Volume 30, Issue 4 November/December 2021



FISHERIES FOCKS

Vision: Sustainable and Cooperative Management of Atlantic Coastal Fisheries

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MAFMC & ASMFC Approve Changes to Commercial and Recreational Allocations of Summer Flounder, Scup, and Black Sea Bass Changes Expected to be Effective January 1, 2023

The Mid-Atlantic Fishery Management Council (Council) and the Atlantic States Marine Fisheries Commission's Summer Flounder, Scup, and Black Sea Bass Board (Board) approved changes to the commercial and recreational allocations of summer flounder, scup, and black sea bass during a joint meeting this December in Annapolis, Maryland. These changes are intended to better reflect the current understanding of the historic proportions of catch and landings from the commercial and recreational sectors. The modified allocations are provided in the table below.

	Current Allocations	Revised Allocations	
Summer Flounder	60% Commercial; 40% Recreational	55% Commercial; 45% Recreational	
	Landings-based	Catch-based	
Scup	78% Commercial; 22% Recreational	65% Commercial; 35% Recreational	
	Catch-based	Catch-based	
Black Sea Bass	49% Commercial; 51% Recreational	45% Commercial; 55% Recreational	
	Landings-based	Catch-based	

Note: Landings-based allocations are based on each sector's harvest only. Catch-based allocations are based on each sector's harvest plus dead discards.

The current commercial and recreational allocations for all three species were set in the mid-1990s based on historical proportions of landings (for summer flounder and black sea bass) or catch (for scup) from each sector. The Council and Board developed this amendment partly in response to recent changes in how recreational catch is estimated by the Marine Recreational Information Program (MRIP), which resulted in a revised time series of recreational data going back to the 1980s. This created a mismatch between the data that were used to set the allocations and the data currently used in management for setting catch limits. In addition, some changes have been made to commercial catch data since the allocations were established.

The amendment contained a range of allocation alternatives, with options that would maintain the current allocations and a variety of options to revise the allocations based on updated data using the same or modified "base years" (the time periods used to set the current allocations). The Council and

continued, see MAFMC & ASMFC on page 15

he 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 Afteen member states of the Commission are: Maine, New Hampshire. Massachusetts. Rhode Jsland, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, and Florida.

Atlantic States Marine Fisheries Commission

A.G. "Spud" Woodward (GA), Chair Joseph Cimino (NJ), Vice-Chair

Robert E. Beal, Executive Director

Patrick A. Campfield, Science Director

Toni Kerns, ISFMP Director

Laura C. Leach, Director of Finance & Administration

Geoff White, ACCSP Director

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Upcoming Meetings

December 22 (9 - 11 a.m.)

Atlantic Menhaden Plan Development Team; visit <u>http://www.asmfc.org/</u> <u>calendar/12/2021/Atlantic-Menhaden-Plan-Development-Team/1823</u> for more information

2022

January 4 (1 - 3 p.m.)

Atlantic Menhaden Plan Development Team; visit <u>http://www.asmfc.org/</u> <u>calendar/1/2022/Atlantic-Menhaden-Plan-Development-Team/1824</u> for more information

January 5 (10 a.m. - Noon)

Atlantic Striped Bass Plan Development Team; visit <u>http://www.asmfc.org/</u> <u>calendar/1/2022/atlantic-striped-bass-plan-development-team/1846</u> for more information

January 6 (1 - 2:30 p.m.)

Jonah Crab Technical Committee and Stock Assessment Subcommittee; visit <u>http://www.asmfc.org/calendar/1/2022/jonah-crab-technical-committee-and-stock-assessment-subcommittee/1849</u> for more information

January 6 (3 - 5 p.m.)

Atlantic Striped Bass Advisory Panel; visit <u>http://www.asmfc.org/calendar/1/2022/</u> <u>Atlantic-Striped-Bass-Advisory-Panel/1876</u> for more information

January 12 (5 - 7 p.m.)

Atlantic Menhaden Advisory Panel; visit <u>http://www.asmfc.org/calendar/1/2022/</u> <u>atlantic-menhaden-advisory-panel/1858</u> for more information

January 24 - 28

Haddock Research Track Assessment Peer Review; visit <u>https://www.fisheries.noaa.</u> <u>gov/event/haddock-2021-research-track-assessment-peer-review-meeting</u> for more information

January 25 - 27

ASMFC Winter Meeting, The Westin Crystal City, 1800 Richmond Highway, Arlington, VA; visit <u>http://www.asmfc.org/home/2022-winter-meeting</u> for more information

February 1 - 3

New England Fishery Management Council, AC Hotel, Portsmouth, NH

February 8 - 10

Mid-Atlantic Fishery Management Council, Durham Convention Center, 301 W. Morgan Street, Durham, NC

March 7 - 11

South Atlantic Fishery Management Council, Westin Jekyll Island 110 Ocean Way Jekyll Island, GA

March 29 & 30

2022 National Saltwater Recreational Fishing Summit, The Westin Crystal City, 1800 Richmond Highway, Arlington, VA; visit <u>https://www.fisheries.noaa.gov/event/2022-national-saltwater-recreational-fisheries-summit</u> for more information

A Time for Celebration and Reflection

November 3rd marked Laura Leach's 40th anniversary with the Atlantic States Marine Fisheries Commission. For those of you who know Laura (and everyone knows Laura), she is in a class of her own and this momentous milestone further distinguishes her from the scores of people who have worked for the Commission. No one has ever achieved this milestone in the nearly 80 years of the Commission. I love sports analogies and Laura's tenure is comparable to Cal Ripken Jr.'s 2,632 consecutive games or Tom Brady's seven Super Bowl victories. Passionate, caring, dedicated, and accomplished are some of the words that I would use to describe her.

