



ASMFC

FISHERIES *focus*

Vision: Sustainably Managing Atlantic Coastal Fisheries

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ASMFC Presents Patrick Augustine Prestigious Captain David H. Hart Award

The Atlantic States Marine Fisheries Commission presented Mr. Patrick Augustine, long-time ASMFC Commissioner from New York and fisheries advocate, the Captain David H. Hart Award, its highest annual award, at the Commission's 73rd Annual Meeting in Mystic, CT.

For nearly two decades, Mr. Augustine has passionately committed his time and energy to the betterment of Atlantic coast fisheries at all levels of fisheries management – state, interstate, regional, and federal. Over the past 16 years, he served at the pleasure of four consecutive Governors to represent New York's fishing constituents on the Commission. Over that time, he actively participated on 15 of the Commission's 17 species management boards, and provided leadership as chair on six of those boards. He also played an important role in elevating the status of ASMFC Legislators and Governor Appointees as equal participants on species management boards, as well as recognizing the outstanding efforts of contributors to our process as a long-standing member of the Awards Committee.



From left: ASMFC Executive Director Bob Beal, Hart Award Recipient Patrick Augustine, and ASMFC Chair Louis B. Daniel, III

Mr. Augustine served for three consecutive terms as a member of the Mid-Atlantic Fishery Management Council, participating on over a dozen committees on issues ranging from demersal and coastal migratory species, research set-asides, ecosystem/ocean planning, Magnuson Stevens reauthorization, bycatch and limited access, and highly migratory species. He also represented the Council as an Advisory Committee member to the US Section for the International Commission for the Conservation of Atlantic Tunas. The Council adopted a formal resolution acknowledging his numerous and outstanding accomplishments upon his retirement from the Council in August 2011.

In New York, he has led and been a member of a number of his state's fishing and marine resource organizations, including the New York Sportfishing Federation, Huntington Anglers Club, New York Bight Regional Ocean Science Council, South Shore Estuary Reserve Council, Long Island Sound Estuary Citizens Advisory Committee, Long Island Coastal Advisory Committee, Sea Grant Programs

continued, see HART AWARD on page 9

Upcoming Meetings

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

Atlantic States Marine Fisheries Commission

Dr. Louis B. Daniel, III (NC)
Chair

Douglas E. Grout (NH)
Vice-Chair

Robert E. Beal
Executive Director

Patrick A. Campfield
Science Director

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December 1 - 5

South Atlantic Fishery Management Council, Doubletree by Hilton New Bern/
Riverfront, 100 Middle Street New Bern, NC.

December 3 (1:30 - 4:30 PM)

ASMFC and MAFMC Summer Flounder, Scup and Black Sea Bass Advisory Panels
Webinar/Conference Call.

December 9 - 11

Mid-Atlantic Fishery Management Council, Royal Sonesta, 550 Light Street,
Baltimore, MD.

December 9 - 11

SEDAR 40 Atlantic Menhaden Stock Assessment Peer Review, Doubletree by Hilton,
2717 West Fort Macon Road, Atlantic Beach, NC.

December 11 - 12

ASMFC Summer Flounder and Scup Ageing Workshop, Newport News, VA.

2015

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.

February 10 - 12

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

February 18 - 20

Bluefish Data Workshop, Providence, Rhode Island.

March 2 - 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 Blvd, Long
Branch, NJ.

April 21 - 23

New England Fishery Management Council, Mystic Hilton, 20 Coogan Boulevard,
Mystic, CT.

May 4 - 7

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

June 2 - 5

Bluefish Stock Assessment Review Workshop, NOAA Northeast Fisheries Science
Center Stock Assessment Review Committee, Woods Hole, MA.

June 8 - 12

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



2014 - 2018 Strategic Plan: Year 1

As 2014 comes to an end, so does the first year of the Commission operating under its new 2014 – 2018 Strategic Plan. This Plan details the Commissioners' commitment to end overfishing and rebuild depleted fishery resources, establish the scientific foundation for informed management actions, protect and enhance fish habitat, and be transparent and accountable in all their actions. This has been a busy year in which the Commissioners made a number of significant management decisions consistent with the new vision of *Sustainably Managing Atlantic Coastal Fisheries*.

The Commission and its member states have achieved a number of fishery management successes, including the restoration of Atlantic striped bass. Many readers are aware of when the Atlantic striped bass stock collapsed in the early 1980s and the slow but steady rebuilding of the stock through stringent regulations and the sacrifices of both recreational anglers and commercial fishermen. Since the mid-1990s, both groups have enjoyed the benefits of a robust population that has resulted in hundreds of millions of dollars of economic activity along the coast. Unfortunately, the stock has experienced substantial declines in the past few years.

