Director's Report

Volume 23, Issue 6
December 2014/January 2015

ASMFC
FISHERIES focus
Vision: Sustainably Managing Atlantic Coastal Fisheries

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ASMFC Winter Meeting

February 3-5, 2015

The Westin Alexandria
400 Courthouse Square
Alexandria, VA
703.253.8600

Preliminary Agenda

Please note: The agenda is subject to change. Bulleted items represent the anticipated major issues to be discussed or acted upon at the meeting. The final agenda will include additional items and may revise the bulleted items provided below. The agenda reflects the current estimate of time required for scheduled Board meetings. The Commission may adjust this agenda in accordance with the actual duration of Board meetings. Interested parties should anticipate Boards starting earlier or later than indicated herein.

TUESDAY, FEBRUARY 3

8 – 8:45 AM **Winter Flounder Management Board**
- Set Specifications for the 2015 Fishing Season
- Review and Consider Approval of the 2014 FMP Review and State Compliance Report

9 – 10:30 AM **Atlantic Herring Section**
- Review and Consider Approval of Draft Amendment 3 for Public Comment
- Review and Consider Approval of the 2014 FMP Review and State Compliance Report

10:45 AM – 12:45 PM **American Lobster Management Board**
- Review and Consider Approval of Draft Addendum XXIV for Public Comment
- Review Preliminary Draft of Jonah Crab Fishery Management Plan
- Review and Consider Approval of Nominations to the Jonah Crab Advisory Panel

1:45 – 5:15 PM **Atlantic Menhaden Management Board**
- Review and Consider Acceptance of 2015 Benchmark Stock Assessment and Peer Review Panel Reports
- Discuss Ecological Reference Points (ERP) Term of Reference
- Discuss Management Objectives Moving Forward Based on Results of the Benchmark Assessment/ERP Term of Reference

continued, see WINTER MEETING AGENDA on page 6

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

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Upcoming Meetings

January 8 - 9
SEAMAP & NEAMAP Catch Processing Workshop, SC DNR, 217 Ft. Johnson Road, Charleston, SC.

January 8 - 9
ASMFC Atlantic Striped Bass Technical Committee, The Hotel at Arundel Preserve, 7795 Arundel Mills Boulevard, Hanover, MD.

January 13 - 14
Atlantic Coast Fisheries Communications Working Group, ASMFC, 1050 N. Highland, Street, Arlington, VA.

January 13 - 16
2015 Florida Artificial Reef Summit, Clearwater Beach Marriott on Sand Key Clearwater Beach, FL.

January 20 - 23
ASMFC Biological Review Panel and Bycatch Prioritization Committee, Holiday Inn Tampa Westshore - Airport Area, 700 N. Westshore Boulevard, Tampa, FL

January 27 - 29
New England Fishery Management Council, Sheraton Harborside, Portsmouth, NH.

February 3 - 5
ASMFC Winter Meeting, The Westin Alexandria, 400 Courthouse Square, Alexandria, VA (see preliminary agenda on page 1).

February 10 - 12
Mid-Atlantic Fishery Management Council, Doubletree by Hilton, Raleigh Brownstone University, 1707 Hillsborough Street, Raleigh, NC.

February 18 - 20
ASMFC Bluefish Stock Assessment Data Workshop, The Providence Biltmore Hotel 11 Dorrance Street, Providence, RI.

March 3 - 6
South Atlantic Fishery Management Council, The King and Prince Resort, 201 Arnold Road, St. Simons Island, GA.

April 14 - 16
Mid-Atlantic Fishery Management Council, Ocean Place Resort, 1 Ocean Boulevard, Long Branch, NJ.

April 21 - 23
New England Fishery Management Council, Hilton Hotel, Mystic, CT.

May 4 - 7
ASMFC Spring Meeting, The Westin Alexandria, 400 Courthouse Square, Alexandria, VA.

June 2
Bluefish Stock Assessment Review Workshop, NMFS Northeast Fisheries Science Center, 166 Water Street, Woods Hole, MA.

June 8 - 12
South Atlantic Fishery Management Council, Doubletree Grand Key Resort, 3990 S. Roosevelt Boulevard, Key West, FL.

June 9 - 11
Mid-Atlantic Fishery Management Council, Doubletree by Hilton, Raleigh Brownstone University, 1707 Hillsborough Street, Raleigh, NC.

In Gratitude

With the year coming to a close and the holiday season upon us, I find myself reflecting back on 2014 – our accomplishments, challenges and opportunities – all of which remind me of the many things I am grateful for as Executive Director of the Atlantic States Marine Fisheries Commission. I am grateful for the dedication and strong work ethic of the Commission staff, from the administrative staff who allow us to seamlessly conduct the day-to-day operations of the Commission, to the technical staff who ensure our Commissioners are provided the best scientific and management information to support their decision making, to our program directors whose sound leadership and guidance ensure we are firmly on track to achieve our annual goals and objectives as well as our vision of sustainably managing Atlantic coastal fisheries.

I am indebted to our Commissioners for their talents, wisdom and sustained commitment to the Commission and its programs. Two-thirds of our Commissioners serve without compensation, devoting their personal time and energies to fully engage in the Commission processes. The Commission is a stronger organization because of their investments and their close connections to their stakeholders. Their involvement, along with our Administrative Commissioners, ensures the broadest range of representation at the state level as well as a balanced discourse on the issues at hand. Our Commissioners made some difficult decisions this year, from management actions on American eel and Atlantic striped bass to committing to full disclosure of their conflicts of interest as it pertains to their involvement on species management boards. They did so in the spirit cooperation, committed to fully understanding the issues before them and the needs of their sister states and their stakeholders. By doing so, they were able to identify areas of compromise that maintained our vision of sustainable management while also addressing the states' economic interests. Next year will offer additional challenges as Commissioners seek management responses to new benchmark assessments for Atlantic menhaden, black drum, tautog, American lobster, scup and bluefish. I am confident in their ability to successfully navigate these challenges and uphold their collective stewardship responsibilities.

I would also like to acknowledge the significant contributions of the staff of our member states and federal partners who serve on our species technical and stock assessment committees. They provide the solid scientific underpinning for our management actions. Without their hard work and dedication, Commissioners would not have robust science to support sound management decisions. Their efforts are particularly noteworthy because they are provided in addition to their already full plates back at their state and federal agencies.

I am grateful for the continued support we receive from Congress and our federal partners. In 2014, appropriators recognized the importance of the Commission's work and prevented large-scale budget cuts during another tough budget cycle. And though the committees with jurisdiction over marine fisheries policy were unsuccessful in reauthorizing the Magnuson-Stevens Act, we appreciate their efforts to include the Commission's input throughout the entire process and are hopeful progress can be made next year. With the 114th Congress set to convene on January 3rd, the Commission will continue to build on its relationships in the U.S. Congress. That process begins with forging relationships with the 26 newly elected members of Congress from our member states. Not to be forgotten are the multitude of Members who keep in close contact with us and are open to hearing about our needs and ways to improve Atlantic coast fisheries management.

2014 was a year of greater engagement with our federal partners. There were three events in 2014 which clearly demonstrated NOAA Fisheries renewed commitment to state/federal partnerships. In September, state directors from the coastal states met with NOAA leadership to seek improvements to state/federal coordination. The issues discussed included budget and management priorities, Endangered Species Act findings and responses to listings, habitat conservation and management, joint law enforcement activities, and the national recreational fishing policy. Discussion on these issues was further reinforced when the regional leadership of NOAA Fisheries met with our Administrative Directors in October at the Commission's Annual Meeting in Mystic, Connecticut, and when the Executive Directors from the three interstate commissions were invited for the first time to meet with the NOAA Leadership Council this November. All involved parties are committed to continuing dialogue to better integrate state and federal science and management activities. This coordination is essential given funding constraints and our shared stewardship responsibilities.

2014 was a great year because of the outstanding people that make up the Commission family. I extend to you all best wishes for a safe and happy holiday season. I look forward to working with you in 2015.

Managers Initiate Development of Fishery Management Plan on Emerging New England Fishery

Introduction

Jonah crab (*Cancer borealis*), a marine crustacean harvested for its inexpensive meat, has gained popularity on the East Coast in recent years. Historically, Jonah crab was considered a bycatch of the New England lobster fishery. However, over the past 15 years market demand has more than quadrupled, increasing targeted fishing pressure on this species. Due to this increased fishing pressure, the Commission, working closely with the New England Fishery Management Council, has moved forward with the development of a fishery management plan (FMP) to monitor fishing pressure and preserve the sustainability of this species.

Life History

Jonah crab is a red marine crab identified by its rough edged carapace with small white to yellow spots. Its claws have distinctively tinted black-brown tips. It ranges from Newfoundland to Florida in depths up to 2500 feet, and is commonly found on rocky ocean substrates in coastal New England or soft silt floors nearing the continental slope. Snails and blue mussels are primary prey items for the Jonah crab, which uses its strong claws to crush mollusk shells. Jonah crab are preyed on by gulls and lobster, and by many fish species, such as tautog, cunner, and cod.

Average size and age at maturity is unclear, owing to differences in growth and maturation rates throughout its geographic range. It is believed male maturation occurs when the width of the carapace (CW) is around 3.5 – 4 inches across, with males larger than females. The largest recorded crab was a male measuring almost 9 inches CW. Female size at 50% maturity is thought to be roughly 3.5 inches CW, and females reach a maximum size of about 6 inches CW. The smallest known egg-bearing female measured 2.6 inches CW, found on the Scotian Shelf (continental shelf southwest of Nova Scotia). Large females can produce over one million eggs per clutch.

Jonah crab are known to migrate seasonally; they have been observed moving into Narragansett Bay in the spring and retreating into deeper water in the winter. Females presumably use warmer water temperatures in the bay to molt and mate in the summer and early fall. Scientists have had difficulty finding larval and juvenile Jonah crab within its known geographic range. Some scientists suggest that Jonah crab larvae are settling elsewhere and migrating into coastal waters later. This is supported by laboratory findings, which conclude that early stage larvae prefer water at 15°C, while latter stage larvae prefer 20°C water.

Commercial & Recreational Fisheries

Taken in conjunction with lobster, Jonah crab is primarily harvested with trap gear. Historically, Jonah crab was treated as a bycatch fishery, with crabs usually discarded, sold to help cover fuel and operational costs, or used as bait. In recent years, the popularity of Jonah crab as a seafood item has increased the ex-vessel value of this species throughout New England, with 2013 landings valued at nearly $12.8 million.

The increasing popularity of Jonah crab among consumers has driven commercial landings to skyrocket over the past 10 years. Throughout the 1990s, landings fluctuated between 2 and 3 million pounds per year. Landings jumped to 7 million pounds in 2005 and again to 10 million pounds in 2010. In 2013, landings totaled over 15 million pounds. Harvest of this species occurs primarily in Massachusetts and Rhode Island. In 2013, these states landed 66% and 29% of the total harvest, respectively, the majority of which was caught in federal waters (3 – 200 miles from shore). The magnitude of recreational harvest is unknown due to identification issues and confusion with other Cancer crab species.

Species Snapshot

Jonah Crab
Cancer borealis

Common Names:
Jonah crab, Atlantic dungeness

Species Range:
Atlantic coast of North America from Newfoundland to Florida and into the Caribbean Sea, with the highest population concentration found from Georges Bank to North Carolina

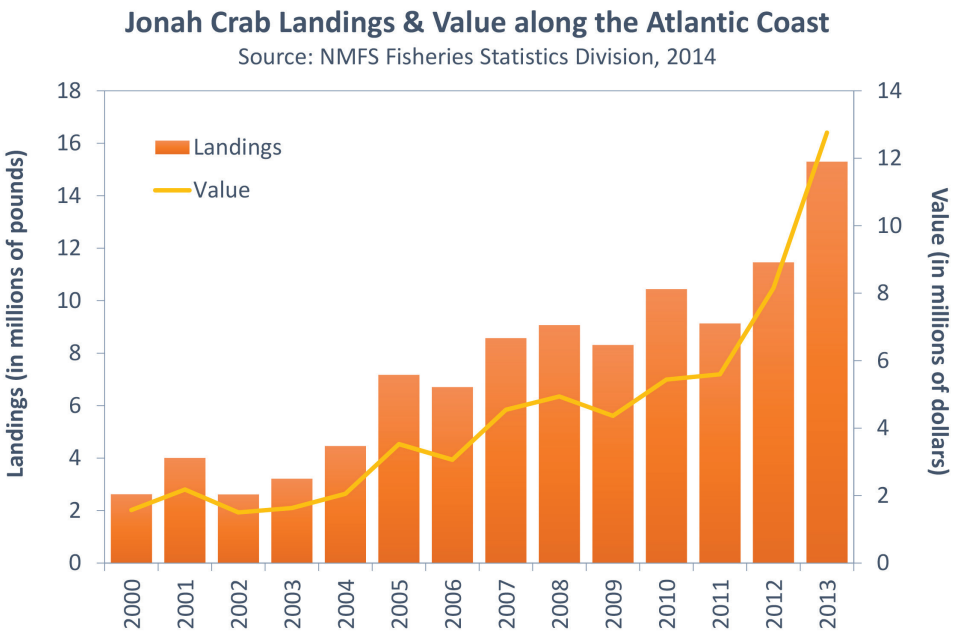
Interesting Facts:
- Females can produce over 1 million eggs per clutch.
- Managed in Canada by the Department of Fisheries and Oceans
- Have complex population structures, with migrating and residential populations

Largest Recorded:
Male at 8.74 inches CW

Life Span: Unknown

Stock Status: Coastwide status unknown; RI assessment indicates local population not overfished but overfishing occurring

Photo © MA DMF



Note: Misidentification between Jonah and rock crab is common. Species-specific landings may be inaccurate.

Stock Status

As there is no coastwide stock assessment for Jonah crab, the status of the resource is relatively unknown. The only available assessment was conducted by the Rhode Island Department of Environmental Management in 2012. The assessment, which addressed local populations of both Jonah and rock crab, found biomass to be above maximum sustainable yield for both species, however, fishing pressure exceeded acceptable limits. The assessment concluded that while the stocks were not overfished, they were experiencing overfishing.

Other sources of data come from inshore state water trawl surveys conducted by Massachusetts, Maine, and New Hampshire, which infrequently encounter Jonah crab and, therefore, provide only minimal data. NOAA Fisheries conducts a trawl survey in federal waters which collects data on Jonah crab abundance and distribution, but this data has not yet been fully analyzed. Stock assessment strategies will be developed in conjunction with the anticipated interstate FMP, with the goal of better understanding this species' stock condition.

Atlantic Coastal Management

Jonah crab management varies from state to state, due to the lack of an existing coastwide FMP. Commercial regulations consist of minimum size limits, permit requirements, closed seasons, and harvest limits. While commercial harvest reporting is required by all states, misidentification of Jonah crab with the related species of rock crab is a prevailing complication that skews catch estimates. In federal waters, commercial harvest of Jonah crab is unregulated.

Recreational harvest is legal in all states, from Maine through Florida. Massachusetts, New York, New Jersey, and Maryland are the only states with recreational possession limits. Limits on recreational traps and licensing requirements also vary by state.

An earnest push toward Jonah crab management began when Delhaize America, a grocery chain, realized its Jonah crab products did not meet its standards for sustainability. Delhaize initiated a Jonah Crab Fishery Improvement Project (FIP), a group of stakeholders including retailers, dealers, processors, fishermen, and academic, state, and federal scientists, who began to work together to promote sustainable use of Jonah crab.

The FIP presented the Jonah crab fishery to state and federal agencies as an issue of urgent importance. They explained that this emerging, unmanaged fishery has grown significantly in the past few years and has the potential to expand further. Fishery managers agreed the recent expansion of the fishery and resulting increased targeted fishing pressure may be compromising the sustainability of the resource. This concern prompted the Commission to initiate the development of a Jonah Crab FMP through its American Lobster Management Board. The Draft FMP will consider management objectives, proposed regulations to the commercial and recreational fishery, monitoring requirements, and recommendations for federal waters fisheries.

Due to the high percentage of Jonah crab caught in federal waters, the Commission will be working closely with the New England Fishery Management Council to develop a plan that will manage both state and federal harvest. The Board will review the first draft of the FMP at the Commission's Winter Meeting in February 2015. For more information, please contact Marin Hawk, FMP Coordinator, at 703.842.0740 or mhawk@asmfc.org.

ASMFC Seeks Advisors for Jonah Crab Advisory Panel

As part of the development of the FMP, the Commission will be forming a Jonah Crab Advisory Panel. Commission advisory panels are typically comprised of commercial and recreational fishermen, processors/dealers, and other stakeholders who are concerned about fisheries conservation and management and have expertise in the respective fishery. The Jonah Crab Advisory Panel will provide the Board with advice concerning fishery practices and management activities. Those interested in becoming a member should contact their state Commissioners.

Winter Meeting Agenda (continued)

WEDNESDAY, FEBRUARY 4

8 – 9 AM **Executive Committee**
(A portion of this meeting may be a closed session for Executive Committee members only)
- Discuss Staff Tenure and Workload
- Review Suggested Changes to Commission Guidance Documents
- Update on 2015 Annual Meeting

9:15 – 11:15 AM **Interstate Fisheries Management Program (ISFMP) Policy Board**
- American Eel Fish Passage Update
- Review and Discuss 2014 Commissioner Survey Results
- Discuss Updating the Roles and Responsibilities of the Committee on Economics and Social Science
- Review and Consider Revisions to the ASMFC Committee Guidance and Assessment Process Document

11:30 AM – 12:15 PM **Weakfish Management Board**
- Review and Consider Approval of the Terms of Reference for the 2015 Benchmark Stock Assessment
- Review Abbreviated Stock Status Update

12:30 – 3:30 PM **Northeast Area Monitoring and Assessment Program (NEAMAP) Board**
- Review NEAMAP Survey Reports
- Review Reports and Recommendations from NEAMAP Committees
- Review and Approve NEAMAP 2015 Operations Plan
- Discuss Creation of NEAMAP Industry Advisory Panel
- Elect Vice-Chair

1:15 – 3:15 PM **South Atlantic State-Federal Fisheries Management Board**
- Review and Consider Acceptance of 2014 Black Drum Benchmark Stock Assessment and Peer Review Panel Reports
- Discuss Need for Management Response to the Benchmark Assessment
- Review and Consider Approval of 2014 FMP Reviews and State Compliance Reports for Spanish Mackerel, Spot, and Spotted Seatrout

3:30 – 6:30 PM **Summer Flounder, Scup, and Black Sea Bass Management Board**
- Review and Consider Final Approval of Addendum XXVI
- Set 2015 Black Sea Bass & Scup Recreational Management Measures

THURSDAY, FEBRUARY 5

8 AM – Noon **Atlantic Striped Bass Management Board**
- Review and Consider Approval of Addendum IV Conservation Equivalency Proposals and Implementation Plans

12:30 – 2:30 PM **Tautog Management Board**
- Review and Consider Acceptance of 2015 Benchmark Stock Assessment and Peer Review Panel Reports
- Discuss Need for Management Response to Benchmark Assessment

continued, see WINTER MEETING AGENDA on page 7

Public Comment Guidelines

With the intent of developing policies in the Commission's procedures for public participation that result in a fair opportunity for public input, the ISFMP Policy Board has approved 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 with the main meeting materials.
2. Comments received by 5:00 PM on the Tuesday immediately preceding the scheduled ASMFC Meeting (in this case, the Tuesday deadline will be **January 27, 2015**) 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 Tuesday, January 27, 2015 5:00 PM 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.

Draft Addendum XXVI Released for Public Comment: *Addendum Proposes Management Options for the 2015 Summer Flounder Recreational Fishery*

The Summer Flounder, Scup and Black Sea Bass Management Board approved Draft Addendum XXVI for public comment at the Joint Commission/Mid-Atlantic Fishery Management Council meeting in Baltimore, Maryland earlier this month. Draft Addendum XXVI proposes alternate management approaches for the 2015 summer flounder recreational fishery, including adaptive regional management options that are intended to provide more equity in recreational harvest opportunities along the coast. The states of Massachusetts through Virginia will be conducting public hearings on the Draft Addendum throughout January. The details of those hearings follow:

Massachusetts Division of Marine Fisheries
January 8, 2015 at 6 PM
Bourne Fire Station #3, Meeting Room
53 Meetinghouse Lane
Sagamore Beach, MA
Contact: David Pierce at 617.626.1532

Rhode Island Division of Fish & Wildlife
January 7, 2015 at 6 PM
University of Rhode Island,
Corliss Auditorium
South Ferry Road
Narragansett, RI
Contact: Jason McNamee at 401.423.1943

continued, see SUMMER FLOUNDER on page 8

WINTER MEETING AGENDA continued from page 6

12:30 – 2:30 PM **Tautog Management Board (continued)**
- Review and Consider Approval of the 2014 FMP Review and State Compliance Report

12:45 – 2:15 PM **Atlantic Coastal Cooperative Statistics Program (ACCSP) Executive Committee**
- Status Updates on the Program and MRIP-APAIS Transition
- Review Action Items from Previous Meeting

2:45 – 4 PM **Shad & River Herring Management Board**
- Review and Consider Approval of 2014 FMP Reviews and State Compliance Reports for Shad & River Herring
- Review New Hampshire Proposal for the Removal of Taylor River Monitoring
- Update on Shad and River Herring Related Activities of the Mid-Atlantic and New England Fishery Management Councils

4:15 – 5:45 PM **ACCSP Coordinating Council**
- ACCSP Status Reports on the Program, MRIP-APAIS Transition, Committee Activities, and Independent Program Review
- Discussion on Providing Operations Committee with More Authority to Recommend Different Funding Split than the 75/25 When Necessary

Preparations Begin for 2015 Bluefish Benchmark Stock Assessment

The Commission has scheduled the Data Workshop for the upcoming bluefish benchmark stock assessment. The assessment will evaluate the health of the bluefish population and inform the management of the species. The Commission's stock assessment process and meetings are open to the public (with the exception of discussion of confidential data).

The Commission welcomes the submission of data sets that will improve the accuracy of the assessment. These include, but are not limited to data on growth, maturation, migration, genetics, stock enhancement, tagging, recruitment, natural mortality, and abundance/biomass. An essential need is information on the adult component of the stock as well as spawning stock condition. For data sets to be considered, the data must be sent in the required format, with accompanying methods description, to the Commission by **January 16, 2015**.

For those interested in submitting data, including the appropriate format, and/or attending the Bluefish Data Workshop, please contact Katie Drew, Senior Stock Assessment Scientist, at kdrew@asmfc.org or 703.842.0740. The deadline for data submission is January 16, 2015. All available data will be reviewed and vetted by the Commission's Bluefish Technical Committee and Stock Assessment Working Group for possible use in the assessment.

The Data Workshop will be conducted February 18-20, 2015 in Providence, Rhode Island. A subsequent press release will announce the specific location of the Data Workshop. The Assessment Workshop will be conducted in spring 2015, with the peer review being conducted through NOAA Northeast Fisheries Science Center Stock Assessment Review Committee from June 2-5, 2015. For more information on the bluefish stock assessment process, please contact Kirby Rootes-Murdy, Fishery Management Plan Coordinator, at krootes-murdy@asmfc.org or 703.842.0740.

Upcoming Science & Management Activities (cont'd)

SUMMER FLOUNDER continued from page 7

Connecticut Dept. of Energy and Environmental Protection
January 6, 2015 at 7 PM
Marine Headquarters
Boating Education
Center, Building 3
333 Ferry Road
Old Lyme, CT
Contact: David Simpson at 860.434.6043

New York State Dept. of Environmental Conservation
January 22, 2015 at 6:30 PM
Bureau of Marine Resources
205 North Belle Mead Road, Suite 1
East Setauket, NY
Contact: John Maniscalco at 631.444.0437

New Jersey Division of Fish and Wildlife
January 12, 2015 at 7 PM
Toms River Township Administrative
Building, L.M. Hirshblond Room
33 Washington Street
Toms River, New Jersey
Contact: Tom Baum at 609.748.2020

Delaware Dept. of Natural Resources and Environmental Control
January 15, 2015 at 6 PM
DNREC Auditorium
89 Kings Highway
Dover, DE
Contact: Stewart Michels at 302.739.9914

Maryland Dept. of Natural Resources
January 13, 2015 at 5:30 PM
Ocean Pines Library
11107 Cathell Road
Berlin, MD
Contact: Steve Doctor at 410.213.1531

Virginia Marine Resources Commission
January 14, 2015 at 6 PM
2600 Washington Avenue
4th Floor Conference Room
Newport News, VA
Contact: Rob O'Reilly at 757.247.2247

Photo © Open Boat Laura Lee

Draft Addendum XXVI was initiated to consider the continuation of the adaptive regional management approach for the recreational summer flounder as established in Addendum XXV, which allowed for the use of regional management for the 2014 fishing season only. Regional management measures required states within a region to utilize the same size limit, bag limit, and season length. Addendum XXV was developed to address a growing concern that summer flounder management measures prior to 2014 were not providing recreational fishermen along the coast with equitable harvest opportunities to the resource. Its adaptive regional management approach was designed to allow the management program to adjust to past, current, and future changes to the resource and the fishery.

Under the provisions of Addendum XXV, the Board also approved the continuation of ad-hoc regional management approaches for the 2015 recreational black sea bass fishery. Addendum XXV allowed for the Board to extend the ad-hoc regional management measures by northern (Massachusetts-New Jersey) and southern regions (Delaware-North Carolina (north of Hatteras)) utilized in 2014 for up to one year. This approach has been used since 2011 and offers some advantages over coastwide regulations, which can disproportionately impact states within the management unit. The Technical Committee will work with the states to develop regional management measures for Board consideration and approval at the Commission's Winter Meeting in early February. Under the stipulation that the northern region states implement management measures to account for overages in previous years and constrain harvest to 2015 recreational harvest limit, the Board and Council approved federal waters management measures for recreational black sea bass that include a 12.5-inch TL minimum size, a 15 fish possession limit, and an open season of May 15-September 21 and October 22-December 31.

Fishermen and other interested groups are encouraged to provide input on Draft Addendum XXVI either by attending state public hearings or providing written comment. The Draft Addendum is available at http://www.asmfc.org/files/PublicInput/SFlounderDraftAddendumXXVI_PublicComment_Dec2014.pdf and can also be accessed on the Commission website (www.asmfc.org) under Public Input. Public comment will be accepted until 5:00 PM (EST) on **January 23, 2015** and should be forwarded to Kirby Rootes-Murdy, Fishery Management Plan Coordinator, 1050 N. Highland Street, Suite 200 A-N, Arlington, Virginia 22201; 703.842.0741 (fax) or at krootes-murdy@asmfc.org (Subject line: Draft Addendum XXVI). For more information, please contact Kirby Rootes-Murdy at krootes-murdy@asmfc.org or 703.842.0740.