Laura began her career with the Commission as a bookkeeper in 1981 and has held many positions since then from Comptroller to Assistant Director to Council Liaison to serving as Acting Executive Director over three different periods. You all know her as our Director of Finance and Administration, which she has been for at least two decades. Over her career, the Commission budget increased from \$130,000 in 1981 to \$17.5 million in 2021, while staff size increased from just a handful of people in the 1980s to over 75 in our Arlington office and scattered along the coast in a number of our member states. She has managed our financial growth with skillful efficiency and oversaw staff growth through several arduous office moves. Under her careful financial management, she orchestrated the purchase of the Commission's current office in Arlington, VA. Last year marked the final payment of the office mortgage, resulting in huge financial savings for the Commission now and for many years to come.

In addition to Laura's professional accomplishments are her less concrete but equally important contributions to the Commission staff, Commissioners and proxies, and our federal partners: the depth of her caring and commitment to the Commission "family." Her unofficial titles include Camp Counselor, Party Planner, Morale Officer, and Activities Director. You've all experienced it in some way. The time and care that she invests in people and their lives, providing guidance when asked and support when needed. Her famous, sought-after home-baked cookies that somehow taste like friendship and comfort. The time and effort she has dedicated to Commissioners' spouses, providing unique and fun activities during our annual meetings while Commissioners are hard at work. She will always go the extra mile for you. Need to make it to the airport after an overly long Commission meeting? Laura is there to say "get in, buckle up, and I will not let you miss your flight." Broke your glasses while at a Commission meeting? Laura is the first to go out to try and get them fixed or replaced. I could go on and on. When I joke with

Laura about when she might retire, her response is always "but how can I leave my family?"

Without a doubt, Laura is the heart and soul of the Commission and when she does decide to leave, the Commission will be forever changed. I am deeply indebted to her for all she has done for me as Executive Director and for the Commission these past four decades. Thanks my friend and co-worker, and congratulations on 40 outstanding years with the Commission!

I also wanted to take the time to congratulate Jennifer Ni, ACCSP Data Analyst, for reaching her 20th year anniversary with the Commission. An original ACCSP staff member, Jennifer has been an integral part of the growth of the program. While her role is largely behind the scenes, Jennifer is responsible for loading all of the data commercial, recreational, and biological - that are visible and used by the ACCSP partners. Jennifer's knowledge, expertise, and awareness of the current and past state of data in ACCSP is invaluable to the Data Team, ACCSP, and the Commission. Not only does Jennifer excel at her job, but she is kind and funny and brings a positive and enthusiastic energy to her job that is infectious. The Commission and ACCSP are extremely lucky to have Jennifer as a part of our family. Congratulations on 20 years and here's to many more!

On a more somber note, Mike Cahall, former ACCSP Director, passed away on November 18th. Many of you knew Mike during his time developing and leading ACCSP from 1998-2019. Under his visionary leadership, ACCSP enjoyed tremendous growth, becoming the principal source of marine fishery statistics for the U.S. Atlantic coast that program partners had envisioned it to be when they created the ACCSP in the mid-1990s. Both innovative in his problem solving and deft at seeking funding, Mike was able to spearhead projects that significantly advanced ACCSP's mission and objectives, including tablet and mobile data entry apps for dealers, commercial harvesters, and the forhire industry. He was an integral part of the ACCSP family, supporting the growth of the program, partnerships, and staff. Mike left us too early, just two years after his retirement. But I can say with 100% confidence that Mike made the very best of those two years, filling them with his effervescent joy of life, community, and family. Rest in peace, Mike.

To you all, I wish you a very happy and healthy holiday season. Best wishes and thanks for the fishes.

Species Profile: Northern Shrimp

Resource Struggles to Rebuild in the Face of Unfavorable Environmental Conditions

Introduction

Historically, northern shrimp, *Pandalus borealis*, have supported a small but important fishery in the Gulf of Maine (GOM), with average annual landings valued at six million dollars per year since 1980. Currently, the northern shrimp stock is considered collapsed, with a fishery moratorium in place since 2014.

The 2021 Stock Assessment Update indicates the GOM northern shrimp population remains depleted. Given the continued poor condition of the resource, the extremely low likelihood of being able to fish sustainably, and the value of maximizing spawning potential to rebuild the stock if environmental conditions improve, the Commission's Northern Shrimp Section (Section) determined at its December meeting that a continuation of the moratorium is the best course of action. This decision aligns with the primary management objective of the Northern Shrimp Fishery Management Plan (FMP) that requires the Section to protect and maintain the stock at sustainable levels that support a viable fishery. An additional FMP objective requires the Section to minimize the adverse impacts the shrimp fishery may have on other natural resources, including other commercially important fish that prey on northern shrimp.

Life History

Northern shrimp are found in boreal waters of the North Atlantic, North Pacific and Arctic Oceans. On the U.S. Atlantic coast, the GOM is considered the southernmost extent of their range, and concentrations generally occur in the western part of the Gulf where temperatures are the coldest.

Northern shrimp are hermaphroditic, maturing first as males at roughly 2 ½ years of age and then transforming to females at about 3 1/2 years. In the GOM, northern shrimp populations are part of a single stock. Spawning takes place in offshore waters during the late summer. Females extrude their eggs onto the abdomen and move into inshore waters in late fall and winter, where the eggs hatch. Larvae metamorphose to a juvenile state and remain in inshore waters for over a year before migrating to deeper waters where they mature as males and later transition to females. Females that survive their first egg hatch will repeat the process, living up to five years old and attaining a size of up to four inches in length. Northern shrimp are also an important link in the marine food web preying on both plankton and benthic invertebrates. In turn, northern shrimp are consumed by many commercially important fish species including cod, redfish, red and white hake, and pollock.

