

FISHERIES FOCUS

Vision: Sustainably Managing Atlantic Coastal Fisheries

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The agenda is subject to change. Bulleted items represent the anticipated major issues to be discussed or acted upon at the meeting. 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.

SUNDAY, OCTOBER 23

6:30 – 8:30 p.m. Welcome Reception

MONDAY, OCTOBER 24

8:30 a.m. - Noon

75th Annual Meeting Plenary Session – Honoring our Past, Celebrating the Present and Envisioning the Future

- Welcome/Kick-off, ASMFC Chair Doug Grout, Chief of Marine Fisheries, NH Fish and Game
- Plenary Overview, ASMFC Executive Director Bob Beal
- ASIVIFC History
 - Honoring the Past (1941-1991), Phil Coates, former MA Division of Marine Fisheries Director and ASMFC Commissioner (1979-2000)
 - Celebrating the Present (1992-2016), Susan Shipman, former GA Coastal Resources Division Director and ASMFC Commissioner (1994-2008)
- ASMFC Highlights Interactive Session
- Morning Session Wrap-up and Overview of Things to Come, Bob Beal

continued, see ANNUAL MEETING AGENDA on page 6

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 fifteen member states of the Commission are: Maine, New Hampshire, Massachusetts. Rhode Island, Connecticut, New Vork, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, and Florida.

Atlantic States Marine Fisheries Commission

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Upcoming Meetings

October 23 - 27

ASMFC 75th Annual Meeting, Harborside Hotel, 55 West Street, Bar Harbor, ME

November 2 & 3

Portland Marriott City Center, 520 SW Broadway, Portland, OR

November 10

Northern Shrimp Advisory Panel and Section, Urban Forestry Center, 45 Elwyn Road, Portsmouth, New Hampshire.

November 14 - 17

ASMFC Stock Assessment Training - Mock Data Workshop, DoubleTree by Hilton Hotel & Suites, 181 Church Street, Charleston, SC.

November 15 - 17

New England Fishery Management Council, Hotel Viking, Newport, RI

December 5 - 9

South Atlantic Fishery Management Council, DoubleTree by Hilton, Atlantic Beach Oceanfront, 2717 W. Fort Macon Road, Atlantic Beach, NC

January 3-5

MREP Workshop on Fisheries Science, Sheraton Hotel, Atlantic City, NJ

January 17-19

MREP Workshop on Fisheries Management, Sheraton Hotel, Atlantic City, NJ

January 31-February 2

ASMFC Winter Meeting, The Westin Alexandria, 400 Courthouse Square, Alexandria, VA

February 14-16

Mid-Atlantic Fishery Management Council, Hilton Garden Inn, Virginia Dare Trail, Kitty Hawk, NC

March 6-10

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

March 14-16

MREP Workshop on Fisheries Science and Management for the Recreational Angler, Crowne Plaza, Warwick, RI

April 11-13

Mid-Atlantic Fishery Management Council, Icona Golden Inn, 7849 Dune Drive, Avalon, NJ

May 8-11

ASMFC Spring Meeting, The Westin Alexandria, 400 Courthouse Square, Alexandria, VA

June 6-8

Mid-Atlantic Fishery Management Council, The Main, 100 Main Street, Norfolk, VA

June 12-16

South Atlantic Fishery Management Council, Sawgrass Marriott, 1000 PGA Tour Boulevard, Ponte Vedra Beach, FL

August 1-3

ASMFC 2017 Summer Meeting, The Westin Alexandria, 400 Courthouse Square, Alexandria, VA

From the Executive Director's Desh

Honoring the Past, Celebrating the Present and Envisioning the Future

This month the Commission will celebrate 75 years since President Franklin D. Roosevelt signed legislation approving the Commission's Compact in 1942. Upon reaching this august milestone, it is important to reflect on the past so that we may forge that progress into continuing success. Above all else, the success of the Commission has been built upon cooperation among the Atlantic states through numerous exceptional men and women over the last three quarters of

a century.

The Striped Bass Act and Atlantic Coastal Act are arguably two of the most revolutionary advancements since the Commission's inception 75 years ago. Each was created in response to a challenge and each has since become assimilated into our routines to promote the better functioning of our fisheries. Even as we enjoy these triumphs, the Commission has entered a new era and faces challenges not seen before. With a changing of the guard up and down the coast, the men and women who possess the Commission's most vital institutional knowledge have an important opportunity to pass it on. It is now more important than ever for our Commissioners to embrace the principles that have enabled us to thrive for 75 years.

In the near future, the Commission must come together to address the considerable impacts of climate change on our oceans. The interstate cooperation required to meet this challenge will put our shared values to the test, but will also offer an opportunity for large-scale collaboration to develop creative management solutions. Although our predecessors never had to wrestle with climate change, we can still learn from them by handling new obstacles as

opportunities, just as they did. Take, for example, the very reason the Commission was formed in the first place – to address conflicting management among neighboring states. The Commission not only achieved its purpose by creating an official forum for coastwide coordination, but it reached further, giving the states a unified voice to pursue greater goals in government such as the Striped Bass Act, Atlantic Coastal Act, and cooperative data collection and research.

The Commission is now experiencing growth not seen since the Atlantic Coastal Act was signed over two decades ago. In 2012, the Commission established the first catch limits for Atlantic menhaden and is now currently working to debut our first suite of ecological reference points that consider the fishery's importance to predator species. In 2015, the Commission began management of Jonah crab and is embarking on complementary management of cobia with the South Atlantic Fishery Management Council. This year, the Atlantic Coastal Cooperative Statistics Program was officially

integrated into the Commission, just as it began to administer the intercept portion of the Marine

Recreational Information Program from the federal government. The Commission has also begun to take on an unprecedented role in administering federal dollars for cooperative data collection and research.

As the Commission grows in size and scope, it is of utmost importance to maintain one of our greatest strengths – the ability to respond quickly and creatively to ecological, economic and political change.

... the success of the Commission has been built upon cooperation among the Atlantic states through numerous exceptional men and women over the last three quarters of a century. Some challenges have always been around and always will be. The states will always wrestle with conserving and sharing finite fishery resources and securing the human and fiscal capital to ensure successful management. The relationships between the states and with our federal partners will be tentative at times, an issue that predates even the Commission. One need only look as far as the lobster fishery for evidence. At first, the individual states were at odds with each other over management, and then with the federal government. In 1996, a lasting solution was forged as the federal FMP was dissolved and the Commission became the primary management authority.