The 2013 striped bass benchmark stock assessment indicated female spawning stock biomass (SSB) was estimated at 128 million pounds just above the SSB threshold of 127 million pounds, but below the SSB target of 159 million pounds. Also, since 2006 the total recreational harvest has declined by nearly 40%. Consistent with the new Strategic Plan, the Commissioners came together to respond to these findings and initiate rebuilding of this important species. Following extensive public comment (which included 19 hearings and thousands of submitted public comment) and Board debate, the Board agreed to reduce harvest in 2015 for coastal fisheries by 25% and Chesapeake Bay harvest by 20.5%. These reductions will protect the large migratory females in the coastal population and reduce harvest in the Bay to allow the available fish to mature and contribute to the spawning success of the stock.

Another major fishery issue addressed by the Commission this year was finalizing management action on American eel fisheries. The 2012 benchmark stock assessment concluded American eel is depleted in US waters due to a combination of historical overfishing, habitat loss, food web alterations,

predation, turbine mortality, environmental changes, toxins and contaminants, and disease. Based on these findings, the Commissioners initiated management changes to reduce mortality across all American eel life stages. Following a two-year process and working through two addenda, the Commission overhauled the eel management program. The number of permits to harvest silver eels was restricted, the first ever coastwide cap on yellow eel harvest was established, and the State of Maine instituted an annual quota and monitoring program to manage its elver fishery. Another important component of the new management program will

be improved catch reporting and increased biological sampling across all life stages. Collectively, this suite of measures will provide the needed protection to American eel, while we continue to study this population and address the myriad of other threats to this complex species.

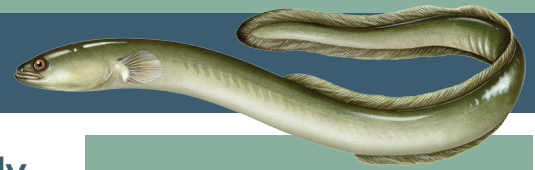
These management changes are the result of the states coming together to thoughtfully and respectfully deliberate the issues, hear each other's perspective, and come to a conclusion that is best for the fishery. Neither fishery management decision

was easy nor did they come without costs to our states and their stakeholders. However, they demonstrate the strength of the Commission's fisheries management process – fair and deliberate debate that seeks to maximize the long-term health of the resource while also recognizing the more immediate needs of fishing communities. In both cases significant and measurable protection was afforded to the stocks while considering the regional socioeconomic needs. The Commissioners accounted for the unique socioeconomic and biological characteristics of the Chesapeake Bay striped bass fish as well as the previous harvest reductions. They also recognized the economic importance of Maine's elver fisher as well as the reduction in harvest that has been achieved over the past two years.

During 2015 the Commissioners will be receiving the results of benchmark assessments for black drum, tautog, Atlantic menhaden, American lobster, weakfish, scup, and bluefish. Each of the assessments will present the Commission with new challenges and opportunities. Referring back to the Strategic Plan will provide the Commissioners with the road-map they need to ensure the long-term sustainability of these fisheries and associated communities.

These management changes are the result of the states coming together to thoughtfully and respectfully deliberate the issues, hear each other's perspective, and come to a conclusion that is best for the fishery.

Species Profile: American Eel



Fishery Scientists and Managers Seek to Sustainably Manage this Ecologically and Economically Valuable Species

Introduction

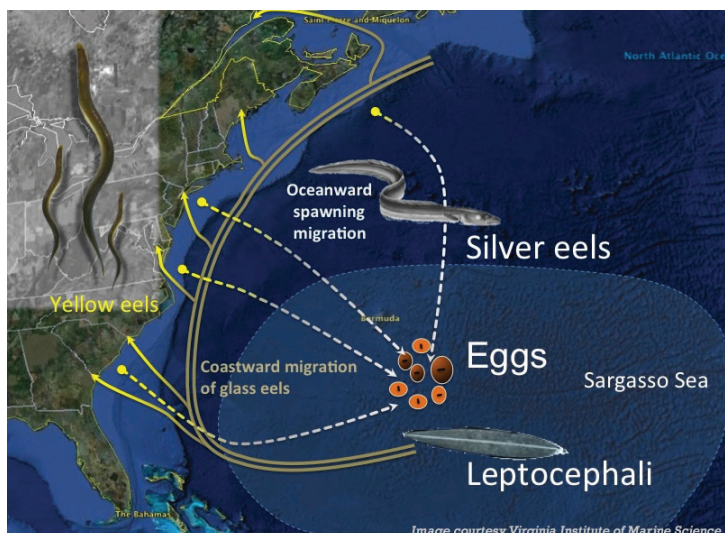
With winter fast approaching, snow is on a lot of our minds. It's also on the minds of marine scientists although the snow they are thinking of is marine snow. This material, which is made up of a combination of decaying plants and animals, soot, and other inorganic matter, falls through the water column before settling on the ocean floor. It has been recently identified as a common food source for the larval stage of the Japanese eel and it may also be important in the diet for American eel larvae as well. This insight is another piece in the puzzle that is being used by scientists to improve techniques for reproducing eels in captivity via aquaculture.

