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. The final agenda and meeting materials will be posted to http://www.asmfc.org/home/2020-winter-meeting on January 22nd.

TUESDAY, FEBRUARY 4

9:30 – 11:00 a.m.  Atlantic Herring Management Board
• Consider Approval of Draft Addendum III for Public Comment
• Technical Committee Review of Ocean Dredged Material Disposal Site
• Review and Set Atlantic Herring Fishery Specifications for 2020 Season

11:15 a.m. – 3:00 p.m.  Atlantic Striped Bass Management Board (lunch will be provided)
• Review and Consider State Implementation Plans and Conservation Equivalency Proposals

3:15 – 4:00 p.m.  Coastal Sharks Management Board
• Update on Implementation of CITES Appendix II Provisions for Atlantic Shortfin Mako
• Update on Atlantic Shortfin Mako from November International Commission for the Conservation of Atlantic Tunas Meeting (if available)

4:15 – 5:00 p.m.  Bluefish Management Board
• Review and Consider Approval of Conservation Equivalency Proposals

WEDNESDAY, FEBRUARY 5

8:30 a.m. – Noon  Atlantic Menhaden Management Board
• Review 2019 Atlantic Menhaden Single-Species and Ecological Reference Point Benchmark Stock Assessments and Peer Review Panel Reports, and Consider Approval for Management Use
• Consider Management Response to Benchmark Stock Assessments
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.

Atlantic States Marine Fisheries Commission

Patrick C. Keliher (ME), Chair
A.G. “Spud” Woodward (GA), Vice-Chair
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Toni Kerns, ISFMP Director
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Upcoming Meetings

January 23 (begins at 1 PM) - 24 (ends at 1 PPM)
NEAMAP Survey Technical Committee Fish Maturity Stages Workshop, Virginia Institute of Marine Science, 1444 Greate Road, Gloucester Point, VA

January 28 - 30
New England Fishery Management Council, Portsmouth Event Center, Portsmouth, NH

January 29 - 30
NEAMAP Annual Meeting, Renaissance Baltimore Harborplace Hotel, 202 East Pratt Street, Baltimore, MD

February 4 - 6
ASMFC Winter Meeting, The Westin Crystal City, 1800 S. Eads Street, Arlington, VA

February 11 - 13
Mid-Atlantic Fishery Management Council, The Sanderling Resort, 1461 Duck Road, Duck, NC

February 25 (9 AM - 5 PM)
Spring 2020 Management Track Assessment Oversight Panel Meeting, NEFSC, Clark Conference Room, 166 Water Street, Woods Hole, MA; visit https://www.fisheries.noaa.gov/event/spring-2020-management-track-assessment-oversight-panel-meeting for more information

March 2 - 6
South Atlantic Fishery Management Council, Westin Jekyll Island, 110 Ocean Way, Jekyll Island, GA

March 9 - 12
Red Hake Stock Structure Research Track Assessment, NEFSC, Clark Conference Room, 166 Water Street, Woods Hole, MA

April 1 (begins at 9 AM) - April 2 (ends at 3 PM)
ASMFC Quality Assurance Fish Ageing Workshop, FL FWC Fish and Wildlife Research Institute, St. Petersburg, FL

April 7 - 9
Mid-Atlantic Fishery Management Council, Stockton Seaview, 401 South New York Road, Galloway, NJ

April 14 - 16
New England Fishery Management Council, Hilton Hotel, Mystic, CT

May 4 - 7
ASMFC Spring Meeting, The Westin Crystal City, 1800 S. Eads Street, Arlington, VA

June 2 - 4
Mid-Atlantic Fishery Management Council, Hilton Virginia Beach Oceanfront, 3001 Atlantic Avenue, Virginia Beach, VA

June 8 - 12
South Atlantic Fishery Management Council, Key West Marriott Beachside, 3841 N Roosevelt Boulevard, Key West FL

June 22 - 26
2020 Management Track Assessment Peer Review, NEFSC, Clark Conference Room, 166 Water Street, Woods Hole, MA; visit https://www.fisheries.noaa.gov/new-england-mid-atlantic/population-assessments/2020-spring-management-assessments for more information
Good News for Menhaden and What’s Ahead for 2020

For those who have been closely following the menhaden compliance issue, the Commission received good news last month when the Secretary of Commerce concurred with our finding that the Commonwealth of Virginia is out of compliance with Amendment 3 to the Interstate FMP for Atlantic Menhaden. Specifically, the Commonwealth failed to implement the 51,000 mt Chesapeake Bay reduction fishery cap (cap). In accordance with this finding, the Secretary declared a moratorium on the Atlantic menhaden fisheries in Virginia waters, effective June 17, 2020. In order to avert the moratorium, the Commonwealth must effectively implement and enforce the cap prior to June 17th. This action was taken pursuant to the provisions of the Atlantic Coastal Fisheries Cooperative Management Act (Atlantic Coastal Act) of 1993.

