwide cap, since there is not a statistical model for estimating the population size of American eel. Addendum VII adopts the use of $I_{TARGET}$ to provide catch limit recommendations based on fishery-independent indices of abundance and catch data with the goal of increasing abundance levels. The new coastwide cap of 518,281 pounds, a reduction from 916,473 pounds, can be updated after three years using the additional years of abundance and catch data.

"In approving Addendum VII and its reduced landings cap, the Board sought to balance responding to the recommendations of the benchmark stock assessment to aid in the recovery of American eel while also allowing for a commercial fishery," stated Board Chair Kris Kuhn of Pennsylvania. "$I_{TARGET}$ provides the Board a much-needed tool for setting the coastwide cap."

The Board slightly modified the requirements of the annual YOY survey by making the biological sampling requirement for YOY surveys optional, as recommended by the assessment and peer review. In addition, Addendum VII establishes use of a three-year average of landings to determine if a state qualifies for *de minimis* status and can be exempt from implementing fishery regulations and monitoring requirements.

Addendum VII is available at https://asmfc.org/uploads/file/6644c67bAmEelAddendumVII_May2024.pdf and Addendum VI will be available on the Commission website on the American Eel webpage by the end of June. For more information, please contact Caitlin Starks, Senior Fishery Management Plan Coordinator, at cstarks@asmfc.org.

*COASTAL SHARKS SPECIES PROFILE, continued from page 6*

ovoviviparity. These reproductive strategies are adapted to the challenges of the open ocean environment, where resources may be scarce and the ability to protect offspring during development is crucial. Management varies by species. For porbeagle, common thresher, and blue sharks, anglers are permitted to harvest no more than one shark per day with a minimum size limit of 54 inches, whereas harvest of shortfin mako is prohibited. In 2021, commercial fisheries landed 98,514 lbs dw of Atlantic pelagic sharks.

In May 2024, the Coastal Sharks Board established a zero possession limit for oceanic whitetip sharks for recreational and commercial fisheries. This is consistent with regulations implemented by NOAA Fisheries in response to the 2018 determination that oceanic whitetip sharks warranted listing as a threatened species under the Endangered Species Act throughout its range, and a 2020 Biological Opinion that encouraged the inclusion of the species on the HMS list of prohibited sharks for recreational and commercial HMS fisheries. Stock status for pelagic shark species varies; both the porbeagle and blue shark are not overfished nor experiencing overfishing, shortfin mako is currently overfished and experiencing overfishing, and stock status is unknown for all other pelagic species. For more information, please contact Caitlin Starks, Senior Fishery Management Plan Coordinator, at cstarks@asmfc.org.

## States Schedule Public Hearings on Atlantic Cobia Draft Addendum II

The Atlantic coastal states of New York through Georgia have scheduled hearings to gather public input on Draft Addendum II to Amendment 1 to the Interstate Fishery Management Plan for Atlantic Cobia, which considers recreational allocation, harvest target evaluation, and the timeline for setting management specifications. Some hearings will be conducted in-person, and some hearings will be conducted via webinar. If you are unable to participate in your state's scheduled hearing, you are welcome to participate in any of the virtual hearings; see accompanying hearing schedule.