Since its inception, the Commission as become a forum for research and cooperation, and

a unified advocate for the states. As those who have been present to celebrate many of our biggest milestones move on, I am confident the new guard will ably bear the standard. We are honored to have many of the Commission's most important figures from the past in attendance at our 75th Annual Meeting in Bar Harbor this month. We are grateful for the institutional knowledge they continue to transfer and we remain committed to responsible stewardship of one of America's most prized resources – Atlantic coastal fisheries.

noEme

Species Profile: Weakfish

Recovery of Historically Important Species Hindered by High Natural Mortality

Introduction

Weakfish, *Cynoscion regalis*, has historically been an important commercial and recreational species; however, the species' abundance has declined since the 1980s resulting in a significant reduction in the size of the fishery. Total landings in 1980 peaked at roughly 36 million pounds. Since that time, landings have steadily declined to a time-series low of 160,000 pounds in 2011.

The decline of the weakfish stock is a result of fishing mortality and high levels of natural mortality (deaths due to predation, starvation, and other natural causes). In fact, while fishing pressure has been reduced due to strict management measures, natural mortality has increased. The result is a weakfish stock that is not subject to overfishing, but is depleted.

The 2016 benchmark stock assessment indicates while there is a slight increase in spawning stock biomass (SSB) in the most recent years, SSB is still well below the management threshold. Given the depleted condition of the stock, the Commission's Weakfish Management Board decided to maintain stringent management measures implemented in 2010.

Life History

Weakfish occur along the Atlantic coast of North America from Nova Scotia to southeastern Florida, but are more common from New York to North Carolina. Warming of coastal waters in the spring prompts an inshore and northerly migration of adults from their offshore wintering grounds between Chesapeake Bay and Cape Lookout, North Carolina into nearshore sounds, bays, and estuaries. Spawning occurs shortly afterwards, peaking from April to June, with some geographical variation in timing. Females continuously produce eggs during the spawning season and release them in increments. In the fall, an offshore and southerly migration of adults coincides with declining water temperatures. Feeding on microscopic animals, larval weakfish journey from spawning areas to nursery areas, located in deeper portions of coastal rivers, bays, sounds, and estuaries. They remain in these areas until October to December of their first year, after which the juveniles migrate to the coast. Growth in weakfish is especially rapid in the

first year and they mature at a young age. Size at age-1 is variable but most fish reach 10 to 11 inches long. As adults, weakfish are often found near the periphery of eelgrass beds, perhaps because weakfish feed primarily on shrimp, other crustaceans, and small fish that are found near these grass beds.

Commercial & Recreational Fisheries

Weakfish have supported fisheries along the Atlantic coast since the 1800s. Over the last 15 years, however, fishermen have had increasing difficulty landing weakfish. From 1950 to 1970, commercial landings fluctuated without trend, ranging from three to nine million pounds. The early 1970s began a period of tremendous growth in the fishery, with 31 million pounds landed in 1986.

Weakfish commercial landings have dramatically declined since the early 1980s, dropping from over 19 million pounds landed in 1982 to roughly 200,000 pounds in 2014. The majority of landings occur in North Carolina and Virginia.

Species Snapshot



Weakfish Cynoscion regalis

Common Names: Tide runner, sea trout, gray trout, squeteague

Interesting Facts

- Weakfish are members of the drum family (Sciaenidae), which also includes spotted seatrout, croaker, spot, red drum and black drum. The males of these species are all noted for the drumming noise they produce, particularly during spawning periods.
- The name weakfish refers to the tender, easily torn membrane of the fish's mouth, rather than its fighting ability.
- Delaware declared weakfish its state fish in 1981.

Largest Recorded: 19.12 pounds (New York, 2008)

Maximum Age: 17 years

Age at Maturity: 90% mature at age 1, 100% mature at age 2

Stock Status: Depleted, overfishing is not occurring



Young-of-the-year weakfish. Photo (c) NYSDEC.

Discarding of weakfish by commercial fisherman is known to occur, especially in the mixed species trawl fishery, and discard mortality is assumed to be 100%. Discards peaked in the 1990s but have since declined as the result of management measures and a decline in stock abundance. Trawls and gillnets are the primary commercial gears, although weakfish are also landed using pound nets and haul seines.

As in the commercial sector, catch in the recreational fishery has declined from over 11 million pounds in 1983 to roughly 77,000 pounds in 2014. Recreational harvest has been dominated by New Jersey, Delaware, Maryland, Virginia, and North Carolina. Recreational discard mortality, which is assumed to be 10%, has decreased with recreational catch.

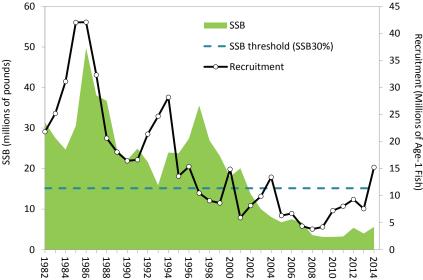
Stock Status

The 2016 Weakfish Benchmark Stock Assessment and Peer Review Report indicates weakfish are depleted and have been for the past 13 years. Under the new reference points, the stock is considered depleted when below a SSB threshold of 30% (15.17 million pounds). In 2014, SSB was 5.62 million pounds. While the assessment indicates some positive signs in the weakfish stock, with a slight increase in SSB and total abundance in the most recent years, the stock is still well below the SSB threshold.

The assessment indicates natural mortality has been increasing since the mid-1990s, from approximately 0.16 in the early 1980s to an average of 0.93 from 2007-2014. Therefore, even though fishing mortality has been at low levels in recent years, the weakfish population has been experiencing very high levels of total mortality, preventing the stock from recovering.

To better address the issues impacting the weakfish resource, the Technical Committee

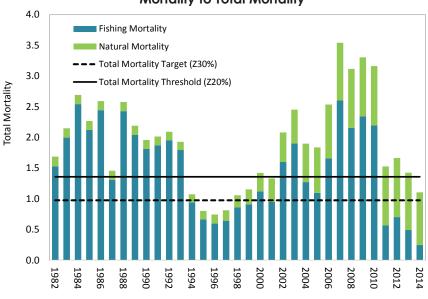
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Weakfish Spawning Stock Biomass and Recruitment

* The stock assessment assumes 10% of the released fish died as a result of being caught and released.

Contributions of Fishing and Natural Mortality to Total Mortality



recommends the use of total mortality (Z) benchmarks to prevent an increase in fishing pressure when natural mortality is high. The assessment proposes a Z target of 0.93 and threshold of 1.36. Total mortality in 2014 was 1.11, which is above the threshold but below the target, indicating that total mortality is still high but within acceptable limits. This is the first time in 13 years that Z has been below the threshold, and additional years of data are needed to determine whether estimates in Z in the most recent years will remain below the threshold.