Since 2011, there has been a growing demand for glass eels for aquaculture purposes, increasing landings and the price per pound of glass eels. This demand, coupled with scientific advice that American eel is depleted throughout its US range, has prompted new management measures for several eel life cycles along the Atlantic coast as well as a renewed effort to sustainably raise eels through aquaculture methods.

Life History

From a biological perspective, American eel are a very mysterious species. Once thought to be a freshwater species, American eel are actually a catadromous species – the only one found in North America. This illusive species begins its life in the Sargasso Sea, an area of the western Atlantic Ocean east of the Bahamas and south of Bermuda. For up to a year and a half the Gulf Stream transports and disperses larval eels, called leptocephali, along the eastern coast of Central and North America. At this stage the eels are transparent and are no bigger than a stick of gum. Leptocephali metamorphose into glass eels as they migrate toward land. The elver stage occurs when glass eels turn a brown color and move into brackish or freshwater. As they grow into yellow eels they will feed mainly at night on insect larvae, crayfish, smaller benthic fish, and even smaller elvers when available.

Yellow eel will typically establish a very small home range and have even been known to return to their home range if they are displaced. Another unique characteristic about American eel is when they are densely concentrated in habitat, they are more likely to be males, while eel living in less dense populations are more likely to be females. Females will also grow larger and reach maturity at a later age than males, particularly in the northern regions. Males grow to two feet long and females can reach up to four feet long, although growth rates are dependent on the habitat latitude and distance from the Atlantic Ocean.



Sexually maturing eel, called silver eel, migrate up to 3,000 miles back to where they were born in the Sargasso Sea. They will spawn once and presumably die. The spawning events have yet to be observed and the exact location remains unknown. Because all mature adult eel from the entire range come together in one place and reproduce, the American eel population is considered a panmictic (single) stock. So the eel you see in your local rivers and streams are the same as the ones found in the St. Lawrence River in Canada or rivers in South America!

Commercial & Recreational Fisheries

Commercial landings fluctuate depending on the market price for eel at their various life stages: glass, yellow, and silver. The majority of commercial landings come from the yellow eel fishery. After an initial decline in the 1950s, commercial yellow eel landings increased to a peak of 3.67 million pounds in 1979,

Species Snapshot

American Eel
Anguilla rostrata

Common Names:

Elver, silver eel, yellow eel, freshwater eel

Interesting Facts:

- Eel can travel over land! This fascinating creature can absorb oxygen through its skin so it is possible for them to travel over land for short distances, such as through mud or wet grass.
- Eel have poor eyesight and likely depend on a keen sense of smell to locate food.
- Aristotle did the first known research on eel.
- Leptocephali (eel larval stage) were originally thought to be a different species.
- American eel were once thought to be the same species as the European eel (*Anguilla anguilla*).

Christmas Eel!

- Eel are considered an important component of the traditional Italian-American "Feast of Seven Fishes" dinner celebrated on Christmas Eve.

East Coast Record: 44.5 inches/8 pounds, caught in New Hampshire in 1975

Oldest Recorded: 20 years

Stock Status:

Depleted throughout its US range

declined again in the 2000s, and have exceeded one million pounds only twice since 2004. Eel pots are the most typical gear used in the commercial yellow eel fishery; however, weirs, fyke nets, and other fishing methods are also employed. Although yellow eel were harvested for food historically, today's fishery sells yellow eel primarily as bait for recreational fisheries. At the silver eel stage the eel are completely focused on migrating and typically do not respond to baited traps. With the approval of Addendum IV, silver eel fisheries are only permitted on a limited basis in the Delaware River (NY). Glass eel fisheries along the Atlantic coast are prohibited in all states except Maine and South Carolina. Over the last three years, there has been a significant increase in the demand for glass eel due to tighter restrictions on the exportation of European eel and decreased ability to harvest Japanese eel. Harvest, by dip net or fyke net, has increased as the market price has risen to over \$2,000 per pound. In 2013, the glass eel fishery was the second most valuable fishery in Maine, behind American lobster. Glass eel are exported to Asia to serve as seed stock for aquaculture facilities. Little information is available on targeted recreational fisheries for American eel.