Northern shrimp abundance in the GOM appears to be closely correlated with ocean temperatures. Colder temperatures and higher spawning biomass tends to produce more recruits. In addition, the proportion of females bearing parasitized eggs, commonly referred to as white eggs, appears to be associated with increases in water temperature. White eggs make shrimp



Northern shrimp, Pandalus borealis (top), and two species of striped shrimp (P. montagui and Dichelopandalus leptocerus bottom). Photo by Cinamon Moffett, University of Maine.

eggs nonviable and in turn hinders recruitment potential. Lastly, preliminary research indicates that changes in ocean temperatures have impacted the spatial distribution of predators, the timing of egg hatch, and timing of inshore-offshore migrations of shrimp. More research is still needed to better understand the causal links between increasing ocean temperatures and these biological changes, but in the meantime the impacts do not bode well for rebuilding the stock to levels that could support a viable fishery

Species Snapshot



Northern Shrimp Pandalus borealis

Management Unit Maine through Massachusetts

Stock Status: Collapsed and overfishing not occurring

Interesting Facts:

- Northern shrimp first mature as males and metamorphose into females in their third year.
- Most shrimp do not live more than 5 years.
- A spine located on the third tail segment distinguishes northern shrimp from other pandalid species.

Commercial and Recreational Fisheries

For nearly four decades, the GOM northern shrimp provided a small but valuable fishery to the New England states. In 2011, a year in which the total allowable catch (TAC) was exceeded, average price per pound was \$0.75, with total landings valued at an estimated \$10.6 million. The fishery has been **Spawning Stock Biomass** characterized by drastic fluctuations in landings throughout its history and is seasonal in nature, peaking in late winter when egg-bearing females migrate inshore and ending in the spring under regulatory closure. The commercial fishery began in earnest in the late 1950s. By 1969, landings increased to a peak of 28.3 million pounds, of which 24.2 million pounds were landed by Maine vessels. New Hampshire vessels entered the fishery in 1966, but landings from New Hampshire were minor until the mid-80s. Landings by Massachusetts vessels were also insignificant in the 1960s, but the fishery developed rapidly in the early 1970s and by 1975 landings from Massachusetts vessels accounted for over 40% of the GOM total. Through the 1970s, total landings dropped precipitously to a low of 840,000 pounds in 1977. The fishery closed in 1978 due to stock collapse, and slowly reopened in 1979 at very low levels of harvest.

Landings fluctuated considerably throughout the next two decades, from a low of 734,000 pounds in 1980 to a high of 21 million pounds in 1996, then steadily declining again through 2002. In keeping with historic trends, the majority of the catch in those years had been taken by Maine vessels (76%), with Massachusetts vessels accounting for most of the remainder (17%). From 2003 to 2006 landings were steady, averaging 4.6 million pounds. In 2007 and 2008, landings jumped to 10.8 and 10.9 million pounds, respectively, despite declining stock abundance since 2006. The 2010 to 2012 fishing seasons were closed early due to industry exceeding the TAC, and in 2013 landings were a mere 761,689 pounds. A complete moratorium was implemented first in 2014, and this past December, the moratorium was extended through 2024.

Prior to the moratorium, the northern shrimp fleet was comprised of lobster vessels in the 30-45 foot range that re-rig for shrimping, as well as other trawlers well into the 55-80 foot range. The shrimp trap fishery represented over 45% of Maine's active vessels from 2006 to 2010. However, the otter trawl remained the primary gear deployed, and was typically chain or roller rigged depending on the type of bottom fished. During the last years of the open fishery there was a trend towards the use of heavier and larger roller, or "rockhopper" gear. In addition to the introduction of electronic equipment (e.g., GPS, radars, and near real time data acquisition of sea surface temperatures and ocean bathymetry, among others), these innovations substantially increased fishermen's ability to find and catch shrimp.

Northern Shrimp Spawning Stock Biomass and Recruitment Source: ASMFC Stock Assessment Update, 2021



Stock Status

The 2018 Benchmark Stock Assessment used a statistical catchat-length model which was developed in collaboration with the University of Maine (the UME model). This model divides the northern shrimp stock into size groups and tracks changes in the proportion of shrimp in each size group across seasons and years to estimate fishing mortality and population size. This model has since been updated with new data through 2021.

Based on the results of the 2021 Stock Assessment Update, the northern shrimp stock in the GOM remains depleted, with spawning stock biomass (SSB) at extremely low levels since 2013. SSB in 2021 was estimated at 1.96 million pounds, higher than in 2018, but well below the time series median of 8.9 million pounds and the 1984-2017 20th percentile of 4.72 million pounds. In addition, recruitment continues to be low, with the 2016, 2018, and 2020 year classes being the lowest in the time series. Fishing mortality has been very low in recent years due to the moratorium, but high levels of natural mortality and low recruitment have hindered rebuilding.

Since predation contributes significantly to natural mortality, and predation has been above its time series average each year since 2006, a return to historically lower levels of natural mortality is not likely in the near future. Recent research suggests the stock collapse may have been linked to climate-driven shifts in longfin squid distribution, a potential predator of northern shrimp. In light of this research, exploratory analysis was conducted by including data on longfin squid abundance in the GOM into the predation pressure index used to inform the stock assessment model. The alternate index was generally similar to the results

continued on next page

NORTHERN SHRIMP, continued from page 5

without the inclusion of squid, but had a higher peak in 2011- 2014, when longfin squid predation may have contributed to the northern shrimp stock collapse.

Recruitment of northern shrimp is related to both SSB and ocean temperatures, with higher SSB and colder temperatures producing stronger recruitment. Ocean temperatures in western GOM shrimp habitat have increased over the past two decades and have sustained unprecedented highs in the past ten years. While 2014 and 2015 temperatures were cooler, temperatures are predicted to continue rising as a result of climate change. This suggests an increasingly inhospitable environment for northern shrimp and the need for strong conservation efforts to help restore the stock.

Atlantic Coastal Management

The GOM northern shrimp fishery has been managed by the Section since 1973, making it the longest running interstate management program on the U.S. Atlantic coast. The Section is comprised of the States of Maine and New Hampshire, and the Commonwealth of Massachusetts.