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Moving Forward on Understanding Shrimp Trawl Bycatch

The South Atlantic shrimp fishery is a valuable and economically important fishery that operates in state and federal waters from North Carolina to the Florida Keys. Target species include Penaeid shrimp (brown, white, and pink) and rock shrimp.

However, observer data indicate that on average, only 20-25% of the biomass caught by a South Atlantic shrimp trawl consists of Penaeid shrimp. The rest of it is made up of fish (mostly juveniles) and other invertebrates that are not targeted. This bycatch is generally discarded at sea. Rock shrimp trawls are somewhat cleaner, but even then, the majority of the catch (58%) is made up of species other than shrimp. Regulations require the use of turtle excluder devices and bycatch reduction devices, but these have not completely eliminated the problem.

Many of the species most commonly encountered in shrimp trawl bycatch are commercially and recreationally important: Atlantic croaker, Spanish mackerel, red snapper, weakfish, and spot, among others. Because bycatch of these species isn't reported, it has been difficult to estimate how much bycatch happens every year, and what the impact of that bycatch is on the health of these populations. Several recent stock assessments of these species have emphasized the importance of developing good estimates of removals due to bycatch. This uncertainty can hinder management; for example, estimates of Atlantic croaker biomass from the 2010 assessment were rejected due to uncertainty in levels of shrimp trawl bycatch, so overfished status could not be determined.

The SouthEast Data, Assessment, and Review process (SEDAR) convened a workshop in July to help address this issue. The workshop had two goals: to assemble and evaluate the available datasets relating to shrimp trawl bycatch and shrimp life history, and to develop a set of best practices for the estimation of shrimp trawl bycatch and the assessment of shrimp stocks.

Photo © Kim Iverson, SAFMC

Prior to the workshop, SEDAR reached out to the Commission, state and federal agencies, as well as academic and non-governmental organizations to put together an exhaustive list of available datasets on shrimp biology and life history, shrimp trawl bycatch rates, and environmental conditions. At the workshop, fisheries biologists, stock assessment scientists, and data program managers evaluated the available datasets and discussed how those data could best be used to estimate shrimp trawl bycatch and to assess shrimp populations.

The core dataset for estimating shrimp trawl bycatch is NOAA Fisheries Southeast Fisheries Science Center's (SEFSC) Observer Program, which operates in the Gulf and South Atlantic. The Observer Program has operated since the early 1990s and has been mandatory since 2008. Although this program only covers ~1% of shrimp trawl trips, it represents the longest time series and the most areas covered out of the datasets examined. Workshop participants recommended that the SEFSC database be supplemented with state-level observer studies, fishery-independent data, and effort data to develop estimates of shrimp trawl bycatch.

Workshop participants acknowledged the limitations of the available data, and made recommendations for additional data collection. There will always be uncertainty in these estimates, particularly for the historical periods, but bringing these datasets together and developing recommendations for best practices – both for working with the existing data and how to improve those datasets in the future – will ensure assessments at the state, federal, and Commission levels are working with the best available data and methods to deal with this difficult issue.

The workshop report (SEDAR PW 6: South Atlantic Shrimp Data Evaluation) and the data inventories (SEDAR PW6: Environmental Inventory and SEDAR PW6: Shrimp Inventory) are available for download at the SEDAR website (http://www.sefsc.noaa.gov/sedar/Sedar_Workshops).

US Fish & Wildlife Service Protects Red Knot as Threatened Under the Endangered Species Act

On December 9th, the U.S. Fish and Wildlife Service announced federal protection for the rufa subspecies of the red knot, a robin-sized shorebird, designating it as threatened under the Endangered Species Act. A "threatened" designation means a species is at risk of becoming endangered throughout all or a significant portion of its range.

"The red knot is a remarkable and resilient bird known to migrate thousands of miles a year from the Canadian Arctic to the southern tip of South America," said Service Director Dan Ashe. "Unfortunately, this hearty shorebird is no match for the widespread effects of emerging challenges like climate change and coastal development, coupled with the historic impacts of horseshoe crab overharvesting, which have sharply reduced its population in recent decades."

Photo © Gregory Breese, USFWS

Since the 1980s, the knot's population has fallen by about 75 percent in some key areas, largely due to declines in one of its primary food resources – horseshoe crab eggs in Delaware Bay, an important migratory stopover site. Although this threat is now being addressed by extensive state and federal management actions, other threats, including sea-level rise, some shoreline projects and coastal development, continue to shrink the shorebird's wintering and migratory habitat.

Changing climate conditions are also altering the bird's breeding habitat in the Arctic and affecting its food supply across its range, in particular through climate-driven mismatches in migration timing that affect the peak periods of food availability. The bird must arrive at Delaware Bay at exactly the time when horseshoe crabs are laying their eggs.

"Although historic threats in the Delaware Bay area have been ameliorated thanks to the actions of federal and state partners, our changing climate is posing new and complex challenges to the red knot's habitat and food supply," Ashe said. "It has never been more critical that we take positive action to save this bird."

One of the longest distance migrants in the animal kingdom, some rufa red knots fly more than 18,000 miles each year between breeding grounds in the Canadian Arctic and wintering grounds along the Gulf Coast, southeast United States and South America. One bird, banded by biologists in 1995 in Argentina, has been nicknamed Moonbird because he has flown the equivalent of a trip to the moon and at least halfway back in his 21 or more years of migrations.

Along its epic migration, the red knot, which can be identified by its rufous breast, belly and flanks during breeding season, can be found across 27 countries and 40 U.S. states in flocks ranging from a few individuals to several thousand. Although rufa red knots mainly occur along the Atlantic and Gulf coasts, small groups regularly use some interior areas of the United States during migration. The largest concentration of rufa red knots is found in May in Delaware Bay, where the birds stop to gorge themselves on the eggs of spawning horseshoe crabs; a spectacle drawing thousands of birdwatchers to the area. In just a few days, the birds nearly double their weight to prepare for the final leg of their long journey to the Arctic. International, state and local governments, the conservation community, beachgoers and land managers are helping ensure red knots have safe areas to winter, rest and feed during their long migrations. These partners help knots in a variety of ways, including managing the harvest of horseshoe crabs (which are caught for use as bait in conch and eel pots), managing disturbance in key habitats, improving management of hunting outside the United States, and collecting data to better understand these birds.

In making its decision, the Service analyzed the best available data in more than 1,700 scientific documents, and considered issues raised in more than 17,400 comments provided during 130 days of public comment periods and three public hearings. Protections under the ESA will take effect 30 days after publication in the Federal Register.

As required by the ESA, the Service is also reviewing the U.S. range of the rufa red knot to identify areas that are essential for its conservation, known as critical habitat. The Service expects to propose critical habitat for the rufa red knot for public review and comment in 2015 after completing the required review of economic considerations.

Visit http://www.fws.gov/northeast/redknot/ to read the final rule and response to comments; view and download video, photos and maps; and explore more resources, such as an interactive timeline and infographic. The rule is available at *www.regulations.gov under docket number FWS-R5-ES-2013-0097.*

NOAA Fisheries Seeks Participation in River Herring Harvest Survey

Through the end of January, NOAA Fisheries is conducting a voluntary survey of individuals who have harvested river herring (alewives and blueback herring) commercially, recreationally, or for personal use at any point in time over

continued on next page

the past 20 years. The goal of this survey is to gather first-hand observations to inform our understanding of alewife and blueback population trends and help our efforts to restore these fish populations along the U.S. east coast. Commercial, recreational, and personal use harvesters have detailed knowledge of the fish in their local areas, such as changes in fish run timing, distribution, and individual fish size and species composition. NOAA wants to document some of this local knowledge in order to better understand river herring and their habitat.

NOAA intends to use the information obtained from this survey to cross-reference scientifically collected data to better understand trends and changes in river herring populations coast-wide. This information can help NOAA identify opportunities for additional research and restoration.

Learn more: http://www.greateratlantic.fisheries.noaa.gov/stories/2014/surveykickoffonRiverHerringinaugust.html

To learn more about the survey or to participate, please contact Dan Kircheis *(*dan.kircheis@noaa.gov*)* or Julia Beaty *(*julia.beaty@maine.edu*, 207-866-7262).*

Migrating river herring. Photo © Greg Wells, Herring Alliance

Illegal, Unreported and Unregulated Fishing and Seafood Fraud

On December 17th, the Presidential Task Force on Combating Illegal, Unreported and Unregulated (IUU) Fishing and Seafood Fraud released recommendations to crack down on global pirate fishing and seafood fraud.

IUU fishing, known colloquially as pirate fishing along with seafood fraud through intentional seafood mislabeling, exerts a high level of unregulated pressure on global fish stocks. Worldwide losses from pirate fishing are estimated to range from $10 billion to $23 billion annually. Although the U.S. is a world-leader in fisheries management and conservation, an estimated 90% of American seafood is imported and operates outside domestic fisheries laws. The task force's recommendations send a message that the U.S. takes pirate fishing and seafood fraud seriously and will be an active participant in reducing the harmful economic and ecological impacts of the practices.

The task force was established by President Obama in June 2014 at a global oceans conference hosted by Secretary of State John Kerry. At the time, President Obama instructed the Departments of State and Commerce to develop joint recommendations to combat seafood fraud and pirate fishing, and report out recommendations in six months. The task force released 15 specific recommendations, a majority of which can be implemented by President Obama and his administration. A few of the recommendations would need congressional approval, such as one that recommends implementing the Port State Measures Agreement, for example. The 15 recommendations fall into four general themes: international pirate fishing; enforcement; domestic partnerships with state/local governments, the private sector, and nongovernmental organizations; and seafood traceability.

A 30-day comment period on the recommendations began on December 18, and the task force is aiming to release an action plan early in 2015. The report and instructions for submitting comments can be viewed at https://www.federalregister.gov/articles/2014/12/18/2014-29628/recommendations-of-the-presidential-task-force-on-combating-illegal-unreported-and-unregulated.

GARFO Seeks Comments on Draft Strategic Plan

NOAA Fisheries Greater Atlantic Regional Fisheries Office (GARFO), which is responsible for the stewardship of the federal living marine resources from Maine to North Carolina, including the Great Lakes, has released its Draft Strategic Plan for Public Comment.

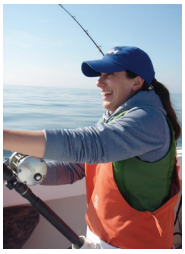
The plan is part of a national effort by NOAA Fisheries. All regional offices and science centers are drafting strategic plans that contain region-specific goals and priorities. However, it is important that these plans align with the agency's overall mission and goals, and are developed in an open and transparent manner.

GARFO's draft plan identifies objectives associated with seven primary strategic goals: sustainable fisheries; protected resources; habitat conservation; community resiliency; aquaculture; organizational excellence; and customer service. GARFO welcomes feedback on its draft plan to ensure that its strategic objectives are addressing stakeholder needs while achieving its federal mandates.

The draft plan is available at http://tinyurl.com/ppmmo5b. Comments can be submitted through **January 15th** to nmfs.gar.strategicplan@noaa.gov.

ASMFC Comings & Goings

December was a bittersweet month for Commission staff as we said good-bye to two longtime employees -- Genny Nesslage and Kate Taylor. Both employees brought to their jobs a deep commitment to the Commission's mission, vision and activities, and an outstanding work ethic that was reflected in the successful completion of numerous benchmark stock assessments, amendments, and addenda. Their accomplishments were coupled with the energetic and positive attitudes they brought to the workplace and all of their committee activities. While they both will be sorely missed, we are excited about the new opportunities that await them and wish them the very best in all of their future endeavors. Below is a recap of their major accomplishments while at the Commission.



Kate Taylor

In the 6 years Kate was at the Commission, first as an FMP Coordinator and later as Senior FMP Coordinator, she made substantial contributions to the Commission's fisheries management program. Over that time, she coordinated management programs for six species, including American eel, American lobster, Atlantic sturgeon, Atlantic striped bass, and shad & river herring. She oversaw the completion of benchmark assessments for 3 of the Commission's most complex species due to their extensive geographic range and multiple threats to the populations -- American shad, river herring, and American eel. She led the development of major plan amendments for shad and river herring, both of which established commercial and recreational fishing moratoria, with exceptions for sustainable systems. She also worked closely with the American Eel Plan Development Team and Management Board to respond to the findings of the American eel benchmark, seeking to reduce overall mortality across all eel life stages. At the end of December, Kate will be the NMFS Program Coordinator within the Office of the Undersecretary.

Genny Nesslage

As the Commission's Senior Stock Assessment Scientist for the past 8 years, Genny played a key role in advancing the quality and understanding of fisheries science and stock assessments through her involvement in various stock assessments, development of the American lobster database, and stock assessment training. She was a lead assessment scientist for 2 American lobster and 2 Atlantic menhaden benchmark stock assessments, as well as the first coastwide benchmark stock assessment for American eel. She provided critical support in the development of the American lobster database, a fundamental component of the lobster assessment. She also worked closely with the Commission's Multispecies Technical Committee in developing and updating its multispecies assessment models that evaluate the relationships of several key predator/prey species, such as striped bass, weakfish, bluefish and Atlantic menhaden. Results from the multispecies models were used in both the 2010 and 2014 Atlantic menhaden assessments, and laid the groundwork for the development of ecological reference points. Genny also led the initial data gathering and analysis efforts to determine the feasibility of a black drum stock assessment, and then advised the black drum assessment team through its completion of the first ever coastwide assessment in 2014.

Genny was also a lead contributor to the evolution of the Commission's stock assessment training program, which not only enhanced our Commissioners' understanding of fisheries stock assessment concepts and models but also greatly expanded the stock assessment expertise of state technical committee members. In January, Genny will be joining the University of Maryland's Chesapeake Biological Laboratory as a Visiting Research Assistant Professor.

Roy W. Miller 2014 Delaware Maritime Hall of Fame Inductee

Earlier this year, Roy W. Miller, who served 34 years as fishery biologist, supervisor, manager, and administrator for the Division of Fish and Wildlife within Delaware's Department of Natural Resources and Environmental Control (DNREC), was inducted into the Delaware Maritime Hall of Fame for his many contributions to maintaining healthy fisheries in Delaware's estuaries. Atlantic striped bass, American shad, river herring, weakfish and horseshoe crab are among the fish species that have benefited from Roy's service. As a charter member of the Commission's Atlantic Striped Bass Technical Committee beginning in 1978 and later its Atlantic Striped Bass Management Board, Roy played a significant role in restoring this keystone species in the Delaware River and Bay. His leadership on the Horseshoe Crab Board came at a critical time as decisions were made to reduce fishing pressure on horseshoe crab.

Roy's achievements also include coordinating fish kill investigations for the state, helping to design an accessible fishing pier for disabled anglers at the Ted Harvey Wildlife Area, supervising the completion of Lewes' public boat ramp, negotiating settlement agreements with a utility that brought $15.5 million to DNREC for public works, and helping to design the DuPont Nature Center at Mispillion Harbor.

Since retirement, Roy has worked as policy coordinator for the Delaware Center for Inland Bays, drafted the 2013 shellfish aquaculture legislation, and serves as Delaware's Governor Appointee to the Commission. Congratulations, Roy!

ACCSP & MRIP Recreational PSE Workshop

The Atlantic Coastal Cooperative Statistics Program (ACCSP) with the support of the Marine Recreational Information Program (MRIP), a recreational fisheries data collection and reporting effort through NOAA Fisheries, convened a workshop on recreational percent standard error (PSE) on September 23 & 24, 2014. The focus was to evaluate levels of recreational data precision that would best support stock assessment results and fisheries management actions. More than 50 individuals from state and federal fisheries agencies participated either in-person or via webinar. Presentations reviewed a simulation model developed for this project, and supporting information on the current use of precision measures by the Councils, Commissions, and states. Dr. John Weidenmann of Rutgers University developed a Management Strategy Evaluation (MSE) model using simulated data to investigate the effect of varying input PSE levels (0.2, 0.3, 0.4, 0.5, 0.6, 0.8. 1.0) on three generalized species having slow, medium, and fast growth over various exploitation histories.

The surprising feedback from participants was that stock assessments appear to be capable of utilizing data with a higher PSE than previously considered. The group supported developing broad guidance on using data within ranges of PSE for stock assessments. There was also general agreement that management actions should be aligned with the precision of the data and the ability to measure the outcome of fishery management actions. Several avenues were identified to further clarify the issues and recommendations. These ranged from additional modeling efforts, vetting the workshop proceedings and guidance to larger audiences, and addressing the guidance to management in a separate venue. Over the next several months, ACCSP will be working with the workshop steering committee and MRIP to complete the workshop proceedings and determine the appropriate process to expand on the feedback received at the PSE workshop.

ACCSP is a cooperative state-federal program focused on the design, implementation, and conduct of marine fisheries statistics data collection programs and the integratation 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.

ACCSP Seeks Nominations for Advisory Committee

The ACCSP is seeking nominations to its Advisory Committee. These suggestions are formally appointed by the Coordinating Council upon a recommendation from the Operations Committee state representative. The Coordinating Council members from each partner state designate one commercial and one recreational and/or for-hire representative to the ACCSP Advisory Committee. The Advisory Committee is expected to provide perspectives from a variety of fishing experiences. Members evaluate technical recommendations and advise on developments and implementation of the Program. To learn more on the advisory process, please review the Guidelines for ACCSP Advisors found here: http://www.accsp.org/documents/ACCSPAdvisorGuidelines_May2013.pdf.

If you are an interested in becoming an advisor, please send a letter of interest to the ACCSP Operations Committee member from your state. A list of Operations Committee members can be found at http://www.accsp.org/opercommittee.

Rick Bellavance, Chair of the ACCSP Advisory Committee, has this to say about his work on the committee, "Working in conjunction with dedicated industry representatives from other states along the East Coast in an effort to improve fisheries-dependent data collection is both fun and rewarding. Improved stock assessments is on the minds of both fishermen and fisheries managers and I have always felt, if given the choice, it is better to participate in the process of making things work better. The Advisory Committee to the ACCSP is one way that participation is possible and I recommend the Committee to anyone interested in learning more about data collection."

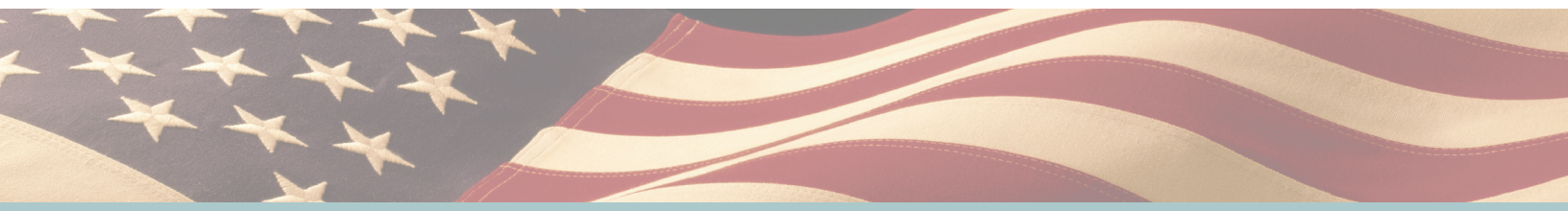
On the Legislative Front: Fiscal Year 2015 Funding

On December 16th, the President signed legislation into law funding most of the federal government through October 30, 2015. Overall funding for Operations, Research, and Facilities for NOAA Fisheries is up $9.5 million to $822.1 million from Fiscal Year 2014. Within that account, funding for Regional Councils and Fisheries Commissions was increased by $738 thousand to $32,738 million, and the Interjurisdictional Fisheries Act Grants line was level funded at $2.5 million. Report language accompanying the appropriations bill contains a number of policy riders addressing a multitude of marine fisheries issues including observer coverage; Atlantic salmon habitat; Saltonstall-Kennedy Act funds; augmenting MRIP data with data collected from electronic reporting programs; the use of charter vessels for research and surveys; third party sustainability certifications; marine debris; and the Hollings Marine Laboratory in South Carolina and NOAA's Beaufort Lab in North Carolina.

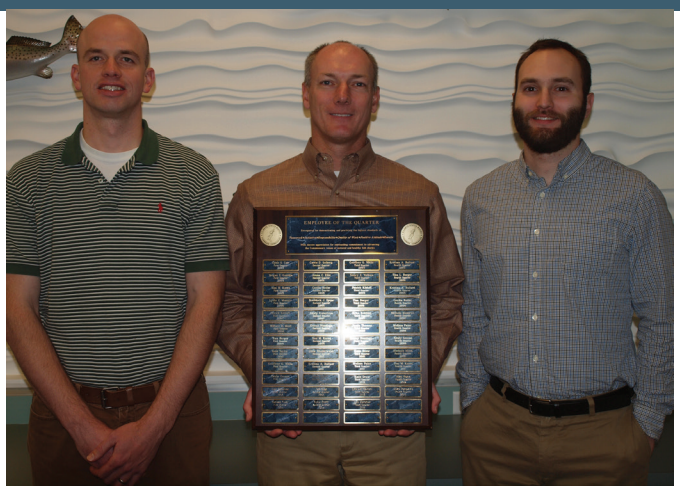
Fisheries Science and Management Appropriations (in thousands $)

	2015 House	2015 Senate	2015 Enacted	2014 Enacted	% Change
Protected Species Research and Management					
Protected Species Research and Management Programs Base	39,000	39,200	39,000	39,000	0.00%
Species Recovery Grants	7,000	5,000	5,000	5,000	0.00%
Marine Mammals	47,000	49,000	49,000	49,000	0.00%
Marine Turtles	11,000	12,200	12,200	12,200	0.00%
Other Protected Species (marine fish, plants and invertebrates)	10,000	10,200	8,000	7,000	14.29%
Fisheries Research and Management					
Fisheries Research and Management Programs Base	176,725	177,000	175,500	175,000	0.29%
National Catch Share Program	20,000	25,000	25,000	25,000	0.00%
Expand Annual Stock Assessments - Improve Data Collection	72,000	72,000	70,000	69,000	1.45%
Economics and Social Sciences Research	7,300	7,417	7,300	7,300	0.00%
Regional Councils and Fisheries Commissions	32,000	32,738	32,738	32,000	2.31%
Fisheries Statistics	22,000	22,000	22,000	22,000	0.00%
Fish Information Networks	22,000	22,000	22,000	22,000	0.00%
Survey and Monitoring Projects	24,000	24,200	24,000	24,000	0.00%
Fisheries Oceanography	2,100	2,179	2,100	2,160	-2.78%
Interjurisdictional Fisheries Grants	2,500	2,502	2,500	2,500	0.00%
National Standard 8 (Consider fishing communities to provide for sustained participation and minimize adverse economic impacts)	0	1,001	1,000	1,000	0.00%
Reducing Bycatch	3,500	3,508	3,500	3,500	0.00%
Enforcement and Observers/Training					
Enforcement	65,000	65,350	65,000	65,000	0.00%
Observers/Training	43,000	43,100	43,000	43,000	0.00%
Habitat Conservation and Restoration					
Total, Habitat Conservation and Restoration	25,000	52,190	47,000	41,700	12.71%
Other Activities Supporting Fisheries					
Aquaculture	5,600	6,000	5,700	5,600	1.79%
Climate Regimes and Ecosystem Productivity	2,000	2,500	2,000	2,000	0.00%
Cooperative Research	12,000	12,080	12,000	12,000	0.00%
Marine Resources Monitoring, Assessment and Prediction	800	801	800	800	0.00%
Regional Studies (fishery-independent data collection and research)	5,000	10,286	10,200	10,200	0.00%

For more information, please contact Deke Tompkins at dtompkins@asmfc.org or 703.842.0740



Jeff Kipp & Kirby Rootes-Murdy Named Employees of the Quarter



Employees of the Quarter Jeff Kipp (left) and Kirby Rootes-Murdy (right) with ASMFC Executive Drector Bob Beal.

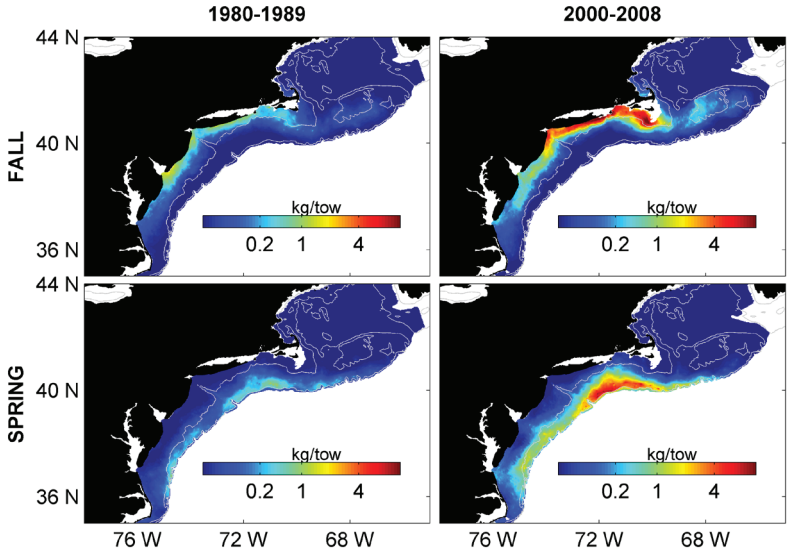
While this space in the newsletter is usually devoted to recognizing the contributions of one employee to achieving the Commission's vision of sustainably managing Atlantic coastal fisheries, in this issue we acknowledge the individual and collective efforts of two employess -- Jeff Kipp and Kirby Rootes-Murdy. As Stock Assessment Scientist for the past two and a half years, Jeff Kipp has made outstanding and numerable contributions to the Commission's Fisheries Science Program. This includes his work as lead assessment scientist on the recently completed and first coastwide benchmark stock assessment for black drum, as well as his efforts on upcoming benchmark stock assessments for red drum and Atlantic sturgeon. With each assessment, Jeff's ability to collaborate with fellow committee members and his proficiency in developing new modeling approaches has elevated the quality of Commission stock assessments. Jeff has also provided critical support to a diversity of science initiatives, including fish ageing, fish tagging, and fish passage.