Atlantic Coastal Management

In 1985, as a result of population declines and limited biological information, the Commission developed an Interstate Fishery Management Plan for Weakfish. While the goals of the plan and its two subsequent amendments were well intentioned, stock rebuilding did not occur until the mid-1990s when the states implemented more restrictive regulations, first voluntarily, and then for compliance purposes once the Atlantic Coastal Fisheries Cooperative Management Act enabled implementation of a mandatory plan

75th Annual Meeting Final Agenda (cont'd)

- Envisioning the Future
 - Introduction, Patrick Keliher, Commissioner, ME Department of Marine Resources
 - Observations on the Current and Future State of the Ocean and Marine Resources, Guest Speaker Dr. Robert Steneck, ME School of Marine Sciences
 - Panel Discussion on Adapting to Future Challenges
- Plenary Wrap-up & Adjournment, Bob Beal

1:00 – 5:00 p.m. Law Enforcement Committee

(A portion of this meeting is a closed session for Committee members only)

- Discuss Emerging ISFMP Issues
- Review and Discuss 2017 Action Plan Items
- Interstate Violator Compacts and Application to Marine Fisheries
- Review of Proposed Jonah Crab Claw Harvest Regulations
- Review Warrant and Search Provisions among LEC Jurisdictions
- Review and Discuss Ongoing Enforcement Activities (Closed Session)

1:00 - 1:30 p.m. Spiny Dogfish Management Board

- Review and Set Spiny Dogfish Fishery Specifications for 2017/2018 Season Final Action
 - Review MAFMC 2016-2018 Specifications Recommendation (M. Appelman)
- Consider 2016 Spiny Dogfish FMP Review and State Compliance (M. Appelman) Action

1:45 – 2:45 p.m. Coastal Sharks Management Board

- Updates from NOAA Fisheries Highly Migratory Species (HMS) Division (K. Brewster-Geisz)
- Review Proposed Rule for HMS Amendment 5b (Dusky Sharks) and 2016 Stock Assessment Results
- Review Draft Environmental Assessment for Amendment 10 to the 2006 Consolidated HMS FMP: Essential Fish Habitat
- Review Proposed Rule for Blacknose Possession Limits for Federally-Permitted Vessels
- Review Proposed Rule for the 2017 Atlantic Shark Commercial Fishing Season
- Set 2017 Coastal Sharks Fishery Specifications (A. Harp) Final Action

3:00 – 5:00 p.m. Atlantic Striped Bass Management Board

- Review Technical Committee Report (*N. Lengyel*)
 - Performance Evaluation of Addendum IV Regulatory Measures
- Review the 2016 Atlantic Striped Bass Stock Assessment Update (G. Nelson)
- Consider Approval of the Advisory Panel Request to Submit Comment to the MAFMC on its Draft Squid Capacity Amendment (J. Gilmore) Possible Action

TUESDAY, OCTOBER 25

8:00 – 10:00 a.m. Executive Committee

(A portion of this meeting may be a closed session for Committee members and Commissioners only)

- Consider Approval of FY16 Audit (L. Leach)
- Review Conservation Equivalency Guidance Document (T. Kerns)
- Review the ASMFC Standard Meeting Practices Document (R. Beal)
- Report of the Awards Committee (S. Woodward)
- Review Performance Appraisal/Merit Increase Protocol (R. Beal)
- Review Resolution Regarding Revision of Retirement Plan
- Discuss Revision of Action Plan to Include ACCSP Goal (R. Beal)
- Discuss Health Benefits for Retired ASMFC Employees (R. Beal)

8:00 a.m. – Noon Law Enforcement Committee

(A portion of this meeting may be a closed session for Committee members only)

- Update on Future Safe Harbor Issues and Input (Other Emerging Issues)
- Update on Aerial Enforcement Subcommittee Discussions
- Federal and State Agency Reports
- Lobster Enforcement Subcommittee Report and Discussion

Public Comment Guidelines

In order to ensure a fair opportunity for public input, the ISFMP Policy Board has established the following guidelines for use at management board meetings:

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 use a speaker sign-up list in deciding 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 a meeting week will be included in the briefing materials.
- 2. Comments received by **5 PM on Tuesday**, **October 18**, **2016** will be distributed electronically to Commissioners/Board members prior to the meeting and a limited number of copies will be provided at the meeting.
- 3. Following the October 18th deadline, the commenter will be responsible for distributing the information to the management board prior to the board meeting or providing enough copies for the management board consideration at the meeting (a minimum of 50 copies).

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.

- Review Law Enforcement Committee Comments and Recommendations to ASMFC Boards
- Review Out-of-State Shipment/Sale Tracking for Enforcement Needs
- Review Updated ISFMP Issues

10:15 a.m. – 12:15 p.m. South Atlantic State/Federal Fisheries Management Board

- Consider Draft Cobia FMP Public Information Document for Public Comment (L. Daniel) Action
- Red Drum Working Group Report (J. Kipp)
 - Presentation of Follow Up Tasks to the Red Drum Assessment
- Progress Report on the Spot and Atlantic Croaker Benchmark Stock Assessments (J. Kipp)
- Consider 2016 FMP Reviews and State Compliance for Black Drum, Spanish Mackerel and Spotted Seatrout (A. Hirrlinger) Action
- SEAMAP Funding Update (S. Madsen)
- Review and Populate Advisory Panel Membership (T. Berger) Action

1:15 – 3:15 p.m. Tautog Management Board

- Review 2016 Stock Assessment Update (J. McNamee)
- Provide Plan Development Team Guidance on Draft Amendment 1 (A. Harp & A. Nowalsky)
- Update on Tautog Tagging Trial (A. Harp)

3:30 – 4:30 p.m. Summer Flounder, Scup, and Black Sea Bass Management Board

- Review MRIP Wave 4 Harvest Estimates for Summer Flounder, Scup, and Black Sea Bass (if available) (K. Rootes-Murdy)
- Consider Management Approaches for 2017 Summer Flounder and Black Sea Bass Recreational Fisheries
 Possible Action
 - Summer Flounder Working Group Report (K. Rootes-Murdy)
- Update on Stock Assessment Progress for Black Sea Bass (K. Rootes-Murdy)
- Consider 2016 FMP Reviews and State Compliance for Summer Flounder, Scup and Black Sea Bass (K. Rootes-Murdy) Action

4:45 – 5:30 p.m. Shad and River Herring Management Board

- Consider Approval of the Nemasket River (MA) Sustainable FMP Final Action (B. Chase)
 - Review Technical Committee Report on the Nemasket River Sustainable FMP
- Discuss the Timetable for the Five-Year Update of Shad and River Herring Sustainable FMP (A. Harp)
- Review MAFMC Decision on Potential Management of Shad and River Herring (B. Goldsborough)