The first FMP was implemented in 1986. The FMP established strict guidelines for a defined fishing season to be set annually by the Section and allowed for the use of gear limitations. Amendment 1, implemented in 2004, established biological reference points for the first time and expanded the tools available to manage the fishery. Amendment 1 resulted in a rebuilt stock and increased fishing opportunities. However, in the 2010 and 2011 fishing seasons, landings rates were far greater than expected,

resulting in early seasonal closures and an overharvest of the recommended TAC. Implemented in 2011, Amendment 2 responded to these issues and completely replaced the FMP. The Amendment provided management options to slow catch rates throughout the season, including trip and trap limits, and days out of the fishery. Additionally, Amendment 2 modified the fishing mortality reference points to include a threshold level, included a more timely and comprehensive reporting system, and allowed for the initiation of a limited entry program to be pursued through the adaptive management process. Addendum 1 to Amendment 2, approved in 2012, further clarified the annual specifications process, allocated the TAC with 87% for the trawl fishery and 13% for the trap fishery based on historical landings, and introduced a research set aside provision which allows the section to "set aside" a percentage of the TAC to help support research on the northern shrimp stock and fishery.

Due to the stock collapse in 2013, the Section implemented a commercial fishing moratorium for the 2014 fishing season, which it has maintained through 2024. In 2017, the Commission approved Amendment 3, which is designed to improve management of the fishery in the event that it reopens. Specifically, the Amendment refined the FMP objectives and provided the flexibility to use the best available information to define the status of the stock and to set the TAC. Furthermore, the Amendment implements a state-specific allocation program to better manage effort in the fishery; 80% to Maine, 10% to New Hampshire, 10% to Massachusetts. The amendment also strengthens catch and landings reporting requirements, implements mandatory use of size sorting grate systems to minimize harvest of small (presumably male) shrimp, incorporates accountability measures, specifies a maximum fishing season length, and formalizes fisherydependent monitoring requirements. The following year, the Section approved Addendum I, which provides states the authority to allocate their state-specific quota between gear types.

At its meeting this December, the Section received a work group update on evaluating management strategies for northern shrimp given changes in species abundance. The Section agreed that this work should be continued with particular focus on further developing a management option for recreational fishing that allows for the personal consumption of harvested shrimp. The work group was also directed to explore how the northern shrimp fishery would be managed if the Commission relinquished control of the fishery management plan. Since future funding for the summer shrimp survey remains uncertain, the Section also tasked the work group with discussing options for maintaining stock assessment updates without the data that this survey provides. The work group will continue to discuss these topics in consultation with representatives from the National Marine Fisheries Service, the Commission's Interstate Fisheries Management Program Policy Board, the Northern Shrimp Technical Committee, and the Northern Shrimp Advisory Panel.

For more information, please contact Dustin Colson Leaning, Fishery Management Plan Coordinator, at <u>dleaning@asmfc.org</u>.



American Lobster Board Releases American Lobster Draft Addendum XXIX/Jonah Crab Draft Addendum IV for Public Comment: Public Hearings and Webinars Scheduled for January 2022

The Commission's American Lobster Management Board has approved for public comment Draft Addendum XXIX to Amendment 3 to the Interstate Fishery Management Plan (FMP) for American Lobster and Draft Addendum IV to the Jonah Crab FMP. The Draft Addenda were initiated in August 2020 to consider implementing electronic tracking requirements for federally-permitted vessels in the American lobster and Jonah crab fisheries, with the objective of collecting high resolution spatial and temporal effort data.

The collection of enhanced spatial and temporal data via electronic tracking devices in the offshore fishery would support managers in addressing a number of challenges facing the fishery. Electronic tracking data would greatly improve the stock assessment's ability to estimate exploitation and abundance for American lobster, as the trackers would allow size composition data to be linked to harvest at a finer spatial resolution than what is currently possible. Additionally, the data could improve the models used to assess the location of vertical lines in the fishery and their associated risk to endangered North Atlantic right whales, which could impact federal risk reduction requirements for the fishery. Characterizing the footprint of the U.S. lobster fishery will also be critical to ocean planning efforts to minimize spatial conflicts with other ocean uses such as aquaculture, marine protected areas, and offshore energy development, as well as provide fishery managers tools to help maintain industry fishing grounds. Last, the efficiency of law enforcement efforts could be significantly improved with data to help enforcement officials locate widely dispersed gear in the offshore fishery.

The Commission and its member states from Maine to Virginia will be conducting a series of hearings to gather public input on the Draft Addenda. Due to the COVID-19 pandemic, most hearings will be conducted via webinar; some hearings will be state-specific and others

regionally-focused. Public hearing information, webinar links, and call-in information are below. Please note that in order to comment during the hearings you will need to use your computer or download the GoToWebinar 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. Additional details on participating in the webinar can be found later in this release; this information is particularly important for those that have not used the GoToWebinar platform before.

The Draft Addenda include two options for proposed management programs. The first is status quo or no changes to the current program, and the second is to implement electronic tracking requirements for federallypermitted American lobster and Jonah crab vessels with commercial trap gear area

continued, see PROPOSED MANAGE-MENT ACTIONS on page 15

Date	State or Regional Hearing	Contact(s)
Wednesday, January 12, 2022	Connecticut and New York	Colleen Bouffard (CT), 860.876.6881
6:30 - 8 PM		Maureen Davidson (NY), 631.444.0483
Thursday, January 13, 2022	New Jersey, Delaware, Maryland and Virginia	Joseph Cimino (NJ), 609.748.2020
6:30 - 8 PM		<u>John Clark</u> (DE), 302.739.9914
		Michael Luisi (MD), 443.758.6547
		Patrick Geer (VA), 757.247.2236
Tuesday, January 18, 2022 6 - 8 PM	Maine Department of Marine Resources	<u>Megan Ware</u> (ME), 207.446.0932
Wednesday, January 19, 2022	Maine Department of Marine	Megan Ware (ME), 207.446.0932
6 - 8 PM	kesources	
Wednesday, January 19, 2022	New Hampshire Department of Fish and Game	Cheri Patterson (NH), 603.868.1095
6:30 - 8 PM		
	Note: This hearing will be held in a hybrid format. To virtually attend this	
	hearing, please use this <u>webinar</u>	
	1.415.655.0052 and enter 879-685-496.	
	You can also attend in person at the address below:	
	Urban Forestry Center	
	Portsmouth, NH 03801	
Thursday, January 20, 2022	Massachusetts and Rhode Island	Nichola Meserve (MA), 617.626.1531
6:30 - 8 PM		Jason McNamee (RI), 401.222.4700