Stock Status

The 2012 benchmark stock assessment concluded American eel is depleted in US waters due to a combination of historical overfishing, habitat loss, food web alterations, predation, turbine mortality, environmental changes, toxins and contaminants, and disease. Despite the large number of surveys and studies available for use in this assessment, the American eel stock is still considered data-poor because very few surveys target eel and collect information on length, age, and sex of the animals caught. Also, given the extremely complex life history of eel it is difficult to describe using traditional stock assessment models. Therefore, two data-poor methods were used to assess the American eel resource: trend analyses and model analysis.

Trend analyses found evidence of declining or, at least, stable abundance of American eel in the US in recent decades. Regional trend analyses identified decreasing populations in the Hudson River and South Atlantic regions, while no consistent trends were found for the Chesapeake Bay and Delaware Bay/Mid-Atlantic Coastal Bays regions. The coastwide model analysis estimated biomass to be at a reduced level. Significant levels of harvest in the 1970s is considered a major factor contributing to the current low biomass levels, but other factors such as habitat loss, predation, and disease have also played a role.

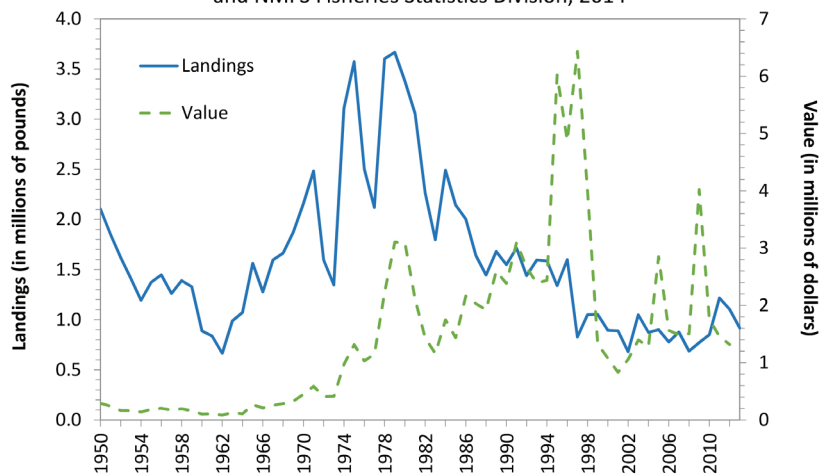
American eel were petitioned for listing as threatened under the Endangered Species Act (ESA) in 2010. At that same time, the Canada Department of Fisheries and Oceans conducted a stock assessment on American eel in Canadian waters and found that region-specific status indices show abundance relative to the 1980s is very low for Lake Ontario and upper St. Lawrence River stock, and either unchanged or increasing in the Atlantic Provinces. Furthermore, in 2014 the International Union for Conservation of Nature (IUCN) listed American eel as endangered on the IUCN Red List. It is anticipated that the US Fish and Wildlife Service will make a determination on the ESA listing by September 2015.

Atlantic Coastal Management

American eel are a particularly challenging species to conserve and manage on a coastwide basis as they are a slow growing, late maturing, semelparous species (meaning they spawn once and then die) that migrate between the high seas and inland estuaries and riverine systems, as well as through international, federal, state, and local jurisdictions. Through the Commission, Atlantic coastal states from Maine through Florida manage American eel in their territorial seas and inland waters. Each state is responsible for

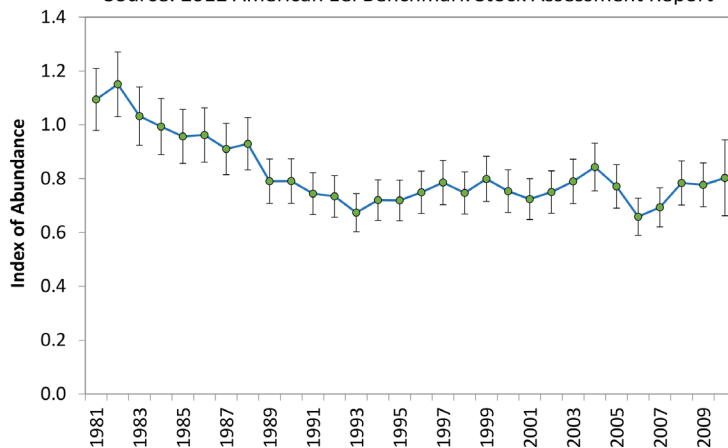
Yellow-Phase American Eel Commercial Landings and Value

Source: 2012 American Eel Benchmark Stock Assessment Report and NMFS Fisheries Statistics Division, 2014



30-Year Index of Abundance for Yellow-phase American Eel along the Atlantic Coast (error bars represent standard errors about the estimates)