6:30 – 9:00 p.m. Annual Dinner

WEDNESDAY, OCTOBER 26

8:00 – 10:00 a.m. Horseshoe Crab Management Board

- Consider Comments from the Adaptive Resource Management (ARM) Subcommittee on Draft Addendum VIII (K. Rootes-Murdy) Possible Action
- ARM Subcommittee Report (K. Anstead)
- Report of the Horseshoe Crab Technical Committees (S. Doctor) Possible Action
 - Shorebird and Horseshoe Crab Survey Reports Summary
 - ARM Framework Harvest Output for 2017
 - Recommendations on Bait Trials
- Set 2017 Delaware Bay Horseshoe Crab Fishery Specifications (K. Rootes-Murdy) Final Action
- Consider Approval of 2016 FMP Review and State Compliance (K. Rootes-Murdy) Action

10:15 – 11:15 a.m. Atlantic Coastal Cooperative Statistics Program (ACCSP) Coordinating Council

- ACCSP Status Report (M. Cahall)
 - Program Updates
 - Committee Updates
- Presentation of the Universe of Electronic Reporting Efforts on the Atlantic Coast (M. Cahall)
- Consider Recommendations of FY2017 Submitted Proposals (P. Campfield, J. Morgan) Action
- Consider Addendum to Memorandum of Understanding to Reflect Governance Change (R. Boyles) Action

continued, see ANNUAL MEETING AGENDA on page 14

Weakfish Species Profile, (cont'd)

(Amendment 3). A subsequent stock assessment showed weakfish resource had experienced modest growth, which prompted the development of Amendment 4 to build upon these gains. Amendment 4 was implemented in 2003 to establish appropriate biological reference points, set a rebuilding schedule if limits were exceeded, revise the reference period on which recreational management options were based, increase the bycatch allowance, and establish a biological sampling program. Two subsequent addenda in 2005 and 2007 replaced Amendment 4's biological sampling program and bycatch reduction device certification requirements for the southern penaeid shrimp trawl fishery.

Despite the gains seen in the late 1990s, a stock assessment following the implementation of Amendment 4 depicted falling biomass after 1999. However, that stock assessment could not technically be used as a basis for management action, because a review panel did not endorse the methods employed. Recognizing that fishing mortality was not the cause for the biomass decline, but that low fishing mortality would be required for a timely recovery if natural mortality declined, the Weakfish Management Board approved several management options under Addendum II aimed at controlling expansion of the fishery when stock status improves. The Addendum reduced most states' recreational creel limits, reduced the bycatch allowance, and established several management triggers to facilitate a prompt response to a change in landings.

In response to the findings of the 2009 stock assessment, which concluded that stock rebuilding can only occur if total mortality is reduced, the Board implemented further harvest reductions in 2010 through Addendum IV. The implemented measures include a one fish recreational creel limit, 100 pound commercial trip limit, 100 pound commercial bycatch limit, and 100 undersized fish per trip allowance for the finfish trawl fishery. Further, all other management measures previously adopted to conserve the stock and reduce bycatch were maintained.

Following the results of the 2016 stock assessment, the Board decided to maintain the strict management measures implemented in Addendum IV. While the assessment does show a slight increase in abundance of the stock in most recent years, the Board chose not to increase fishing mortality given the continued high levels of natural mortality. In order to determine whether the up-tick in abundance is a true signal of stock recovery, the Board requested a stock assessment update be conducted in 2018.

For more information, please contact Mike Schmidtke, FMP Coordinator, at mschmidtke@asmfc.org or 703.842.0740.

Understanding Natural Mortality

Fisheries scientists and managers continually work on data collection and analysis methods to improve the reliability of stock status determination and improve confidence in management actions. However, one topic of fisheries science that continues to inspire both great interest and debate is natural mortality.

Fish die of either natural mortality (depicted by the symbol M) or fishing mortality (depicted by the symbol F), and the two added together constitute the total mortality (Z) experienced by a population. Assessment methods based on catch (removals of fish from a population) and its composition (i.e. the size, age, and sex of the caught fish) indicate total mortality. As a result, F comes from the subtraction of M from Z. The challenge is determining natural mortality.

Natural mortality rates generally vary between fish species. For example, fish like anchovies, mackerel, and herring have high natural mortality rates due to the fact they mature early, grow fast, and have short life spans. By comparison, fish such as tautog, cod, sturgeon, and haddock have lower natural mortality rates because they mature later, grow slower, and have long life spans. Natural mortality can also vary during each life stage of a particular species of fish. Environmental variation such as temperature, competition, food availability, and predation can have significant and often immeasurable effects on fish survival as they mature from eggs and larvae to juveniles and adults.

Fisheries scientists attempt to include natural mortality in stock assessment calculations, because it is known that not all fish losses are due to fishing and that, in some situations, natural losses may be of greater significance to a population than fishing losses. Classically, there are two methods for deriving natural mortality, one involving a constant rate of mortality among ages, and another involving age-specific mortality. Constant mortality rate assumes each life stage experiences the same rate of loss or same chance of dying from natural causes. Age-specific mortality, on the other hand, assumes that an age-1 fish will die from natural causes at a different rate (generally higher rate) than an age-10 fish.

The 2016 weakfish stock assessment is unique in that it tracks changes in natural mortality over time. This allows scientists and managers to understand changing dynamics in the stock. It is still unclear what is causing the increase in M for weakfish. Two hypotheses include increased predation and changing sea surface temperatures.

For more information on natural mortality or other fisheries science topic, download a copy of the Commission's Guide to Fisheries Science and Stock Assessments at http://www.asmfc.org/publications/GuideToFisheriesScienceAndStockAssessments.pdf. Printed copies can also be requested at info@asmfc.org.

ASMFC & MAFMC Maintain Multi-Year Specifications for Black Sea Bass, Bluefish, and Scup and Modify Summer Flounder Specifications

In August, the Atlantic States Marine Fisheries Commission (Commission) and the Mid-Atlantic Fishery Management Council (Council) reviewed previously implemented specifications for scup, black sea bass and bluefish fisheries and modified specifications for summer flounder. The Commission's actions are final and apply to state waters. The Council will forward its federal waters recommendations regarding summer flounder specifications to NOAA Fisheries Greater Atlantic Regional Fisheries Administrator for final approval.

The accompanying table summarizes commercial quotas and recreational harvest limits for summer flounder, scup, black sea bass, and bluefish (2016 values are provided for comparison purposes). Please note specifications for years 2017 and beyond may be adjusted based on changes in the fishery or new scientific information.