ASMFC 2022 Winter Meeting Preliminary Agenda

January 25-27, 2022

Westin Crystal City 1800 Richmond Highway

Arlington, VA 22202

Preliminary Agenda

Currently, the meeting is scheduled to be held both in-person and virtually; more details will be provided in mid-January. Please note the public will be limited to virtual participation (no audience in attendance). The agenda is subject to change. Bulleted items represent the anticipated major issues to be discussed or acted upon at the meeting. The final agenda will include additional items and may revise the bulleted items provided below. The agenda reflects the current estimate of time required for scheduled Board meetings. The Commission may adjust this agenda in accordance with the actual duration of Board meetings. Interested parties should anticipate Boards starting earlier or later than indicated herein.

TUESDAY, JANUARY 25

10:00 – 11:30 a.m.

0 a.m. American Lobster Management Board

- Consider Draft Addendum XXVII for Public Comment: Electronic Vessel Tracking for Federal Permit Holders
- Consider Fishery Management Plan Reviews and State Compliance for American Lobster and Jonah Crab for 2020 Fishing Year
- Consider Terms of Reference for Jonah Crab Benchmark Stock Assessment

11:30 a.m. – 1:00 p.m. Lunch Break

1:00 – 2:30 p.m. Tautog Management Board

- Review and Discuss Hypothetical Scenarios for Risk and Uncertainty Decision Tool
- Review Feedback from Law Enforcement Committee on Commercial Tagging Program

2:45 – 4:15 p.m. Summer Flounder, Scup, and Black Sea Bass Management Board

• Consider 2022 Recreational Specifications (if necessary)

4:30 – 5:00 p.m. Spiny Dogfish Management Board

- Consider Postponed Motions from October 2021 Board Meeting to Adjust Commercial Trip Limit for Northern Region
- Review and Populate Advisory Panel Membership

WEDNESDAY, JANUARY 26

8:00 – 10:00 a.m.

Executive Committee

- Discuss the Commission's Role in Coordinating the Member States' Efforts in Offshore Wind Energy Development
- Discuss Appeals Process

10:15 – 11:45 a.m. Horseshoe Crab Management Board

- Consider Adaptive Resource Management (ARM) Framework Revision and Peer Review Report
- Consider Management Response to ARM Revision and Peer Review Report

11:45 a.m. – 12:45 p.m. Lunch Break

12:45 – 1:15 p.m. NOAA Presentation on Sea Turtle Bycatch in Trawl Fisheries

1:30 – 5:00 p.m. Atlantic Striped Bass Management Board

- Consider Draft Amendment 7 for Public Comment
- Elect Vice-Chair

THURSDAY, JANUARY 27

8:30 a.m. – Noon Atlantic Menhaden Management Board

- Consider Approval of Draft Addendum I for Public Comment: Commercial Allocations, Incidental Catch, and Episodic Event Set Aside Program
- Update on Menhaden Mortality Events in 2021

Noon – 1:00 p.m. Lunch Break

1:00 – 3:00 p.m. Interstate Fisheries Management Program Policy Board

- Review Results of the 2022 Commissioner Survey
- Consider Standards for De Miminis Programs
- Consider Policy on Information Requests
- Committee Reports
 - Law Enforcement
 - Habitat
 - Atlantic Coastal Fish Habitat Partnership
 - Update on East Coast Climate Change Scenario Planning
- Review Noncompliance Findings (if necessary)

3:00 – 3:15 p.m. Business Session

- Consider Approval of Summer Flounder, Scup, and Black Sea Bass Commercial/ Recreational Allocation Amendment
- Consider Noncompliance Recommendations (if necessary)

ASMFC PUBLICATIONS ARE GOING DIGITAL

In a continuing effort to reduce our carbon footprint and save on printing and mailing costs, as of January 1, 2022, this newsletter and Habitat Hotline Atlantic will no longer be paper printed! We will be delivering these publications directly to your email inbox.

To help make this transition as seamless as possible, we would appreciate it if you would make sure we have your valid email address.

Requests to be placed on the distribution list for future editions of the Fisheries Focus may be sent to <u>info@asmfc.org</u> (Subject line: Subscribe FF).

Public Comment Guidelines

For issues that are not on the agenda, management boards will continue to provide opportunity to the public to bring matters of concern to the board's attention at the start of each board meeting. Board chairs will ask members of the public to raise their hands to let the chair know they would like to speak. Depending upon the number of commenters, the board chair will decide how to allocate the available time on the agenda (typically 10 minutes) to the number of people who want to speak.

For topics that are on the agenda, but have not gone out for public comment, board chairs will provide limited opportunity for comment, taking into account the time allotted on the agenda for the topic. Chairs will have flexibility in deciding how to allocate comment opportunities; this could include hearing one comment in favor and one in opposition until the chair is satisfied further comment will not provide additional insight to the board.

For agenda action items that have already gone out for public comment, it is the Policy Board's intent to end the occasional practice of allowing extensive and lengthy public comments. Currently, board chairs have the discretion to decide what public comment to allow in these circumstances.

In addition, the following timeline has been established for the submission of written comment for issues for which the Commission has NOT established a specific public comment period (i.e., in response to proposed management action).

1. Comments received 3 weeks prior to the start of the webinar (**January 10**) will be included in the briefing materials.

2. Comments received by 5 PM on Tuesday, **January 18** will be included in the supplemental materials.

3. Comments received by 10:00 a.m. on Friday, **January 21** will be distributed electronically to Commissioners/Board members prior to the meeting.

The submitted comments must clearly indicate the commenter's expectation from the ASMFC staff regarding distribution. As with other public comment, it will be accepted via mail, fax, and email.