| Date and Hearing Format | State/Agency | Contact |
|---|---|---|
| **Wednesday, June 5**<br>***In-person Hearing***<br>6:00 – 8:00 p.m. | **Georgia Dept. of Natural Resources**<br><br>***Hearing Location:***<br>Sapelo Saltwater Fishing Club<br>3576 Old Shellman Road<br>Townsend, GA 31331 | Doug Haymans<br>912.264.7218 |
| **Thursday, June 6**<br>***In-person Hearing***<br>6:00 – 8:00 p.m. | **South Carolina Dept. of Natural Resources**<br><br>***Hearing Location:***<br>Port Royal Sound Foundation Maritime Center<br>310 Okatie Highway<br>Okatie, SC 29909 | Ben Dyar<br>843.953.9841 |
| **Tuesday, June 11**<br>***In-person Hearing***<br>6:30 – 8:30 p.m. | **North Carolina Dept. of Environmental Quality**<br><br>***Hearing Location:***<br>Dare County Administration Building<br>954 Marshall Collins Drive<br>Room 168<br>Manteo, NC 27954 | Chris Batsavage<br>252.241.2995 |
| **Wednesday, June 12**<br>***In-person Hearing***<br>6:00 – 8:00 p.m. | **Virginia Marine Resources Commission**<br><br>***Hearing Location:***<br>Virginia Marine Resources Commission<br>380 Fenwick Road, Building 96<br>Fort Monroe, VA, 23651 | Shanna Madsen<br>757.247.2200 |
| **Thursday, June 20**<br>***Webinar Hearing***<br>6:00 – 8:00 p.m. | **South Carolina Dept. of Natural Resources and Georgia Dept. of Natural Resources**<br><br>*The webinar registration link is available here, and additional webinar instructions are below.* | Ben Dyar (SC)<br>843.953.9841<br>Doug Haymans (GA)<br>912.264.7218 |
| **Monday, June 24**<br>***Webinar Hearing***<br>6:00 – 8:00 p.m. | **Maryland Dept. of Natural Resources, Virginia Marine Resources Commission, and North Carolina Dept. of Environmental Quality**<br><br>*The webinar registration link is available here, and additional webinar instructions are below.* | Lynn Fegley (MD)<br>410.260.8285<br>Shanna Madsen (VA)<br>757.247.2200<br>Chris Batsavage (NC)<br>252.241.2995 |
| **Tuesday, June 25**<br>***Webinar Hearing***<br>6:00 – 8:00 p.m. | **New York State Dept. of Environmental Conservation, New Jersey Dept. of Environmental Protection, and Delaware Dept. of Natural Resources and Environmental Control**<br><br>*The webinar registration link is available here, and additional webinar instructions are below.* | John Maniscalco (NY)<br>631.444.0437<br>Joe Cimino (NJ)<br>609.748.2063<br>John Clark (DE)<br>302.739.9108 |

The Coastal Pelagics Management Board initiated the Draft Addendum to consider updating recreational allocations using more recent harvest data, which reflects increased cobia landings in some Mid-Atlantic states in recent years. Draft Addendum II presents options for Atlantic cobia management, including a framework for recreational allocation, ways to account for data uncertainty and respond to quota overages, and an extended multi-year specification setting. For the recreational allocation framework, Draft Addendum II considers options for the data timeframe to form the basis for allocations, and options for the geographic scope of allocations (state-by-state, regional, or coastwide).

### *Webinar Instructions*

Please note that in order to comment during virtual webinar hearings you will need to use your computer or download the GoTo app for your phone. Those joining by phone only will be limited to listening to the presentation and will not be able to provide input. In those cases, you can send your comments to staff at comments@asmfc.org or US mail at any time during the public comment period. To attend the webinar in listen only mode, dial 562.247.8422 and enter access code 240-122-968. If you are unable to participate in your state's scheduled hearing, you are welcome to participate in any of the virtual hearings.

For all virtual hearings, please go to https://attendee.gotowebinar.com/rt/4078966477099083616 and select the hearing(s) you plan to attend from the dropdown menu to register for a public hearing webinar. Hearings will be held via GoToWebinar, and you can join the webinar from your computer, tablet or smartphone. If you are new to GoToWebinar, you can download the software at https://support.goto.com/webinar/help/how-do-i-download-goto-webinar or via the App store under GoTo. We recommend you register for the hearing well in advance of the hearing since GoToWebinar will provide you with a link to test your device's compatibility with the webinar. If you find your device is not compatible, please contact the Commission at info@asmfc.org (subject line: GoToWebinar help) and we will try to get you connected. We also strongly encourage participants to use the computer voice over internet protocol so you can ask questions and provide input at the hearing.