Species	Year	Commercial Quota (millions of pounds)	Commercial Minimum Fish Size (TL)	Commercial Diamond Mesh Size	Recreational Harvest Limit (millions of pounds)
Summer Flounder	2016	8.12	14"	5.5"	5.42
	2017	5.66	14"	5.5"	3.77
	2018	6.63	14"	5.5"	4.42
Scup	2016	20.47	9"	5"	6.09
	2017	18.38	9"	5"	5.50
	2018	17.34	9"	5"	5.21
Black Sea Bass	2016	2.70	11"	4.5"	2.82
	2017	2.71	11"	4.5"	2.82
Bluefish	2016	4.88	Varies by state		11.58
	2017	6.07	Varies by state		11.58
	2018	7.24	Varies by state		11.58

Summer Flounder

For summer flounder, both groups approved a commercial quota of 5.66 million pounds

and a recreational harvest limit of 3.77 million pounds for 2017, an approximate 30% decrease from 2016. This decrease in catch and landings limits responds to the findings of the 2016 stock assessment update, which indicates summer flounder has been experiencing overfishing since 2008. In 2015, fishing mortality exceeded its threshold by 26% (i.e., the level beyond which overfishing is occurring). The 2015 estimate of spawning stock biomass (SSB) is at 58% of the biomass target, and only 16% above the threshold. If the stock were to fall below the threshold, it would be considered overfished, requiring the development of a rebuilding plan to reduce fishing mortality and rebuild stock biomass. These results appear to be driven largely by below-average recruitment, an underestimation of the fishing mortality level in the last years of the assessment, and declining biomass indices. The assessment update indicates the stock experienced six below-average year classes from 2010 to 2015. Additionally, indices of abundance from state and federal surveys have indicated declines in abundance ranging from 9 to 97% from their most recent peaks (generally 2009 to 2012). The 2016 assessment update estimated biomass has been trending down since 2010. Summer flounder harvest limits for 2018 may be adjusted in the future based on changes in the fishery or new scientific

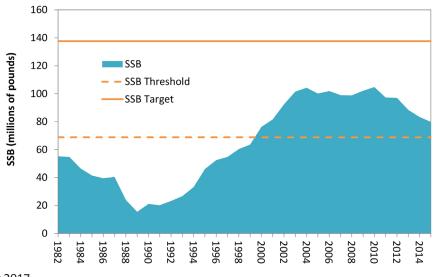
Scup and Black Sea Bass

information.

For scup and black sea bass, the Commission and Council maintained the previously implemented multi-year specifications set in August and October 2015, respectively. The decline in harvest limits for scup since 2016 is due to a decrease in SSB as projected by the 2015 benchmark stock assessment. For black sea bass, 2017 harvest limits remain unchanged relative to 2016 levels (in 2016, there was a reduction in the commercial quota due to overages in the previous year). Both the commercial quota and recreational harvest limit may be changed pending the results of the next benchmark stock assessment, scheduled for peer review through the Northeast Regional Stock Assessment Workshop/Stock Assessment Review Committee in late 2016. The Commission and Council will consider the results of the benchmark stock assessment in early 2017.

Summer Flounder Spawning Stock Biomass (SSB)

Northeast Fisheries Science Center Assessment Update, 2016



continued, see FISHERY MANAGEMENT ACTIONS on page 10

Fishery Management Actions (cont'd)

Bluefish

For the bluefish fishery, the final 2016 commercial quota is 4.88 million pounds and the recreational harvest limit is 11.58 million pounds. The final 2016 harvest limits include a 1.58 million pound transfer from the recreational sector to the commercial sector. The Commission and Council did not make any changes to the 2017 and 2018 specifications. The 2017 and 2018 commercial quotas and recreational harvest limits are preliminary and will likely change following release of 2016 and 2017 final Marine Recreational Information Program harvest estimates. These estimates can impact how much is transferred from the recreational sector to the commercial sector.

For all four species, the Commission and Council actions are consistent with the recommendations of the Council's Scientific and Statistical Committee based on the best available scientific information. For more information about summer flounder, scup, or black sea bass, please contact Kirby Rootes-Murdy, Senior FMP Coordinator, at krootes-murdy@asmfc.org. For more information about bluefish, please contact Max Appelman, FMP Coordinator, at mappelman@asmfc.org.



Photo (c) John McMurray, www.nyflyfishing.com

Coastal Sharks Addendum IV Modifies Smooth Dogfish Measures

The Coastal Sharks Management Board approved Addendum IV to the Interstate Fishery Management Plan (FMP) for Atlantic Coastal Sharks. The Addendum amends the FMP to allow smooth dogfish carcasses to be landed with corresponding fins removed from the carcass as long as

the total retained catch on board at the time of landing is composed of at least 25% smooth dogfish. Trips that do not meet the 25% catch composition requirement can land smooth dogfish, but the fins must remain naturally attached to the carcass. Naturally attached is defined as attached to the corresponding shark through some portion of uncut skin.

Through the Board's action, the Addendum maintains consistency between federal and state shark FMPs and better incorporates the intent of the smooth dogfish limited exception in the Shark Conservation Act of 2010 (SCA) into state regulations. States are required to implement the Addendum's management measure by January 1, 2017.

The Addendum is available othe Commission website at http://tinyurl.com/zeryjqz. For more information, please contact Ashton Harp, FMP Coordinator, at aharp@asmfc.org.

Atlantic Menhaden Addendum I Modifies Bycatch Provision

The Atlantic Menhaden Management Board approved Addendum I to Amendment 2 to the Interstate Fishery Management Plan for Atlantic Menhaden. The Addendum modifies the bycatch provision of Amendment 2 by allowing two permitted commercial fishermen working together from the same vessel using stationary multi-species gear to land up to 12,000 pounds of menhaden per trip per day. In this case, stationary multi-species gears are defined as pound nets, anchored/ staked gillnets, and fyke nets. Interested states may implement the new bycatch provision as their regulatory processes allow, but no earlier than August 15.

The practice of two permitted fishermen working together from the same vessel to harvest Atlantic menhaden primarily occurs in the Chesapeake Bay pound net fishery. This practice enables the fishermen to pool resources for fuel and crew. However, the practice was constrained under Amendment 2's bycatch allowance provision, which stipulated a 6,000 pound/vessel/day limit.

Board members also discussed 2017 specifications but postponed final action on these measures until the Commission's Annual Meeting in late October. Addendum I is available on the Commission website at http://tinyurl.com/jxvc56z. For more information, please contact Megan Ware, FMP Coordinator, at mware@asmfc.org.