The Latest from ACCSP: 2021 Accomplishments

In 2021, ACCSP staff worked with our partners and stakeholders to address the mission and vision of the ACCSP through a variety of projects and initiatives in three major categories: funded projects, SAFIS applications, and data collection and dissemination. In collaboration with committee members and partner staff. ACCSP forwarded the objectives outlined in the Commission's 2019-2023 Five-Year Stratgic Plan and 2021 Action Plan by (1) supporting the needs of partners through funded projects; (2) building software that is free to our partners, flexible enough to meet specific partner needs, while reducing the burden on industry and meeting the reporting requirements of multiple jurisdictions in a single report; and (3) collecting, standardizing, and disseminating data in an accessible and timely fashion while still maintaining the necessary levels of confidentiality and integrity. As the end of the year approaches, ACCSP staff would like to thank all those involved for helping us achieve the successes highlighted below and much more.

Funded Projects

- The Coordinating Council, with rankings and recommendations provided by the Operations Committee and Advisory Panel, selected 14 partner projects to support with approximately \$1.4 million of FY2021 funds.
- ACCSP staff worked with the South Atlantic Fishery Management Council and North Carolina Division of Marine Fisheries to facilitate a series of workshops for stakeholders and the creation of the citizen science mobile application SciFish.
- ACCSP staff worked with the Massachusetts
 Department of Marine Fisheries and Rhode Island
 Department of Environmental Management on the
 ACCSP-funded project to develop an Application
 Programming Interface-based integration of
 geographical vessel-monitoring data with real-time
 electronically reported data in the eTRIPS mobile
 application for small scale inshore fisheries. ACCSP
 staff developed a VMS track application in the SAFIS
 Management System (SMS) that allows administrators
 to view and query vessel locations.



SAFIS Applications

- SAFIS eTRIPS redesign was implemented, with major improvements to central data processing, and alignment of the mobile, online, and trip upload functions. This included many detailed components staged throughout the year. The most important feature enabling the flexibility of the system is the SMS Switchboard, which allows partners the ability to manage additional attributes for trips, efforts, gears, catches, species, dispositions, and offloads.
- Completed multi-regional coordination of one application, one report in support of the One Stop Reporting initiative across several NOAA Fisheries' Science Centers, Regional Offices and the Division of Highly Migratory Species (HMS) for commercial and forhire trip reports. The result of this collaboration is that eTRIPS is currently the only reporting application that fulfills the reporting requirements for vessels with multiple federal permits. It is compliant with permit reporting requirements for the Greater Atlantic Region Fisheries Office commercial and for-hire permits, Southeast Fisheries Science Center Coastal Fisheries Logbook Program, Southeast For-Hire, and HMS commercial logbook and for-hire permits.

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Employee of the Quarter

Kristen Anstead

For the fourth quarter of 2021, Kristen Anstead, ASMFC Stock Assessment Scientist, was awarded Employee of the Quarter (EOQ). Since joining the Commission in August 2015, Kristen has brought to her position a unique combination of talents, including tireless work ethic, strong communication and writing skills, and calm, clear leadership in guiding challenging projects.

Kristen made multiple, significant contributions to developing the new Adaptive Management Resource (ARM) Framework for horseshoe crabs and red knot shorebirds. Kristen served as an analyst for the model used to estimate the Delaware Bay horseshoe crab population and significantly improved the estimates of commercial horseshoe crab discards. Kristen maintained a diplomatic and professional attitude throughout the ARM revision process and was praised by the Review Panel



and her colleagues on the ARM Committee for her highly dedicated work to improve the horseshoe crab population dynamics model for management use. In all aspects of the two-year ARM Revision project, Kristen led the charge in keeping the data, modeling, and committee communication going, in arguably one of the most challenging ASMFC assessment in recent years.

Kristen also made substantial contributions towards other ASMFC stock assessments for American eel, Atlantic menhaden, and spiny dogfish. To make science results more digestible for Commissioners and stakeholders, Kristen helped to develop a new short report format for stock assessment updates that was unveiled this year through the 2021 Tautog Assessment Update and has already received high praise. Kristen's dedication to excellence, teamwork, and advancing the Commission's scientific expertise and capabilities make her a valued contributor to the Fisheries Science Department and the Commission's science activities at large. As EOQ, Kristen received a cash award and a letter of appreciation to be placed in her personal record. In addition, her name is on the EOQ plaque displayed in the Commission's lobby. Congratulations, Kristen!

THE LATEST FROM ACCSP, continued from page 10

Data Collection and Dissemination

- The Recreational Team completed the electronic data collection app for the Socioeconomic Add-on Survey (SEAS) portion of the Marine Recreational Fishing Expenditure Survey in cooperation with NOAA Fisheries, Atlantic state partners, and the Gulf States Marine Fisheries Commission. Every five years, SEAS is conducted in conjunction with the annual Access Point Angler Intercept Survey (APAIS). Through ACCSP coordination, the 2022 SEAS will be electronic data collection, streamlining the survey to reduce angler burden.
- The Recreational Team coordinated significant coastwide increases in APAIS sampling supported by Modern Fish Act funds and accomplished by state partners.
- The Data Team performed four coastwide data refreshes in the Data Warehouse in order to accommodate partner deadlines for 2020 data due to COVID-19 and other impacts. The Team also updated existing or created new processes for implementing standards and functionality of SAFIS Redesign reports in the Data Warehouse.
- ACCSP staff worked with state and federal partners to consolidate map data on fishing reporting areas and display them in an ArcGIS Online interactive map to help SAFIS and Data Warehouse users. The ACCSP Standard Codes committee and the GulfFIN Commercial Technical committee created a new coding system for offshore fishing areas in the Gulf of Mexico that satisfies federal requirements.



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. It is composed of representatives from natural resource management agencies coastwide, including the Atlantic States Marine Fisheries Commission, the three Atlantic fishery management councils, the 15 Atlantic states, the Potomac River Fisheries Commission, the D.C. Fisheries and Wildlife Division, NOAA Fisheries, and the U.S. Fish & Wildlife Service. For further information please visit www.accsp.org.