In a little over a year and half as the Commission's Fishery Management Plan Coordinator for a number of species including summer flounder, scup, black sea bass, bluefish, Atlantic croaker, black drum, red drum, spot, spotted seatrout, Spanish mackerel, Kirby Rootes-Murdy has proved he is a critical contributor to the Commission's fisheries management program. Over the past year, he worked closely with members of the Atlantic Croaker Technical Committee and Spot Plan Development Team to develop a new traffic light approach to evaluate fisheries trends and develop state-specified management actions for both croaker and spot (i.e., bag limits, size restrictions, time & area closures, and gear restrictions) when harvest and abundance thresholds are exceeded. He faciliated the development and implementation of regional management approaches for both the black sea bass and summer flounder recreational fisheries and has collaborated with committee members and Mid-Atlantic Fishery Management Council staff on new management approaches for summer flounder. Working in close coordination with Jeff, Kirby played an important role in the successful completion of the black drum benchmark as well as providing assitance on the upcoming benchmark assessment for red drum.

Jeff's and Kirby's ability to effectively collaborate with each other, and with representatives from the states, Mid-Atlantic Council and NOAA Fisheries are terrific examples of what can be achieved when scientists and managers commit to teamwork and strong partnerships. Their strong initiative, responsibility, quality of work, positive attitudes, and dedication to teamwork truly epitomize the attributes for which the award was created. As Employees of the Quarter for the fourth quarter of 2014, Jeff and Kirby received a cash award and small gift, a letter of appreciation for their personnel folder, and their names engraved on a plaque displayed in the Commission's lobby. Congratulations Jeff and Kirby!

Summer Flounder Biomass Graphs Revisited

In the August/September issue of *ASMFC Fisheries Focus* we illustrated some of the climate change tools the Commission is using to evaluate changes in fish stocks. The graphic associated with this article was taken from Bell et al. 2014 and visually depicts summer flounder distribution. These data were from the fall Northeast Fisheries Science Center Bottom Trawl Survey. Many of our readers expressed concern that the graphic used in this article did not reflect the same scale over time. The author of the report to ASMFC has provided this updated graphic placed on the same scale over time to address these concerns.



A comparison of changes in summer flounder biomass and distribution over time (red denotes areas of higher biomass, while dark blue reflects areas of no biomass). Source: R. Bell, NEFSC.

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North Carolina Division of Marine Fisheries
Quota Monitoring
Landings Report

North Carolina Quota Monitored Species Reporting

Species currently under a quota monitoring requirement by the North Carolina Division of Marine Fisheries (NCDMF) include summer flounder, striped bass, black sea bass North of Cape Hatteras, spiny dogfish, and river herring. Seasons are opened and closed by proclamation as shown in the table below. Landings reports are updated weekly during the proclamation season.

2015 North Carolina Quota Monitored Landings

Updated 01/29/2015

Species	2015 Total Quota (LBS)	80% of quota for Winter Fishery	2015 Transfer	2015 Harvest	Total Quota Remaining for 2015	Proclamation	Trip Limit (pounds)	Comments
2015 Summer Flounder	3,038,093	2,430,474	23,480	895,654	1,511,340	FF-86-2014	15,000	**Closes** 01/31/2015 at 6:00pm
2015 Black Sea Bass N of Cape Hatteras	243,422		109	100,897	142,416	FF-85-2014	3000 trawl, hook & line, fish pot	**Closes** 01/31/2015 at 6:00pm
2014/2015 Spiny Dogfish	7,276,052			2,215,309	5,060,743	FF-87-2014	per day: 10,000	**Closes** 04/30/2015 at 6:00pm
A.O. Striped Bass	360,360							
TRAWL	120,120			0	120,120	FF-1-2015	100 fish/day	Closes 3/31/15
SEINE	120,120			0	120,120	FF-77-2014	150 fish/day	Closes 3/31/15
GILL NET	120,120			0	120,120	FF-91-14	50 fish/day	Closes 02/14/2015
ASMA Striped Bass	137,500			5,309	132,741	FF-90-14	10 fish/day	Closes 04/30/2015
CSMA Striped Bass	25,000			22,845		FF-13-14	10 fish/day	Closed 04/20/2014

*** All figures are in pounds unless otherwise noted**

For questions about quota monitoring or to report landings:

Permitted Species	FAX	E-mail Address	Telephone #
Striped Bass, River Herring	**252-264-3723**	LANDINGS@ncdenr.gov	800-338-7805
Summer Flounder, Black Sea Bass North of Cape Hatteras, Spiny Dogfish	**252-726-3903**	FLOUNDER@ncdenr.gov	800-682-2632

YEAR	Month	SPECIES	POUNDS	DEALERS	TRIPS	AVERAGE (2007-2009)	CONF
2012	1	SOUTHERN FLOUNDER	3,334	36	200	7,713	
2012	2	SOUTHERN FLOUNDER	3,283	49	273	4,617	
2012	3	SOUTHERN FLOUNDER	10,997	89	956	23,512	
2012	4	SOUTHERN FLOUNDER	23,391	118	890	68,389	
2012	5	SOUTHERN FLOUNDER	62,439	131	1,741	122,514	
2012	6	SOUTHERN FLOUNDER	121,115	141	2,507	154,090	
2012	7	SOUTHERN FLOUNDER	101,806	154	2,138	170,387	
2012	8	SOUTHERN FLOUNDER	171,106	145	3,085	201,862	
2012	9	SOUTHERN FLOUNDER	375,651	163	3,879	396,301	
2012	10	SOUTHERN FLOUNDER	601,854	155	3,576	781,717	
2012	11	SOUTHERN FLOUNDER	171,047	110	1,670	392,150	
2012	12	SOUTHERN FLOUNDER	48	8	10	37,303	
2013	1	SOUTHERN FLOUNDER	2,942	42	276	7,713	
2013	2	SOUTHERN FLOUNDER	896	37	254	4,617	
2013	3	SOUTHERN FLOUNDER	4,387	57	682	23,512	
2013	4	SOUTHERN FLOUNDER	16,697	93	1,177	68,389	
2013	5	SOUTHERN FLOUNDER	49,629	123	1,778	122,514	
2013	6	SOUTHERN FLOUNDER	79,203	137	2,127	154,090	
2013	7	SOUTHERN FLOUNDER	119,720	150	2,839	170,387	
2013	8	SOUTHERN FLOUNDER	124,177	147	2,685	201,862	
2013	9	SOUTHERN FLOUNDER	416,097	161	3,631	396,301	
2013	10	SOUTHERN FLOUNDER	883,476	172	5,512	781,717	
2013	11	SOUTHERN FLOUNDER	483,762	121	2,589	392,150	
2013	12	SOUTHERN FLOUNDER	5,288	12	27	37,303	
2014	1	SOUTHERN FLOUNDER	2,978	29	183	7,713	
2014	2	SOUTHERN FLOUNDER	1,823	29	285	4,617	
2014	3	SOUTHERN FLOUNDER	3,430	43	677	23,512	
2014	4	SOUTHERN FLOUNDER	18,997	71	933	68,389	
2014	5	SOUTHERN FLOUNDER	16,001	93	681	122,514	
2014	6	SOUTHERN FLOUNDER	80,129	123	1,985	154,090	
2014	7	SOUTHERN FLOUNDER	84,771	141	2,141	170,387	
2014	8	SOUTHERN FLOUNDER	106,389	137	2,201	201,862	
2014	9	SOUTHERN FLOUNDER	403,976	153	3,572	396,301	
2014	10	SOUTHERN FLOUNDER	633,167	141	3,386	781,717	
2014	11	SOUTHERN FLOUNDER	287,121	52	1,587	392,150	
2014	12	SOUTHERN FLOUNDER	***	1	1	37,303	*

***2014 data are preliminary and only complete through October.

Red Drum Landings 2013-2014

Landings are complete through October 31, 2014
2013 landings are final; 2014 landings are preliminary

Year	Month	Species	Pounds	Conf	2009-2011 Average	2011-2013 Average
2013	9	Red Drum	65,273		28,991	30,735
2013	10	Red Drum	135,745		43,644	56,121
2013	11	Red Drum	61,658		14,318	25,338
2013	12	Red Drum	0		3,428	2,036
2014	1	Red Drum	***		5,885	2,755
2014	2	Red Drum	0		3,448	2,832
2014	3	Red Drum	0		5,699	2,425
2014	4	Red Drum	***		7,848	4,643
2014	5	Red Drum	0		13,730	7,687
2014	6	Red Drum	***		12,681	9,304
2014	7	Red Drum	0		13,777	13,152
2014	8	Red Drum	***		21,252	20,467
Fishing Year (Sept 1, 2013 - Aug 31, 2014) Landings			**262,753**			

Year	Month	Species	Pounds	Conf	2009-2011 Average	2011-2013 Average
2014	9	Red Drum	34,749		28,991	30,735
2014	10	Red Drum	36,239		43,644	56,121
2014	11	Red Drum	13,018*		14,318	25,338
2014	12	Red Drum	1,978*		3,428	2,036
Fishing Year (Sept 1, 2014 - Aug 31, 2015) Landings			**85,983**			

*partial trip ticket landings only
***landings are confidential

North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

MEMORANDUM

To: N.C. Marine Fisheries Commission

From: Trish Murphey, Interim Southern District Manager

Date: Jan. 30, 2015

Re: Mechanical Oyster Season Update

Background

The harvest of oysters by mechanical methods is managed under Supplement A to Amendment 2 to the N.C. Oyster Fishery Management Plan. Mechanical methods for harvesting oysters are prohibited in areas designated in 15A NCAC 03R .0108. The director has proclamation authority to further restrict all aspects of the fishery and is guided in the use of that authority by management strategies in Amendment 2 and Supplement A.

The mechanical harvest of oysters is managed under separate strategies for the smaller bay areas that remain open to the use of mechanical gear and the larger area of sounds and rivers. The areas where mechanical harvest is allowed in the bays are limited to a six-week season with a harvest limit of 10 bushels per fishing operation. This harvest limit coincides with the hand harvest limit in the same area. Mechanical harvest season in these bays closed on Dec. 19, 2014. The remaining mechanical harvest areas are open to harvest until the percentage of legal oysters in samples collected from an area drop below 26 percent for two consecutive sampling periods. Harvest limits in these areas are set by the director up to a maximum of 20 bushels. The mechanical harvest season in all mechanical harvest areas opened Nov. 10, 2014.

Western Pamlico Sound oyster resources were impacted by Hurricane Irene in August 2011 and by low dissolved oxygen in bottom waters in late summer 2012, greatly reducing productivity. The deep water portions of the lower Neuse River have not produced any oysters since 2012 due to mortality from low dissolved oxygen events and slow recovery in the Pamlico River Area from Hurricane Irene. Landings in the mechanical harvest fishery increased to 64,137 bushels during the 2013/14 season (Figure 1). Mechanical harvest was closed in the Neuse River Area on Feb. 28, 2014 but there were few boats working and harvesting was confined to a limited area spared from the low dissolved oxygen mortality event. Mechanical harvest was closed in the western Pamlico Sound Area on March 24, 2014 but most of the boats working this area had already moved to the Northern Dare Area to finish out the season. Both closures were made due to failure to meet the 26 percent legal sized oyster criterion. The Northern Dare Area remained open until the oyster season closed by rule. The available oyster season runs until March 31 each year.

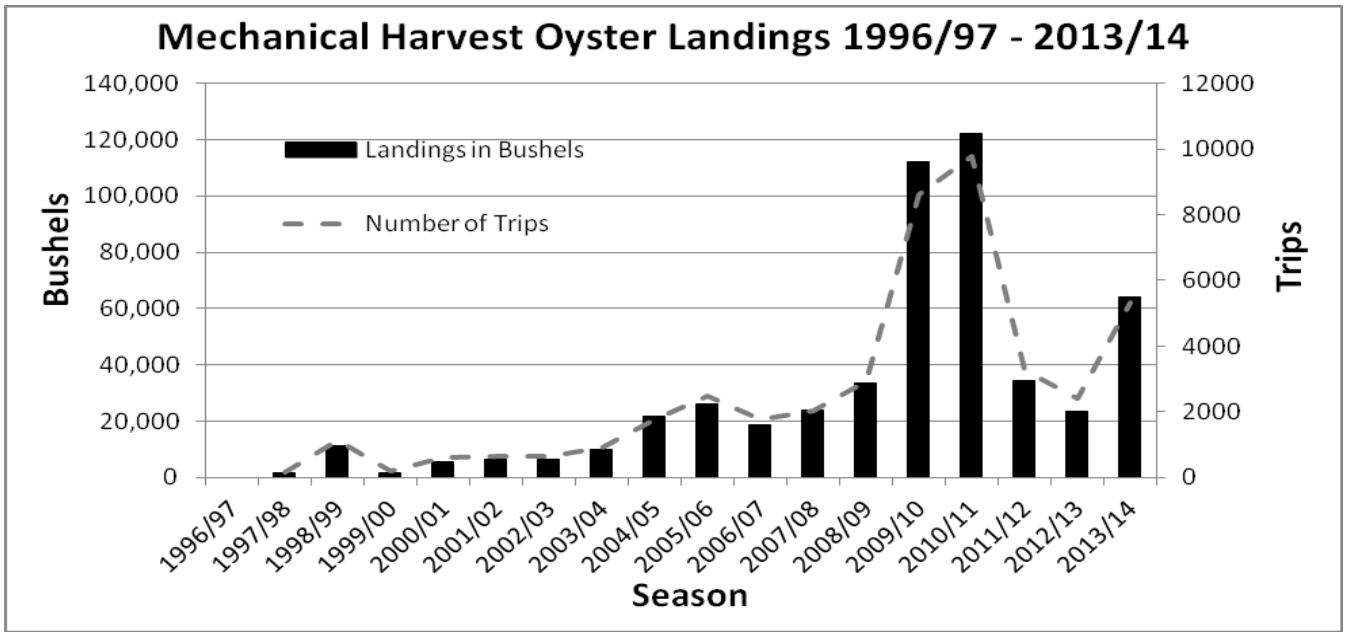


Figure 1. Mechanical harvest oyster landings by season 1996/97 through 2013/14. (DMF Trip Ticket Program)

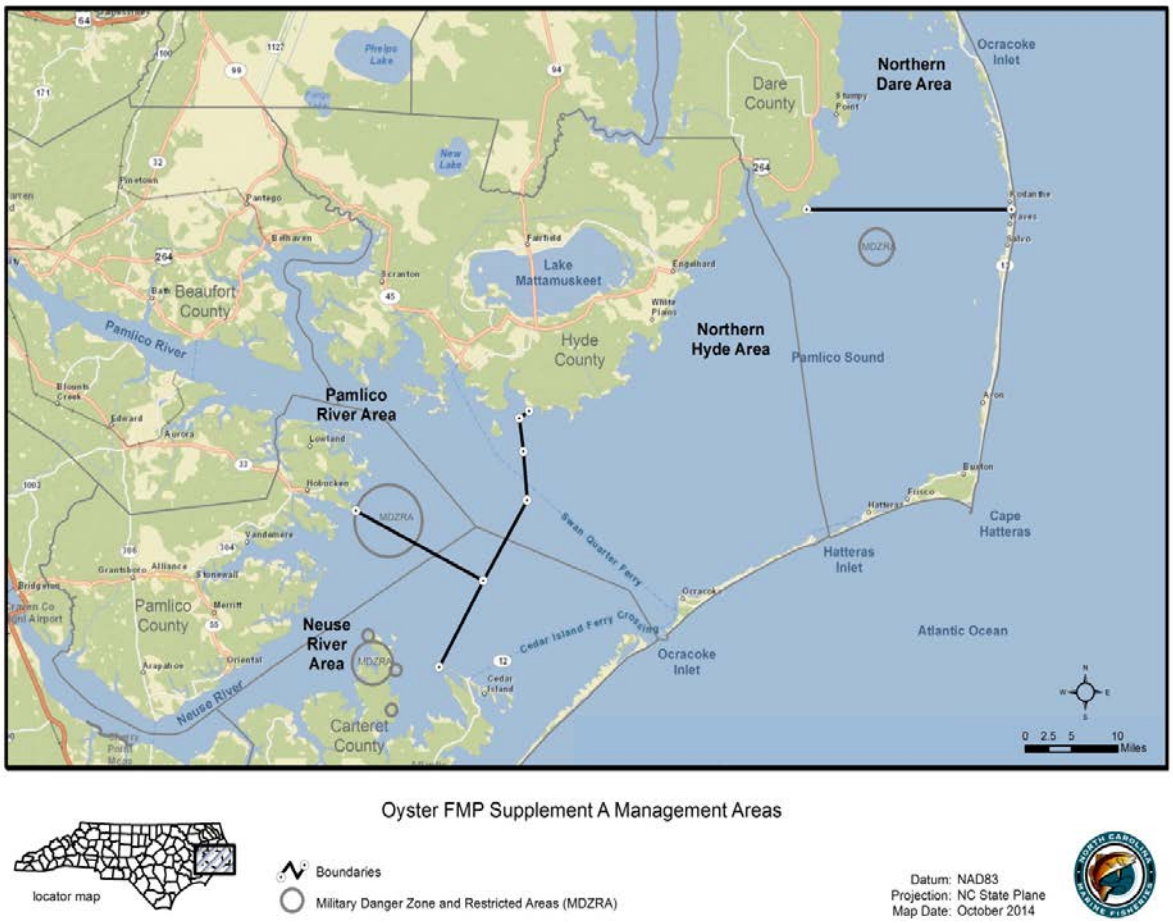


Figure 2. Areas used for management under the provisions of Supplement A.

2014/15 Oyster Sampling

Mechanical harvest of oysters is managed in four areas (Figure 2). Preseason sampling for the Neuse River Area was confined to the limited area worked in 2013/14. Samples in this area indicated oyster sizes were above the 26 percent trigger when the mechanical harvest season opened. Effort has been consistently low in the Neuse River due to oystermen having to work all day (no later than 4:00 p.m.) to harvest five to seven bushels, which is lower than the 15-bushel limit. Sampling results in the Neuse River has been above the trigger, however low numbers of small oysters have influenced the percentages (Table 1). This is likely due to impacts from Hurricane Irene and low dissolved oxygen impacts to the area over the past several years, resulting in low recruitment. On Jan. 21, 2014 sampling results fell below 26 percent legal-size oysters (Table 1). Additional sampling of Neuse River took place on Jan. 29 with the resulting percentage above the trigger (Table 1). This area remains open and will be sampled again the week of Feb. 9, 2015.

Preseason sampling in the Pamlico River Area also showed the initial percentage of legal-size oysters were above the 26 percent trigger when the mechanical harvest season opened. Additionally, the oysters showed signs of growth and significant numbers of sublegal sizes that should attain the 3-inch minimum size during the season. Fishing effort is higher in the Pamlico River area than the Neuse River with much of the fleet scattered from the mouth of the river to Brant Island.

The Northern Hyde and Northern Dare areas were also above the percentage of legal-size oysters during preseason sampling. Sampling of these areas before Christmas resulted in percentages below the trigger (Table 1). The number of small oysters in the samples influenced the percent of legal oysters sampled. Effort in Northern Hyde was mostly in Wysocking Bay while effort in Dare County was from Sandy Point to the Crab Hole. After Christmas, more effort shifted into the Crab Hole area off of Stumpy Point Bay due to Hyde County boats joining the Northern Dare fishery. Dealers reported that fishermen were bringing in their limits by mid-day. Unfortunately after the shift to Northern Dare, sampling resulted in less than 26 percent legal-size oysters for two consecutive sampling trips in both Dare and Hyde Counties (Table 1). This resulted in a closure of these areas on Jan. 12, at sunrise. Sampling of these areas commenced again the week of Jan. 26 to determine if oysters grew enough to reopen but as of Jan. 30, these areas remain below the trigger (Table 1). An area may reopen after two consecutive sampling trips results in meeting the trigger.

Table 1. 2014-2015 Percentage of legal sized oysters by area.

2014-2015 Trigger Sample Results							
Neuse River		Pamlico River		Northern Hyde County		Northern Dare County	
Date	Percentage	Date	Percentage	Date	Percentage	Date	Percentage
Sep. 22, 2014	25	Sep. 22, 2014	24	Oct. 1, 2014	31	Sep. 16, 2014	28
Nov. 5, 2014	32	Oct. 20, 2014	37	Dec. 1 2014	30	Dec. 3, 2014	34
Dec. 3, 2014	31	Nov. 5, 2014	33	Dec. 15, 2014	21	Dec. 16, 2014	23
Dec. 15, 2014	36	Nov. 19, 2014	35	Jan. 5, 2015	25	Jan. 6, 2015	22
Jan. 6, 2015	32	Dec. 3, 2014	40	Jan. 29, 2015	22	Jan. 26, 2015	24
Jan. 21, 2015	23	Dec. 15, 2014	34				
Jan. 29, 2015	29	Jan. 6, 2015	30				
		Jan. 21, 2015	30				

Preliminary data collected by month through the NCDMF Observer Program through December 2014.

	Trips		Observer Large Mesh				Observed Takes By Species								
							Kemp's		Green		Loggerhead		Unknown	A. Sturgeon	
Month	Estimated [1]	Actual [2]	AP Attempts [3]	Trips	Yards	Coverage [4]	Live	Dead	Live	Dead	Live	Dead	Live	Live	Dead
WINTER															
January	206	244	76	3	800	1.5									
February	774	594	14	45	26,415	5.8								1	
SPRING															
March	1,694	1,850	5	93	62,462	5.5								15	
April	1,669	1,036	100	38	18,780	2.3								1	
May	1,468	308	29	2	3,400	0.1									
SUMMER															
June	1,679	944	41	83	85,315	4.9								5	
July	2,042	856	55	90	79,932	4.4									
August	2,119	1,048	67	109	116,214	5.1									
FALL															
September	2,618	2,366	49	276	224,893	10.5	2		4		1		1	4	2
October	4,283	1,958	96	249	201,310	5.8	3		10	7	1		1	18	
November	1,858	1,042	109	112	91,915	6.0			3					11	
WINTER															
December	159	278	108	1	300	0.6									
Total	20,569	12,524	749	1,101	911,736	5.4	5	0	17	7	2	0	2	55	2

[1] Finalized trip ticket data from 2013

[2] Preliminary trip ticket data for 2014

[3] Alternative Platform trips where no fishing activity was found

[4] Based on estimated trips and observer large mesh trips

Preliminary data collected by month through the NCDMF Observer Program through December 2014.

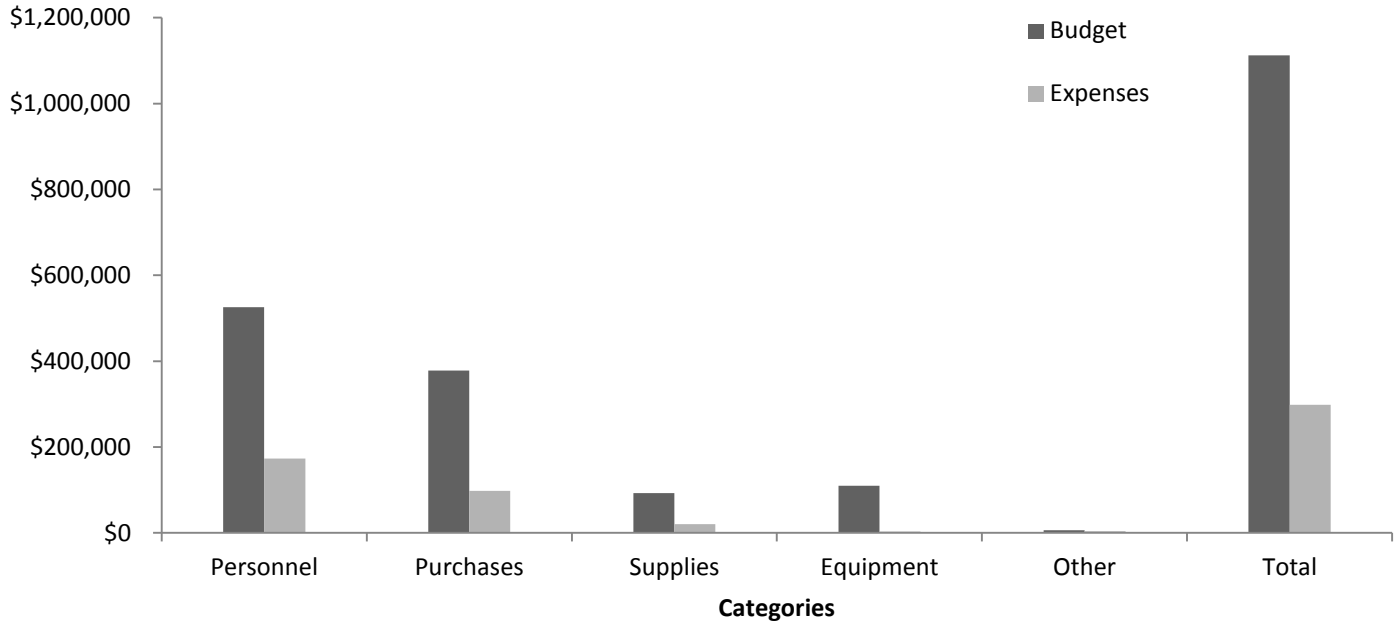
						Observed Takes By Species								
	Trips		Observer Small Mesh			Kemp's		Green		Loggerhead		Unknown	A. Sturgeon	
Month	Estimated [1]	Actual [2]	Trips	Yards	Coverage [3]	Live	Dead	Live	Dead	Live	Dead	Live	Live	Dead
WINTER														
January	743	681	11	7,750	1.5									
February	856	782	20	11,430	2.3								1	
SPRING														
March	1,344	561	6	2,130	0.4									
April	1,672	1,141	26	39,255	1.6								1	
May	1,197	778	13	15,600	1.1									
SUMMER														
June	841	792	4	5,000	0.5									
July	714	635	10	16,020	1.4									
August	818	840	19	22,540	2.3									
FALL														
September	811	774	24	14,390	3.0									
October	1,210	1,168	34	12,240	2.8			1						
November	877	521	37	15,920	4.2									
WINTER														
December	674	373	34	19,550	5.0									
Total	11,757	9,046	238	181,825	2.0	0	0	1	0	0	0	0	2	0

[1] Finalized trip ticket data from 2013

[2] Preliminary trip ticket data for 2014

[3] Based on estimated trips and observer small mesh trips

2014-2015 At-Sea Observer Program Budget and Expenses (Through Dec. 2014)



Personnel includes salaries and benefits for permanent staff
Purchases include temporary observer wages, vehicle repairs, travel expenses (lodging, meals), phones, postage, and vehicle insurance
Supplies include office, sampling, and safety supplies, vehicle/boat fuel, fluids, and parts
Equipment includes trucks, boats, motors, trailers, computers and software, and office furniture and equipment
Other includes tort claims and regional office space expenses

Fall 2014 Seasonal Progress Report

Incidental Take Permit No. 16230

September 1 – November 30, 2014

Jacob Boyd
Protected Species Biologist
North Carolina Division of Marine Fisheries

December 17, 2014

Summary

The fall season for large and small mesh gill nets in North Carolina is September through November as defined in Incidental Take Permit (ITP) No. 16230. The Division opened large mesh gill nets via proclamation M-25-2014 on September 1, 2014 in management unit A and via proclamation M-29-2014 on September 15, 2014 in management units C and D2. On September 22, 2014 the Division opened management units B and E to large mesh gill nets via proclamation M-30-2014. On September 24, 2014 management unit E was closed via proclamation M-31-2014 due to sea turtle interactions and reopened on November 2, 2014 via proclamation M-39-2014. On October 1, 2014 management unit A was closed via proclamation M-33-2014 due to sea turtle interactions with the western Albemarle Sound and Currituck Sound reopening on October 27, 2014 via proclamation M-36-2014. The remainder of management unit A was reopened on November 6, 2014 via proclamation M-41-2014. The annual management unit D1 opening was done on October 14, 2014 via proclamation M-34-2014. On October 26, 2014 the shallow water portions of management unit B (PSGNRA) was closed via proclamation M-37-2014 due to sea turtle interactions and was reopened on November 6, 2014 via proclamation M-40-2014.