Photo (c) Kevin Kalasz, DE DNREC

Horseshoe Crab Draft Addendum Initiated to Address Changes to ARM Framework

The Horseshoe Crab Board approved development of Draft Addendum VIII to the Horseshoe Crab Fishery Management Plan (FMP). The Draft Addendum will propose changes to the Adaptive Resource Management (ARM) Framework, which is used annually to set harvest specifications for the Delaware Bay states taking into consideration horseshoe crab abundance and red knot forage needs.

This action is in response to a recent technical review, which suggested changes to the ARM Framework, including the incorporation of mortality associated with biomedical bleeding activities into the Framework, and explored options that allow for the harvest of female horseshoe crab in the Delaware Bay Region. In its review, the ARM Subcommittee suggested mortality associated with biomedical activities due to capture, handling, or post-bleeding stress could be considered a form of harvest and recommended its inclusion in the Framework. This source of mortality had not been included in the

continued, see FISHERY MANAGEMENT ACTIONS on page 12

Maine Launches eDR Swipe Card System for Sea Urchin



Photo (c) Trisha Cheney, ME DMR

When the Maine sea urchin fishery opened on September 1, the transaction between urchin harvester and urchin dealer looked slightly different. This is because, beginning with the opening of the 2016 season, the state of Maine now requires dealers to report sea urchin landings using the ACCSP's swipe card-enabled dealer reporting system, eDR/mobile.

Developed by Harbor Light Software for our partners Maine Department of Marine Resources (Maine DMR) and Massachusetts Division of Marine Fisheries, eDr/mobile uses state-issued harvester swipe cards to identify harvesters and vessels as part of the dealer reporting process.

The system allows dealers to verify that a harvester is authorized to sell sea urchin before making a purchase. With the help of the information saved on the card, the dealer completes the electronic landings report and submits the data directly to the Standard Atlantic Fisheries Information System (SAFIS). Maine Department of Marine Resources fishery managers can access the data for real-time quota monitoring and compliance tracking.

In preparation for the launch, Fran Karp of Harbor Light Software hosted a hands-on training workshop to teach Maine seafood dealers how to use the new eDr/mobile system. Five dealers and several of their employees attended with a variety of devices and platforms on which they plan to run the application, including Windows laptops, Android tablets and phones, iPads, and iPhones.

Fran and four representatives from the Maine Department of Marine Resources provided the attendees with user guides and worked with each individually, teaching each dealer how to set up and operate the system. Dealers learned how to save their favorite species, ports, and gear types in the application; set up their devices with the card readers; enter landings reports; connect their devices to printers; and print and email receipts for the harvesters.

Once their systems were set up, dealers then conducted practice runs using a dummy account set up by Maine DMR. The workshop was, by all accounts, a success. The dealers readily grasped the new technology and began using it once the season opened on September 1.



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.

Science Highlight: NY, MD, and NC Atlantic Menhaden Harvester and Dealer Survey Participants Sought for Socioeconomic Study

The Atlantic States Marine Fisheries Commission awarded funding to a research team headed by Dr. John Whitehead of Appalachian State University and Dr. Jane Harrison from North Carolina Sea Grant to conduct a socioeconomic study of Atlantic menhaden commercial fisheries. The study is intended to characterize the coastwide commercial fisheries, including bait and reduction sectors and the fishing communities they support.



Photo (c) John Surrick, Chesapeake Bay Foundation

The principal investigators have sent survey announcements to fishermen and bait dealers in Maryland. Survey announcements in New York and North Carolina will

go out by October 17th. Participation in this survey is highly encouraged, as the data from this study will be used in the development of Draft Amendment 3 to the Atlantic Menhaden Fishery Management Plan in 2017 and subsequent management decisions. The deadline for responding to this survey is early November. Rhode Island surveys will be completed during the week of October 11th. Surveys were previously distributed to fishermen and bait dealers in Maine, New Jersey, and Virginia and the results are currently being analyzed for the project's completion in March 2017. The full proposal can be found at http://bit.ly/2bG4TOT. For more information, please contact Dr. Jane Harrison, North Carolina Sea Grant, at jane harrison@ncsu.edu or 919.513.0122.

FISHERY MANAGEMENT ACTIONS continued from page 10

ARM Framework as initially established in 2012.

The ARM Framework currently presents five harvest packages to ensure a sustainable annual harvest of horseshoe crab in the Delaware Bay Region. While the Framework can produce harvest packages that include female crab harvest, the threshold for horseshoe crab abundance precludes allowing for female harvest at this time. However, the Board expressed interest in exploring alternatives that allow for female harvest without compromising the integrity of the ARM Framework. As a result, the Draft Addendum will present alternative harvest packages which allow for female harvest. Further, the Draft Addendum will propose incorporating mortality associated with biomedical bleeding activities into the ARM Framework. The Draft Addendum will be presented to the Board for its consideration and approval for public comment at the Commission's Annual Meeting in October 2016.

The ARM Framework was developed by the Commission, U.S. Fish and Wildlife Service, and U.S. Geological Survey in recognition of the relationship between horseshoe crab eggs and shorebirds in the Delaware Bay Region. The ARM predicts the optimal strategy for horseshoe crab bait harvest in the Delaware Bay Region while accounting for the need for successful red knot stopover feeding during migrations through the region.

Additionally, the Board tasked the Technical Committee with developing a proposal to test the use of alternative bait in the whelk and eel fisheries. The Board will review the proposal in October 2016 as

well. For more information, please contact Mike Schmidtke, FMP Coordinator, at mschmidtke@asmfc.org.

ASMFC Initiates Interstate Fishery Management Plan for Cobia

The Atlantic States Marine Fisheries Commission approved the initiation of a new Interstate Fishery Management Plan (FMP) for the Atlantic Migratory Group of Cobia to complement fishery management efforts of the South Atlantic Fishery Management Council (Council). This action responds to a request by the Council for the Commission to consider joint or complementary management of the resource in light of the significant overage of the 2015 recreational annual catch limit (ACL), the impact of those overages to state management, and the observation that approximately 82% of reported recreational landings are harvested in state waters.

Widely distributed throughout the western Atlantic and Gulf of Mexico, cobia are managed as two distinct groups - the Gulf Migratory Group and the Atlantic Migratory Group. The Atlantic Migratory Group, which ranges from New York to Georgia, is managed by the Council. Recreational landings of the Atlantic Migratory Group in 2015 were approximately 1.5 million pounds, 145% over the ACL, resulting in a June 20, 2016 closure of the fishery by NOAA Fisheries. Commercial cobia landings in 2015 were 83,148 pounds, 38% over the ACL. Late landings reports in 2015 precluded a timely closure of the commercial fishery.