In taking this action, the Secretary showed his support for the Commission’s interstate fisheries management process and, in particular, our efforts to manage Atlantic menhaden, an important forage species, in a precautionary manner. The Secretarial backstop is a key provision of the Atlantic Coastal Act, which established a unique partnership between the states and the federal government to work cooperatively to ensure the conservation and sustainability of nearshore fishery resources.

As the Commonwealth works to come back into compliance with Amendment 3, the Commission’s Atlantic Menhaden Management Board will be considering the findings of the highly-anticipated ecological reference point (ERP) benchmark stock assessment in February. The results of the ERP assessment, which incorporates the forage needs of key menhaden predators in its analysis, will be presented alongside the findings of the traditional single-species benchmark assessment. If endorsed by the Peer Review Panel for use in management, both assessments will be used to evaluate the health of the stock and inform the management of the species in an ecological context.

Looking ahead to the Winter Meeting and beyond, the Commission and the states have a full plate of issues to address in 2020. A highlight of our major management and science activities follow.

MANAGEMENT ACTIVITIES

American Lobster
- Develop management strategy for the Gulf of Maine (GOM)/Georges Bank stock that acknowledges the effects of climate change and addresses the resilience of the stock
- Implement Addendum XXVI data elements to improve data collection and characterization of the fishery
- Monitor and respond as necessary to NOAA rulemaking on Atlantic Large Whale Take Reduction Plan Modifications
- Review findings of the 2020 Benchmark Assessment and Peer Review Report and consider a management response if necessary

Atlantic Herring
- Consider new approaches for managing the Area 1A sub-annual catch limit under low quota scenarios
- Work with NEFMC to review findings of Management Track Stock Assessment and consider adjustments to 2021 specifications if necessary

Atlantic Striped Bass
- Initiate stock rebuilding through implementation of Addendum VI measures and development of additional measures to rebuild biomass and address long-term fishery issues

Black Sea Bass/Scup/Summer Flounder
- Work with MAFMC to adjust black sea bass state-by-state commercial allocation and consider ways to reform black sea bass recreational management
- Explore, in coordination with MAFMC, changes to commercial/recreational allocation for all three species

Bluefish
- Develop, with MAFMC, amendment to address issues including: commercial/recreational allocation, state-by-state commercial allocation, and stock rebuilding

Cobia
- Review findings of Benchmark Stock Assessment and Peer Review and consider a management response if necessary

Horseshoe Crab
- Revise Adaptive Resource Management Framework based on recommendations from benchmark stock assessment

SCIENCE ACTIVITIES

- Finalize Commission policy on risk and uncertainty
- Collect new data to address data deficiencies, including fishery-dependent data using black sea bass research fleet and new data elements from lobster fisheries
- Increase bycatch monitoring of sturgeon, shad and river herring, and sciaenids in state waters
- Increase diet data collection to support ecosystem-based assessments and management
- Promote collection and use of acoustic tagging information
- Partner with USGS to identify shared research priorities and opportunities for enhanced scientific support
- Standardize timeline of Commission assessments to support timely updates to ERP assessments for Atlantic menhaden
- Evaluate the effects of changing ocean conditions on stock productivity and distribution

New Amendment and Addendum will Consider Potential Changes to Commercial and Recreational Allocations

Introduction
Black sea bass are an important recreational and commercial fishery ranging from Maine to Florida. There are two distinct stocks on the Atlantic Coast, divided at Cape Hatteras, North Carolina. The northern stock is jointly managed by the Commission and the Mid-Atlantic Fisheries Management Council (Council). The commercial fishery dates back to the 1800s with landings reaching a peak at 22 million pounds in the 1950’s, but then declining to only a few million pounds by the early 1990s. In 1997, the Black Sea Bass Fishery Management Plan (FMP) was implemented, instituting a commercial fishery quota and a recreational harvest limit (RHL) in order to reduce fishing mortality and recover the stock. The fishery was officially declared rebuilt in 2009, and commercial landings have since increased to a high of 3.8 million pounds in 2017. Due to warming waters, the distribution of the fishery and catches have expanded northward in recent years.

Based on the 2019 operational stock assessment, black sea bass are not overfished and overfishing is not occurring. The assessment found spawning stock biomass (SSB) to be well above the target level. However, 2018 recruitment fell below the time series average. This could lead to a decrease in exploitable biomass in coming years. Currently, the black sea bass quota is divided almost equally between the recreational and commercial fisheries. An amendment is currently under development to consider changes to the commercial and recreational allocations based on updated data for both fisheries. An addendum is also underway, which will consider modifications to the state shares of the commercial black sea bass quota, which have not changed since being implemented in 2003.