Management Strategy Evaluations and Their Use in Fisheries Management

Introduction

In recent years, management strategy evaluations (MSEs) have become increasingly popular tools in fisheries management. An MSE, as its name suggests, is a process for identifying management strategies that are robust to uncertainty (meaning they perform well across a range of key uncertainties about the system) and meet management objectives. They allow fisheries scientists and managers to simulate the fisheries system in order to better understand the potential effects of different management strategies and evaluate the tradeoffs between them.

Recently, MSEs have been used for two species the Commission manages with the regional fishery management councils. The New England Fishery Management Council conducted an MSE to evaluate a range of harvest control rules for management of Atlantic herring, while considering the species' role as a forage fish in the ecosystem. In addition, there is an ongoing MSE led by the Mid-Atlantic Fishery Management Council to evaluate management strategies designed to minimize discards in the recreational summer flounder fishery <u>https://www.</u> mafmc.org/actions/summer-flounder-mse.

Why Conduct an MSE?

Often in fisheries management, we want to test out a different approach whether it is changes to data collection, a new assessment method, or potential management actions. Unfortunately, experimenting with fisheries science and management approaches in the real world can have real world consequences. For example, a new management approach could seem valid on paper, but not protect the portion of the stock that is key to rebuilding once implemented. If this new approach was implemented in the real world it could cause long-term harm to the population. In an MSE, the only consequences of a failed management strategy are numbers on a screen and the management strategy can be removed

from further consideration for real world management.

In the real world, it can also be difficult to distinguish the effect of a change in management strategy from all of the other changes going on in the system at the same time. For example, a stock might be rebounding due to a management change, or it could be the result of strong recruitment. MSEs provide a way to look at the potential effects of different changes to the system in isolation and in combination with each other. This can help managers and scientists understand the tradeoffs between different choices and select the best approach based on their objectives.

Understanding tradeoffs is a key purpose of an MSE because different stakeholders often have vastly different and competing needs and desires for fishery management. These competing needs make management decisions challenging in the absence of quantified tradeoffs and MSE is intended to facilitate an objective management decision process by balancing these quantified tradeoffs. Stakeholder input and participation is often interwoven throughout an MSE process and is critical to its successful use in management.

Another benefit of MSE is its ability to handle uncertainty and provide a comprehensive characterization of risk. Uncertainties are prevalent in fisheries systems and cannot be fully accounted for with traditional management processes, such as applying a management action to real world fisheries based on stock assessment projections. MSE provides a tool that is able to account for more, although not all, system uncertainties in the results.

Getting Started

The first step in successful fisheries management and science is always to identify your objectives, and the same is true of MSEs. The specific question an MSE is trying to answer will depend on the general management objectives of the fishery and the specific issues that it is facing. For one fishery, it might be "what harvest rules will have the greatest impact on stock rebuilding, while having the least negative economic impact on the small-scale fishery?" For another, it could be "what fishery-independent survey design would have the greatest impact on reducing uncertainty in the stock assessment?"

Stakeholders (e.g., recreational anglers, commercial harvesters, environmental NGOs) can play an important role in identifying MSE objectives. This is especially true for MSEs that are focused on potential management changes. Understanding the range of stakeholder perspectives is the first step in developing management strategies that meet multiple stakeholders' needs and balance the tradeoffs between them.

Once the objectives have been identified, performance metrics for each objective are selected. Performance metrics are concrete, measurable indicators that represent how well the system is performing for a given objective. For example, if an objective was to maximize the economic benefit, a metric might be the annual profits from the fishery.

Building an MSE

Fisheries are a part of complex, interconnected systems that include both the human and natural worlds. A fisheries system includes, among other things, the target species, ecosystems, the physical environment, markets, communities, and government. These factors also range in scale from very local/small-scale to global. For example, a fisheries system can be affected by anything from local habitat depletion to global climate change, while the fishery can be influenced by anything from local bait supply or habitat loss, to a global climate change or a rise in oil prices. MSEs simulate these systems providing us with a virtual world to tinker with.

An MSE consists of two main parts: an continued on next page



Graphic adapted from "<u>Management strategy evaluation: best practices</u>" by André E Punt, Doug S Butterworth, Carryn L de Moor, José A A De Oliveira, and Malcolm Haddon

operating model and a management strategy. The operating model simulates the fishery system and produces simulated data, which is used to calculate the performance metrics. Fisheries scientists and managers can use these performance metrics to evaluate and compare management strategies. The operating model also links to the management strategy by feeding it monitoring data – this represents data that would reasonably be available for stock assessments and management decisions, e.g., data from a fishery-independent survey. The management strategy component includes an estimation method, i.e., stock assessment, and harvest control rules. The management strategy component links to the operating model by applying management regulations triggered by the harvest control rule to the "world" of the operating model which it implements in the simulation of the fishery system. The links between the operating model and management strategy create a "feedback loop" that allows the process to be conducted multiple times to evaluate both short-term and long-term management strategy performance. This is a key aspect that differentiates MSE from traditional management advice processes such as recommended, short-term management actions based on stock assessment projections.

Using an MSE

Through an MSE, fisheries managers and scientists can see the potential effects of different management strategies. By comparing performance metrics of different strategies, they are able to determine what the tradeoffs between different approaches might be and select a strategy that achieves the best balance of management objectives for their goals. While not a crystal ball, MSEs can be a powerful tool for fisheries decision-making.

For more information, please contact Sarah Murray, Fisheries Science Coordinator, at smurray@asmfc.org.

Comings & Goings





ANNA-MAI CHRISTMAS-SVAJDLENKA

In November, Anna-Mai joined the ACCSP as one of its Data Coordinators, working with the Data Team and Program Partners to provide support for data-intensive activities, providing quality control and monitoring for ACCSP partner data feeds, and coordinating with ACCSP technical committees in guiding the evolution of ACCSP data collection standards. Anna-Mai comes to us from the Virginia Marine Resources Commission as a Data Analysis Contractor, helping with data cleaning, the disaster relief fund, and in the ageing lab. She has a Bachelors in Marine Biology from the University of the Virgin Islands and two Masters: one in Environmental Science from the Western Washington University and the other in Instructional Design from Washington Governors University. Welcome aboard Anna-Mai!