### *Hearing Presentation Recording*

For those who cannot attend any in-person or virtual hearings, a recording of the hearing presentation can be found at https://youtu.be/pl53Nq7s7-w or on the Commission's YouTube page so that stakeholders may watch the presentation and submit comment at any time during the comment process. This recording will be available by early June, with the recording link provided at https://asmfc.org/about-us/public-input.

### *Submitting Comments*

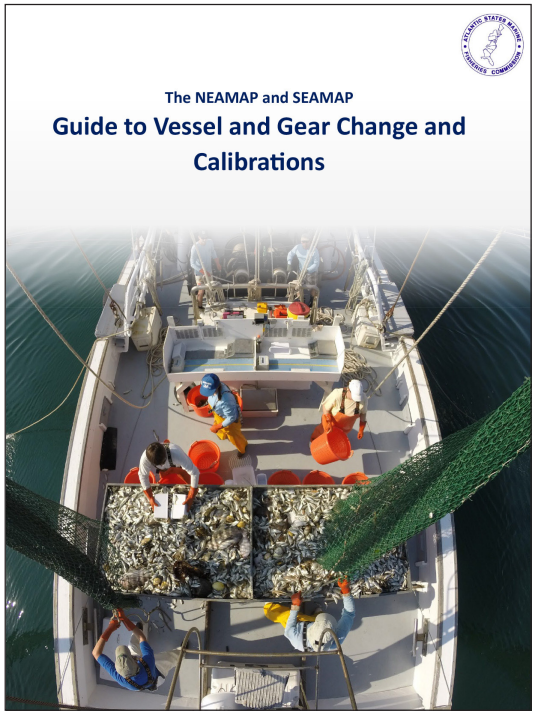
The Draft Addendum is available at https://asmfc.org/files/PublicInput/AtlCobiaDraftAddII_PublicComment_May2024.pdf or on the Commission's Public Input webpage at https://asmfc.org/about-us/public-input. All those interested in the management of Atlantic cobia are encouraged to provide input either by participating in public hearings, which may be conducted in-person or via webinar, or providing written comment. Public comment will be accepted until 11:59 PM (EST) on July 8, 2024, and should be sent to Emilie Franke, FMP Coordinator, at 1050 N. Highland St., Suite 200 A-N, Arlington, Virginia 22201; or at comments@asmfc.org (Subject line: Cobia Draft Addendum II).

## Ensuring the Longevity of Long-Term Fishery-Independent Surveys

Commemorating NOAA's Northeast Bottom Trawl Survey's 60th anniversary, Phil Politis, the Bottom Trawl Survey Program Lead at NOAA's Northeast Fisheries Science Center reflected on the value of the survey, "I mean, that's really the big benefit of a long-running time series. At its core, what we're doing is collecting the baseline fishery-independent information that's going into the regional fish stock assessments. We're able to look at that across a very long timeframe. This is a time series that can look at, 'What did these populations look like in 1970s?' Well, look what they look like now. What are the ocean temperatures looking like? Is that a factor? Is that driving fish north? And the only way to do that is to look at these things over a long time."

This federal survey is just one of many fishery-independent surveys conducted in the waters of the US East Coast. The goal of these surveys is to provide unbiased, accurate data that management agencies like the Commission can use to make well-informed decisions about daily interactions with the marine world.

These surveys are often conducted by state or federal agencies and are designed by scientists to provide an unbiased estimate of fish populations. Much like NOAA's Northeast Bottom Trawl Survey, many of the state-run fishery-independent surveys have been conducted for decades to give managers long-term, consistent data that can help them better understand trends in populations based on their historic management decisions or a changing climate. However, the problem with having a long-running survey is that equipment and vessels have an expiration date. The nets used to catch fish samples and the vessels that perform the surveys can become outdated or difficult to repair after weather damage, mechanical failure, or just repeated exposure to saltwater environments. In highly scientific surveys, replacing the boat or survey equipment is not as easy as calling up the manufacturer and having them send over a new one. Consistency is key in these types of surveys but each individual




net and boat acts differently in the water. For example, if a survey replaces a net that they have been using for the past three seasons with a new net from the same manufacturer, the new net might perform better and catch more fish, which could bias the time series data. Even boats can travel differently through the water and cause a difference in catch.