Source: 2012 American Eel Benchmark Stock Assessment Report



see AMERICAN EEL, continued on page 12

Atlantic Striped Bass Addendum IV Approved for Implementation in 2015

The Atlantic Striped Bass Management Board approved Addendum IV to Amendment 6 to the Interstate Fishery Management Plan for Atlantic Striped Bass. The Addendum establishes new fishing mortality (F) reference points, as recommended by the 2013 benchmark stock assessment. In order to reduce F to a level at or below the new target, coastal states will implement a 25% harvest reduction from 2013 levels. Chesapeake Bay states/jurisdictions will implement a 20.5% harvest reduction from 2012 levels since their fisheries were reduced by 14% in 2013 based on their management program. All states/jurisdictions will promulgate regulations prior to the start of their 2015 fisheries.

“I congratulate members of the Management Board for making tough choices to ensure the long-term health and viability of our striped bass fishery resources,” stated Board Chair Douglas Grout of New Hampshire. “The Board struck an important balance in taking immediate action to reduce fishing mortality back to the target while also recognizing the unique characteristics of the Chesapeake Bay fisheries. The action will assure a more rapid increase in the abundance of spawning fish which has been declining in recent years.”

The Addendum responds to results of the 2013 Atlantic striped bass benchmark assessment indicating F in 2012 was above the new F target and female spawning stock biomass (SSB) has been steadily declining below the target level since 2006. This means even though the stock is not overfished and overfishing is not occurring, SSB is approaching its overfished threshold and stock projections show SSB will likely fall below the threshold in the coming years. In addition, a similar decline has been observed in total harvest.

The Addendum includes changes to the coastal commercial quota and the coastal recreational fishery to achieve reductions in 2015. Commercial quotas established in Amendment 6 will be reduced by 25% while maintaining current size limits to minimize discard mortality. The Board also maintained no transfer of unused commercial quotas as a conservation benefit to the resource. The coastal recreational fishery harvest will be reduced by implementing a one fish bag limit while keeping a 28" size limit. Under Amendment 6, states may use conservation equivalency to develop state-specific measures that are different than a one fish bag limit and 28" size limit for their coastal fisheries but still achieve a 25% reduction in harvest.

The Chesapeake Bay states/jurisdictions will reduce their 2012 Bay commercial harvest level by 20.5% and will submit conservation equivalency proposals to achieve a 20.5% reduction from the Bay recreational fishery. The Technical Committee will continue to work on Chesapeake Bay specific reference points for future management.



Photo © Captain John McMurray, www.nycflyfishing.com

The Addendum will be implemented on January 1, 2015. The Technical Committee will review any submitted conservation equivalency proposals by the states and the Board will review and consider approval of those proposals at the Commission's Winter Meeting in Alexandria, VA. Addendum IV will be made available on the Commission's website, www.asmfc.org, under Breaking News by mid-November. For more information, please contact Mike Waine, FMP Coordinator, at mwaine@asmfc.org.

Northern Shrimp Moratorium Maintained for 2015 Commercial Fishing Season

The Northern Shrimp Section approved a moratorium for the 2015 commercial fishery. This action was taken in response to the findings of the 2014 Stock Status Report, indicating current fishable biomass is the lowest on record. A suite of indicators were used in the 2014 Stock Status Report. These include abundance and biomass indices from fishery-independent surveys for 2012-2014, which were at all-time lows, and recruitment indices for the 2010-2012 year classes, which were well below average. The recruitment index increased slightly in the 2014 survey, but these recruits are not expected to enter into the fishery until 2017. The Northern Shrimp Technical Committee considers the stock to have collapsed with little prospect of recovery in the immediate future. A 25 metric ton research set aside quota was also approved to maintain data collection for assessment and management purposes.

“The bleak status report and continuing unfavorable environmental conditions convinced the Section to maintain a moratorium in 2015 to protect the remaining spawning biomass and allow as much reproduction to take place as possible,” stated Northern Shrimp Section Chair Mike Armstrong of Massachusetts. “The Section will work with its industry and technical advisors to ensure the highest quality data is collected through the research set aside quota.”

In the Gulf of Maine, increasing water temperatures and a decline in phytoplankton abundance (a food source for shrimp) are factors which likely have and will continue to contribute to the poor recruitment in the stock. The increased abundance of northern shrimp predators (spiny dogfish, redfish and

silver hake) may play a role in declining biomass. Northern shrimp stocks in other areas of the world (Greenland, Flemish Cap, Grand Banks) have also seen decreasing trends in abundance and recruitment, providing additional evidence that environmental conditions are impacting northern shrimp across their range. The 2014 Stock Status Report for Gulf of Maine Northern Shrimp is available on the Commission website, www.asmfc.org, on the Northern Shrimp page under Stock Assessment Reports.