Observer coverage was calculated for the fall 2014 season by management unit by estimating fishing trips using the previous year's trip ticket data compared to the observer trips completed throughout the fall season. The Observer Program achieved 9% large mesh gill-net coverage for the fall season meeting the minimum requirement (n = 7%) in each management unit except in management unit A (Table 1). Coverage was not met in management unit A due to several factors including the lack of fishermen compliance and the closure of 25 days. Overall, fishermen compliance has improved. Another factor that may have led to the 1.3% deficit of coverage in management unit A was inflated numbers from last year's fishing effort. Last year's effort in management unit A was unusually high and may not reflect what the effort will be for 2014. Once the finalized trip ticket data is analyzed, the 7% minimum coverage in management unit A may be met by the Observer Program. To illustrate such a difference 2014 observer trip data was applied to trip ticket data (fishing effort) from 2012 (Table 2). The Observer Program achieved 3.3% small mesh gill-net coverage for the fall season meeting the minimum requirement (n = 1%) in each management unit (Table 3).

There were n = 33 sea turtle interactions from large mesh gill nets and n = 1 from small mesh gill nets in the fall 2014 season (Table 4). The species composition was made up of primarily green sea turtles (n = 73.5%; n = 18 alive; n = 7 dead) with Kemp's ridley sea turtles (n = 14.7%; n = 4 alive; n = 1 dead) being the second highest species observed (Table 4). There were also n = 2 loggerhead sea turtles and n = 2 unknown sea turtles observed all of which were alive (Table 4). There were n = 3 reported sea turtle interactions during this time period (Table 5). The cumulative takes for large and small mesh gill nets from the fall 2014 season are in Tables 6 and 7.

Marine Patrol made 465 gill net checks for the fall 2014 season. Of these 465 gill net checks, there were five citations written (Table 8).

The Observer Program has various ways to contact fishermen to set up trips. The most common method is by phone due to limited resources, fishermen leaving from their residence, and efficiency. One of the many checks the Program has is a call log which is filled out for every phone call that is made when attempting to obtain a trip. Each call is put into a specific category and other information is gathered (Table 9). The phone log was analyzed by month and category to determine what percentage of phone calls (n = 2,803) resulted in positive observer trips (Table 10). Of the 2,803 calls that were made 46.1% were categorized as 1, 11, 12, 13, and 14 which inclusively represents not being able to get in touch with fishermen or fishermen refusing trips. Fishermen compliance improved by 4% from the

summer season with observers making n = 1,367 more phone calls in the fall season. Improvements were made to the contact log with more categories being added to further detail interactions with fishermen.

As per the ITP, the Division established a permit to register all fishermen participating in the large and small mesh gill-net fisheries. The ITP's Implementing Agreement states that the Division has two years to implement this permit to serve as a certificate of inclusion for fishermen. However, due to the compliance issues the Division was facing, the permit was developed (Estuarine Gill Net Permit-EGNP) and became effective September 1, 2014 (1 year from ITP issuance). This multifaceted permit allows the Division to closely monitor for compliance with the already successful permit system the Division has in place. This resulted in more effective regulation and better compliance for the fall 2014 season. As of December 16, 2014 there have been 2,368 EGNPs issued.

Tables

Table 1. Observer coverage calculated from the previous year's trip ticket data and observer data from the fall 2014 season (September - November) by management unit for large mesh gill nets.

	Trips		
Management Unit [1]	Estimated (2013)	Observed	Coverage (%)
A	3,336	191	5.7
B	1,732	154	8.9
C	1,282	152	11.9
D1	59	23	39.0
D2	311	58	18.6
E	80	58	72.5
Total	7,089	636	9.4

[1] Management units A, B, and E were closed during portions of the fall 2014 season.

Table 2. Observer coverage calculated from 2012 trip ticket data and observer data from the fall 2014 season (September - November) by management unit for large mesh gill nets.

	Trips		
Management Unit	Estimated (2012)	Observer	Coverage (%)
A	2,744	191	7.0
B	1,406	154	11.0
C	809	152	18.8
D1	63	23	36.5
D2	277	58	20.9
E	641	58	9.0
Total	5,940	636	10.7

Table 3. Observer coverage calculated from the previous year's trip ticket data and observer data from the fall 2014 season (September - November) by management unit for small mesh gill nets.

	Trips		
Management Unit	Estimated (2013)	Observed	Coverage (%)
A	575	18	3.1
B	1,223	22	1.8
C	321	15	4.7
D1	74	7	9.5
D2	203	9	4.4
E	502	24	4.8
Total	2,898	95	3.3

Table 4. Summary of observed sea turtle interactions in large and small mesh gill nets from the fall 2014 season (September - November).

Date	Management Unit	Latitude	Longitude	Species	Disposition	Tag		Curved Carapace (mm)	
						PIT	Inconel	Length	Width
9/9/2014	E	3357.177	7756.161	loggerhead	alive	n/a	n/a	n/a	n/a
9/16/2014	A	3559.705	7614.192	unknown	alive	n/a	n/a	n/a	n/a
9/23/2014	B	3514.421	7540.129	green	alive	n/a	n/a	330	279
9/23/2014	B	3514.421	7540.129	green	alive	n/a	n/a	336	266
9/23/2014	E	3426.444	7732.555	kemps	alive	n/a	n/a	240	200
9/23/2014	E	3426.491	7732.518	kemps	alive	n/a	n/a	290	280
9/24/2014	B	3507.575	7557.166	green	alive	n/a	n/a	n/a	n/a
9/26/2014	A	3547.304	7533.153	green	alive	989.001001951894	EET810	240	192
10/1/2014	A	3557.824	7545.917	kemps	alive	989.001001952697	UUE046	318	343
10/3/2014	B	3504.484	7604.897	green	dead	n/a	n/a	351	310
10/7/2014	B	3516.398	7541.830	green	alive	989.001001951677	n/a	281	232
10/7/2014	B	3516.227	7541.878	green	alive	989.001001951710	n/a	362	266
10/8/2014	B	3516.227	7534.571	loggerhead	alive	989.001001951907	EET806	584	541
10/8/2014	B	3542.397	7531.306	unknown	alive	n/a	n/a	n/a	n/a
10/10/2014	B	3518.323	7532.758	green	alive	n/a	n/a	n/a	n/a
10/10/2014	E	3439.111	7709.080	green[1]	alive	n/a	n/a	n/a	n/a
10/16/2014	B	3508.558	7555.952	green	dead	n/a	EET820	280	250
10/16/2014	B	n/a	n/a	green	dead	n/a	n/a	n/a	n/a
10/17/2014	D1	3446.637	7636.866	green	alive	989.001001951714	n/a	341	308
10/17/2014	B	3519.899	7534.882	green	alive	989.001001951878	EET804/5	324	278
10/21/2014	B	3521.120	7534.783	green	alive	3DD.003BB892B3	n/a	290	250
10/21/2014	B	3521.048	7534.364	green	alive	3DD.003BB892DB	EET802/3	350	310
10/21/2014	B	n/a	n/a	kemps	alive	989.001001951673	n/a	250	243
10/21/2014	B	3449.165	7622.689	green	dead	n/a	n/a	241	203
10/21/2014	B	3448.754	7622.859	green	dead	n/a	n/a	292	248
10/21/2014	B	3448.740	7622.873	green	dead	n/a	n/a	305	273
10/22/2014	B	3503.212	7605.637	green	alive	989.001001952679	UUE95/100	340(est)	281(est)
10/22/2014	B	3503.967	7605.268	green	alive	989.001001952761	n/a	295(est)	249(est)
10/22/2014	B	3503.639	7605.206	green	dead	n/a	n/a	313(est)	276(est)
10/22/2014	B	3503.517	7605.456	kemps[2]	dead	n/a	n/a	241(est)	264(est)
10/22/2014	D1	3444.704	7630.175	green	alive	4B02465510	UUE078	500(est)	400(est)
11/11/2014	B	3509.678	7553.358	green	alive	989.001001952701	n/a	280	230
11/12/2014	B	3506.066	7603.325	green	alive	n/a	n/a	n/a	n/a
11/13/2014	B	3505.551	7603.006	green	alive	9890001001952680	n/a	267	246

[1]Indicates small mesh gear

[2]Turtle died on 11/28/2014 at the Karen Beasley Sea Turtle Hospital

Table 5. Summary of reported sea turtle interactions in large and small mesh gill nets from the fall 2014 season (September - November).

						Curved Carapace (mm)	
Date	Management Unit	Latitude	Longitude	Species	Disposition	Length	Width
9/23/2014	E	n/a	n/a	unknown	alive	n/a	n/a
9/24/2014	E	n/a	n/a	unknown	alive	n/a	n/a
10/22/2014	D1	n/a	n/a	Loggerhead[1]	alive	n/a	n/a

[1]Indicates small mesh gear

Table 6. Summary of estimated and/or observed cumulative sea turtle interactions from the fall 2014 season (September - November) by management unit for large mesh gill nets.

	Green		Kemp's ridley		Loggerhead		Unknown	
Management Unit	Alive	Dead	Alive	Dead	Alive	Dead	Alive	Dead
A	*1	0	*1	0	0	0	*1	0
B	127.8	61.5	9.0	9.2	*1	0	*1	0
C	0	0	0	0	0	0	0	0
D1	5.6	0	0	0	0	0	0	0
D2	0	0	0	0	0	0	0	0
E	0	0	9	0	*1	0	0	0
Total	134.4	61.5	9.0	9.2	2	0	2	0

*Indicates observed takes

Table 7. Summary of observed cumulative sea turtle interactions from the fall 2014 season (September - November) by management unit for small mesh gill nets.

	Green	
Management Unit	Alive	Dead
E	*1	0
Total	*1	0

*Indicates observed takes

Table 8. Citations written by Marine Patrol for large and small mesh gill nets by violation code during the fall 2014 season (September - November).

	Violation	
Date	Code	Description
9/14/2014	NETG04	Leave gill nets in waters when could not be legally fished
9/26/2014	NETG04	Leave gill nets in waters when could not be legally fished
10/21/2014	NETG03	Using gill net with improper buoys or identification
10/22/2014	NETG22	Improperly set gill net
10/25/2014	NETG10	Gill net with illegal mesh size

Table 9. Categories and descriptions for the Observer Program's call logs used for analysis.

Categories	Category description
1	Left message with someone else
2	Not fishing general
3	Fishing other gear
4	Not fishing because of weather
5	Not fishing because of boat issues
6	Not fishing because of medical issues
7	Booked trip
8	Hung up, got angry, trip refused
9	Call back later time/date
10	Saw in person
11	Disconnected
12	Wrong number
13	No answer
14	No answer, left voicemail

Table 10. The number of calls (n = 2,083) made by the observers trying to set up trips by month categorized by call type (0-14) and defined in table 9 for the fall 2014 season (September - November).

	Categories (%)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Total
September	0.0	0.3	0.2	0.0	0.0	0.0	1.3	0.0	0.8	0.0	0.1	0.0	0.5	1.2	4.6
October	1.5	9.8	3.3	1.5	0.9	0.8	6.9	0.1	4.7	0.0	1.2	0.3	5.2	16.0	52.4
November	1.2	11.0	3.1	1.1	0.8	0.2	3.2	0.1	3.2	0.3	0.9	0.2	4.8	12.9	43.0
Total	2.8	21.2	6.7	2.6	1.7	1.1	11.4	0.2	8.7	0.3	2.1	0.5	10.5	30.1	100.0

Annual Sea Turtle Interaction Monitoring of the Gill-Net Fisheries in North Carolina for Incidental Take Permit Year 2014

Annual Completion Report for Activities under Endangered Species Act
Section 10 Incidental Take Permit No. 1630

Jacob Boyd

North Carolina Department of Environment and Natural Resources
North Carolina Division of Marine Fisheries
Fisheries Management Section
3441 Arendell Street
Morehead City, NC 28557

January 2015

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BACKGROUND

The North Carolina Division of Marine Fisheries (NCDMF) applied for an Incidental Take Permit (ITP) under Section 10(a)(1)(B) of the Endangered Species Act of 1973 (Public Law 93-205) (ESA) on June 14, 2010 to address sea turtle interactions with set gill nets in NC internal coastal waters. This request was prompted by notification from the National Marine Fisheries Service (NMFS) - Southeast Regional Office (SERO) in July and November 2009 indicating the need for the state of North Carolina to address unauthorized takes of sea turtles occurring in inshore gill-net fisheries. A revised ITP application was submitted on August 17, 2011 based on feedback received from NMFS on May 12, 2011. Feedback on the revised application from NMFS was provided again on May 2, 2012 after public and peer review comments had been compiled. In response to requested changes from NMFS, and considering the public and peer review comments, including the comments made by the NC Sea Turtle Advisory Committee (STAC), NCDMF made extensive revisions to its application and resubmitted it on September 6, 2012. After another round of public and peer review comments NMFS requested more information and clarification on certain portions of the application. On November 14, 2012, the response to the information request was discussed via teleconference between NMFS and NCDMF and provided to them beforehand. NMFS recommended that NCDMF update the current ITP application with an appendix containing all the updated information requested.

During the November 14, 2012 teleconference, NMFS suggested breaking down the annual requested takes for Kemp's ridley and loggerhead sea turtles cumulatively similar to the previous ITPs for the Pamlico Sound Gill Net Restricted Area (PSGNRA). NCDMF also suggested annual cumulative requested takes for all species of sea turtles for the exempt areas. A revised application was resubmitted on January 18, 2013.

On April 17, 2013 NMFS set up a teleconference with NCDMF to go over the revised ITP application that was submitted on January 18, 2013. Information was provided to NMFS to clarify issues they had with the application. On April 22, 2013 NMFS again asked for further clarification on different aspects of the ITP application which NCDMF promptly responded to. At that time NCDMF was informed by NMFS that they hoped to have a draft permit within a month to discuss with NCDMF. On April 30, 2013 staff was called by NMFS for further explanation on the methodologies of the Observer Program. Explanations were provided and NMFS did not have any more questions at the time.

After the last phone call between staff of NCDMF and NMFS, it was decided that another teleconference was in order. On May 20, 2013, the NCDMF had a teleconference with NMFS concerning the ITP application status and to review the Biological Opinion and Environmental Assessment protocols. At this time NMFS raised concerns on the number of observed takes requested in the ITP application. During the last teleconference, NCDMF and NMFS agreed to base allowable takes by area on an annual basis instead of a seasonal basis. As such, the number of requested observed takes was reduced by taking the seasonal component out of the equation. NMFS brought up the idea of having an Implementing Agreement for the Sea Turtle ITP, much like the Implementing Agreement NMFS has suggested for the Atlantic Sturgeon ITP. NCDMF asked NMFS to provide a copy of a draft Implementing Agreement for consideration.

NMFS explained that an Implementing Agreement would provide more flexibility and could reduce the risk of the permit being suspended due to excessive takes, but it will not allow for additional takes. NMFS explained that any new information could be provided in another appendix to the existing application.

The NCDMF received the Sea Turtle ITP on September 11, 2013. This ITP authorized the implementation of adaptive management measures to protect threatened and endangered sea turtles and other ESA listed species, while allowing estuarine gill-net fisheries prosecuted by commercial license holders to fish in the internal coastal (estuarine) waters of North Carolina.

METHODS

OBSERVER ACTIVITY

The conservation plan includes managing inshore gill-net fisheries by dividing estuarine waters into 6 management units (A, B, C, D1, D2, and E; Figure 1). Existing observer data from previous years is used when estimating the amount of trips needed for the current year in each management unit and season. Also, real time trip ticket data is used for areas where effort may be increasing. Each year effort can potentially shift from one management unit to another making it important for NCDMF to not base the observer effort solely on previous years' trip ticket data, but also on current effort changes.

Traditional, onboard trips are the preferred method of obtaining observer data and are used most frequently where observers ride aboard fishermen's vessels. For alternative platform trips, observers and Marine Patrol follow the same protocols using NCDMF vessels to observe the fishing trip. Each observer attempts to obtain a minimum of three to four trips per working week. Observers are assigned a management unit to work weekly and the amount of observers assigned to a management unit depends upon the season and fishing effort. Fishing effort is estimated from the previous year's trip ticket data by week and by month and management unit to determine where and how much observer coverage is needed each week and for each management unit by month/season. Reports from observers and other staff are used to determine if effort is fluctuating between management units. Trends from the previous year's trip ticket data are also analyzed to determine if fishing effort is shifting from one management unit to another. Fishermen holding a Standard Commercial Fishing License (SCFL) and landing fish in North Carolina using gill nets in the previous years are pooled by management unit. The contact information is then given to the observer assigned to that area and the observer contacts the fishermen randomly to set up trips from the list of names given. Preliminary trip ticket information is also used when pooling fishermen to contact along with contacting fishermen at fish houses. Observers hand out business cards with their contact information and brochures explaining the Observer Program and giving the fishermen another outlet to allow observers on their vessels. Additionally, the Observer Program utilizes a website (http://portal.ncdenr.org/web/mf/observers-program) to provide outreach to fishermen to obtain trips.

Alternative platform trips are utilized for areas that may be hard to get onboard trips (i.e., fishermen in remote locations that leave from their residence by boat). Alternative platform trips are also utilized in areas where fishing effort may increase quickly or sea turtle abundance is high. Marine Patrol also conducts alternative platform trips weekly in all management units based on the same methodology as the Observer Program. Coordination of onboard, alternative platform, and Marine Patrol alternative platform trips is done daily, monthly, and yearly to avoid sampling bias and to achieve the maximum amount of observer coverage possible for each management unit. Changes in effort, sea turtle abundance, and other protected species interactions are monitored on a daily, weekly, and monthly basis to ensure proper observer coverage is being maintained. The ITP requires a minimum of 7% observer coverage with a goal of 10% of the total large mesh gill-net (≥4 inches stretched mesh-ISM)

fishing trips and 1% coverage with a goal of 2% of the total small mesh gill-net (<4 ISM) fishing trips per management unit for the spring, summer, and fall seasons.

Each observer is trained to identify, measure, resuscitate, and tag sea turtles by NMFS – Beaufort Lab and NCDMF. Date, time, tag numbers, location (latitude and longitude, when possible), condition (i.e., no apparent harm, injury including a description of the nature of the injury, or mortality), species, sex (if determinable), and curved carapace length (mm) and width (mm) are recorded for each turtle observed. Dead sea turtles are brought to shore when feasible. All live, debilitated sea turtles are brought to shore for examination and treatment. Observers collect data on location, gear parameters, catch, and bycatch for each haul. The landed catch is sampled throughout each trip and total flounder weights (kg) are obtained. Data are coded on NCDMF data sheets and uploaded to NCDMF Biological Database for analysis. All observers are debriefed within 24 hours of each trip to obtain data on flounder catch, set locations, gear parameters, and sea turtle interactions to provide estimates of sea turtle bycatch.

The total bycatch of sea turtles for each management unit was estimated using the stratified ratio method (SAS 1989). The bycatch rate (sea turtles caught per fishing trip) estimated from observer data was multiplied by the total fishing trips. Strata consisted of the six management units (A, B, C, D1, D2, and E; Figure 1). Estimates were calculated by date of capture, management unit, species and disposition. Estimates were accumulated each week to implement necessary management measures if authorized take thresholds were approached.

$$\text{Estimated Interactions} = \frac{\text{\# sea turtle interactions observed}}{\text{total gill-net trips observed}} \times \text{total gill-net trips}$$

Seasons

The Observer Program's activities are reported on a weekly, seasonal, and annual basis. Weekly progress reports are required following a week in which a sea turtle interaction occurred and includes information such as take estimates, cumulative totals, and all information on observed takes. The seasonal progress reports include a summary of the weekly reports, any additional management measures taken, compliance, any violations that occurred, and any adaptive management actions taken during the season. Annual reports include actual and estimated takes (including mortality and the level of uncertainty of the estimates (i.e., 95% confidence intervals) by management unit, size composition along with all other interaction information, one or more maps illustrating the geographic distribution of all observed large and small mesh gill-net hauls and the locations of all interactions, and a description of the mitigation activities, adaptive management actions, and enforcement activities conducted during the ITP year.

AUTHORIZED TAKES

Authorized levels of annual incidental take are specified in Tables 1 - 5. The amount of incidental take is expressed as either estimated or observed takes depending on the amount of data available for modeling predicted takes. Because reaching the estimated or observed level for any category of take for any species would end the incidental take authorization for all species, it is highly unlikely that all five species would be impacted at these full levels. Takes must be incidental to otherwise lawful activities associated with the large and small mesh gill-net fisheries, and as conditioned herein. The permit covers incidental takes from the date of issuance through August 31, 2023.

COMPLIANCE

NCDMF observers and NCDMF Marine Patrol conduct weekly fish house visits, boat patrols, fisherman spot checks, gear checks, aerial surveys, and continued outreach to the industry for the purpose of ensuring industry compliance and communicating efforts throughout the state.

The Observer Program has various ways to contact fishermen to set up trips. The most common method is by phone due to limited resources, fishermen leaving from their residence, and efficiency. The Observer Program has a call log which is filled out for every phone call that is made when attempting to obtain a trip. Beginning in the spring of 2014 each call was put into a specific category and other information was gathered (Table 6). The phone log was analyzed by month and category to determine what percentage of phone calls resulted in positive observer trips.

RESULTS

OBSERVER ACTIVITY

Fall 2013

The fall season for large and small mesh gill nets in North Carolina is September through November as defined in Incidental Take Permit (ITP) No. 16230. Management unit E closed on July 14, 2013 via proclamation M-20-2-13 and management unit B closed on July 24, 2013 via proclamation M-21-2013 due to sea turtle interactions. Management unit D1 has an annual closure from May 8 through October 14. On September 1, 2013 the federal closure of the Pamlico Sound went into effect and NCDMF released a proclamation (M-23-2013) keeping management units B and E closed until the ITP application was approved. The ITP was approved on September 11, 2013 and NCDMF opened management units B and E to large mesh gill nets on September 30, 2013 via proclamations M-30-2013 and M-31-2013. Proclamation M-33-2013 opened management unit D1 on October 15, 2013 to large mesh gill nets. The flounder commercial harvest season in internal coastal waters closed on December 1, 2013 via proclamation FF-60-2013 (Boyd 2013b).

There were sea turtle interactions observed in large mesh gill nets (n = 16) and in small mesh gill nets (n = 1) for the fall season (Table 7; Figure 2). The species composition was made up of primarily green sea turtles (73.5%; n = 11 alive; n = 4 dead; Table 7; Figure 2). The remaining species consisted of a Kemp's ridley sea turtle (n = 1) and an unknown sea turtle (n = 1) all of which were alive (Table 6; Figure 2). The majority of the interactions (82.3%) occurred in management unit B (Table 7; Figure 2). There was a reported sea turtle interaction (n = 1) during this time period. (Boyd 2013b).

The Observer Program exceeded the 7.0% requirement for coverage within each of the management units for large mesh gill-nets with 358 total trips except in management unit A where coverage averaged 3.5% (Table 8; Figure 3). The Observer Program exceeded the 1.0% requirement for coverage in all management units for small mesh gill-nets with 40 total trips except management unit D2 where no observer trips occurred (Table 9; Figure 3; Boyd 2013b).

Spring 2014

The spring season for large and small mesh gill nets in North Carolina is March through May as defined in Incidental Take Permit (ITP) No. 16230. In April, the NCDMF received a letter from the North Carolina Fisheries Association (NCFA) asking to the NCDMF to close anchored large mesh gill nets statewide May 1, 2014 due to red drum bycatch with some areas exempted starting June 1, 2014. The NCDMF closed large mesh gill nets via proclamation M-16-2014 from May 5, 2014 through May 31, 2014 statewide to give the Marine Fisheries Commission (MFC) time to assess the situation at their May meeting (Boyd 2014a). At the May MFC meeting it was decided to keep large mesh gill-net fishing closed in areas except major

portions in management units A and C and a portion of management unit E in the New River (Proclamation M-21-2014; Figure 1).

There were no observed or reported sea turtle interactions in the spring 2014 season (Boyd 2014a).

The Observer Program averaged 4.0% large mesh gill-net coverage throughout all management units with 133 total trips (Table 8; Figure 3). The coverage was not met for all management units except management unit E due to many factors including a statewide closure in May when fishing effort is typically at its peak for the spring, weather, and compliance. The American shad season was shortened in management unit A in 2014 compared to effort levels from 2013 due to the adoption of the Shad Sustainability Plan. The Observer Program exceeded the 1.0% requirement for coverage in all management units for small mesh gill-nets with 45 total trips (Table 9; Figure 3; Boyd 2014a).

Summer 2014

The summer season for large and small mesh gill nets in North Carolina is June through August as defined in Incidental Take Permit (ITP) No. 16230. The large mesh gill-net closure enacted in the spring season remained in effect throughout the entire summer season (Boyd 2014b).

There were no observed or reported sea turtle interactions in the summer 2014 season (Boyd 2014b).