To account for this, surveys have to perform calibrations for their gear and vessels when switching their equipment. These calibrations are meant to find specific calibration factors for each survey's target species, but finding calibration factors can be costly and time-intensive. For trawl surveys, one of the most accurate ways to see the differences between vessels and nets is to perform a side-by-side paired tow which requires a double of everything — two boats, two nets, and even two crews. Then, all of the samples from each tow have to be processed to find specific differences between the trawl conducted with the new vessel or gear and the old. This is the calibration factor which is then used to analyze any new data that is collected using the new gear. Using this process, the time series can be used as one whole data set to give managers and scientists a more accurate understanding of population trends for different species in the area where the survey is being conducted.

However, paired tows are not always possible because of a lack of crew, funding, or the appropriate equipment. To tackle this problem, two survey programs the Commission helps coordinate — the Southeast Area Monitoring Program-South Atlantic (SEAMAP-SA) and the Northeast Area Monitoring Program (NEAMAP), which are composed of state-run surveys from Maine to Florida — came together for three days in January 2024 to discuss ways to ensure the longevity of their surveys. Experts from the state surveys within NEAMAP and SEAMAP, NOAA, and Canada's Memorial University of Newfoundland met to present the best practices for calibrating vessels and gear and understanding the best statistical methods to address calibrations. After three days of presentations and discussions, the workshop participants compiled a list of best practices to follow when switching vessels and gear and recommendations for statistical analysis of calibration data. The group has recently released a white paper that summarizes their workshop findings with the hope that by consistently following these practices, changing vessels and gears will become easier across the US East Coast. The white paper can be found at https://asmfc.org/files/pub/GuideToVessel_GearChange_Calibrations_April2024.pdf.

One of the biggest takeaways from this workshop was the importance of communication between surveys. When state and federal agencies talk to one another, they can better come up with ways to find solutions to common problems. To continue this conversation and see what else can be learned from one another, the NEAMAP/SEAMAP programs hope to host an in-person vessel and gear workshop in the fall.

For more information, please contact Jainita Patel, Science Committee Coordinator, at jpatel@asmfc.org.

## ACCSP Featured in Oracle's Business Innovations with Oracle APEX Series

In a recent session titled "Using Oracle APEX/Low Code Solutions to Collect Atlantic US Saltwater Fisheries Data-Customer Story," the Atlantic Coastal Cooperative Statistics Program (ACCSP) showcased its extensive use of Oracle tools to revolutionize fisheries data management along the Atlantic coast. The session, lasting one hour, delved into ACCSP's journey of employing Oracle databases and applications to standardize and centralize fisheries-dependent data collection, enabling more efficient natural resource management. Featured speakers included Geoff White and Julie DeFilippi Simpson (ACCSP), Karen Cannell (TH Technology), Jim Czuprynski (Zero Defect Computing), and Salim Hlayel (Oracle). A recording of the session can be found on YouTube (https://youtu.be/gf0vsCm4-qU?si=68gxMGQwZxhGGSB5).

Established in 1995 as part of the Fisheries Information Networks initiative, ACCSP has been instrumental in improving the consistency, compatibility, and accessibility of saltwater fish data. With representatives from 23 marine fisheries management agencies, including federal, state, and regional bodies, ACCSP has worked tirelessly to develop standardized data collection methods and systems.

A key aspect of ACCSP's success lies in its adoption of Oracle technologies, particularly Oracle APEX (Application Express), Forms, and Oracle Spatial. These tools have facilitated the development of internal systems and the creation of the Standard Atlantic Fisheries Information System (SAFIS) suite of applications. These applications include electronic commercial dealer reporting and catch reporting for commercial, for-hire, and recreational harvesters.