For more information, please contact Marin Hawk, FMP Coordinator, at mhawk@asmfc.org.

Spiny Dogfish Addendum V Approved to Ensure Consistency with the Shark Conservation Act

The Spiny Dogfish Management Board approved Addendum V to the Interstate Fishery Management Plan for Spiny Dogfish. The Addendum ensures consistency in spiny dogfish management with the Shark Conservation Act of 2010 by prohibiting processing at-sea, including the removal of fins. Prior to approval, states could process spiny dogfish at-sea, so long as the ratio of fins aboard the vessel did not exceed 5% of the ratio of carcasses aboard the vessel. The Board set an implementation date of May 1, 2015 for states to promulgate this measure.

In related business, the Coastal Sharks Management Board approved a July 1, 2015 opening date for the large coastal sharks species group. All other species groups will open in conjunction with federal waters' fisheries. Additionally, based on the recommendation of its Coastal Sharks Technical Committee, the Board approved a 36 fish possession limit for sharks in the large coastal sharks species group (silky, tiger, blacktip, spinner, bull, lemon, nurse, scalloped hammerhead, great hammerhead, and smooth hammerhead sharks) for 2015. For more information, please contact Marin Hawk, FMP Coordinator, at mhawk@asmfc.org.

2015 Specifications Established for Horseshoe Crabs of Delaware Bay Origin

The Horseshoe Crab Management Board approved harvest specifications for horseshoe crabs of Delaware Bay origin. Under the Adaptive Resource Management (ARM) Framework, the Board set a harvest limit of 500,000 Delaware Bay male horseshoe crabs and zero female horseshoe crabs for the 2015 season. Based on the allocation mechanism established in Addendum VII, the following quotas were set for the states of New Jersey, Delaware, Maryland and Virginia, which harvest horseshoe crabs of Delaware Bay origin:

	Delaware Bay Origin Horseshoe Crab Quota (no. of crabs)	Total Quota
State	Male Only	Male Only
Delaware	162,136	162,136
New Jersey	162,136	162,136
Maryland	141,112	255,980
Virginia*	34,615	81,331

*Virginia harvest refers to harvest east of the COLREGS line only

The Board chose a status quo management program due to the lack of compatible data on horseshoe crab abundance. The ARM Framework, established through

Addendum VII, incorporates both shorebird and horseshoe crab abundance levels to set optimized harvest levels for horseshoe crabs of Delaware Bay origin. The horseshoe crab abundance estimate is based on data from the Benthic Trawl Survey conducted by Virginia Polytechnic Institute. The Benthic Trawl Survey was not conducted in 2013 or 2014 due to a lack of funding. The Horseshoe Crab Technical Committee reviewed other available data sources, but did not find a suitable option for the ARM Framework. The Technical Committee will continue to investigate other options, while the Commission and states seek long-term funding sources for the Benthic Trawl Survey. The optimized harvest level will be reevaluated annually, allowing for management to adapt to the changes in the population levels of horseshoe crabs and shorebirds as a result of the regulations. For more information, please contact Marin Hawk, FMP Coordinator, at mhawk@asmfc.org.

Emily Greene Receives 2014 Melissa Laser Fish Habitat Conservation Award

Ms. Emily Greene was presented the 2014 Melissa Laser Fish Habitat Conservation Award by the Atlantic Coastal Fish Habitat Partnership (ACFHP) for her exemplary work in furthering the conservation, protection, restoration, and enhancement of habitat for native Atlantic coastal, estuarine-dependent, and diadromous fishes. The award was presented at the 7th National Summit on Coastal and Estuarine Restoration in National Harbor, Maryland on November 5th.

Emily was ACFHP's first Coordinator and is currently working at the National Oceanic and Atmospheric Administration as the Marine Habitat Program Outreach Specialist. As Coordinator, Emily worked tirelessly to guide the Partnership and Steering Committee in developing its reputation as a successful fish habitat conservation and restoration organization. Her personality and enthusiasm have been major factors in guiding the Partnership to where it is today. She was integral in managing the Steering Committee, establishing the operational framework for the Partnership, and developing the first Conservation Strategic Plan. She was also responsible for collaborating with federal partners to secure funding for restoration projects, coordinating the development of multiple scientific products, securing operational funding, and disseminating information via numerous outreach opportunities. Emily contributed significantly to the improvement of fish habitat along the Atlantic coast

continued, see EMILY GREENE on page 9

Proposed Management Actions

Draft Addendum Initiated to Address 2015 Summer Flounder Recreational Fishery

The Summer Flounder, Scup and Black Sea Bass Management Board initiated the development of Draft Addendum XXVI to the Summer Flounder Fishery Management Plan (FMP). The Draft Addendum will propose alternate regional management approaches for the 2015 recreational summer flounder fishery to continue to improve equity in recreational harvest opportunities along the coast. The Draft Addendum will include options to allow for the averaging of harvest estimates, mandatory regions, and the sharing of unused quota.