Life History
Black sea bass (Centropristis striata) inhabit Atlantic coastal waters from the Gulf of Maine to the Florida Keys, concentrating in areas from Cape Cod, Massachusetts to Cape Canaveral, Florida. A temperate reef fish, black sea bass commonly inhabit rock bottoms near pilings, wrecks, and jetties. Black sea bass rely on their large mouth and swift ocean currents to catch prey, which include fish, crabs, mussels, and razor clams. Two distinct stocks of black sea bass exist along the Atlantic coast with overlapping ranges. The northern stock migrates seasonally, summering in northern inshore waters at depths of less than 120 feet and wintering in southern offshore waters at depths of 240 to 540 feet. Spawning occurs off of New England in the late summer.

Black sea bass are protogynous hermaphrodites, which mean they start life as a female and then change sex to become males when they reach 9-13 inches (2-5 years of age). More than a third of females in the Mid-Atlantic reverse sexes between August and April after most fish have spawned. Even though some fish are males when they reach sexual maturity, most produce eggs when they first mature. Following transition, a sea bass will either become a dominant male, characterized by a larger size and a bright blue nuchal hump during spawning season (see accompanying photo), or a subordinate male that has few distinguishing features.

Commercial & Recreational Fisheries
Black sea bass are highly sought after by both commercial fishermen and recreational anglers throughout the Mid-Atlantic. Fisheries change seasonally with changes in fish distribution. Inshore and more southern commercial fisheries primarily use fish pots and handlines, and when fish move offshore in the winter, they are primarily caught in trawl
fisheries targeting summer flounder, scup, and Loligo squid. Recreational fisheries generally occur during the period that sea bass are inshore (May to September), but season duration varies among the states. Since the FMP’s approval in 1997, the black sea bass commercial fishery has operated under a quota. The recreational fishery is restricted by a coastwide RHL.

Commercial landings have been recorded since the late 1800s. Fish were primarily harvested by handlines until the early 1950s. From 1887 through 1948, commercial landings north of Cape Hatteras fluctuated around 6 million pounds. By 1952, with the emergence of the trap fishery, landings peaked at 22 million pounds. Since 1998, commercial landings have been primarily influenced by the commercial quotas. Between 1998 and 2007, landings averaged 2.8 million pounds. From 2008 to 2012, reduced quotas resulted in average landings of only 1.6 million pounds. Landings have since increased, reaching a high of 3.8 million pounds in 2017, and 3.3 million pounds in 2018. Commercial fishery discards historically represented a small fraction of total fishery removals from the stock at less than 0.4 million pounds per year, but have increased in recent years. In 2017, commercial discards were 1.78 million pounds. Otter trawls and fish pots/traps have accounted for the majority of the landings in most states. Other important gear include handlines and lobster pots.

Black sea bass are also an important recreational species in the Mid-Atlantic, commonly caught using squid and natural bait. In 1965, over half of the total catch of black sea bass was credited to recreational fishing. Angling pressure increased markedly in the mid-1980s. In 1998 and 1999, recreational landings decreased substantially, which may be partially attributed to an increase in minimum size limits. Landings started to increase in 2000 and averaged 4.4 million pounds from 2000 to 2009. Recreational landings increased rapidly and peaked in 2016 at approximately 12 million pounds, and in 2017 dropped slightly to 11.4 million pounds. Recreational discards have also increased to about 85% of total catch over the past 10 years. Assuming a 15% hook and release mortality, in 2018, estimated mortality from recreational discards were estimated at 3.13 million fish, equal to 44% of the total recreational removals (harvest plus dead discards).

**Stock Status**

An operational assessment that incorporated new recreational harvest estimates was peer reviewed in August 2019. The assessment found the black sea bass stock north of Cape Hatteras was not overfished nor experiencing overfishing in 2018 relative to revised reference points.

Starting in 2007, SSB increased rapidly and reached a peak in 2014 at over 76 million pounds, then decreased slightly. SSB in 2018 was estimated at 73.65 million pounds, 2.4 times the biomass target of 31.07 million lbs. The average fishing mortality in 2018 was 0.42, 91% of the fishing mortality threshold of 0.46. To account for the fact that black sea bass change sex from female to male, the assessment defined SSB as the total of male and female mature biomass to adjust for changes in sex ratio.

continued, see BLACK SEA BASS on page 6
Recruitment of the 2017 year class as age 1 in 2018 was estimated at 16 million fish, well below the time series average. The 2011 year class was estimated to be the largest in the time series at 144.7 million fish and the 2015 year class was the second largest at 79.4 million fish. Despite uncertainty associated with the most recent year estimates, exploitable biomass is expected to decrease in coming years due to poor recruitment by the 2017 year class along with declining abundance of the 2015 year class. Over the past decade, the distribution of the fishery and catches has generally expanded northward.