Concerns were expressed by individual states whose recreational seasons were significantly reduced by the closure

due to the 2015 quota average. North Carolina and Virginia developed alternate management strategies to avoid the June 20, 2016 closure enacted by NOAA Fisheries for federal waters. South Carolina has recently implemented more restrictive measures that are consistent with the actions of NOAA Fisheries in some areas. A complementary Commission FMP for cobia will provide the states flexibility to respond to changes in the fishery and stock that meet their state fisheries' needs while staying within the ACL.

A Draft Public Information Document, the first step in the development of a Commission FMP, will be presented to the South Atlantic State/Federal Fisheries Management Board for its review and possible approval in October at the Commission's Annual Meeting. For more information, please contact Louis Daniel at ldaniel@asmfc.org.

American Lobster Board Identifies Management Goal and Options for Draft Addendum XXV to Address Southern New England Stock Declines

The American Lobster Management Board approved development of Draft Addendum XXV to Amendment 3 to the Interstate Fishery Management Plan for American Lobster. The Draft Addendum seeks to respond to the depleted condition of the SNE stock while preserving a functional portion of the lobster fishery in this area. The document will present a suite of management measures to increase egg production and lower fishing mortality through a combination of management tools including lobster size and escape vent changes, season closures, and trap limits and reductions.

The Draft Addendum responds to the results of the 2015 American lobster benchmark stock assessment which found the SNE stock severely depleted and undergoing recruitment failure with poor prospects of recovery. Declines in



 $continued, see \ \textit{FISHERY MANAGEMENT ACTIONS} \ on$

Comings & Goings

COMMISSIONERS



Rachel Dean

Appointed by Maryland's Gov. Larry Hogan in June 2016, Ms. Rachel Dean is a lifelong resident of Maryland and serves as a Commissioner for the Maryland Tidal Fisheries Advisory Commission. Ms. Dean has commercially harvested finfish and shellfish since 1999, is co-owner of Patuxent River Seafood and holds a United States Coast Guard 100 Ton Master's License. Ms. Dean also owns and operates Solomons Island Heritage Tours.

Ms. Dean has a M.A. in Leadership and Teaching from the College of Notre Dame of Maryland and a B.S. in English Literature from the University of Maryland Baltimore County. Ms. Dean currently teaches high school English at her Alma Mater, Patuxent High School, in Lusby, Maryland and lives with her husband, Simon, and their daughter and fishing buddy, Jamie, in Lusby, Maryland. Welcome aboard, Rachel!



Bill Goldsborough

In June, Bill Goldsborough concluded over 20 years of service to the Commission as Maryland's Governor Appointee and as one of the earliest members and longest serving Chair of the Habitat Committee. In over 30 years of fisheries management and conservation, Bill has remained steadfast in his commitment to sensible,

science-based decision making. Bill played a central role in the recovery of the striped bass beginning with the implementation of the Maryland moratorium in 1985 and has long advocated for ecosystem based fisheries management. Bill officially joined the Commission after passage of the Atlantic Coastal Act as a member of the Atlantic Coastal Act Transition Team. Bill served as Maryland's Governor Appointee from 1995 to 2004 and then again from 2007 to this year. Throughout his more than two decades of Commission involvement, Bill has been an independent, conservation-oriented voice on numerous boards, workgroups and committees. Bill was awarded both the Melissa Laser Fish Habitat Conservation Award and the Annual Award of Excellence for Management & Policy Contributions in 2013. We wish Bill the very best in all his future endeavors.

STAFF



Mike Schmidtke

On September 1st, Mike Schmidtke joined the Commission as Fishery Management Plan Coordinator for horseshoe crab, weakfish, and South Atlantic species. Mike has a Master of Science in Ocean and Earth Science and is working towards the completion of a Ph.D in Oceanography, both from Old Dominion University. His previous research focused on the growth and

reproduction of blueline tilefish, and his data-limited assessment allowed an annual catch limit for this species to be established in the Mid-Atlantic region. Mike recently moved to the area with his wife, Genese, and their baby boy, Joseph. Welcome aboard, Mike!

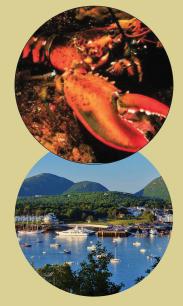
New Species Coordinator Assignments

ISFMP Responsibilities				
Coordinator	Species			
Max Appelman, mappelman@asmfc.org	Atlantic Striped Bass, Atlantic Sturgeon, Bluefish, Northern Shrimp, Spiny Dogfish			
Dr. Louis Daniel, ldaniel@asmfc.org	Cobia			
Ashton Harp, aharp@asmfc.org	Atlantic Herring, Coastal Sharks, Shad & River Herring, Tautog, Winter Flounder			
Kirby Rootes-Murdy, <u>krootes-</u> murdy@asmfc.org	American Eel, Black Sea Bass, Scup, Summer Flounder			
Mike Schmidtke, mschmidtke@asmfc.org	Horseshoe Crab, South Atlantic Species (Atlantic Croaker, Black Drum, Spanish Mackerel, Spot, Spotted Seatrout), Weakfish			
Megan Ware, mware@asmfc.org	American Lobster, Atlantic Menhaden, Jonah Crab			

75th Annual Meeting Final Agenda (cont'd)







Bar Harbor, Maine is a town of about 5,200 residents on Mount Desert Island in Hancock County, Maine. At 108 square miles, Mount Desert Island is the largest island off the coast of Maine and the sixth largest island in the contiguous United States.

11:30 a.m. – 12:30 p.m. Business Session

- Election of Commission Chair and Vice Chair (R. Beal) Action
- Review and Consider Approval of the 2017 ASMFC Action Plan Action

12:30 – 1:45 p.m. Captain David H. Hart Award Luncheon

2:00 – 5:00 p.m. Atlantic Menhaden Management Board

- Review Timeline of Menhaden Activities through 2019 (M. Ware)
- Set 2017 Atlantic Menhaden Fishery Specifications Final Action
 - Review of Stock Projections and Trends in Recent Juvenile Abundance Indices (*J. McNamee*)
 - Consider Postponed Motion to Set the 2017 Total Allowable Catch (TAC)
 - Motion to set the 2017 coastal TAC for the Atlantic menhaden fishery at 225,456 metric tons (20% increase)
- Consider Draft Amendment 3 Public Information Document for Public Comment Action
 - Overview of Public Information Document (M. Ware)
 - Advisory Panel Report (J. Kaelin)
- Technical Committee Report (J. McNamee)
 - Review of "The Fate of an Atlantic Menhaden Year Class"
- Biological Ecological Reference Point Working Group Progress Report (S. Madsen)
- Review and Populate Advisory Panel Membership (T. Berger) Action