Draft Addendum XXVI is initiated to allow for the continued the use of regional management to harvest the coastwide recreational harvest limit for summer flounder. In 2014, the Board approved Addendum XXV which provided a shift away from state-by-state harvest targets used in previous years. Regional management allowed for the use of the same management measures within regions, as well as more similar management measures between regions. State-by-state harvest targets created difficulties for some states as overages occurred due largely to state shares and limits not reflecting local abundance of summer flounder and its availability to recreational fishermen. State targets were based solely upon the 1998 estimate of harvest from the Marine Recreational Fishery Statistics Survey. The 2014 management regions are: Massachusetts; Rhode Island; Connecticut-New Jersey; Delaware-Virginia; and North Carolina.

Draft Addendum XXVI will be presented to the Board for its consideration and approval for public comment at its joint December meeting with the Council in Baltimore, Maryland. At this meeting, the Board and Council will also consider management measures for 2015 black sea bass fishery. For more information, please contact Kirby Rootes-Murdy, FMP Coordinator, at krootes-murdy@asmfc.org.

Jonah Crab FMP and American Lobster Draft Addendum XXIV Initiated

The American Lobster Management Board approved the development of an Interstate Fishery Management Plan (FMP) for Jonah Crab and initiated the development of Draft Addendum XXIV to Amendment 3 to the Interstate FMP for American Lobster.

The Jonah Crab FMP was initiated in response to concern about increasing targeted fishing pressure for Jonah crab, which has long been considered a bycatch in the lobster fishery. However, growing market demand has doubled landings in the past seven years. Given the absence of state and federal management programs and a stock assessment for Jonah crab, there is concern current harvest may compromise the sustainability of the resource. The Draft Jonah Crab FMP will consider management objectives, proposed regulations to the commercial and recreational fishery, monitoring requirements, and recommendations for federal waters fisheries.

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 Jonah crab fishery. The advisory panel provides the Board with advice concerning fishery practices and species' management activities. Those interested in becoming a member should contact their state Commissioners.

Draft Addendum XXIV will address inconsistencies between state and federal American lobster trap transfer regulations. Options will be drafted to propose alignment between state and federal measures for full business conservation tax, trap transfer increments, and dual permits transferability rules.

It is anticipated both documents will be presented to the American Lobster Board

for its consideration at the Commission's Winter Meeting in Alexandria, VA.

Northern Shrimp Draft Amendment 3 PID Approved for Public Comment

The Northern Shrimp approved the Public Information Document (PID) for Draft Amendment 3 for public comment. The Draft Amendment was initiated to consider establishing a limited entry program for the northern shrimp fishery for use in the future if and when the stock recovers and the fishery is re-opened.

While the fishery is managed through a total allowable catch and defined season, it remains an open access fishery and has experienced significant fluctuations in participation over the last 30 years. This open access, coupled with concern about the health of the stock, led the Section to move forward on a limited entry program to further control effort in the fishery. A limited entry program will consider the appropriate number of participants in the fishery given biological, environmental, and economic considerations. The Draft Amendment will also consider state-by-state allocations and revisit the fishery specifications process.

As the first step in the Commission's amendment process, the PID is intended to gather information concerning northern shrimp and provide an opportunity for the public to identify and comment on major issues relative to the management of this species. Following the initial phase of information-gathering and public comment, the Section will evaluate potential management alternatives and develop Draft Amendment 3 for public review. After the public comment period, the Section will specify the management measures to be included in Amendment 3. A tentative schedule for the completion of Amendment 3 is included in PID.

It is anticipated Maine, New Hampshire, and Massachusetts will be conducting public hearings on the PID. For more information, please contact Marin Hawk, FMP Coordinator, at mhawk@asmfc.org.

Atlantic Coastal States to Collect Recreational Intercept Data for MRIP

Beginning in 2016, all coastal states from Maine through Georgia will transition to conducting the Access Point Angler Intercept Survey (APAIS) to collect information on marine recreational fishing catch and effort data in their own waters. APAIS, which is a component of the Marine Recreational Information Program (MRIP), has been administered by NOAA Fisheries through a third party contractor. Over the past decade several states (e.g., Maine, New Hampshire, Massachusetts, North Carolina, South Carolina and Georgia) have successfully improved data quality, and stakeholder confidence in that data, through greater state involvement with APAIS contractors.