Atlantic Coastal Management

Black sea bass is managed jointly by the Commission and the Council under Amendment 13 to the Summer Flounder, Scup and Black Sea Bass FMP (August 2002) and its subsequent addenda (Addenda XII-XXIII). The objectives of the FMP are to reduce fishing mortality to assure overfishing does not occur and allow immature black sea bass to increase SSB; improve yield from the fishery; promote compatible regulations, and uniform and effective enforcement among states and between federal and state jurisdictions; and minimize regulations necessary to achieve the stated objectives.

The management program divides a total annual quota between the recreational fishery (51%) and the commercial fishery (49%). The recreational fishery is currently managed on a regional basis using a combination of minimum size limits, bag limits, and fishing seasons to achieve a regional harvest target. The coastwide commercial quota is divided among the states annually. In addition to minimum requirements set annually on a coastwide basis, states may...
Bluefish

In mid-December, the Mid-Atlantic Fishery Management Council (Council) recommended and the Atlantic States Marine Fisheries Commission (Commission) approved new recreational fishing regulations for the 2020 Atlantic bluefish fishery from Florida to Maine. These measures, which include a 3-fish bag limit for private anglers and shore-based fishermen and a 5-fish bag limit for for-hire fishermen, represent a substantial reduction compared to the federal 15-fish bag limit that has been in place since 2000. The Council’s actions are final and apply to state waters (0-3 miles from shore), while the Council will forward its recommendation for federal waters (3 – 200 miles from shore) to the NOAA Fisheries Greater Atlantic Regional Fisheries Administrator for final approval.

The most recent operational assessment of the Atlantic bluefish stock concluded that the stock is overfished but not experiencing overfishing. During their joint meeting in October, the Council and Commission adopted a recreational harvest limit (RHL) of 9.48 million pounds for 2020 and 2021, which is an 18% decrease compared to the 2019 RHL. Using the current regulations, the recreational sector is projected to land 13.27 million pounds, which will exceed the RHL by 28.56%. Therefore, the Council and Commission met in December to approve new recreational management measures to constrain harvest to the reduced RHL.

The Council and Commission considered several combinations of bag limits and minimum size limits, including options to set a single set of regulations for all fishing modes or different regulations for shore/private modes and the for-hire mode. Although the Council’s Bluefish Monitoring Committee recommended a coastwide 3-fish bag limit, the majority of comments from the public and Bluefish Advisory Panel (AP) members expressed opposition to this option, noting that it would have severe economic consequences for the for-hire sector, which was only responsible for 3.6% of coastwide landings from 2016 to 2018. Additionally, AP members and the public emphasized that these proposed reductions come at a challenging time for for-hire stakeholders as they are also facing new restrictions on striped bass, black sea bass, summer flounder, and scup.

After an extensive discussion and thorough consideration of public comments, the Council recommended and Commission approved a 3-fish bag limit for private and shore modes and a 5-fish bag limit for the for-hire mode. No restrictions were made to minimum fish size or seasons.

“For many years, bluefish has been one of our most abundant recreational fisheries,” said Council Chairman and ASMFC Board member Mike Luisi. “The Council and Commission are fully committed to the effective conservation and management of this stock, but we also recognize that a sudden change in regulations could have severe socioeconomic consequences for some stakeholders. After evaluating a wide range of options and considering numerous comments from the public, we feel that this approach is the most fair and effective way to achieve the necessary reduction in harvest next year.”

The Council and Commission are continuing to work on development of a rebuilding plan as part of the Bluefish Allocation and Rebuilding Amendment. Additional information and updates on this action are available at [http://www.mafmc.org/actions/bluefish-allocation-amendment](http://www.mafmc.org/actions/bluefish-allocation-amendment).

Summer Flounder, Scup and Black Sea Bass

The Council and Commission have scheduled a series of scoping hearings to gather public input on the range of issues and information to be considered in the Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment. Hearings will be held February 13 – March 3. Written comments will be accepted through March 17, 2020. All comments provided at public hearings or in writing will be presented to the Council and Commission.

This amendment will consider potential modifications to the allocations of catch or landings between the commercial and recreational sectors for summer flounder, scup, and black sea bass. The 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. In July 2018, the Marine Recreational Information Program released revisions to its time series of catch (harvest and discards) estimates. These revisions resulted in much higher recreational catch estimates compared to previous estimates, affecting the entire time series of data going back to 1981. Some changes have also been made to commercial catch data since the allocations were established. The current commercial and recreational allocation percentages for all three species do not reflect the current understanding of the recent and historic proportions of catch and landings from the two sectors. This amendment will consider whether changes to these allocations are warranted.

Scoping is the first and best opportunity to raise concerns related to the scope of issues that will be considered. You are encouraged to submit comments on which options may or may not be useful or practical for meeting the goal of this action and any other relevant issues the Council and Commission should consider.