The Observer Program exceeded the 7.0% requirement for coverage within each of the management units for large mesh gill-nets with 281 total trips except in management unit A where coverage averaged 4.8% (Table 8; Figure 3). Coverage was not met in management unit A due to several factors most prominently being the lack of fishermen compliance. The Observer Program exceeded the 1.0% requirement for coverage in all management units for small mesh gill-nets with 43 total trips except management unit D2 where no observer trips occurred (Table 9; Figure 3; Boyd 2014b).

AUTHORIZED TAKES

There were sea turtle interactions observed in large mesh gill nets (n = 16) and in small mesh gill nets (n = 1) for the fall season (Table 7; Figure 2). The species composition was made up of primarily green sea turtles (73.5%; n = 11 alive; n = 4 dead; Table 7; Figure 2). The remaining species consisted of a Kemp's ridley sea turtle (n = 1) and an unknown sea turtle (n = 1) all of which were alive (Table 6; Figure 2). The majority of the interactions (82.3%) occurred in management unit B (Table 7; Figure 2). There was a reported sea turtle interaction (n = 1) during this time period. (Boyd 2013b).

The size distribution of green sea turtles ranged from a curved carapace length of 230 mm to 342 mm and a curved carapace width of 200 mm to 297 mm (Figure 4).

There were no sea turtle interactions in the spring or summer 2014 seasons. The cumulative total estimated and observed takes for large and small mesh gill nets did not reach the threshold of allowed takes for any management unit for ITP year 2014 (Tables 10 and 11). Confidence intervals (95%) were estimated for management units and species where estimated takes are used using a bootstrap method (Table 12). Estimated confidence-intervals (95%) for live green sea turtles in management unit B (estimated n = 108) were (48 - 214) and for deceased in management unit B (estimated n = 52) were (14 - 139). Estimated confidence-intervals (95%) for deceased green turtles in management unit E (estimated n = 4) were (0 – 12) and for live Kemp's ridley sea turtles in management unit B (estimated n = 15) were (0 – 45; Table 12).

COMPLIANCE

Marine Patrol made 445 gill-net checks for the fall 2013 season (Table 13). Of these 445 gill-net checks, there were eight citations (Table 13). Marine Patrol made 59 gill-net checks for the spring 2014 season (Table 13). Of these 59 gill-net checks, there were no violations (Table 13). Marine Patrol made 194 gill-net checks for the summer 2014 season (Table 13). Of these 194 gill-net checks, there were seven citations issued (Table 13).

In the spring 2014 season phone calls (n = 972) were made with 65.2% being categorized as 1, 2, 3, and 8 which inclusively represents not being able to get in touch with fishermen or fishermen refusing trips (Table 14). In the summer 2014 season phone calls (n = 1,436) were made with 50.0% being categorized as 1, 2, 3, and 8 which inclusively represents not being able to get in touch with fishermen or fishermen refusing trips (Table 14).

DISCUSSION

MANAGEMENT HISTORY

The NCDMF has addressed protected sea turtle issues in the coastal waters since the 1970s. This has been accomplished by cooperative agreements with the North Carolina Wildlife Resources Commission (NCWRC), establishment of a sea turtle sanctuary, proclamation authority delegated to the Director of NCDMF, additional queries on recreational surveys, management of the PSGNRA, formation of the NC STAC, implementation of a large and small mesh gill-net observer program, commercial bycatch reduction gear testing projects, outreach to the fishing industries, and collaboration with the NMFS.

The NCDMF applied and received four ITPs for the PSGNRA from 2000 – 2005 managing the area for sea turtle takes in the fall of each year through 2012 under these permits (Gearhart 2001, 2002, 2003; Price 2004, 2005, 2006, 2007a, 2008, 2009a, 2010a; Murphey 2011; Boyd 2012a, 2013a). Between 2000 and 2012, a number of changes were made in the PSGNRA such as: adjustments to allowable fishing areas, modified restrictions (e.g., state closure, net length restriction), and allowable take levels reduced (Gearhart 2003; Price 2010a; Murphey 2011; Boyd 2012a). These adaptations were made feasible as a result of the extensive monitoring program conducted by the NCDMF in the PSGNRA. The NCDMF also observed limited trips in the large and small mesh gill-net fisheries outside of the PSGNRA from 2004-2010 (Boyd 2012b; Brown and Price 2005; Price 2007b, Price 2009b, Price 2010b). The information gathered from these direct observations allowed NCDMF to generate requested estimated take numbers for observed fisheries and draft a functional Conservation Plan.

In June 2009, the NMFS began an Alternative Platform Observer Program in Core Sound, NC. The NMFS observers documented sea turtle interactions in large mesh gill nets in this area beginning in late-June and notified the NCDMF of their concern for these unauthorized takes. The NCDMF consulted with the NMFS-SERO via conference calls and correspondence to discuss short- and long-term actions to address sea turtle takes in gill nets in Core Sound and throughout the state. In the short term, the agencies agreed for the NCDMF to implement gear restrictions (yardage limits, mesh depth reduction, and net shot reductions) and increased observer coverage in Core Sound and adjacent water bodies (NCDMF Proclamation M-16-2009). For the long-term, the NCDMF continued consultations with the NMFS-SERO concerning the preparation of an ITP application for all internal coastal waters while compiling sea turtle interaction data from gill-net surveys, research projects, and direct observations.

On October 20, 2009, the day that authorized sea turtle takes were reached in the 2009 PSGNRA, a 60-day Notice of Intent (NOI) to sue the NCDMF and the NCMFC was received from the Duke Environmental Law and Policy Clinic on behalf of the Karen Beasley Sea Turtle Rescue and Rehabilitation Center Foundation (Beasley Center). The NOI stated that the NCDMF and the NCMFC violated Section 9 of the ESA by allowing gear in state waters that had unauthorized takes of threatened or endangered sea turtles.

The NCDMF consulted with the NMFS-SERO concerning this NOI while continuing to work toward the preparation of an application for a statewide ITP for gill-net fisheries in internal coastal waters. In November 2009, the NCDMF received further correspondence from the NMFS-SERO reiterating the need to "satisfy the requirements of the ESA" relative to Core Sound sea turtle interactions. The NCDMF continued to collect sea turtle interaction data while developing an interim plan to address sea turtle interactions in gill-net gear. As a result of discussions and correspondence with the NMFS-SERO, the NCDMF submitted an interim plan in January 2010 to address sea turtle interactions in gill-net fisheries prosecuted in internal coastal waters. The plan proposed to close large mesh gill-net fisheries throughout the majority of the estuarine waters of North Carolina from May to December 2010.

On February 18, 2010 the NCDMF presented the interim proposal to the NCMFC and the public at an emergency NCMFC meeting in New Bern, NC. During the meeting, numerous commercial fishery representatives expressed concern with the proposed closure on the basis of the economic devastation that would result from such a closure. Representatives from the Coastal Conservation Association (CCA-NC) did not support the interim closure stating the plan was too limited in scope. After thoroughly debating the issue, the NCMFC voted to direct the NCDMF to implement alternative measures that included reductions in the number of days per week that large mesh gill nets were allowed to be fished, restricted soak times, reductions in the length of individual nets (shots), and reductions in total yardage.

On February 23, 2010, the Duke Environmental Law and Policy Clinic filed suit against the NCDMF and the NCMFC on behalf of the Beasley Center. Negotiations between the parties occurred between late February and March 23, 2010, when the NCMFC met again. During the meeting, the NCMFC directed the fisheries director to issue a gill-net proclamation effective May 15, 2010 restricting the number of days during the week that large mesh gill nets would be allowed, limiting soak time, establishing a maximum yardage limit, mandating maximum mesh depth, requiring maximum individual gill net (shot) lengths, establishing spacing between net shots, and eliminating the use of tie-downs and floats or corks along float lines. The NCDMF Director did not issue the proclamation because, as detailed below, ongoing negotiations with the Beasley Center and the Duke Environmental Law and Policy Clinic produced a settlement agreement which preempted this particular action.

The NCMFC met May 12 through 14, 2010 and discussed the parameters of the final Settlement Agreement between the Beasley Center (plaintiff) and the NCDMF and the NCMFC. At that meeting, the NCMFC reached an agreement concerning restrictions that would be implemented in the large mesh gill-net fishery in NC estuarine waters. As a result of the NCMFC action, the NCDMF issued Proclamation M-8-2010 effective May 15, 2010 implementing the provisions of the Settlement Agreement.

Gill-net restrictions implemented by the proclamation included: a range of 4 ISM to, and including, 6 ½ ISM for large mesh gill nets; soak times limited to overnight soaks an hour before sunset to an hour after sunrise, Monday evenings through Friday mornings; large mesh gill nets were restricted to a height of no more than 15 meshes, constructed with a lead core or leaded

bottom line and without corks or floats other than needed for identification; a maximum of 2,000 yards of large mesh gill nets allowed to be used per vessel; and maximum individual net (shot) length of 100 yards with a 25-yard break between shots. Fishermen in the southern portion of the state were allowed to use floats on nets but were restricted to the use of a maximum of 1,000 yards of large mesh gill-net per fishing operation.

The Settlement Agreement included gill nets from 4 ISM to less than 5 ISM in the large mesh category because of observed sea turtle takes in 4 ISM and 4 ½ ISM gill nets in the NCDMF Independent Gill Net Survey. The measures were modified slightly several times, with the concurrence of the Beasley Center, to improve gear efficiency or adjust fishing area boundaries without compromising the sea turtle conservation provisions of the Settlement Agreement.

OBSERVER ACTIVITY

There was turnover within the Observer Program with positions being filled as quickly as possible to maintain coverage. The Observer Program actively placed observers in areas where fishing effort was high and where known sea turtle interactions occur. During the fall 2013 season during ITP year 2014 there were closures throughout the state due to sea turtle interactions. When a management unit closes for a portion of time the observers are shifted to the open management units to increase coverage in those management units. With ITP year 2014 being the first full statewide ITP year the Observer Program did run into some irregularities. Due to the number of phone calls the observers make and the different types of responses that are gathered from the fishermen, the Observer Program created a new call log for the spring 2014 season which included different categories to place each contact that was made to a fisherman in (Table 6). This was beneficial for analyzing the type of contact that was being made and to see the number of positive observer trips that were obtained through the calling system.

COMPLIANCE

The previous ITPs (PSGNRA) did not require observer coverage in the northern portion of North Carolina (management unit A). Because of this, fishermen were not as familiar with the Observer Program and requirements of the ITP, so more time was needed to educate the industry. Management unit A had compliance issues throughout ITP year 2014. NCDMF discussed the situation with industry leads to improve awareness and increase compliance. NCDMF followed up with NMFS to explain the situation and then NCDMF put in a mandatory overnight soak time on July7 25, 2014 via proclamation M-22-2014 for management unit A to increase observer coverage. While overall compliance improved with these measures, the minimum coverage was still not met.

An issue that was discovered during the summer season was fishermen using large mesh anchored gill nets as if they were strike or runaround nets in closed areas. Once discovered, this situation was dealt with via proclamation M-29-2014 closing the loopholes that allowed this fishery to continue.

Estuarine Gill Net Permit

As per the ITP the NCDMF established a permit to register all fishermen participating in the large and small mesh gill-net fisheries. The ITP's Implementing Agreement states that the NCDMF has two years to implement this permit to serve as a certificate of inclusion for fishermen. However, due to the compliance issues the NCDMF was facing during ITP year 2014, the permit was developed (Estuarine Gill Net Permit-EGNP) and became effective September 1, 2014 (1 year from ITP issuance). This multifaceted permit allows the NCDMF to closely monitor for compliance with the already successful permit system the NCDMF has in place. The EGNP is also used as a tool to improve fishermen compliance by requiring fishermen to allow NCDMF observers aboard their vessels to monitor catches. Failure to comply with this permit provision results in a permit suspension. This results in more effective regulation and better compliance. As of December 16, 2014 there have been 2,368 EGNPs issued.

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TABLES

Table 1. Authorized annual estimated takes in large mesh (≥4 inch stretched mesh-ISM) gill nets by management unit for ITP year 2014 (September 1, 2013 - August 31, 2014).

	Management Unit									
	B		D1		D2		E		Total	
	Estimated Takes		Estimated Takes		Estimated Takes		Estimated Takes			
Species	Alive	Dead	Alive	Dead	Alive	Dead	Alive	Dead	Alive	Dead
Green	225	112	9	5	n/a[1]	n/a[1]	96	48	330	165
Kemp's ridley	53	26	15	7	6	3	24	13	98	49
Total	278	138	24	12	6	3	120	61	428	214

[1]Insufficient observer data exist to model an estimated annual take level; therefore, for management unit D2, an annual observed take number has been identified for green turtles, and is found in Table 2.

Table 2. Authorized annual observed takes (live and dead combined) in large mesh (≥4 inch stretched mesh-ISM) gill nets by management unit for ITP year 2014 (September 1, 2013 - August 31, 2014).

	Management Unit				
	B	D1	D2	E	
Species	Observed (live/dead)	Observed (live/dead)	Observed (live/dead)	Observed (live/dead)	Total
Green	n/a[1]	n/a[1]	6	n/a[1]	6
Kemp's ridley	n/a[1]	n/a[1]	n/a[1]	n/a[1]	n/a[1]
Hawksbill	1	1	1	1	4
Leatherback	1	1	1	1	4
Loggerhead	3	3	3	3	12
Total	5	5	11	5	26

[1]Sufficient observer data exist to model an estimated annual take level for Kemp's ridley sea turtles in all management units and green sea turtles in all management units except D2. See Table 1 for the authorized annual estimated take level.

Table 3. Authorized annual observed takes in small mesh (<4 inch stretched mesh-ISM) gill nets by management unit for ITP year 2014 (September 1, 2013 - August 31, 2014).

	Management Unit				
	B	D1	D2	E	
Species	Observed (live/dead)	Observed (live/dead)	Observed (live/dead)	Observed (live/dead)	Total
Green	3	3	3	3	12
Hawksbill	1	1	1	1	4
Kemp's ridley	3	3	3	3	12
Leatherback	1	1	1	1	4
Loggerhead	3	3	3	3	12
Total	11	11	11	11	44

Table 4. Authorized annual observed takes (live and dead combined) in large mesh (≥4 inch stretched mesh-ISM) and small mesh (<4 inch stretched mesh-ISM) gill nets for management units A and C combined for ITP year 2014 (September 1, 2013 - August 31, 2014).

	Management Unit		
	A	C	
Species	Observed (live/dead)	Observed (live/dead)	Total
Green, Hawksbill, Kemp's ridley, Leatherback, Loggerhead	4 turtles of any species	4 turtles of any species	8
Total	4	4	8

Table 5. Total annual authorized takes (estimated and observed) by species and condition for ITP year 2014 (September 1, 2013 - August 31, 2014).

		Estimated		
Species	Observed (live/dead)	live	dead	Total
Green	18	330	165	513
Hawksbill	8	n/a[1]	n/a[1]	8
Kemp's ridley	12	98	49	159
Leatherback	8	n/a[1]	n/a[1]	8
Loggerhead	24	n/a[1]	n/a[1]	24
Any Species	8	n/a[1]	n/a[1]	8
Total	78	428	214	720

[1]Insufficient observer data exist to model an estimated annual take level; therefore, takes are expressed as observed.

Table 6. Categories and descriptions for the Observer Program's call logs used for analysis.

Categories	Category description
1	Disconnected/Wrong Number
2	No answer no voicemail/Voicemail full
3	No answer left voicemail/Left message
4	Not fishing/Fishing other fishery
5	Not fishing because weather/Environmental
6	Booked trip
7	Not fishing medical
8	Hung up
9	Call back later today/Next week/Next month etc.
0	Other

Table 7. Summary of observed sea turtle interactions (n = 17) in large and small mesh gill nets for the 2014 ITP year (September 1, 2013 – August 31, 2014).

Date	Management Unit	Mesh Size	Latitude	Longitude	Species	Disposition	Tag		Curved Carapace (mm)	
							PIT	Inconel	Length	Width
9/25/2013	C	Large	3505.231	7635.639	Green	Alive	n/a	n/a	290	270
10/2/2013	B	Large	3449.768	7625.274	Green	Alive	n/a	n/a	n/a	n/a
10/3/2013	B	Large	3508.706	7555.816	Green	Alive	4A0A701430	n/a	342	297
10/7/2013	D2	Large	3441.207	7658.277	Green	Alive	4A0A70402D	n/a	320	290
10/8/2013	B	Large	3452.35	7624.344	Unknown	Alive	n/a	n/a	n/a	n/a
10/8/2013	B	Large	3452.606	7624.428	Green	Alive	4A717A300C	n/a	284	247
10/8/2013	B	Large	3504.179	7604.672	Green	Alive	4A0A7C177C	n/a	322	256
10/11/2013	B	Large	3450.444	7624.751	Kemps	Alive	989.001001951698	n/a	240	250
10/16/2013	B	Large	3503.174	7605.06	Green	Dead	n/a	n/a	275	240
10/17/2013	B	Large	3510.205	7549.584	Green	Alive	4A0C033B3A	n/a	309	276
10/18/2013	B	Large	3452.23	7622.275	Green	Dead	n/a	n/a	230	200
10/22/2013	B	Large	3452.477	7623.505	Green	Dead	n/a	n/a	280	242
10/22/2013	B	Large	3515.713	7542.198	Green	Alive	4A630E750B	UUE021	250	230
10/22/2013	B	Small	3451.441	7623.008	Green	Alive	989.001001951762	n/a	265	221
10/24/2013	E	Large	3410.619	7750.615	Green	Dead	n/a	n/a	273	230
10/29/2013	B	Large	3522.583	7532.78	Green	Alive	n/a	n/a	275	225
11/12/2013	B	Large	3509.884	7552.715	Green	Alive	4B0309136A	n/a	297	245

Table 8 Observer coverage calculated from the previous year's trip ticket data and observer data from each season (spring, summer, and fall) for ITP year 2014 (September 1, 2013 - August 31, 2014) by management unit for large mesh gill nets.

	Coverage (%)		
Management Unit	Fall 2013	Spring 2014 [1]	Summer 2014 [2]
A	3.5	2.5	4.8
B	7.3	0.4	0.0
C	7.2	4.8	8.0
D1	36.5	0.0	0.0
D2	8.3	0.0	0.0
E	8.9	30.9	15.1
Total	6.0	4.0	4.8

[1] Management unit D1 was closed during a portion of the spring 2014 season.

[2] Management unit's B, D1, and D2 were closed during the summer 2014 season.

Table 9. Observer coverage calculated from the previous year's trip ticket data and observer data from each season (spring, summer, and fall) for ITP year 2014 (September 1, 2013 - August 31, 2014) by management unit for small mesh gill nets.

	Coverage (%)		
Management Unit	Fall 2013	Spring 2014	Summer 2014
A	1.2	0.4	1.5
B	1.2	1.2	1.0
C	1.2	1.2	3.8
D1	23.5	21.2	37.5
D2	0.0	0.0	2.7
E	1.0	1.3	1.8
Total	1.5	1.1	1.8

Table 10. Summary of cumulative estimated sea turtle interactions through August 2014 by management unit and disposition for large mesh gill nets during ITP year 2014 (September 1, 2013 - August 31, 2014).

Management Unit	Green		Kemp's ridley	
	Alive	Dead	Alive	Dead
B	108	52	15	0
C	*1	0	0	0
D2	*1	0	0	0
E	0	4	0	0
Total	110	56	15	0

*Indicates observed takes

Table 11. Summary of cumulative sea turtle interactions by management unit and disposition for small mesh gill nets during ITP year 2014 (September 1, 2013 - August 31, 2014).

Management Unit	Green	
	Alive	Dead
B	*1	0
Total	*1	0

*Indicates observed takes

Table 12. Estimated confidence intervals (95%) for estimated takes using a bootstrap method based on observer data for coverage and sea turtle interaction levels by management unit and season for ITP year 2014 (September 1, 2013 - August 31, 2014).

	Green		Green		Kemp's	
Management Unit[1]	Alive	95% CI	Dead	95% CI	Alive	95% CI
A	0		0		0	
B	108	48 - 214	51	14 - 139	15	0 - 45
C	0		0		0	
D1	0		0		0	
D2	0		0		0	
E	0		4	0 - 12	0	

[1]Estimated confidence intervals were not applied for management units, gears, or species where observed takes are allowed and estimated takes are not used.

Table 13. Number of gill-net checks made and citations issued by Marine Patrol for large and small mesh gill nets by season during ITP year 2014 (September 1, 2013 - August 31, 2014).

Season	# Gill Net Checks	# Citations
Fall 2013	445	8
Spring 2014	59	0
Summer 2014	194	7

Table 14. The percentage of calls made (n = 2,408) by the observers trying to set up trips by season categorized by call type (0-9) as defined in Table 6 for ITP year 2014 (September 1, 2013 - August 31, 2014).

	Categories (%)										
Season	0	1	2	3	4	5	6	7	8	9	Total
Spring 2014	3.2	36.3	11.8	16.4	16.2	1.3	7.7	1.0	0.7	5.4	100
Summer 2014	6.2	13.1	10.9	25.4	15.2	1.6	12.3	1.7	0.6	13.0	100
Total	9.4	49.4	22.7	41.8	31.4	2.9	20.0	2.7	1.3	18.4	

[1]The categories for the contact log were developed prior to the spring 2014 season.

FIGURES

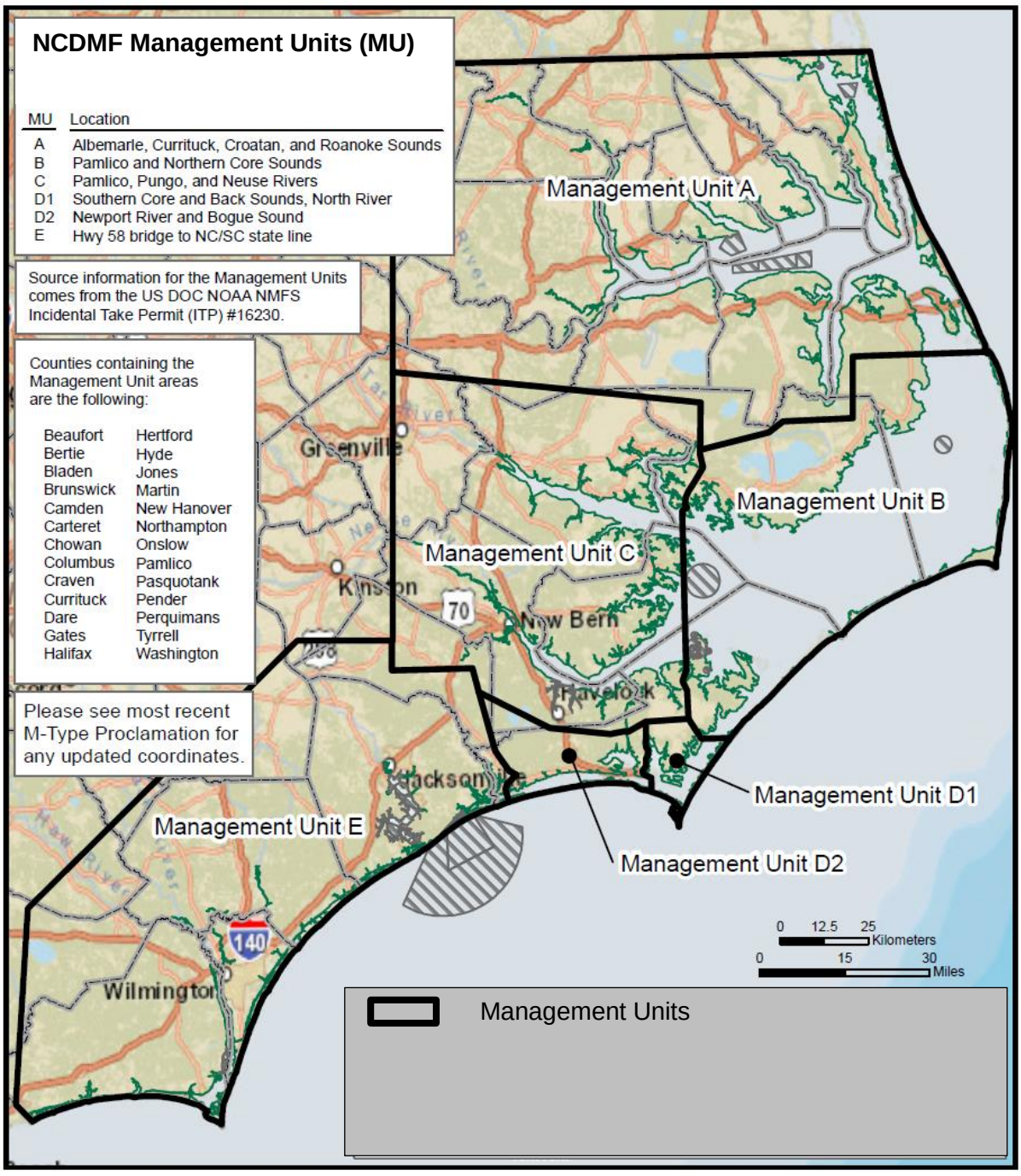


Figure 1. Management units (A, B, C, D1, D2, and E) as outlined in the Conservation Plan and utilized by the Observer Program for ITP year 2014 (September 1, 2013 – August 31, 2014).