During the session, ACCSP provided insights into its long-standing partnership with Oracle and demonstrated key features of its applications, emphasizing the role of APEX, Oracle Spatial, and Real Application Security (RAS). Attendees had the opportunity to interact with ACCSP staff through a Q&A session, gaining valuable insights into the practical application of Oracle tools in the realm of fisheries data management.

ACCSP's commitment to providing these tools and applications at no cost to users underscores its dedication to supporting effective natural resource management. By streamlining data collection and management processes across jurisdictions, ACCSP has significantly contributed to the sustainability of Atlantic coast fisheries.

The session not only highlighted ACCSP's achievements but also served as a testament to the transformative power of Oracle technologies in addressing complex challenges in the realm of environmental conservation and resource management.

As ACCSP continues to evolve and innovate with Oracle, the organization remains at the forefront of fisheries data management, setting a benchmark for collaborative efforts in preserving marine ecosystems and supporting sustainable fishing practices along the Atlantic coast.

*ACCSP is a cooperative state-federal program focused on the design, implementation, and conduct of marine fisheries statistics data collection programs and the integration of those data into a single data management system that will meet the needs of fishery managers, scientists, and fishermen. For further information please visit www.accsp.org.*

# Comings & Goings

## STAFF

**MICHAEL OPIEKUN**

On May 16th, Michael Opiekun joined the Commission staff as the ACCSP Data Team Lead. In this position, Michael will oversee the activities of the data team, providing guidance on catch, landings, and biological sampling data related activities, including standards, data collection, data warehousing, and data dissemination through ACCSP systems. He will also facilitate support to partner agencies to maintain data feeds and for data-intensive activities. Michael comes to us from the Inter-American Tropical Tuna Commission, where he worked on the Tuna Tagging Program, processing tag return data (including data entry), managing and improving databases for a more a streamlined interface, and overseeing general management of long-term datasets. He also has experience in synthesizing data for use in stock assessments. Michael studied Gulf of Alaska salmon production for his Master of Science degree at the University of South Carolina. He received his Bachelor of Science from the University of Miami, majoring in marine science, physics and biology. Please join us in welcoming Michael to our staff.

## ASMFC Schedules Horseshoe Crab Management Objectives Workshop for July 15-16 in Lewes, Delaware

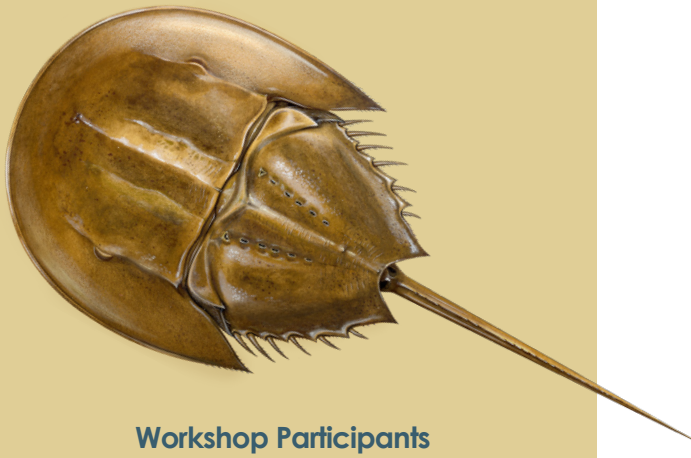
The Commission's Horseshoe Crab Management Board is convening a stakeholder workshop aimed at generating recommendations for Board consideration regarding horseshoe crab management in the Delaware Bay region. The workshop responds to public concern and differing positions related to use of the Adaptive Resource Management (ARM) Framework, which describes acceptable harvest levels for the Delaware Bay bait fishery based on the abundance of horseshoe crabs and shorebirds. The participants represent a range of perspectives reflecting various stakeholder interests, including horseshoe crab and shorebird/rufa red knot biologists; environmental organizations; commercial harvesters and dealers; biomedical industry representatives; and resource managers (see right for participants). Each stakeholder representative is encouraged to solicit input from other others within their stakeholder group so workshop participants can better understand and consider all perspectives as they work to develop consensus recommendations for Board consideration.