Learn More

The Scoping and Public Information Document contains background information on summer flounder, scup, and black sea bass management and on issues that may be addressed in the amendment, as well as a description of the amendment process and timeline. This document, along with additional information and updates on development of this amendment, is available on the Council’s website at [http://www.mafmc.org/actions/sfsbsb-allocation-amendment](http://www.mafmc.org/actions/sfsbsb-allocation-amendment).

Contacts

Julia Beaty, Mid-Atlantic Fishery Management Council jbeaty@mafmc.org 302.526.5250

Dustin Colson Leaning, Atlantic States Marine Fisheries Commission dleaning@asmfc.org 703.842.0740

continued, see FISHERY MANAGEMENT ACTIONS on page 8
FISHERY MANAGEMENT ACTIONS, continued from page 7

Please note that some hearings will be held in conjunction with (immediately before or after) supplemental scoping hearings for an ongoing Bluefish Allocation Amendment. A schedule for the bluefish hearings will be posted at: http://www.mafmc.org/actions/bluefish-allocation-amendment.

Written Comments
In addition to providing comments at any of the scheduled public hearings, you may submit written comments by 11:59 pm Eastern Daylight Time on Tuesday, March 17, 2020. Written comments may be sent by any of the following methods:

ONLINE: http://www.mafmc.org/comments/sfsbsb-allocation-amendment

EMAIL: jbeaty@mafmc.org

MAIL or FAX: Dr. Christopher Moore, Executive Director
Mid-Atlantic Fishery Management Council
800 North State Street, Suite 201
Dover, DE 19901
FAX: 302.674.5399

Please include “Fluke/Scup/Sea Bass Allocation Amendment” in the subject line if using email or fax, or on the outside of the envelope if submitting written comments. All comments, regardless of submission method, will be compiled into a single document for review and consideration by both the Council and Commission. Please do not send separate comments to the Council and Commission.
On the Legislative Front

President Signs Law Funding for the Department of Commerce in 2020

H.R. 1158, Consolidated Appropriations Act for Fiscal Year 2020 was enacted into law on December 20, 2019. The law includes funding and detailed spending instructions, directives and expectations to the Department of Commerce and NOAA, including how the agency may spend lump-sum amounts shown in the table below.

H.R. 1158:
- Provides $2 million for American lobster research on the impacts of environmental changes and availability of herring for bait
- Provides $300,000 to collect biological, fishery, and environmental data for American lobster and Jonah crab using modern technology on commercial fishing vessels
- Directs NOAA Fisheries to continue the Mid-Atlantic horseshoe crab trawl survey
- Rejects the President’s request to defund Joint Enforcement Agreements

For more information, please contact Deke Tompkins, Executive Legislative Assistant, at dtompkins@asmfc.org.

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| Other Line Items of Interest                                 |              |                |            |             |            |
| National Sea Grant College Program                           | 68,000       | 0              | 73,000     | 75,000      | $74,000    |
| Coastal Zone Management and Services                         | 43,500       | 44,976         | 46,500     | 45,000      | $45,000    |
| Coastal Zone Management Grants                               | 75,500       | 0              | 81,000     | 76,500      | $77,000    |
| National Estuarine Research Reserve System                   | 27,000       | 0              | 29,000     | 27,000      | $27,500    |

*Increase to FY19 amount, decrease to FY19 amount, >10% change
The U.S. Geological Survey (USGS) provides the public and decision-makers with reliable scientific information to describe and understand the Earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and enhance and protect our quality of life. As a key science agency within the Department of the Interior (DOI), USGS has a role under the Commission’s Compact and the Atlantic Coastal Fisheries Cooperative Management Act (ACFCMA) to serve as a primary research agency for the Commission, in collaboration with state fisheries agencies, the U.S. Fish and Wildlife Service, and NOAA Fisheries.

As part of the USGS Ecosystem Mission Area, the agency’s Fisheries Program has specific responsibilities to provide actionable research and technology to inform the conservation and management of fisheries resources with emphasis on imperiled, migratory, and interjurisdictional fish stocks, and their associated habitats. Habitats and species ranges include headwater streams, large rivers, and estuaries.

Leadership at the USGS Leetown Science Center (USGS-LSC) and national headquarters has strengthened recent collaborations with the Commission by expanding scientific support to diadromous and coastal fisheries research, stock assessment, and habitat restoration. In addition to scientific personnel, USGS provided more than $500,000 of funding to support research projects in 2019 to address Commission research priorities. The projects focus on sturgeon acoustic tagging, fishway entrance design, eel migration, and horseshoe crab survival and movement. Most recently, USGS secured another $100,000 to conduct research in 2020 on the development of new American eel stock assessment methods, information system (GIS) based habitat assessments could aid stock assessment activities, particularly if habitat information could inform estimates of eel population size, sex ratios, and/or biomass. In other words, how much living space is available for eels in Atlantic rivers and estuaries? Based on available space, is the stock fully occupying potential habitat, or is there capacity for the stock to grow larger and expand?