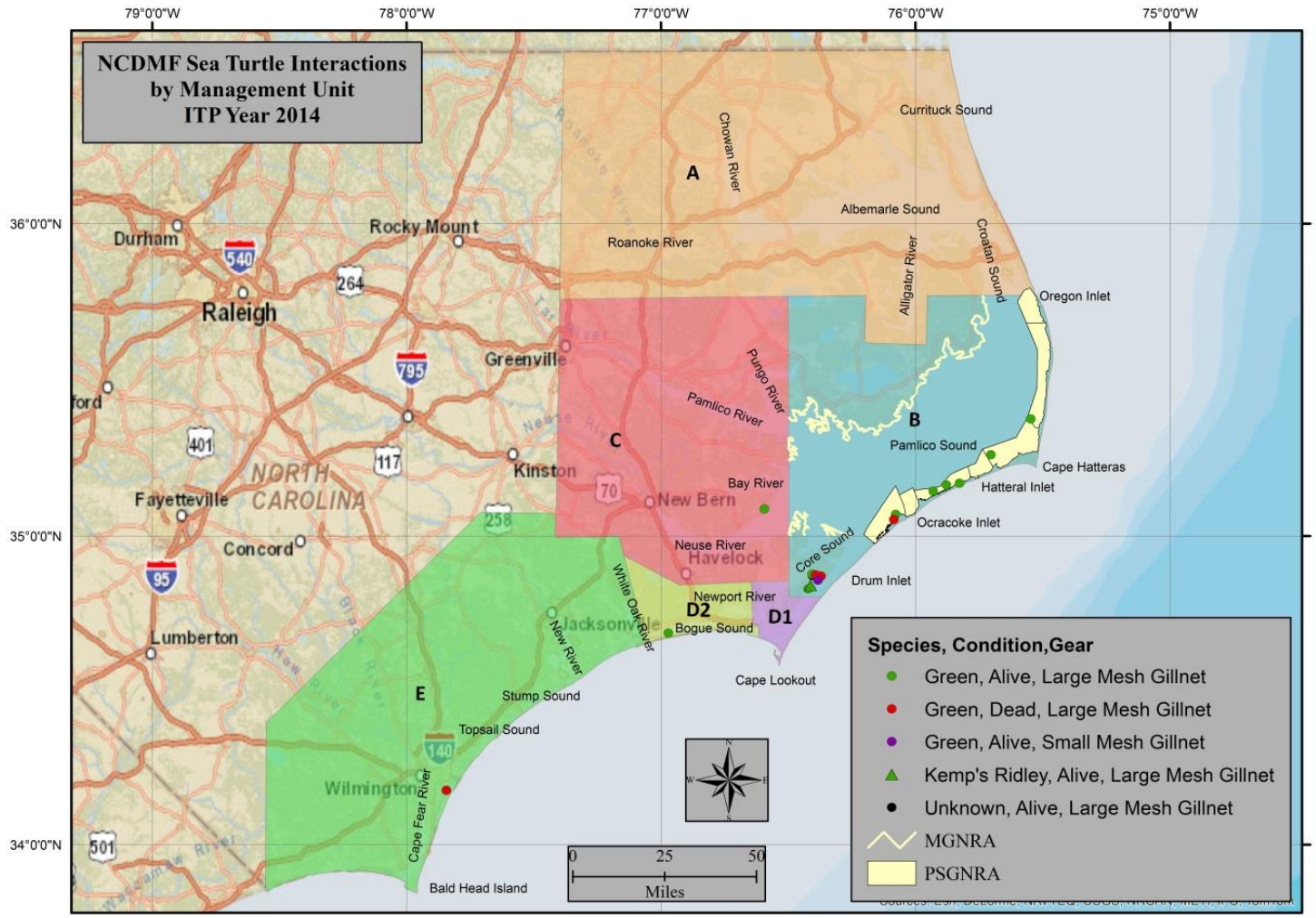


Figure 2. Sea turtle interaction locations (n = 17) by species, disposition, and gear for ITP year 2014 (September 1, 2013 – August 31, 2014).

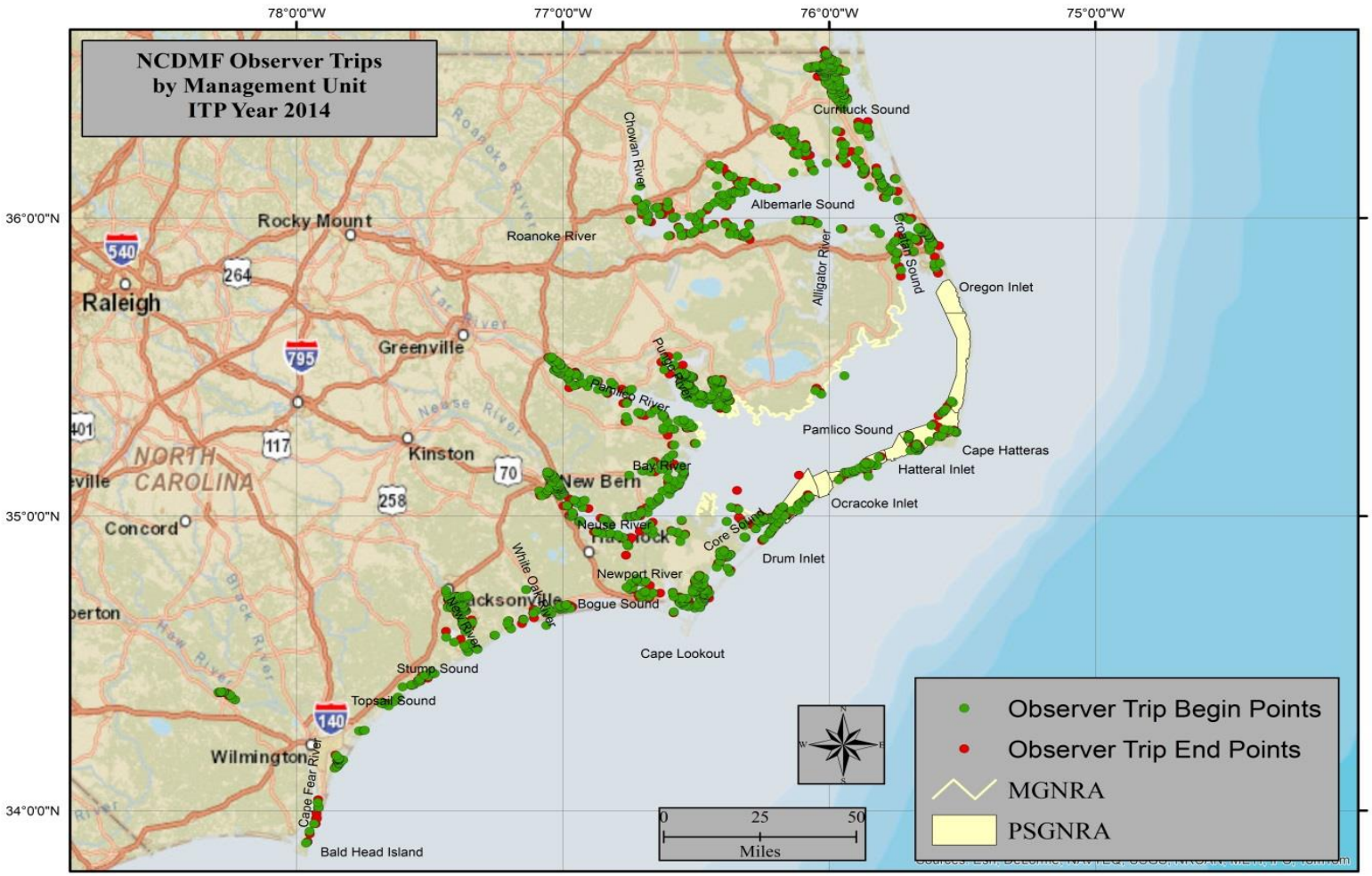


Figure 3. Starting and ending locations of observer trips (n = 900) conducted by the Observer Program for ITP year 2014 (September 1, 2013 – August 31, 2014).

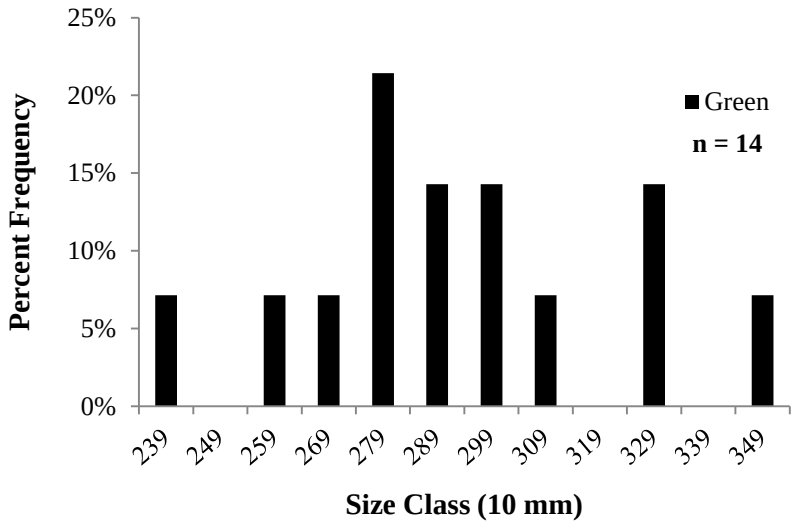


Figure 4. Length-frequency (curved carapace length) from notch to tip of observed incidental captures of green sea turtles (n = 14) collected by the Observer Program from onboard and alternative platform observations for ITP year 2014 (September 1, 2013 – August 31, 2014).

North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

MEMORANDUM

TO: Louis Daniel, Division of Marine Fisheries Director
Sammy Corbett, Marine Fisheries Commission Chairman

FROM: Chris Batsavage, Protected Resources Section Chief/Special Assistant for Councils
Division of Marine Fisheries, NCDENR

DATE: Jan. 30, 2015

SUBJECT: Mid-Atlantic Fishery Management Council Meeting—December 8-11, 2014

The Mid-Atlantic Fishery Management Council met on Dec. 8-11, 2014 in Baltimore, MD. Management actions taken by the council are discussed below and are summarized in the attached Council Meeting Summary.

SUMMER FLOUNDER FISHERY MANAGEMENT PLAN AMENDMENT

The Atlantic States Maine Fisheries Commission's Summer Flounder, Scup and Black Sea Bass Management Board met jointly with the council to review the comments from the Summer Flounder Fishery Management Plan Amendment Scoping Hearings and to decide which issues to address in the amendment. A total of 14 scoping hearings were held from Massachusetts to North Carolina drawing over 200 attendees. In addition, written comments were received from over 100 individuals and groups. Based on the input received, the council and commission decided to address four issues in the amendment: (1) Fishery management plan goals and objectives, (2) quota allocation between the commercial and recreational sectors, (3) commercial management measures and strategies, and (4) recreational management measures and strategies. Issues such as discards, catch monitoring, and ecosystems will be addressed under the issues identified above. The Fishery Management Action Team will meet and issue-specific work groups will be formed in early 2015.

SUMMER FLOUNDER RECREATIONAL SPECIFICATIONS

The council and board recommended conservation equivalency (state or region-specific) management measures for the 2015 recreational summer flounder fishery. The coast wide (Massachusetts—North Carolina) recreational harvest limit for 2015 is 7.38 million pounds, which is an increase from the 2014 recreational harvest limit of 7.01 million pounds. The commission's Draft Addendum XXVI includes several options for conservation equivalency, including regional management similar to what was implemented in 2014. The board will meet in early February to recommend 2015 specific conservation equivalency measures.

As a non-preferred alternative, the council and board recommended a coastwide minimum size limit of 18 inches, a 4-fish possession limit, and an open season from May 1 through Sept. 30. If a state fails implement conservation equivalency management measures, their summer flounder fishery must be managed under precautionary default management measures comprised of a 20-inch minimum size, 2-fish possession limit and an open season from May 1 through Sept. 30.

SCUP RECREATIONAL SPECIFICATIONS

The coast wide [Massachusetts to North Carolina (north of Cape Hatteras)] recreational harvest limit for scup in 2015 is 6.80 million pounds, which is a decrease from 7.03 million pounds in 2014. Projected harvest estimates indicate that the 2014 harvest is below the harvest limit, so no harvest reduction is necessary in 2015. The council recommended a 9-inch minimum size limit, a 50-fish possession limit, and no closed season for federal waters in 2015. The federal waters possession limit in 2014 was 30 fish. For state waters, the board voted for conservation equivalency in 2015, and the states will develop state-specific management measures for approval at the Board's February meeting. Over 90 percent of the harvest occurs from Massachusetts through New York, and most of the harvest from these states is in state waters. Therefore, the harvest in federal waters and from New Jersey through North Carolina (north of Cape Hatteras) is of minor importance. Scup are rarely caught or harvested by anglers in North Carolina fishing north of Cape Hatteras.

BLACK SEA BASS RECREATIONAL SPECIFICATIONS

The coast wide [Massachusetts to North Carolina (north of Cape Hatteras)] recreational harvest limit for black sea bass in 2015 is 2.33 million pounds, but the council and board recommended a 28% harvest reduction due to the 2014 projected harvest exceeding the harvest limit. The commission's Summer Flounder, Scup and Black Sea Bass Management Board voted to continue the provisions of Addendum XXV, which includes options for ad hoc regional management of black sea bass in state waters. If the state waters measures address the required reduction, the council and board recommended that federal waters measures include a 12.5-inch TL minimum size, a 15 fish possession limit, and open seasons from May 15 – Sept. 21 and Oct. 22 – Dec. 31. If the state management measures do not address the required reduction, then coastwide measures for both state and federal waters would be set at a 14-inch Total Length minimum size limit, a 3-fish possession limit, and a July 15-Sept. 15 season.

FORAGE SPECIES MANAGEMENT

The executive committee received a presentation on a forage fish white paper that was developed to inform the council's ongoing development of an Ecosystem Approaches to Fisheries Management (EAFM) guidance document. The council voted to initiate an action that would protect unmanaged species of forage fish in the Mid-Atlantic by placing restrictions on the development or expansion of directed fisheries on these fish.

BLUELINE TILEFISH

In response to the drastic increase in commercial blueline tilefish landings in the mid-Atlantic region, the council voted to send a letter to mid-Atlantic and Southern New England states requesting the states adopt consistent incidental commercial trip limits and recreational bag limits for blueline tilefish to prevent the expansion of this fishery. The South Atlantic Fishery Management Council manages blueline tilefish from North Carolina to Florida, but there is no comprehensive management in the mid-Atlantic or in New England.

UPCOMING MEETING

The next meeting of the Mid-Atlantic Fishery Management Council will be Feb. 10-12, 2015 at the Doubletree by Hilton Raleigh Brownstone University in Raleigh, N.C.

December 2014 Council Meeting Report

December 8 – 11, 2014

Baltimore, Maryland

The following summary highlights Council actions and issues considered at the December 2014 Council Meeting in Baltimore, MD. Presentations, briefing materials, and audio recordings are linked from the relevant sections below. Additional information about the meeting is available at www.mafmc.org/briefing/december-2014.

- Agenda
- Complete Briefing book
- Meeting Motions

Summer Flounder, Scup, Black Sea Bass

The Council and the Atlantic States Marine Fisheries Commission's Summer Flounder, Scup, and Black Sea Bass Board (Board) met jointly to discuss the Comprehensive Summer Flounder Amendment and to set 2015 recreational management measures for Summer Flounder, Scup, and Black Sea Bass.

Comprehensive Summer Flounder Amendment

Council and Commission staff presented a summary of public input provided during scoping for the Comprehensive Summer Flounder Amendment. Comments were provided by more than 200 individuals at fourteen scoping hearings and 100 individuals and groups who submitted written comments. After considering this input, the Council and Board identified four categories of issues to be addressed in the amendment: (1) Fishery Management Plan (FMP) goals and objectives, (2) quota allocation between the commercial and recreational sectors, (3) commercial management measures and strategies, and (4) recreational management measures and strategies. In addition, the Council and Board agreed to address issues related to discards, ecosystems, and catch monitoring under the umbrella of the categories listed above. Next steps for the amendment will include a Fishery Management Action Team (FMAT) meeting early next year and establishment of issue-specific working groups. Additional information, updates, and background documents about the amendment are available at http://www.mafmc.org/actions/summer-flounder-amendment.

- Briefing Materials
- Presentation
- Webinar Recording

2015 Recreational Management Measures

In August 2014, the Council and Board reviewed previously implemented commercial quotas and recreational harvest limits for summer flounder, scup, and black sea bass for the 2015 fishing year. At the August 2014 meeting, the Council and Board recommended no changes to the current 2015 specifications. However, the Council also voted to suspend the Research Set-Aside (RSA) program in 2015 and redistribute the 3% portion of the quota normally withheld from each species' quotas, resulting in adjustments to the previously specified recreational harvest limits (RHL) for 2015. Details on the commercial quota and RHL for each species are available in the final rule published May 22, 2014.

Summer Flounder: The Council and Board recommended the use of conservation equivalency to achieve the 2015 summer flounder RHL of 7.38 million pounds. Conservation equivalency allows individual states or multi-state regions to develop customized recreational measures that, in combination, will achieve the coastwide harvest limit. The combination of these measures would be equivalent to the non-preferred coastwide alternative approved by the Council and Board, which includes a four fish possession limit, an 18-inch total length (TL) minimum size, and an open season from May 1 through September 30. In addition, a precautionary default

measure of a two fish possession limit, a 20-inch TL minimum size, and an open season of May 1 - September 30 was approved for states or regions that do not develop management measures consistent with the conservation equivalency guidelines. The Commission's Draft Addendum XXVI includes several options for summer flounder recreational management under conservation equivalency in 2015.

- Briefing Materials
- Presentation
- Webinar Recording

Scup: To achieve the 2015 scup RHL of 6.80 million pounds, the Board voted to continue using a regional management approach, and the Council and Board recommended a 9-inch minimum fish size (TL), a 50 fish possession limit, and an open season from January 1 through December 31 in federal waters.

- Briefing Materials
- Advisory Panel meeting summary
- Presentation

Black Sea Bass: The Council and Board recommended recreational management measures to achieve the 2.33 million pound RHL for black sea bass in 2015. Based on projected 2014 landings, this will require a 28% reduction in landings. The Board voted to continue the provisions of Addendum XXV, which includes options for ad hoc regional management of black sea bass in state waters. If the combination of measures in state waters addresses the required reduction, then federal measures would include a 15 fish possession limit, a 12.5-inch TL minimum fish size, and an open season from May 15 through September 21, and October 22 through December 31. The Council and Board also adopted a set of backup coastwide management measures representing the most restrictive size, possession, and seasonal limit across all states that would be implemented *only if the ad hoc regional measures do not address the necessary reduction*. These measures include a 14-inch TL minimum size, a 3 fish possession limit, and an open season from July 15-September 15 in both state and federal waters.

- Briefing Materials
- Advisory Panel meeting summary
- Presentation

Summary of Proposed 2015 Recreational Management Measures

	Recreational Harvest Limit	Type of Measures	Minimum Fish Size *(TL)*	Possession Limit	2015 Season
Summer Flounder	7.38 million pounds	**State/ Federal**	**Conservation equivalency -** *Measures will be developed by state or region and approved at the Commission's February meeting*		
Scup	6.80 million pounds	**State**	**Regional Management Approach –** *State-specific measures will be developed through the Commission's process and voted on in February.*		
		Federal	**9 inch**	**50 fish**	**Jan 1 – Dec 31**
Black Sea Bass	2.33 million pounds	**State**	**Regional management approach -** *State-specific measures will be developed through the Commission's process and voted on in February.*		
		Federal[1]	**12.5 inch**	**15 fish**	**May 15 – Sept. 21 Oct 22 – Dec 31**

Forage Management

The Executive Committee received a presentation on a forage fish white paper that was developed to inform the Council's ongoing development of an Ecosystem Approaches to Fisheries Management (EAFM) guidance document. After discussion by the Executive Committee and the full Council, the Council voted to initiate a

[1] Subject to the northern states addressing the required reduction.

regulatory action to prohibit the development of new, or expansion of existing, directed fisheries on unmanaged forage species until adequate scientific information is available to promote ecosystem sustainability.

- Briefing Materials
- Presentation: Forage Fish White Paper
- Webinar Recording

Ecosystem and Ocean Planning Committee

Habitat Project Update

Council staff provided an update on the Habitat Pilot Project and other Committee Priority Activities. The Habitat Pilot Project is intended to support the development of overarching fish habitat objectives for the EAFM Document. The project involves several elements, including production of a report on current practices and objectives used in the identification of critical habitat areas in the US and abroad, the development of policy statements on anthropogenic impacts on fish habitat, and the development of multi-species Habitat Areas of Particular Concern (HAPCs). Since the last update, an Oversight Team has been formed and a contractor has been selected. The Habitat Practices Report and background/policy documents are currently under development. This phase of the project is expected to wrap up in spring 2015.

- Briefing Materials
- Webinar Recording (Habitat Project Updates)
- Presentation: Habitat Project Update

New England Fishery Management Council Public Hearing – Omnibus EFH Amendment 2

New England Council staff conducted a public hearing on its draft Omnibus Essential Fish Habitat (EFH) Amendment 2. Following the public hearing, the Council developed comments focused on the EFH and Habitat Area of Particular Concern (HAPC) Alternatives, and Spatial Management Alternatives proposed within the Amendment. The Council agreed to send a letter with these comments to the NEFMC.

- Presentation: EFH Amendment 2 Hearing
- Webinar Recording (Part 1 – Presentation and Public Comments)
- Webinar Recording (Part 2 - Ecosystem Committee Comments)

GARFO Strategic Plan

Harry Mears, Assistant Regional Administrator of NOAA Fisheries' Greater Atlantic Regional Fisheries Office (GARFO), presented a draft of GARFO's 2015-2019 strategic plan. The plan identifies objectives associated with seven primary strategic goals: sustainable fisheries; protected resources; habitat conservation; community resiliency; aquaculture; organizational excellence; and customer service. The Council provided comments on the draft and agreed to submit additional input in a letter later this month.

- Briefing Materials
- Presentation
- Webinar Recording

Tilefish White Paper

The Council discussed a number of issues presented in the Tilefish White Paper developed by staff. The Council passed a motion to include the following items in the Framework 2 to the Tilefish FMP: 1) change the specification process to account for separate discards in the IFQ and incidental portions of the fishery; 2) deal with possible elimination of the IVR system; 3) require tilefish be landed with head attached (i.e., head-on gutted or whole); 4) prohibit vessels from fishing for more than one IFQ allocation at a time; and, 5) prohibit the use of mini-long lines in the recreational fishery.

- Briefing Materials
- Presentation
- Webinar Recording

Other Business

Listening Session: The topic of the listening session was deep sea corals in the Mid-Atlantic. Dr. Martha Nizinski, a zoologist with NOAA Fisheries National Systematics Lab, gave a presentation on recent explorations of deep sea habitats in the Northeast. Her presentation was followed by an informal discussion with Council members and the public.

- Briefing Materials
- Webinar Recording

2015 Implementation Plan: The Council reviewed and approved the 2015 Implementation Plan, which was revised to incorporate input from the Executive committee at the October meeting. The implementation plan will guide the Council's activities and priorities through 2015 and beyond.

Blueline Tilefish: The Council voted to send a letter to mid-Atlantic and Southern New England states requesting the states adopt consistent incidental commercial trip limits and recreational bag limits for blueline tilefish to prevent the unmanaged expansion of this data-poor fishery.

2015 Council Meeting Schedule

February 10-12, 2015: Raleigh, North Carolina
Doubletree by Hilton Raleigh Brownstone University
1707 Hillsborough St.
Raleigh, NC 27605
919-828-0811

April 14-16, 2015: Long Branch, New Jersey
Ocean Place Resort
1 Ocean Blvd.
Long Branch, NJ 07740
732-571-4000

June 9-11, 2015: Virginia Beach, Virginia
Hilton Virginia Beach Oceanfront
3001 Atlantic Ave.
Virginia Beach, VA 23451
757-213-3000

August 11-13, 2015: New York City, New York
Holiday Inn Midtown
440 West 57th Street
New York City, New York 10019
212-581-8100

October 6-8, 2015: Philadelphia, Pennsylvania
Doubletree Philadelphia Center City
237 S. Broad St.
Philadelphia, PA 19107
215-893-1600

December 8-10, 2015: Annapolis, Maryland
The Westin Annapolis
100 Westgate Circle
Annapolis, MD 21401
410-972-4300

North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

MEMORANDUM

TO: Sammy Corbett, Marine Fisheries Commission Chairman
Dr. Louis B. Daniel III, Director, Division of Marine Fisheries

FROM: Michelle Duval

DATE: Jan. 30, 2015

SUBJECT: South Atlantic Fishery Management Council Meeting (Dec. 1-5, 2014)

The South Atlantic Fishery Management Council (Council) met in New Bern, North Carolina. Following is a summary of actions taken by the Council. The next meeting will be held in St. Simon's Island, Georgia, March 2-6, 2015.

Snapper Grouper Visioning Workshop

The Council continued its work developing a vision for the future of the snapper grouper fishery. The outcomes of the special October 2014 Visioning Meeting for council members were reviewed, and draft blueprints of the "Management" and "Communication" strategic goals were discussed. Each blueprint incorporates action strategies suggested by the public during the March 2014 port meetings held throughout the region, as well as suggestions from Council members. The Council will review drafts of the "Science" and "Governance" blueprints at its upcoming meeting in Georgia. The Council is expected to approve a complete draft blueprint of all four goals for public input at its June 2015 meeting.

Protected Resources Committee

The committee received an update on the Atlantic sturgeon Section 7 consultation for the Coastal Migratory Pelagics fishery (mackerels, cobia), which should be completed by March 2015. The committee received a presentation from the National Marine Fisheries Service regarding the Atlantic Large Whale Take Reduction Plan and the requirements under the new vertical line rule. These include modifications to line-marking requirements and a new nearshore trap/pot restricted area off South Carolina, Georgia and northern Florida.

Southeast Data, Assessment, and Review (SEDAR) Committee

This is the name of the stock assessment process in the southeast, and each Southeast, Data, Assessment and Review, or "SEDAR" is given a number. The Council received updates on the following stock assessment activities:

- *SEDAR 41 (gray triggerfish and red snapper)*: The Council approved an updated schedule for the assessment, which was delayed due to concerns regarding the accuracy of headboat reporting from north Florida. To resolve the issue, historic experts were consulted to review the approaches developed by the Southeast Fisheries Science Center to address the data deficiencies. Quality assurance practices that were in place during the 1970's and 1980's will be reviewed and biases in the data evaluated.
- *SEDAR 37 (hogfish)*: The assessment concluded there are two stocks of hogfish – one from Georgia to North Carolina, and a second stock off Florida through the Keys. However, the assessment for the Georgia-North Carolina stock was deemed insufficient to determine stock status and based management decisions upon. The southeast/Florida stock was determined to be overfished with overfishing occurring.
- *SEDAR 38 (king mackerel)*: The stock is not overfished and overfishing is not occurring. While the annual catch limits will increase, the Council's Scientific and Statistical Committee recommended caution in setting those limits due to uncertainty in future recruitment. One of the more notable outcomes of the assessment is a change in the boundaries of the "mixing zone" between the Gulf and South Atlantic stocks. The mixing zone was determined to

be much smaller than in previous assessments; the end result is that Florida east coast harvest of king mackerel will all be attributed all to the Atlantic stock, rather than split evenly between Gulf and Atlantic stocks.