ADAM LEE

Adam also joined the ACCSP Data Team as a Data Coordinator in November. Like Anna-Mai, he will be working with the Data Team and Program Partners to provide support for data-intensive activities, providing quality control and monitoring for ACCSP partner data feeds, and coordinating with ACCSP technical committees in guiding the evolution of ACCSP data collection standards. With a strong background in education, Adam was a high school science teacher for the past three years, teaching both core courses, as well as electives. Adam has a Bachelors in Marine Science and a Minor in Chemistry from Eckerd College in St. Petersburg, FL. He also has a Masters in Ocean, Coastal and Earth Science from the University of Texas Rio Grande Valley. Adam's graduate work focused on the life history and reproductive status of commercially valuable artificial reef species, such as red snapper and gray triggerfish. Welcome aboard Adam!



GABE THOMPSON

As the new ACCSP Recreational Fisheries Data Coordinator, Gabe will be working with the Recreational Fisheries Data Team to assist in the conduct of the Marine Recreational Information Program's Access Point Angler Intercept Survey and Forhire Telephone Survey, including communicating with state partners on data needs, database management, and field interviewer training. Gabe comes to us from the Virginia Institute of Marine Science, where he was a Senior Laboratory Specialist in the Aquatic Health Sciences Department. Gabe has a Bachelor of Science in Marine Science with emphasis in Biological Oceanography from the University of South Carolina and a Master of Professional Science in Marine Conservation from the University of Miami. Welcome aboard, Gabe!



SAVANNAH LEWIS

This December, Savannah will be leaving the Commission staff as she and her husband, who is active duty Air Force, will be moving to Oahu. In her 16 months at the Commission, Savannah accomplished quite a lot. She helped to wrap up the Black Sea Bass Commercial Shares Addendum and the Cobia Quota Allocation Addendum; started the Red Drum Simulation Modeling with Jeff Kipp; quickly came up to speed on all of the sciaenid species; and co-lead work with the Mid-Atlantic Council staff on the harvest control rule for several Mid-Atlantic species. In everything she did, Savannah brought a strong work ethic, sunny disposition, and dedication to team work (with both ASMFC staff and her work with the Mid-Atlantic staff). While she will be missed, we wish her and her husband the greatest success in their new chapter in life. Pomaika'I (good luck in Hawaiian), Savannah!

PROPOSED MANAGEMENT ACTIONS continued from page 7

permits for Lobster Conservation Management Areas 1 through 5 and Outer Cape Cod. Under this option, the specified permit holders would be required to install an approved electronic vessel tracking device to their vessel prior to beginning a fishing trip to collect and transmit spatial data. The devices would collect vessel locations every minute, which would allow for the distinction between transiting and fishing activity, as well as the estimation of traps per trawl. The Draft Addenda also describe administrative processes at the Commission, state, and federal levels for successful implementation of the management program to ensure the data collected meet the needs of state and federal partners.

Webinar Instructions

To register for a public hearing webinar go to https://attendee. gotowebinar.com/rt/59519183062316299 and select the hearing(s) you plan to attend from the dropdown menu. 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 (https:// support.goto.com/webinar/help/download-now-g2w010002) or via the App store under GoToWebinar. 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 (VoIP) so you can ask questions and provide input at the hearing. Those joining by phone only, will be limited to listening to the presentation but will not be able to provide input during the hearing. In those cases, you can send your comments to staff via email, U.S. mail, or fax at any time during the public comment period. To attend the webinar in listen only mode, dial 1-877-309-2071 and enter access code 350-416-497.

The Commission will also post a recording of the hearing presentation 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 in early January; a subsequent press release will announce the availability of the recording.

The Draft Addenda are available at http://www.asmfc.org/files/ PublicInput/LobsterDraftAdd_XXIX_JonahCrabDraftAdd_IV_ PublicComment_Dec2021.pdf or via the Commission's website at http://www.asmfc.org/about-us/public-input. Members of the commercial fishing industry and other stakeholders are encouraged to provide input either by participating in public hearings, webinars, or providing written comment. Public comment will be accepted until 5 PM (EST) on January 31, 2022 and should be sent to Caitlin Starks, FMP Coordinator, at 1050 N. Highland St., Suite 200 A-N, Arlington, Virginia 22201; 703.842.0741 (fax) or at comments@asmfc.org (Subject line: Lobster Draft Addendum XXIX). For more information, please contact Caitlin Starks at cstarks@asmfc.org or 703.842.0740.

MAFMC & ASMFC continued from page 1

Board ultimately voted to revise the allocations using the original base years updated with new data. This approach allows for consideration of fishery characteristics in years prior to influence the commercial/recreational allocations, while also using the best scientific information available to understand the fisheries in those base years.

For all three species, these changes result in a shift in allocation from the commercial to the recreational sector. However, because the summer flounder and black sea bass fisheries will be transitioning from landings-based to catch-based allocations, the current and revised allocations for those species are not directly comparable.

The Council and Board also approved an option to allow future changes to commercial/recreational allocations, annual quota transfers, and other measures addressed in the amendment to be made through framework actions/addenda. The Council

and Board considered but did not recommend an option to "phase in" the allocation changes over a period of time. A phase in period was deemed unnecessary given the relatively small magnitude of allocation changes. They also considered, but did not recommend, an option to allow transfers of annual quota between the commercial and recreational sectors at this time.

The Council will forward the amendment to the National Marine Fisheries Service for review and rulemaking. The Commission's Business Session, which represents its 15 state members, will consider final approval of the amendment, based on the Board's recommendations, at its Winter 2022 Meeting in late January. These changes are expected to take effect on January 1, 2023.

Additional information about this amendment is available at <u>https://www.mafmc.org/actions/sfsbsb-allocation-amendment</u>. For more information, please contact Dustin Colson Leaning, Fishery Management Plan Coordinator, at <u>dleaning@asmfc.org</u>.