In collaboration with the Commission’s American Eel Technical Committee, USGS-LSC is conducting a two-phase project (data inventory and compilation; GIS modeling) in the Delaware and Chesapeake Bay watersheds in FY19-20. The project is developing methodologies and testing models for including habitat in eel stock assessments. The work aligns with existing USGS-LSC research in the Chesapeake and Delaware Bay watersheds on fish habitat assessment, American eel life history characteristics, bathymetric habitat modeling, fish passage, and other fisheries related research. Using USGS-LSC guidance, the Commission is gathering data from the states to serve as input variables for eel density models. States are also providing metadata summaries (data set descriptions) for surveys targeting American eel and other fishery independent surveys where eels are captured. USGS is continuing work with the Technical Committee in 2020 to explore habitat-based models. Recently, USGS-LSC scientists participated in an American eel stock assessment framework meeting held in Halifax, Nova Scotia by the Canadian Department of Fisheries and Oceans to discuss novel approaches to conducting eel assessments, including using GIS-based habitat models. USGS-LSC scientists presented their study approach and received encouraging feedback from European counterparts who have conducted similar GIS-based modeling on European eels (Anguilla anguilla). If models with GIS habitat metrics are viable, they will be fully developed in anticipation of the next U.S./Commission eel stock assessment.

**Flexing the ARM**

Since 2013, the Commission has relied on the Adaptive Resource Management (ARM) Framework to set harvest for horseshoe crabs of Delaware Bay-origin. The ARM Framework was designed to set harvest while accounting for the forage needs of migratory shorebirds that use Delaware Bay as a stopover. The ARM Framework has been very effective at managing harvest in an explicit and transparent way.

In the ARM Framework, future population abundance levels are predicted using weighted averages of an existing stock assessment. The Commission is continuing to develop a new model (ESM) for the management of horseshoe crabs to take into account the additional short- and long-term implications of the American eel invasion.

**Homing in on Eel Habitat**

The Commission periodically conducts stock assessments for American eel (*Anguilla rostrata*) in support of fisheries management for Atlantic coastal states. The Commission requested assistance from the USGS-LSC to evaluate if and how geographic improvements to horseshoe crab-red knot models, and predation of diadromous fish by invasive catfish.

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| American eel at Swift Creek Dam, VA. Photo (c) Virginia State Parks |  }

continued, see SCIENCE HIGHLIGHT on page 12
The list below includes dates for fiscal year 2020, including ACCSP committee meetings and relevant dates of the funding cycle. For more information on this calendar or funding, please contact ACCSP staff at info@accsp.org.

**ACCSP 2020 Calendar**

Jan 28-30: Recreational data collection Mid-Atlantic Training – Dover, DE
Feb 11: Biological Review Panel Annual Meeting – Webinar
Mar 1: Start of ACCSP FY20

Week of Mar 23: Operations and Advisory Committees Spring Meeting - Webinar
May 4-7: ASMFC Meeting/Coordinating Council Meeting; ACCSP issues request for Proposals- Arlington, VA

Week of Jul 13: Review of initial proposals by Operations and Advisory Committees – Webinar
Aug 17: Revised proposals due

Oct 19-23: Coordinating council Meeting (in-person) [Project Proposals Approved]
Jan 21-23: Recreational data collection South Atlantic Training - Wilmington, NC
Feb 4-6: Recreational data collection North Atlantic Training - Gloucester, MA
Feb 12: Bycatch Prioritization Committee Annual Meeting – Webinar

Week of Mar 11: Commercial Technical Committee & Information Systems Committee Annual Meetings – TBD
Early Apr: Recreational Technical Committee-Webinar

Week of Jun 15: Recreational Data Wave 2 Meeting – Webinar
Jun 15: Initial proposals are due *

Week of Aug 15: Recreational Data Wave 3 Meeting – Webinar
Sep 22-23: Annual Advisors and Operations Committee Joint Meeting (in-person; location TBD) [Proposal Ranking]

Late Oct: Recreational data collection Wave 4 Meeting – TBD

*This year ACCSP is likely to have a higher than usual amount of funding for new projects available. Please start thinking about potential projects now. Stay tuned for the release of the request for proposals and be sure to get your proposals in on time.

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.
species population dynamics models for shorebirds and horseshoe crabs. Also, swept-area estimates from a trawl survey provide the observed abundances for adult horseshoe crabs. The 2019 benchmark assessment demonstrated the use of the catch survey model (CSM) to estimate abundance and stock size. Therefore, making the ARM more flexible to incorporate CSM estimates would be a significant advance.

The Framework currently uses an older software program, ASDP, to run the ARM model and use outputs to inform crab harvest decisions. However, ASDP is outdated and cannot be used with current operating systems, limiting its accessibility. Recently developed software (MDPSolve in MATLAB) is a significant advance in methodology that can operate on multiple platforms, giving more scientists the ability to run the ARM model.