Snapper Grouper Committee

The committee received updates on the status of the following amendments under review:

- *Regulatory Amendment 14:* The final rule published Nov. 7, 2014 and became effective Dec. 7, 2014. This amendment changes the start of both the commercial and recreational fishing years for black sea bass and greater amberjack, modifies commercial black sea bass trip limits, and establishes a commercial trip limit stepdown for gag grouper when 75 percent of the annual catch limit is reached (to 500 pounds).
- *Amendment 29 (Only Reliable Catch Stocks and gray triggerfish):* The proposed rule Dec. 7, 2014 with comments due by Jan. 7, 2015. The amendment updates the Council's Allowable Biological Catch control rule to include the use of a data-limited approach, establishes a minimum size limit for gray triggerfish (12 inches fork length), a commercial split season and a commercial trip limit of 1,000 pounds.
- *Amendment 32 (blueline tilefish):* The amendment is under review; comments on the amendment are due Feb. 17, 2015. The proposed rule published Jan. 23, 2015 with comments due by Feb. 23, 2015. It establishes a several reduced annual catch limit, a commercial trip limit of 100 pounds and a recreational bag limit of one fish per vessel per day (harvest allowed May-August).
- *Regulatory Amendment 20 (snowy grouper):* The amendment is under review in the region and has not been noticed for comment, nor has the proposed rule been published. It would increase the annual catch limit for snowy grouper, increase the commercial trip limit from 100 to 200 pounds (gutted weight), maintain the existing one fish per vessel per day recreational bag limit and restrict harvest to May through August.

Regulatory Amendment 16 (black sea bass pot closure): The Council spent a significant amount of time discussing this amendment, which contains a range of alternatives to modify the existing November through April prohibition on the use of black sea bass pots due to concerns regarding risk to right whales. The Council was required to implement this closure in late 2013 in order to double the annual catch limit based on a stock assessment update. Staff from the National Marine Fisheries Service Protected Resources Division gave presentations on regulations regarding the triggering and development of a biological opinion, as well as right whale biology and new information since the 2006 biological opinion. Council staff also provided analyses regarding reductions in pot effort as a result of the actions taken in Amendment 18A, which established the pot endorsement program that limits participation to 32 endorsement holders, with a maximum of 35 pots per endorsement holder, a trip limit of 1,000 pounds (gutted weight) and a requirement to bring all pots back in at the end of a trip.

Modifications of several existing alternatives were added to the amendment for analysis. All alternatives consider spatial and temporal modification to the pot closure to more closely target the time of year and depth ranges where right whales occur during the calving and migration season. An action was also added to require additional gear markings specific to the sea bass pot fishery. The Council was original scheduled to approve the amendment for public hearings in December, but addition of extra alternatives pushed this schedule back; instead, the Council will select preferred alternatives in March 2015 and approve for public hearings in June 2015.

Regulatory Amendment 22 (gag grouper and wreckfish): This amendment updates the annual catch limits for gag grouper and wreckfish based on updated stock assessments, and considered a modification to the gag recreational bag limit (currently at one fish within the three-fish grouper aggregate). While gag is not overfished, there was debate regarding whether or not overfishing was occurring, and the Council selected a slightly lower annual catch limit for gag based on comments of concern from the public and chose to leave the bag limit at one fish. The amendment was submitted for formal secretarial review.

Amendment 22 (recreational harvest tags): This amendment would establish a systems to distribute tags to track recreational harvest of species with very low annual catch limits that the Marine Recreational Information Program was not designed for. The amendment was postponed while the Council received legal guidance regarding whether or not the use of a lottery-based system to distribute tags constituted a limited access privilege program. In order to provide the Council with other options for tracking of "rare-catch" species, N.C. Division of Marine Fisheries staff member Doug Mumford provided an overview of the state's catch card program for billfish and bluefin tuna. The Council discussed the program as a possible option, but took no further action.

Amendment 36 (spawning Special Management Zones (SMZs)): The Council received a presentation from Dr. Will Heymans, an ecologist who has been conducting cooperative research with snapper grouper fishermen off South Carolina to identify spawning areas for snapper and grouper species, focusing on "elbow-shaped" bathymetric features. Dr. Heymans also made a brief trip to North Carolina to examine a few areas, and is interested in transferring his survey methods to fishermen. The Council requested staff examine the bottom topography and biomass within the areas identified off each state as possible alternatives for spawning special management zones, and bring back a range of configurations for consideration in March. The Council will review the draft amendment and likely select preferred alternatives for public comment in June 2015.

Amendment 35 (removal of species and golden tilefish endorsements): This amendment contains actions to remove species from the fishery that are primarily caught in south Florida (black snapper, mahogany snapper, dog snapper and schoolmaster snapper), and address a loophole in the golden tilefish longline endorsement that has allowed endorsement holders to fish on the 25 percent of the annual catch limit set aside for hook-and-line fishermen that did not receive endorsements. The Council approved this document for public hearings in January 2015.

Joint Dolphin/Wahoo and Snapper Grouper Committee

The committee took final action on the following amendments:

- *Dolphin/Wahoo Amendment 7/Snapper Grouper Amendment 33 (fillets from Bahamas)*: This amendment provides an exemption for dolphin and wahoo legally harvested in the Bahamas to be transported back to the U.S. as fillets, similar to an existing exemption for snapper grouper species. Fillets of any species must have the skin intact, and fishermen must abide by both U.S. and Bahamian possession limits (whichever is more restrictive) when in U.S. waters. The amendment was approved for formal secretarial review.
- *Dolphin/Wahoo Allocation/Generic Accountability Measures Amendment*: This amendment establishes an allocation of 90 percent recreational/10 percent commercial for the dolphin annual catch limit (based on the average landings from 2008-2012), and adjusts accountability measures for remaining Council-managed species to provide consistency across all fishery management plans. The amendment was approved for formal secretarial review.

Mackerel Committee

The committee received updates on the following amendments under review:

- *Amendment 20B (zones and transit provisions)*: This amendment creates northern and southern zones for king and Spanish mackerel (boundary at North Carolina/South Carolina border), and a Florida east coast sub-zone for cobia. The final rule published Jan. 21, 2015 and will be effective March 1, 2015.
- *Framework Action 2013 (Spanish mackerel transfer-at-sea*): This amendment allows for transfer-at-sea of Spanish mackerel harvested by gill net in excess of the trip limit to another federally-permitted vessel with certain restrictions. The final rule became effective Dec. 19, 2014.
- *Framework Amendment 1 (Spanish mackerel ACLs)*: This amendment adjusts the ACLs for Spanish mackerel based on the latest stock assessment. The final rule became effective Dec. 22, 2014.
- *Framework Amendment 2 (Atlantic Spanish mackerel trip limits)*: This amendment adjusts the trip limit stepdowns in the southern zone for Spanish mackerel when 75 percent and 100 percent of the adjusted quota has been met. The amendment is still under review in the region.

Amendment 26 (king mackerel annual catch limits and stock boundary): This amendment would adjust the king mackerel annual catch limits based on the SEDAR 38 stock assessment (refer to results on page 2). It includes actions to adjust the boundary between Gulf and South Atlantic stocks; allow for sale of king mackerel incidentally caught in the shark gill net fishery; and considers a separate quota for the mixing zone between the Gulf and South Atlantic stocks (the area off the Florida Keys). The amendment was approved for scoping.

Amendment 24 (Atlantic Spanish mackerel allocation shift): This amendment contains a range of alternatives for temporary, in-season shifts of allocation between commercial and recreational sectors. Based on input from the advisory panels, and workload issues the Council decided to postpone consideration of this amendment until 2016.

Finally, the Council discussed separation of the fishery management plan. Currently, the species in the plan are managed jointly with the Gulf of Mexico Fishery Management Council and each council must approve the others actions. This was done originally due to the mixing between Gulf and South Atlantic stocks along the east coast of Florida. However, this is an extremely cumbersome process and has led to some disagreement between the councils. With the revisions to the mixing zone, the Council is interested in re-examining this and directed staff to bring back information for the March 2015 council meeting regarding all components that would need to be addressed.

Data Collection Committee

Status of Bycatch Reporting in the Southeast: A workgroup comprised of staff from the National Marine Fisheries Service Regional Office and Southeast Fisheries Science Center has been formed to address the status of bycatch reporting in the southeast. Federal law requires each council to establish a standardized bycatch reporting system. The council will receive an update in March regarding past and current efforts to track bycatch and how best to meet the legal requirements.

Electronic Technology Implementation Plan: The Council received an update on the draft Electronic Technologies Implementation Plan for the Southeast Region from the National Marine Fisheries Service. There is a national directive to develop and implement electronic means of reporting and monitoring of fisheries. The Council provided comments on the draft plan, emphasizing its focus on electronic reporting. The draft plan was released on Jan. 9, 2015 for public input. Comments are due by Feb. 9, 2015.

Commercial Electronic Reporting: The Council received an update on the development of an electronic version of the existing commercial logbook form that fishermen could voluntarily use to submit catch information. The Atlantic Coastal Cooperative Statistics Program is working with the Southeast Fisheries Science Center to implement this product. The intent is for the form to be operational in early 2015. Additionally, the Council received an update on the status of the commercial electronic logbook pilot program. Fishermen throughout the region have been selected for pilot testing of a variety of platforms (tablet computers, onboard laptops, etc.). The infrastructure and software changes should be complete by August 2015 for testing to begin.

Joint Gulf/South Atlantic Charterboat Electronic Reporting: Council staff provided an overview of the final report and recommendations from the joint Gulf and South Atlantic workgroup tasked with examining electronic reporting for charter vessels in both regions. The Council directed staff to begin work on a joint amendment in 2015 that incorporates workgroup recommendations and is patterned after the Joint Electronic Headboat Reporting Amendment.

Finally, the Council received an update on changes to the Marine Recreational Information Program effort survey. The program will be transitioning to a paper-based mail survey, which was demonstrated to have higher response rates than the phone survey. A dual-frame survey will be conducted for the next two years that employs both methods. Annual catch limits will continue to be tracked using the existing phone survey until such time as a full transition is complete and data can be recalibrated for use in stock assessments.

North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

MEMORANDUM

TO: Dr. Louis B. Daniel III, Division of Marine Fisheries Director
Sammy Corbett, Marine Fisheries Commission Chairman

FROM: Randy Gregory
Holly White
Division of Marine Fisheries, NCDENR

DATE: Jan. 30, 2015

SUBJECT: Highly Migratory Species Update

The Highly Migratory Species Advisory Panel's spring meeting will be held March 10 - 12, 2015 in Bethesda, Maryland. The National Marine Fisheries Service Highly Migratory Species Fishery Management Division staff will discuss the Draft Amendment 6 to the 2006 Consolidated Highly Migratory Species Fishery Management Plan on the future of shark fishery, providing updates on Amendment 5b on dusky shark management and Amendment 9 on smoothhound shark management and ongoing stock assessment, reviewing Final Amendment 7 on bluefin tuna management measures, and discussing the Highly Migratory Species Essential Fish Habitat 5-Year Review. The meeting will also include discussion of the Electronic Technologies Implementation Plan for Atlantic Highly Migratory Species, implementation of 2014 International Commission for the Conservation of Atlantic Tunas recommendations, and Highly Migratory Species Management-Based Research Priorities document.

<u>Bluefin Tuna</u>

National Marine Fisheries Service published the final rule to implement Amendment 7 on Dec. 2, 2014. Final measures are meant to meet the main objectives of Amendment 7, i.e., they would prevent overfishing and rebuild Atlantic bluefin tuna; minimize bluefin bycatch to the extent practicable; reduce and account for bluefin dead discards in all categories; and enhance reporting and monitoring. The final rule implements measures applicable to the pelagic longline fishery, including Individual Bluefin Quotas, two new Gear Restricted Areas (Cape Hatteras Pelagic Longline Gear Restricted Area), closure of the pelagic longline fishery when annual bluefin tuna quota is reached, elimination of target catch requirements associated with retention of incidental bluefin tuna in the pelagic longline fishery, mandatory retention of legal-sized bluefin tuna caught as bycatch, expanded monitoring requirements, including electronic monitoring via cameras and bluefin tuna catch reporting via Vessel Monitoring System (VMS), and transiting provisions for pelagic and bottom longline vessels. In the General category, an Automated Catch Reporting System will be required and inseason adjustments of the General category time-period subquota allocations would be allowed. For the 2015 fishing year, National Marine Fisheries Service transferred 21 metric tons forward from the General category December period to the January period resulting in a subquota of 42.4 metric tons. The January General category period ends March 31st. In the Angling category (recreational), the Trophy South subquota allocation was reduced and the Trophy subquota is now split evenly between North, South, and the Gulf of Mexico.

Sharks

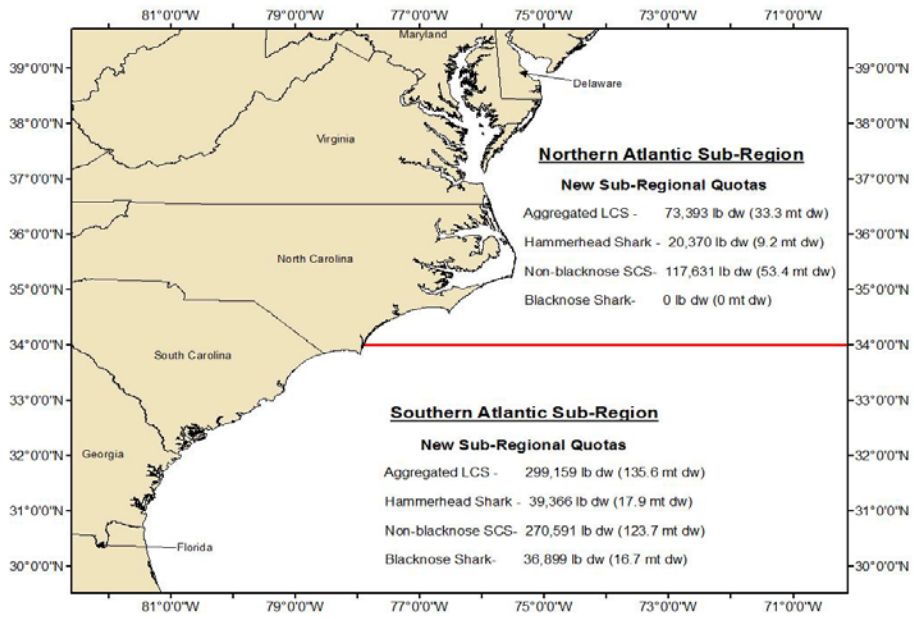
On Jan. 16, 2015, National Marine Fisheries Service released Draft Amendment 6 to the Consolidated Highly Migratory Species Fishery Management Plan and proposes a range of management measures for the commercial shark fisheries. National Marine Fisheries Service considers options for permit stacking, adjusting the large coastal sharks (LCS) trip limit for shark directed limited access permit holders, creating sub-regional quotas in the Atlantic and Gulf of Mexico regions for large coastal sharks and small coastal sharks (SCS), modifying the large coastal sharks and small coastal sharks quota linkages, implementing total allowable catches and adjusting the non-blacknose small coastal sharks commercial quotas in the Atlantic and Gulf of Mexico regions based on the 2013 Atlantic sharpnose and bonnethead sharks stock assessments, and modifying upgrading restrictions for shark permit holders.

Preferred alternatives include:

- Permit Stacking: Do not implement permit stacking (No Action).
- Commercial Retention Limits: Increase the large coastal shark retention limit for directed permit holders from 36 to 55 large coastal sharks other than sandbar sharks per trip and establish a new (reduced) sandbar shark research fishery quota.
- Atlantic Regional and Sub-Regional Quotas (Figure 1): Split the Atlantic regional commercial quotas for certain large coastal shark and small coastal sharks management groups along 34° 00' N Lat.; maintain small coastal sharks quota linkages in the southern sub-region; remove the small coastal sharks quota linkages in the northern sub-region and prohibit the harvest and landing of blacknose sharks in that sub-region; and establish a non-blacknose small coastal sharks total allowable catches and maintain the current commercial base annual quota of 176.1 metric tons dressed weight.
- Commercial Vessel Upgrading Restrictions: Remove current upgrading restrictions for shark limited access permit holders.

National Marine Fisheries Service is currently recalculating the large coastal shark and small coastal shark annual percentages and sub-regional quotas due to calculation errors. Potentially, the Northern Atlantic sub-region could receive more quota for both large coastal shark and small coastal shark. The N.C. Division of Marine Fisheries is working with National Marine Fisheries Service to properly account for research fishery landings and correctly proportion out unclassified sharks landings.

Figure 1: Map of proposed Amendment 6 Atlantic sub-regional quotas



N.C. Marine Fisheries Commission Rules Suspension Update- As of Jan. 30, 2015
(In accordance with N.C. Division of Marine Fisheries Resource Management Policy 2014-2)

New Suspensions-Action Required
The following new suspensions occurred since the commission's November 2014 meeting. These suspensions are action items on the February 2015 agenda and are subject to approval:

- The following portion of N.C. Marine Fisheries Commission Rule 15A NCAC 03M .0519 SHAD is suspended:
  Paragraphs (a) and (b) which read:
  (a) It is unlawful to take American shad and hickory shad by any method except hook-and-line from April 15 through December 31.
  (b) It is unlawful to possess more than 10 American shad or hickory shad, in the aggregate, per person per day taken by hook-and-line or for recreational purposes.

- The following portion of N.C. Marine Fisheries Commission Rule 15A NCAC 03Q .0107 SPECIAL REGULATIONS: JOINT WATERS is suspended:
  Paragraph (4) which reads**:**
  (4) Shad: It is unlawful to possess more than 10 American shad or hickory shad, in the aggregate per person per day taken by hook-and-line.

Suspension of portions of these rules allows the division to change the season and creel limit of American shad under the management framework of the N.C. American Shad Sustainable Fishery Plan. It is requested that the portions of these rules be suspended indefinitely.

New Suspensions-No Action Required
The following rule suspension occurred since the commission's November 2014 meeting. The rule is currently in effect and no action is required by the commission.

- N.C. Marine Fisheries Commission Rule 15A NCAC 03M .0516 COBIA was suspended in its entirety from December 11, 2014 until January 1, 2015.
  (a) It is unlawful to possess cobia less than 33 inches fork length.
  (b) It is unlawful to possess more than two cobia per person per day.

This suspension was implemented in proclamation FF-79-2014 in order to allow the division to comply with NOAA Fisheries FB14-092 that initiated a closure for the commercial harvest of cobia in south Atlantic waters on December 11, 2014 due to the Annual Catch Limits being met. Proclamation FF-79-2014 was rescinded, effective January 1, 2015 and cobia harvest was allowed in accordance with 15A NCAC 03M. 0516.

Continuing Suspensions
- The following portion of N.C. Marine Fisheries Commission Rule 15A NCAC 03J .0103 GILL NETS, SEINES, IDENTIFICATION, RESTRICTIONS is suspended:
  Section (i) (1), which reads:
  (i) For gill nets with a mesh length five inches or greater, it is unlawful:
  (1) To use more than 3,000 yards of gill net per vessel in internal waters regardless of the number of individuals involved.

Suspension of portions of this rule allows the division to decrease the total yardage of gill nets with a mesh length five inches or greater in order to manage the gill net fishery in accordance

with the Federal Incidental Take Permits (ITPs) for sea turtles and Atlantic sturgeon. This rule is suspended indefinitely.

Suspensions to a Date Certain

- The following portion of N.C. Marine Fisheries Commission Rule 15A NCAC 03O .0501 PROCEDURES AND REQUIREMENTS TO OBTAIN PERMITS is suspended:
  Section (f) (1) is modified by the suspension of the following wording: "prior to November 1 of".
  Section (f) (1) of North Carolina Marine Fisheries Commission Rule 15A NCAC 03O .0501 as modified will read as follows:
  (f) Atlantic Ocean Striped Bass Commercial Gear Permit:
  (1) Application for an Atlantic Ocean Striped Bass Commercial Gear Permit must be made each year. A person shall declare one of the following gears for an initial Atlantic Ocean Striped Bass Commercial Gear Permit and at intervals of three consecutive license years thereafter:
  (A) gill net;
  (B) trawl; or
  (C) beach seine.

Suspension of this rule allows the division to remove the Nov. 1 requirement for obtaining an Atlantic Ocean Striped Bass Commercial Gear Permit which will allow fishermen additional time to decide which gear they want to declare. This rule suspension approval is to the effective date of the current rule package, anticipated to be as early as May 1, 2015.

- N.C. Marine Fisheries Commission Rule 15A NCAC 03M .0510 AMERICAN EEL is suspended in its entirety.
  It is unlawful to:
  (1) Possess, sell or take eels less than six inches in length; and
  (2) Possess more than 50 eels per person per day for recreational purposes.

Suspension of this rule allows the division to reduce the size and harvest limits of American eel in compliance with Addendum III to the Atlantic States Marine Fisheries Commission American Eel Fishery Management Plan. This rule suspension approval is to the effective date of the current rule package, anticipated to be as early as May 1, 2015.

N.C. Division of Marine Fisheries Resource Management Policy Number 2014-2
Title: Temporary Rule Suspension [Efficient Process for Implementation of G.S. 143B-289.52 and Rule 15A NCAC 03I .0102 [1]]
Date: Nov. 4, 2014

Background:

The rule for temporary suspension of rules (Appendix A) requires that, when the Division of Marine Fisheries ("DMF" or "Division") Director implements a temporary rule suspension by proclamation, that the Marine Fisheries Commission ("MFC" or "Commission") receive notification of the suspension at the next meeting following rule suspension. This notification alerts the MFC of the temporary rule suspension, provides them with information about the reason for the suspension, and allows them to take appropriate action at that meeting. In practice, DMF has put every[2] rule suspension to the MFC as an agenda item at every meeting subsequent to the first suspension, and asked the MFC to vote on continuing suspension. Following every meeting, DMF goes through the notification process of the continued suspension (including drafting a new proclamation, posting it on the web site, and distributing it via email and U.S. mail.) This process has become burdensome to both the Division and the Commission, taking meeting time and causing significant additional staff time and expense.

Policy for Temporary Suspension of Rules by the Director and Notification of the Marine Fisheries Commission of Such Suspension:

Going forward, when a rule suspension is first presented to the MFC, assuming the MFC agrees with the suspension, the MFC will be asked to vote on whether to delegate to the Director the authority to suspend the rule (a) indefinitely (continuing suspensions), (b) for a fixed time period (suspensions to a date certain) or (c) until external conditions/triggers occur (indefinite suspensions until trigger events or conditions.) Following that initial vote, the MFC will be kept informed as follows:

Continuing Suspensions will be reported by inclusion as a non-action, non-discussion informational item at every meeting by providing a copy of the suspensions in every MFC briefing book and will reference that inclusion by notation on the agenda. In addition, the Division will provide verbal reminder and specific agenda reference of all current rule suspensions annually at every November meeting of the Commission.

Suspensions to a Date Certain will be reversed by proclamation effective on the date certain and, while in effect, will be reported to the Commission as if it were a continuing suspension. The Division will report the end of the suspension as an agenda item at the next MFC meeting following that date certain.

[1] Legal authorities include N.C. Gen. Stat. §§ 143B-289.52 & 113-221.1, and 15A NCAC 03I .0102, TEMPORARY SUSPENSION OF RULES, 15A NCAC 03H .0103, PROCLAMATION AUTHORITY OF FISHERIES DIRECTOR. (See Appendix A)

[2] The division has put every rule suspension to the MFC as an agenda item at every meeting subsequent to the first suspension except for those rule suspensions otherwise exempted from this requirement as stated in other MFC rules. Note that certain rules such as 15A NCAC 03J .0301(k) (proposed for adoption as 03I .0122 in 2015) and 15A NCAC 03K .0110 provide exemptions to the review requirement.

Indefinite Suspensions until Trigger Events or Conditions will be continued until the triggering event/condition occurs and will be reported to the Commission while ongoing as if it were a continuing suspension. The Division will report the change in conditions/tripping of a trigger as an agenda item at the next MFC meeting following the occurrence of the condition/trigger.

This policy will not prohibit reconsideration of a prior rule suspension in accordance with G.S. 113-221.1 (d), it will simply eliminate the additional time and effort where continuing suspensions are agreed upon. New Commissioners will receive a copy of this policy, along with a copy of all current rule suspensions at the time that they join the Commission so that they will have specific notice that these rule suspensions are in effect. New suspensions will continue to be presented to the Commission at its next meeting following the initial suspension.

Appendix A

15A NCAC 03H .0103 PROCLAMATION AUTHORITY OF FISHERIES DIRECTOR

(a) It is unlawful to violate the provisions of any proclamation issued by the authority of Marine Fisheries Commission Rule.

(b) Unless specific variable conditions are set forth in a rule granting proclamation authority to the Fisheries Director, variable conditions triggering the use of the Fisheries Director's proclamation authority may include any of the following:

(1) compliance with changes mandated by the Fisheries Reform Act and its amendments;
(2) biological impacts;
(3) environmental conditions;
(4) compliance with Fishery Management Plans;
(5) user conflicts;
(6) bycatch issues; and
(7) variable spatial distributions.

History Note: *Authority G.S. 113-134; 113-135; 113-182; 113-221.1; 143B-289.52;*
Eff. January 1, 1991;
Amended Eff. March 1, 1994; September 1, 1991;
Temporary Amendment Eff. July 1, 1999;
Amended Eff. April 1, 2011; August 1, 2000.

15A NCAC 03I .0102 TEMPORARY SUSPENSION OF RULES

The Fisheries Director is authorized to suspend, in whole or in part, until the next meeting of the Marine Fisheries Commission, or for a lesser period, the operation of any rule of the Marine Fisheries Commission regarding coastal fisheries which may be affected by variable conditions.

History Note: *Authority G.S. 113-134; 143B-289.52;*
Eff. January 1, 1991;
Recodified from 15A NCAC 3I .0002 Eff. December 17, 1996.

§ 113-221.1. Proclamations; emergency review.

(a) Chapter 150B of the General Statutes does not apply to proclamations issued under this Article.