THURSDAY, OCTOBER 27

8:00 – 10:30 a.m. Interstate Fisheries Management Program (ISFMP) Policy Board

- Executive Committee Report (D. Grout)
- Review Revisions to Conservation Equivalency Guidance Document (*T. Kerns*) Final Action
- Update on Climate Change Working Group (T. Kerns)
- Discuss Risk and Uncertainty Policy Workgroup White Paper (J. McNamee)
- Habitat Committee Report (T. Kerns) Action
 - Review and Consider the Sciaenid Habitat Source Document
 - Review the State Reports on Climate Change Initiatives
 - Review the Draft Letter to BOEM Regarding Seismic Testing
- Atlantic Coastal Fish Habitat Partnership Report (P. Campfield)
- Law Enforcement Committee Report (M. Robson)
- Review Non-Compliance Findings (if necessary) Possible Action

10:45 a.m. – 12:15 p.m. Atlantic Herring Section

- Elect Vice-Chair Action
- Review and Discuss White Paper on Fishery Performance and Alternative Management Tools (A. Harp & R. White) Possible Action
- Set 2017 Atlantic Herring Specifications for Area 1A Final Action

12:30 – 4:00 p.m. American Lobster Management Board (Lunch to be provided)

- Consider American Lobster Draft Addendum XXV for Public Comment (M. Ware) Action
- Discuss Trap Caps Included in Addenda XXI and XXII (M. Ware)
- American Lobster Reporting Work Group Report (M. Ware) Possible Action
- Consider Jonah Crab Draft Addendum II for Public Comment Action
 - Jonah Crab Working Group Report (M. Ware)
- Consider Approval of 2016 American Lobster FMP Review and State Compliance (M. Ware)
- Update on the Atlantic Marine Monument Designation (M. Ware)
- Update on New England Fishery Management Council Deep-Sea Coral Amendment (M. Ware)

FISHERY MANAGEMENT ACTIONS continued from page 12

population abundance were most pronounced in the inshore portion of the stock where environmental conditions have remained unfavorable to lobsters since the late 1990s. Despite fleet attrition, stock declines have continued. These declines are largely in response to adverse environmental conditions including increasing water temperatures over the last 15 years combined with continued fishing mortality.

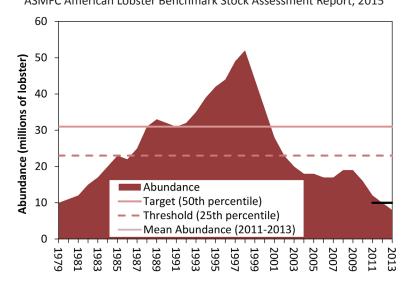
Declines in the offshore portion of the fishery were evident as well though not as severe. However, the offshore portion of the SNE stock likely depends on nearshore larval settlement and offshore migration as the source of recruits (e.g., young of the year lobsters). Therefore, the offshore component is expected to see eventual declines as well.

The Draft Addendum will include a suite of management options aimed to increase egg production from zero to 60%. In its discussion of the stock, the Board agreed the addendum is an initial response to the 2015 stock assessment and stock status will continue to be reviewed. The Draft Addendum will be presented for Board review and possible approval for public comment at the Commission's Annual Meeting in late October. For more information, please contact Megan Ware, Fishery Management Plan Coordinator, at mware@asmfc.org or 703.842.0740.

Tautog Board Accepts Regional Assessments for Long Island Sound and New Jersey/New York Bight Management Use

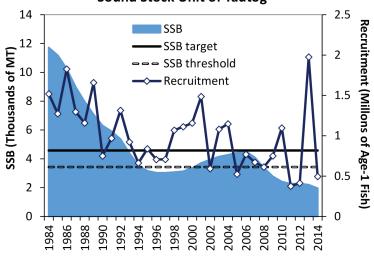
The Tautog Management Board approved regional stock assessments for Long Island Sound (LIS) and New Jersey-New York Bight (NJ-NYB) for management use. Stock status for both

SNE American Lobster Abundance and Reference Points ASMFC American Lobster Benchmark Stock Assessment Report, 2015

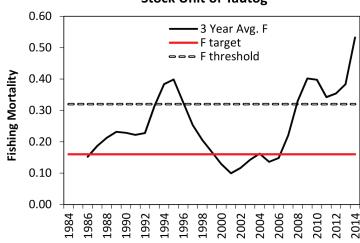


regions was found to be overfished and experiencing overfishing. The assessments were initiated in response to the findings of the 2015 benchmark stock assessment which explored a number of regional breakdowns for management purposes, including the option of: (1) Massachusetts and Rhode Island; (2) Connecticut, New York and New Jersey; and (3) Delaware, Maryland and Virginia. The Board had concerns about the biological implications of grouping LIS with New Jersey ocean waters. The Board requested a new assessment that would explore the population dynamics of the Connecticut, New York and New Jersey region in more detail. The regional assessments propose two additional stock unit boundaries for consideration at a finer regional scale: LIS, which consists of Connecticut and New York waters north of Long Island, and NJ-NYB, which consists of New Jersey and New York waters south of Long Island.

Spawning Stock Biomass for the Long Island Sound Stock Unit of Tautog



Fishing Mortality for the Long Island Sound Stock Unit of Tautog



continued, see FISHERY MANAGEMENT ACTIONS on page 16

Atlantic States Marine Fisheries Commission

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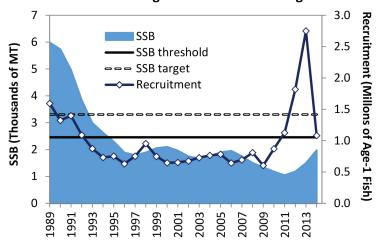
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FISHERY MANAGEMENT ACTIONS continued from page 15

Given approval of the regional assessments by the peer review panel and Management Board, the Tautog Technical Committee will move forward with updating the benchmark stock assessment, including data through 2015 for all four regions for Board review and approval in October. Upon its completion, work on developing a new amendment to the Tautog Fishery Management Plan can begin. The draft amendment will propose a four region management approach: Massachusetts and Rhode Island; Long Island Sound; New Jersey/New York Bight; and Delaware, Maryland and Virginia. It is anticipated that a draft for public comment will be presented to the Board for its review and approval in February 2017, with final amendment approval later in the year.

The stock assessments and peer review report, which are combined into one document, will be available on the Commission website, www.asmfc.org, on the Tautog page by the end of August. For more information on the stock assessments, please contact Katie Drew, Senior Stock Assessment Scientist, at kdrew@asmfc.org; and for more information on tautog management, please contact Ashton Harp, FMP Coordinator, at aharp@asmfc.org.

Spawning Stock Biomass for the New Jersey -New York Bight Stock Unit of Tautog



Fishing Mortality for the New Jersey - New York Bight Stock Unit of Tautog