The USGS provided new funding in 2020 for the ARM development project that will result in improved science-based conservation of the Delaware Bay ecosystem by 1) incorporating the CSM estimates into the ARM Framework and 2) translating and testing the conversion of the ASDP code into MDPSolve. Once the software conversion is completed and tested by USGS scientists, new resource decision matrices will be generated and Commission committee members will be trained to run the ARM in the new software. The new ARM version will then be used to provide harvest advice to fishery managers.

Blue Catfish Invasion
Blue catfish (*Ictalurus furcatus*) is an invasive fish predator with an increasing distribution in the Chesapeake Bay watershed. Its populations have grown to nuisance-level abundances in the past three decades. Early records of blue catfish in the Potomac River were “random and sporadic” in the 1980s and there was no evidence of reproduction. At that time, occurrences of invasive catfishes in the upper Chesapeake Bay were considered temporary, the result of wet years in 1993 and 1994. Since then, blue catfish reproduction has led to high abundances that support a Potomac River commercial fishery of over a million pounds per year. The species has also spread to the adjacent Patuxent River, rivers of the upper Chesapeake Bay, and Eastern Shore rivers such as the Nanticoke.

In the past 40 years, research has been conducted regarding the abundance and diets of blue catfish in Virginia. Early forecasts of abundance estimates from Virginia rivers suggested that over a million blue catfish could exist in the Chesapeake Bay. However, it is unlikely that blue catfishes are spread uniformly throughout the watershed because of habitat differences among and within rivers, and preferences for certain habitats. Research has shown the species achieved high abundances in Virginia rivers and consumed both fish and macroinvertebrates, having a preference for the latter and foraging more commonly at lower trophic levels.

Opportunistic feeding and an omnivorous diet suggest broad ecosystem impacts from this invasive species that differ over space and time. Spatiotemporal differences in diet may exist among streams within a river, and also among rivers within the Chesapeake Bay watershed. The recent spread of blue catfish into habitats occupied by striped bass during their spawning season, as well as co-occurrence with American shad in the Potomac River, has raised additional concerns regarding feeding impacts of this very abundant predator. Because of the recent spread of blue catfish throughout the Chesapeake Bay, a robust understanding of movement patterns and consumption impacts at greater spatial and temporal scales will require studies across the range of the species in the watershed.

The USGS, Commission, and the Maryland Department of Natural Resources are partnering to provide scientific expertise and funding for a new study in the Patuxent River, MD, on the distribution, movements, abundances, and diets of blue catfish from freshwater tidal to brackish waters. The study will improve understanding of ecological and socioeconomic impacts, and design an effective harvest control strategy via a targeted commercial fishery. Results from the project will identify overwintering (November-February) and spawning

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set additional commercial management measures, including 1) minimum size limits, 2) minimum mesh requirements for trawls or 3) a moratorium on entry into the fishery and closed seasons.

Although the black sea bass fishery was declared rebuilt in 2009, the unique life history of the species contributes to uncertainty about the size of the stock. The response of this species, as well as other hermaphroditic species, to exploitation is not fully understood. Given these concerns, the Commission and Council approved a 3.52 million pound commercial quota and a 3.66 million pound RHL for the 2019 fishing season. Based on the 2019 operational stock assessment results indicating SSB is larger than previously thought and the stock status is positive, the Board approved a commercial quota of 5.58 million pounds and an RHL of 5.81 million pounds for 2020 and 2021.

In December 2018, the Board approved Addenda XXXI and XXXII to the FMP. Addendum XXXI adds to the suite of tools available for management, with particular focus on enhancing the compatibility of state and federal regulations, by allowing the use of conservation equivalency for recreational management starting in 2020. Conservation equivalency allows recreational management measures in federal waters measures to be waived, and instead requires recreational anglers to abide by the measures of the state in which they land their catch. The Board and Council will annually decide whether to enact conservation equivalency; this policy will not be used in 2020.

Addendum XXXII establishes an annual specifications process for developing recreational management measures. The Board will approve regional measures in early spring each year, based on technical committee analysis of stock status, resource availability, and harvest estimates. Public input on specifications will be gathered by states through their individual public comment processes. The specifications process will provide the Board more flexibility in adjusting measures, if necessary, to constrain harvest to the annual coastwide recreational harvest limit (RHL). Further, the process will enable the Board to consider a host of factors, including: regional equity; regulatory stability; species abundance and distribution; and late-breaking recreational harvest estimates.

**Pending Actions**

**Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocations Amendment**
In October 2019, the Board and the Council initiated the development of a joint amendment to reevaluate the FMP’s commercial and recreational allocations. This action will consider whether changes to these allocations are warranted given updated commercial data, and revised recreational catch and landings estimates provided by MRIP. The Commission and Council have approved a Public Information Document and public hearings to gather stakeholder input on issues for consideration will occur in February and March of 2020.