The workshop will be facilitated by Dr. Kristina Weaver, who recently moderated a Virginia Institute of Marine Science workshop to develop a plan for the study of Atlantic menhaden in Chesapeake Bay. Dr. Weaver brings expertise in facilitation and mediation to empower communities to create shared solutions for complex social and environmental problems.

The public is welcome to attend the workshop. Since the workshop will be a working meeting, there may be a limited opportunity for the public to provide comments at the end of the meeting. The workshop will be conducted from July 15-16 at the Delaware Department of Natural Resources & Environmental Control Lewes Field Office, 901 Pilottown Road, Lewes, Delaware 19958.

It is important to note that no management decisions are being formulated or acted upon at the workshop. The meeting is intended to initiate discussions on ecosystem and management objectives, identify common ground among divergent stakeholder views, and develop options for Board discussion and consideration. For more information or if you plan to attend the workshop, please contact Caitlin Starks, Senior Fishery Management Plan Coordinator, at cstarks@asmfc.org, or James Boyle, Fishery Management Plan Coordinator, at jboyle@asmfc.org.

*Horseshoe crabs (c) Kevin Kalasz, DE DNREC*



### Workshop Participants

***Horseshoe Crab Biologists***
John Sweka, US Fish and Wildlife (USFWS)
Jordan Zimmerman, Delaware Department of Natural Resources (DE DNREC)

***Shorebird/Rufa Red Knot Biologists***
Henrietta Bellman, Audubon Society
Wendy Walsh, USFWS

***Environmental NGOs***
Lisa Ferguson, Wetlands Institute
Tim Dillingham, American Littoral Society
Jim White, Delaware Nature Society

***Biomedical Repsresentatives***
Allen L. Burgenson, Lonza
Nora Blair, Charles River Laboratories

***Horseshoe Crab Fishing Industry***
Jeff Eutsler
Craig D Pugh
Sam Martin

***Delaware Bay State Managers***
Joe Cimino, New Department of Environmental Protection
John Clark, DE DNREC
Mike Luisi, Maryand Department of Natural Resources
Shanna Madsen, Virginia Marine Resources Commission

***Facilitator***
Dr. Kristina Weaver (Institute for Engagement ment and Negotiation, University of Virginia)

## Alex DiJohnson Named Employee of the Quarter

Alex DiJohnson, ACCSP Recreational Data Team Lead, was named Employee of the Quarter (EOQ) for the first Quarter of 2024 in recognition of his work on several projects essential to the success of ACCSP and the Marine Recreational Information Program (MRIP). Highlights of these projects include an unusually high level of activity for the ACCSP Recreational Technical Committee on developing a proposal on MRIP released fish enumeration, continued development of the for-hire logbook methodology, and supporting implementation of updated recreational fisheries queries via the Data Warehouse.

Since becoming Recreational Data Team Lead in November 2019, Alex has been keeping partners engaged in MRIP state conduct of the Access Point Angler Intercept Survey and For-Hire Telephone Survey, as well as overseeing data submissions and wave report completions due to MRIP. His leadership, extensive facilitation, and project management skills have improved the committee process, ensuring the ACCSP Recreational Team meets all of its data delivery timelines, thereby enabling fishery managers, scientists, and other stakeholders to make better decisions. He also recently took on additional tasks to update the state cooperative agreements and annual budget consolidation. In total, these projects have shown his commitment to the program and its partners.

Alex's organization and leadership across ACCSP teams for the recreational query updates using AGILE management was exemplary. The project significantly revamped access to MRIP catch data and preserved partner access to wave level estimates. Due to his collaboration with other staff, the transition was seamless for both internal and external users. His positive attitude and practical approach have contributed substantially to the quality of data provided by program partners and made available through ACCSP systems.

As EOQ recipient, Alex received a cash award and a letter of appreciation to be placed in his personal record. In addition, his name is on the EOQ plaque displayed in the Commission's lobby. Congratulations, Alex!