(b) The Marine Fisheries Commission may delegate to the Fisheries Director the authority to issue proclamations suspending or implementing, in whole or in part, particular rules of the Commission that may be affected by variable conditions. These proclamations shall be issued by the Fisheries Director or by a person designated by the Fisheries Director. Except as provided in this subsection, all proclamations shall state the hour and date upon which they become effective and shall be issued at least 48 hours in advance of the effective date and time. A proclamation that prohibits the taking of certain fisheries resources for reasons of public health or that governs a quota-managed fishery may be made effective immediately upon issuance. A proclamation to reopen the taking of certain fisheries resources closed for reasons of public health shall be issued at least 12 hours in advance of the effective date and time of the reopening. A person who violates a proclamation that is made effective immediately upon issuance shall not be charged with a criminal offense for the violation if the violation occurred between the time of issuance and 48 hours after the issuance and the person did not have actual notice of the issuance of the proclamation. Fisheries resources taken or possessed by any person in violation of any proclamation may be seized regardless of whether the person had actual notice of the proclamation. A permanent file of the text of all proclamations shall be maintained in the office of the Fisheries Director. Certified copies of proclamations are entitled to judicial notice in any civil or criminal proceeding. The Fisheries Director shall make every reasonable effort to give actual notice of the terms of any proclamation to persons who may be affected by the proclamation. Reasonable effort includes a press release to communications media, posting of a notice at docks and other places where persons affected may gather, personal communication by inspectors and other agents of the Fisheries Director, and other measures designed to reach the persons who may be affected. It is a defense to an enforcement action for a violation of a proclamation that a person was prevented from receiving notice of the proclamation due to a natural disaster or other act of God occasioned exclusively by violence of nature without interference of any human agency and that could not have been prevented or avoided by the exercise of due care or foresight.

(c) All persons who may be affected by proclamations issued by the Fisheries Director are under a duty to keep themselves informed of current proclamations. It is no defense in any criminal prosecution for the defendant to show that the defendant in fact received no notice of a particular proclamation. In any prosecution for violation of a proclamation, or in which proof of matter contained in a proclamation is involved, the Department is deemed to have complied with publication procedures; and the burden is on the defendant to show, by the greater weight of the evidence, substantial failure of compliance by the Department with the required publication procedures.

(d) Pursuant to the request of five or more members of the Marine Fisheries Commission, the Chair of the Marine Fisheries Commission may call an emergency meeting of the Commission to review an issuance or proposed issuance of proclamations under the authority delegated to the Fisheries Director pursuant to subsection (b) of this section or to review the desirability of directing the Fisheries Director to issue a proclamation to prohibit or allow the taking of certain fisheries resources. At least 48 hours prior to any emergency meeting called pursuant to this subsection, a public announcement of the meeting shall be issued that describes the action requested by the members of the Marine Fisheries Commission. The Department shall make every reasonable effort to give actual notice of the meeting to persons who may be affected. After its review is complete, the Marine Fisheries Commission, consistent with its duty to protect, preserve, and enhance the commercial and sports fisheries resources of the State, may approve, cancel, or modify the previously issued or proposed proclamation under review or may direct the Fisheries Director to issue a proclamation that prohibits or allows the taking of certain fisheries resources. An emergency meeting called pursuant to this subsection and any resulting orders issued by the Marine Fisheries Commission are exempt from the provisions of Article 2A of Chapter 150B of the General Statutes. The decisions of the Marine Fisheries Commission shall be the final decision of the State and shall not be set aside on judicial review unless found to be arbitrary and capricious. (1915, c. 84, s. 21; 1917, c. 290, s. 7; C.S., s. 1878; 1925, c. 168, s. 2; 1935, c. 35; 1945, c. 776; 1953, cc. 774, 1134, 1251; 1963, c. 1097, s. 1; 1965, c. 957, s. 2; 1973, c. 1262, ss. 28, 86; c. 1331, s. 3; 1975, 2nd Sess., c. 983, s. 70; 1979, c. 388, s. 6; 1983, cc. 221, 619, 620; 1987, c. 641, ss. 7, 19; c. 827, s. 7; 1997-400, s. 4.3; 1998-225, s. 3.8; 2000-189, s. 9; 2003-154, s. 2.)

§ 143B-289.52. Marine Fisheries Commission - powers and duties.

(a) The Marine Fisheries Commission shall adopt rules to be followed in the management, protection, preservation, and enhancement of the marine and estuarine resources within its jurisdiction, as described in G.S. 113-132, including commercial and sports fisheries resources. The Marine Fisheries Commission shall have the power and duty:

(1) To authorize, license, regulate, prohibit, prescribe, or restrict all forms of marine and estuarine resources in coastal fishing waters with respect to:
   a. Time, place, character, or dimensions of any methods or equipment that may be employed in taking fish.
   b. Seasons for taking fish.
   c. Size limits on and maximum quantities of fish that may be taken, possessed, bailed to another, transported, bought, sold, or given away.

(2) To provide fair regulation of commercial and recreational fishing groups in the interest of the public.

(3) To adopt rules and take all steps necessary to develop and improve mariculture, including the cultivation, harvesting, and marketing of shellfish and other marine resources in the State, involving the use of public grounds and private beds as provided in G.S. 113-201.

(4) To close areas of public bottoms under coastal fishing waters for such time as may be necessary in any program of propagation of shellfish as provided in G.S. 113-204.

(5) In the interest of conservation of the marine and estuarine resources of the State, to institute an action in the superior court to contest the claim of title or claimed right of fishery in any navigable waters of the State registered with the Department as provided in G.S. 113-206(d).

(6) To make reciprocal agreements with other jurisdictions respecting any of the matters governed in this Subchapter as provided by G.S. 113-223.

(7) To adopt relevant provisions of federal laws and regulations as State rules pursuant to G.S. 113-228.

(8) To delegate to the Fisheries Director the authority by proclamation to suspend or implement, in whole or in part, a particular rule of the Commission that may be affected by variable conditions as provided in G.S. 113-221.1.

(9) To comment on and otherwise participate in the determination of permit applications received by State agencies that may have an effect on the marine and estuarine resources of the State.

(10) To adopt Fishery Management Plans as provided in G.S. 113-182.1, to establish a Priority List to determine the order in which Fishery Management Plans are developed, to establish a Schedule for the development and adoption of each Fishery Management Plan, and to establish guidance criteria as to the contents of Fishery Management Plans.

(11) To approve Coastal Habitat Protection Plans as provided in G.S. 143B-279.8.

(12) Except as may otherwise be provided, to make the final agency decision in all contested cases involving matters within the jurisdiction of the Commission.

(13) To adopt rules to define fishing gear as either recreational gear or commercial gear.

(b) The Marine Fisheries Commission shall have the power and duty to establish standards and adopt rules:

(1) To implement the provisions of Subchapter IV of Chapter 113 as provided in G.S. 113-134.

(2) To manage the disposition of confiscated property as set forth in G.S. 113-137.

(3) To govern all license requirements prescribed in Article 14A of Chapter 113 of the General Statutes.

(4) To regulate the importation and exportation of fish, and equipment that may be used in taking or processing fish, as necessary to enhance the conservation of marine and estuarine resources of the State as provided in G.S. 113-170.

(5) To regulate the possession, transportation, and disposition of seafood, as provided in G.S. 113-170.4.

(6) To regulate the disposition of the young of edible fish, as provided by G.S. 113-185.

(7) To manage the leasing of public grounds for mariculture, including oysters and clam production, as provided in G.S. 113-202.

(8) To govern the utilization of private fisheries, as provided in G.S. 113-205.

(9) To impose further restrictions upon the throwing of fish offal in any coastal fishing waters, as provided in G.S. 113-265.

(10) To regulate the location and utilization of artificial reefs in coastal waters.

(11) To regulate the placement of nets and other sports or commercial fishing apparatus in coastal fishing waters with regard to navigational or recreational safety as well as from a conservation standpoint.

(c) The Commission is authorized to authorize, license, prohibit, prescribe, or restrict:

(1) The opening and closing of coastal fishing waters, except as to inland game fish, whether entirely or only as to the taking of particular classes of fish, use of particular equipment, or as to other activities.

(2) The possession, cultivation, transportation, importation, exportation, sale, purchase, acquisition, and disposition of all marine and estuarine resources and all related equipment, implements, vessels, and conveyances as necessary to carry out its duties.

(d) The Commission may adopt rules required by the federal government for grants-in-aid for coastal resource purposes that may be made available to the State by the federal government. This section is to be liberally construed in order that the State and its citizens may benefit from federal grants-in-aid.

(d1) The Commission may regulate participation in a fishery that is subject to a federal fishery management plan if that plan imposes a quota on the State for the harvest or landing of fish in the fishery. The Commission may use any additional criteria aside from holding a Standard Commercial Fishing License to develop limited-entry fisheries. The Commission may establish a fee for each license established pursuant to this subsection in an amount that does not exceed five hundred dollars ($500.00).

(d2) To ensure an orderly transition from one permit year to the next, the Division may issue a permit prior to July 1 of the permit year for which the permit is valid. Revenue that the Division receives for the issuance of a permit prior to the beginning of a permit year shall not revert at the end of the fiscal year in which the revenue is received and shall be credited and available to the Division for the permit year in which the permit is valid.

(e) The Commission may adopt rules to implement or comply with a fishery management plan adopted by the Atlantic States Marine Fisheries Commission or adopted by the United States Secretary of Commerce pursuant to the Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. § 1801, et seq. Notwithstanding G.S. 150B-21.1(a), the Commission may adopt temporary rules under this subsection at any time within six months of the adoption or amendment of a fishery management plan or the notification of a change in management measures needed to remain in compliance with a fishery management plan.

(e1) A supermajority of the Commission shall be six members. A supermajority shall be necessary to override recommendations from the Division of Marine Fisheries regarding measures needed to end overfishing or to rebuild overfished stocks.

(f) The Commission shall adopt rules as provided in this Chapter. All rules adopted by the Commission shall be enforced by the Department of Environment and Natural Resources.

(g) As a quasi-judicial agency, the Commission, in accordance with Article IV, Section 3 of the Constitution of North Carolina, has those judicial powers reasonably necessary to accomplish the purposes for which it was created.

(h) Social security numbers and identifying information obtained by the Commission or the Division of Marine Fisheries shall be treated as provided in G.S. 132-1.10. For purposes of this subsection, "identifying information" also includes a person's mailing address, residence address, date of birth, and telephone number.

(i) The Commission may adopt rules to exempt individuals who participate in organized fishing events held in coastal or joint fishing waters from recreational fishing license requirements for the specified time and place of the event when the purpose of the event is consistent with the conservation objectives of the Commission. (1997-400, ss. 2.1, 2.2; 1997-443, s. 11A.123; 1998-217, s. 18(a); 1998-225, ss. 1.3, 1.4, 1.5; 2001-474, s. 32; 2003-154, s. 3; 2004-187, ss. 7, 8; 2006-255, ss. 11.2, 12; 2012-190, s. 5; 2012-200, s. 17; 2013-360, ss. 14.8(v), (w).)

North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

MEMORANDUM

TO: N.C. Marine Fisheries Commission

FROM: Kathy Rawls, Fisheries Management Section Chief
Division of Marine Fisheries, NCDENR

Patti Fowler, Shellfish Sanitation and Recreational Water Quality Section Chief
Division of Marine Fisheries, NCDENR

DATE: Jan. 30, 2015

SUBJECT: Proclamation Review Process

The division has received comments from the public and the commission that proclamations are difficult to understand. This memorandum reviews the recent efforts by the division to improve the process of drafting, reviewing and issuing proclamations. These efforts have resulted in improvements that hopefully address most of the concerns expressed.

In the summer of 2014, the division implemented a new proclamation process that covered all aspects of proclamations from drafting and reviewing to issuance of the documents. The division issues as many as 300 proclamations each year. A significant number of these are reissued seasonally each year. The previous year's version of a proclamation is the starting point for drafting new ones. Over time, many of the documents did not capture changes in rules, authority and processes and became increasingly difficult for fishermen to understand as a result. The initial steps that led to the most recent improvements in consistent content and format of each proclamation included establishing a proclamation review team. This team consists of division staff from various sections and is charged with reviewing each draft proclamation prior to issuance to ensure the proclamations are clear, concise and enforceable. The full benefit of the team's increased scrutiny will be realized when a full year's worth of proclamations have been reviewed. A proclamation calendar was created to track and plan when proclamations should be issued. "Old" proclamations (those issued a number of years ago but still in effect) have been identified and are being reissued at the appropriate time to make them more accessible.

Recent changes include more descriptive proclamation titles, which provide increased clarity for the reader. This added detail helps fishermen determine exactly what the proclamation is pertaining to, i.e. Striped Bass Season - Commercial Trawl: Atlantic Ocean. This title informs fishermen of the species, gear and waterbody to which this particular proclamation pertains. The review team has also increased the level of detail and focus of the various section headings as well as a standard format for these across proclamations to help the reader separate and more easily follow the

information contained in the proclamation. A sample proclamation is attached for your reference to illustrate this.

Another focus of the review team has been ensuring management measures implemented by proclamations are accurate, specific and distinct from any measure contained in existing proclamations, rules or general statutes. Management measures of the proclamation are contained in the sections leading up to the General Information section and are often referred to as the "body" of the proclamation. This is the part of the proclamation that describes the specific action(s) the proclamation is taking and outlines what is or is not allowed. The review team makes an effort to keep the language precise and easy to understand. The review team also considers if two distinct proclamations should be combined into one or a single one split into two proclamations. This is to improve the understanding of the parties and hence, compliance. An example of this is the restructuring of the single snapper grouper proclamation into two: one for recreational measures and the other for commercial.

The General Information section of the proclamation contains any references to existing proclamations, rules and statutes and other information that is not part of the specific action of the proclamation, but provides valuable information to the reader. It also contains the division's contact information, making it easily accessible in case the reader has a question or needs clarification. This section also contains the intent of the proclamation which provides the reader the necessary detail on why the proclamation is being issued. In addition, the final sentence in the section is bolded and specifically states what action is being taken. This provides the reader with a precise, one sentence explanation that is easy to find and understand. In addition, proclamations distributed via email contain this same bolded sentence at the top of the email, announcing to the reader in advance about the subject of the attached proclamation.

The review team is also evaluating proclamations on an individual basis to determine when/if maps should be included. Although fishermen should not rely on the maps alone and must reference the proclamation in its entirety, maps are a helpful tool to guide the reader to the specific areas affected by the proclamation. The team focuses on developing maps that are specific only to the areas and restrictions included in the proclamation.

The division has made other efforts to simplify proclamations beyond the efforts of the proclamation review team. A division management policy was put in place with the concurrence of the commission in November 2014 regarding temporary rule suspensions, which are implemented by proclamation. Prior to implementing the policy, the division would bring all rule suspensions before the commission for re-suspension of each rule at each commission meeting. This necessitated issuance of new proclamations following each meeting even though, in most instances, there was no change to the requirements, but only changes to the effective date of the proclamation. Fishermen did not experience any tangible changes from the re-suspension of rules; however, it was confusing to receive what seemed like identical proclamations. The new policy eliminates this redundancy, streamlines the process, and reduces confusion to all affected stakeholders.

Another effort the division is undertaking is development of an improved search engine on the division web site to search for specific proclamations. This effort is in its infancy and the division will provide updates to the commission as it progresses.

It is important to remember that each proclamation is a legally binding document that must be clear, concise and enforceable. The division has formed the proclamation review team and implemented improvements in the process over the last several months to make proclamations more easily understandable for the public, yet maintain the enforceability necessary for effective management.

M-47-2014

PROCLAMATION

RE: HORSESHOE CRABS – COMMERCIAL FISHING OPERATIONS

Dr. Louis B. Daniel III, Director, Division of Marine Fisheries, hereby announces that the commercial horseshoe crab fishery **will open effective 12:01 A.M, Thursday, January 1, 2015 and close effective 11:59 P.M., Sunday, May 31, 2015**, and the following restrictions will apply:

HARVEST RESTRICTIONS

A. During the period beginning at 12:01 A.M., Thursday, January 1, 2015 and ending at 11:59 P.M. Sunday, May 31, 2015 it is unlawful to take or possess more than 50 horseshoe crabs per fishing operation per day, regardless of the number of persons or vessels involved.

B. Effective June 1, 2015 it is unlawful to possess horseshoe crabs taken in a commercial fishing operation.

GENERAL INFORMATION

A. This proclamation is issued under the authority of N.C.G.S. 113-170.4; 113-170.5; 113-182; 113-221.1; 143B-289.52 and NC Marine Fisheries Commission Rules 15A NCAC 03H .0103 and 15A NCAC 03L .0207.

B. It is unlawful to violate the provisions of any proclamation issued by the N.C. Fisheries Director under his delegated authority pursuant to N.C. Marine Fisheries Commission Rule 15A NCAC 03H .0103.

C. The intent of this proclamation is to allow North Carolina to comply with the requirements of the Atlantic States Marine Fisheries Commission Interstate Fisheries Management Plan for Horseshoe Crab. North Carolina is operating under a state quota and these trip limits and harvest periods are meant to constrain the harvest of horseshoe crabs to the quota.

D. Contact N.C. Division of Marine Fisheries, P. O. Box 769, Morehead City, NC 28557 252-726-7021 or 800-682-2632 for more information or visit the division website at http://portal.ncdenr.gorg/web/mf/.

E. **This proclamation opens the commercial horseshoe crab fishery and establishes the daily harvest limit.**

BY: _____
Dr. Louis B. Daniel III, Director
DIVISION OF MARINE FISHERIES

December 3, 2014
10:30 A.M.
M-47-2014
/sab

233 copies of this public document were printed at a cost of 5 cents per copy.

North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

MEMORANDUM

TO: N.C. Marine Fisheries Commission

FROM: Garry Wright, Jason Peters and Curt Weychert
Division of Marine Fisheries, NCDENR

THROUGH: Dr. Louis B. Daniel, III and Nancy Fish
Division of Marine Fisheries, NCDENR

DATE: Jan. 15, 2015

SUBJECT: Minimum Size of an Effective "Sanctuary"

In 1995, the Blue Ribbon Advisory Council on Oysters recommended the development of oyster sanctuaries in N.C. waters. Construction began in 1996 and was initially administered by the N.C. Division of Marine Fisheries Artificial Reef and Oyster Rehabilitation programs. Since then, the Oyster Sanctuary Program has expanded to consist of 15 permitted sites, including 12 developed sanctuaries, two under construction, and one in design phase. To supplement, the U.S. Army Corps of Engineers is constructing four sanctuaries as environmental mitigation. Total sanctuary area, including U.S. Army Corps of Engineers projects, will be approximately 322.5 acres.

Oyster sanctuaries in North Carolina range from 4.6 to 40 acres in size. As a strategic plan to withstand catastrophic events (e.g. hurricane or anoxic event), a network of small oyster sanctuaries was established in lieu of a few larger ones. This strategy should prevent catastrophic events from damaging or causing mass mortalities throughout the oyster sanctuary network. Additionally, a network of oyster reefs is necessary to ensure reef connectivity through larval supply. Since spat do not usually recruit to the same reef on which they were spawned, larval connectivity is essential to maintain oyster populations (Geraldi et al. 2013). Connectivity is largely attributed to reef location, larval supply, and system hydrodynamics. System hydrodynamics play an important role in larval dispersal through transport. Each oyster reef and oyster sanctuary relies on currents or tides to disperse larvae throughout coastal waters. In the absence of these currents oyster larvae would not be transferred from reef to reef for settlement. In many instances, natural oyster reefs provide larvae to oyster sanctuaries, especially for initial spat sets. In turn, the oyster sanctuaries provide an unfished biomass of oysters which provide larvae to both natural reefs and other sanctuaries.

In addition to system hydrodynamics, connectivity is driven by larval supply. Oyster population density and population size structure are essential factors in determining the potential reproductive production of a reef. These data are necessary to guide decisions on effective sanctuary size within a network.

The effective size of an oyster sanctuary is largely unknown and subjective as the knowledge necessary to maximize the effectiveness is limited (Geraldi et al. 2013). However, Powers et al. (2009) established a threshold of 10 oysters per meter squared as an indicator for a functional reef. Other factors, such as the size of the waterbody a sanctuary is constructed in, may play an important role in its effectiveness. Networks of smaller sanctuaries (approximately 5 acres or less) may be more suitable for smaller waterbodies (e.g. Newport River, Core Sound, Bogue Sound) and larger sanctuaries (up to 40 acres) may be more suited to larger waterbodies like the Pamlico Sound.

Research in Pamlico Sound has indicated that the existing network of sanctuaries is not self-sustaining, though oyster densities within sanctuaries overall are increasing over time (Puckett and Eggleston 2012). This suggests sanctuary sustenance is reliant on larval subsidies from non-protected reefs in the system, including natural and enhanced (cultch-planted) reefs. In Pamlico Sound, population density is considerably lower at non-protected reefs versus sanctuaries; however, the expansive total area of non-protected reefs far surpasses that of sanctuaries. Oyster size is directly related to gamete and larval production, with larger individuals producing a higher number of gametes (Mroch et al. 2012). Relative to non-protected reefs, sanctuaries exhibit approximately 72-times greater oyster densities and a size structure favoring larger oysters. Therefore, reproductive potential of sanctuaries is estimated to be approximately 30-times greater than non-protected reefs (Peters 2014). Peters et al. (in prep) noted that due to areal coverage of natural reefs compared to oyster sanctuaries that the potential larval output was similar. This is attributed to the approximately two orders of magnitude difference in natural reefs areal coverage compared to oyster sanctuaries.

North Carolina's smallest oyster sanctuary (4.6 acres) exceeds the 10 oysters per meter squared threshold which classifies them as a functional oyster reefs according to standard set forth by Powers et al. (2009). North Carolina's larger sanctuary sites meet the thresholds and have more potential to produce oysters and larvae, based on surface area alone. North Carolina has not built oyster sanctuaries smaller than 4.6 acres is size. However, the N.C. Division of Marine Fisheries Cultch Planting Program began planting cultch material in 1970s with sites ranging from approximately 0.5 – 30 acres in size. Most, if not all, cultch planting sites exceed and maintain the threshold of 10 oysters per meter squared with the exceptions being due to low spat fall, catastrophic events or depletion. Peters et al., (in prep) found mean production on these small scale cultch planting sites to be 247 oysters per meter squared. In contrast, Peters et al. (in prep) documented mean production on, high relief, oyster sanctuaries to be 1,936 per meter squared. Therefore, on average, all of North Carolina's oyster restoration efforts exceed the 10 oysters per meter squared threshold for functional oyster reefs by approximately 25 to 193-times. According to recent research, sites as small as 0.5 acres may be classified as functional reefs; thus, sites as small as 0.5 acres should be effective as sanctuaries.

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Table 1. Summary of North Carolina red drum harvest and trips for 2013 and 2014 providing information on average weights for individual red drum harvested by month from NCDMF fish house sampling.

Year	Month	Species	Harvested (lb)**	Trips with Red Drum**	Average lb/trip	Avgerage Indvidual Weight (lb)***	Average Individuals/trip
2013	1	Red Drum	3,129	216	14.5	3.6	4.0
2013	2	Red Drum	4,984	304	16.4	2.7	6.1
2013	3	Red Drum	4,030	303	13.3	2.9	4.5
2013	4	Red Drum	6,876	627	11.0	2.4	4.5
2013	5	Red Drum	8,710	766	11.4	2.5	4.6
2013	6	Red Drum	13,310	1,067	12.5	2.8	4.4
2013	7	Red Drum	26,154	1,575	16.6	2.7	6.1
2013	8	Red Drum	42,081	1,899	22.2	3.3	6.8
2013	9	Red Drum	65,273	2,618	24.9	4.1	6.1
2013	10	Red Drum	135,745	4,433	30.6	4.7	6.6
2013	11	Red Drum	61,658	2,064	29.9	4.7	6.3
2013	11	Red Drum	*	*	*	*	*
2014	1	Red Drum	*	*	*	*	*
2014	2	Red Drum	*	*	*	*	*
2014	3	Red Drum	*	*	*	*	*
2014	4	Red Drum	*	*	*	*	*
2014	5	Red Drum	*	*	*	*	*
2014	6	Red Drum	*	*	*	*	*
2014	7	Red Drum	*	*	*	*	*
2014	8	Red Drum	*	*	*	*	*
2014	9	Red Drum	34,749	1,463	23.8	5.8	4.1
2014	10	Red Drum	36,239	1,552	23.3	5.6	4.2
2014	11	Red Drum	13,018	635	20.5	4.4	4.7
2014	12	Red Drum	1,978	86	-	-	-

*Red drum harvest closed

**NCDMF Trip Ticket Program

***NCDMF Fish House Sampling Program

North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

MEMORANDUM

TO: N.C. Marine Fisheries Commission

FROM: John Hadley
Division of Marine Fisheries, NCDENR

DATE: Jan. 30, 2015

SUBJECT: Commercial License Holder Personal Consumption and Donation Survey Update

The division has undertaken a mail-based pilot survey of commercial fishing license holders as part of an effort to gather information on fish and shellfish that are landed with commercial fishing gear and kept for personal consumption or donation. Being a pilot survey to gauge if more effort is needed to investigate the extent of unsold catch, the survey is designed to be brief and contains five questions on fishing behavior as well as final disposition of fish and shellfish harvested with commercial gear or in commercial quantities. A copy of the survey is included as part of this memo.

The first mail out of the survey took place in the third week of January 2015 and included 1,000 randomly selected Standard Commercial Fishing License, Retired Standard Commercial Fishing License, and Shellfish License holders from the North Carolina Division of Marine Fisheries commercial license database. As of the writing of this memo, over 200 survey responses have been received. Given a response rate that is above 20 percent, a second mailing of the survey will take place in early February to another 1,000 commercial license holders to gather additional responses. A verbal update on the progress of this survey will be given during the N.C. Marine Fisheries Commission's February 2015 meeting. In the meantime, feel free to contact me with any questions on the survey at john.hadley@ncdenr.gov or 252- 808-8107.

1) What is your main purpose for owning a commercial fishing license? **PID:#######**

2) Did you fish with commercial gear or harvest fish/shellfish in commercial quantities in 2014?

☐ Yes (If "yes" please continue with the survey)

☐ No (if "no" please disregard the following questions and mail this survey back to NCDMF)

3) Which commercial gear(s) did you use in 2014? (Please check all that apply)

☐Crab Pot ☐Gig ☐Trawl ☐Gill Net ☐Rod and Reel ☐By Hand/Rake/Tong ☐Other:_____

4) When fishing with commercial gear, what do you usually do with your harvest?

- Sell all of your catch ☐ Yes ☐ No
- Do not sell any of your catch ☐ Yes ☐ No
- Sell part of your catch and keep the other portion for personal consumption or for donation

☐ Yes ☐ No

5) When fishing with commercial gear please estimate how many pounds of the following seafood categories that you kept this year <u>and did not sell</u>?

<u>Category</u>		***<u>Please circle correct measure</u>***
Finfish (flounder, spot, jumping mullet, etc.)	_____	pounds
Shellfish (oysters, clams, bay scallops, etc.)	_____	bushels / numbers
Crabs	_____	bushels
Shrimp	_____	pounds

<u>Thank you</u> for participating in this survey! Please drop this survey card in the most convenient U.S. Postal Service mailbox for return to NCDMF. (*Please note that no postage is necessary*)