**Black Sea Bass Commercial Addendum**
In October 2019, the Board initiated an addendum to consider changes to black sea bass commercial state allocations. This action will consider the current distribution and abundance of black sea bass as one of several adjustment factors to achieve more balanced access to the resource. In December 2019, the Council also activated an Amendment to consider adding black sea bass state shares to the Council FMP. The Plan Development Team is in the process of preparing a draft document for Board and Council consideration in May 2020.

For more information, please contact Caitlin Starks, Fishery Management Plan Coordinator, at cstarks@asmfc.org.

**Science Highlight, continued from page 12**

Habitats (May-July) for the purposes of efficiently lowering population densities during periods when densities are expected to be at their greatest.

Field sampling will be conducted in the Patuxent River, because it has a growing blue catfish population, offers a relatively pristine environment, and can serve as a model study for other Chesapeake rivers. We lack a comprehensive study of catfish diets from brackish areas, as well as many rivers in the Chesapeake Bay, confounding our understanding of ecological relationships in the Bay watershed. Achieving project objectives will inform management actions by: 1) guiding efficient harvesting of blue catfish by agencies and watermen when fish are in overwintering and spawning habitats; and 2) informing managers of possible additive effects on natural mortality of recreationally and commercially valued species (e.g., blue crabs, yellow perch, and striped bass).

For more information on USGS fisheries research initiatives, contact Tom O’Connell, Director, USGS Leetown Science Center, at toconnell@usgs.gov, 304.724.4401, or visit https://www.usgs.gov/centers/lsc.

For more information on Commission science initiatives, contact Pat Campfield, Director of Fisheries Science, at pcampfield@asmfc.org, 703.842.0726.
Employee of the Quarter: Chris Jacobs

Each quarter, the Commission honors an individual who has made notable contributions to the Commission’s mission, vision, programs, and activities. For the fourth quarter of 2019 (October - December), Chris Jacobs, Facilities and Technology Administrator, was named the Employee of the Quarter for his enthusiastic and untiring pursuit of the values recognized by the award (teamwork, initiative, responsibility, quality of work, positive attitude and results).

In a little over 18 months, Chris has made himself an indispensable asset to the staff by helping to ensure that all things IT-related are running smoothly and efficiently. Over the past few months, he played a huge role in upgrading the Commission’s network and servers, often working extended hours late into the evening and over the weekend to migrate the network and servers while minimizing lost work time by ASMFC staff. Alongside this major task, Chris also continued to address staff computer and network needs, as well as maintain office infrastructure, including temperature control, office security, furniture repair, and meeting week equipment support.

Conscientious, responsive, and highly motivated, Chris takes great personal pride in the quality of his work. His can do attitude and upbeat personality make him a great team player and someone staff feels comfortable going to for their IT questions and problems. In appreciation of his efforts, Chris received a cash award and a letter of appreciation to be placed in his personal record. In addition, his name is on the plaque displayed in the Commission’s lobby. Congratulations, Chris!

Comings and Goings

COMMISSIONERS

ASSEMBLYMAN ERIC HOUGHTALING
In December, Assemblyman Houghtaling became New Jersey’s Legislative Commissioner to the ASMFC, replacing Assemblyman Robert Andrzejczak who served in that position since May 2014. Elected to the New Jersey General Assembly in 2016, Assemblyman Houghtaling serves on the Telecommunications and Utilities Committee and the Labor Committee. He is also Chair of the Agriculture and Natural Resources Committee and Vice-Chair of the Oversight, Reform and Federal Relations Committee.

A lifelong resident and former Mayor of Neptune Township, Assemblyman Houghtaling has always strived to give back to the community in which he raised his family. He is a career electrician and a proud, 40-year member of the International Brotherhood of Electrical Workers Local 400. He has also served as a representative to the Monmouth and Ocean Counties Central Labor Council. Through his work with labor, Assemblyman Houghtaling has gained a keen understanding of the issues facing working families, including the need to create good-paying jobs, make education more effective, and keep communities safe. Eric and his wife Linda have two daughters and seven grandchildren. Welcome aboard, Assemblyman Houghtaling!

STAFF

MARISA POWELL
In January, Marisa Powell joined the Commission staff as the ACCSP Program Assistant. She will be responsible for providing staff support to ACCSP committees, managing ACCSP outreach (e.g. website, social media, and newsletter articles), assisting in the annual funding process, and providing support to the Program Director and Deputy Director.

Before coming to the Commission, Marisa worked in outreach and as a hatchery husbandry assistant at the Downeast Institute in Beals, Maine. She held this position through AmeriCorps VISTA, Corporation for National and Community Service and Maine Conservation Corps. Marisa graduated from Coastal Carolina University School of Science with a Bachelor degree in Marine Science. Welcome aboard, Marisa!