Based on these successes, the states, through the Atlantic Coastal Cooperative Statistics Program (ACCSP) and the Atlantic States Marine Fisheries Commission (ASMFC), approved a plan to transition to state conduct of APAIS in 2016. The approved plan details the transition from a NOAA Fisheries contractor to ASMFC/ACCSP and state conduct of the APAIS. Under this plan, NOAA Fisheries will retain primary accountability for APAIS and will be responsible for survey design, catch and effort estimation, and public dissemination. ASMFC/ACCSP will act as the central coordinator of the state-conducted APAIS and be responsible for data entry, compilation, quality control checks and edits, as well as formatting and delivery of intercept data to NOAA Fisheries. States will manage field collection, which will be conducted by state employees in accordance with APAIS standard data collection protocols.

The goals of the state conduct of APAIS are to:

- Build more cooperative ownership of recreational data and the data collection program
- Support field data collection via state staff with vested interest in fisheries
- Maximize angler participation and minimize refusal rates
- Improve and maximize data quality and efficiency of data collection

For more information on the details of the transition plan, please contact Geoff White, ACCSP Data Team Leader, at Geoff.white@accsp.org or 703.842.0785.

ACCSP is a cooperative state-federal program to design, implement, and conduct marine fisheries statistics data collection programs and to integrate 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 or www.accsp.org/prelease.htm.

The states, ACCSP, and ASMFC are very appreciative of the hard work and dedication provided by Geoff White and the ACCSP Recreational Technical Committee in developing the APAIS transition plan. Through their efforts, the plan establishes a solid framework for the states and NOAA Fisheries to better meet the needs of fishery stakeholders, scientists, and managers.

*- Cheri Patterson,
ACCSP Coordinating Chair*

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Citizens Advisory Committee, Long Island Coastal Advisory Committee, Sea Grant Programs Advisor, and the New York State Boating Advisory Council. And yet, given all these responsibilities he still found time to offer his expertise as a speaker at numerous fishing clubs and special interest groups, and providing valuable input at the Marine Resources Advisory Council.

Throughout it all, Mr. Augustine brought to all his interactions his quick wit and good humor, dedication to fully understanding all the issues brought before him, and commitment to seeking balance among the competing demands of all resource users within fisheries management arena. To the latter point, he was often found talking directly to anglers when forming his position on an issue before the Commission. He is well known for having no reservations about taking those facts up directly at Commission meetings, or going straight to his Governor, Congress, or other elected officials when advocating for a given management action. This approach kept him wholly connected to New York anglers and grounded his positions in real-world facts as few others could. Because of his knowledge and relationships, Mr. Augustine has been at the forefront of resolving countless issues over the years, not only at the Commission, but in his role as a Council member and countless fishing and conservation organizations.

The Commission instituted the Award in 1991 to recognize individuals who have made outstanding efforts to improve Atlantic coast marine fisheries. The award is named for one of the Commission's longest serving members, who dedicated himself to the advancement and protection of marine fishery resources.

Understanding Socioeconomics and its Use in Fisheries Management

At the Commission's 73rd Annual Meeting, the Committee on Economics and Social Sciences (CESS) held a Workshop on Fisheries Socioeconomics. Commissioners received presentations from CESS members outlining different analyses that could be used to help inform management decisions and create an understanding of policy impacts. They also discussed the challenges in performing these analyses given limited data on socioeconomic activities and the sensitivities surrounding collecting the data.

The first presentation, from Dr. Jorge Holzer, summarized the differences between two types of economic analyses: cost-benefit and economic impact. The presentation sought to dispel the common misconception that economic value and economic impact are synonymous terms. These terms are evaluated by the two distinct analyses (cost-benefit and economic impact) with separate questions that each analysis can and cannot address.

For example, given an investment decision between two fictional companies Company X with \$200K in revenue and \$160K in costs and Company Y with \$100K in revenue and \$20K in costs, which should be chosen? Since the net revenue of Company X is lower than Company Y, Company Y has the higher economic value. However, because Company X has higher revenues overall and higher costs, it generates more money may flow through the local economy, giving it a higher economic impact. Therefore, there may be a trade-off between economic value and economic impact. This rationale can also be applied to fisheries management regimes and allocation of quota.

The objective of a cost-benefit analysis is to determine economic value (i.e. net benefits), which is a pertinent metric when assessing the allocation of limited resources across competing projects/policies (i.e. economic efficiency). Costs are treated as a "negative" here in the sense that for a given set of benefits, minimizing costs increases the economic

value of a project/policy. The objective of an economic impact analysis (also known as input/output models) is to assess the effects of a given project/policy on the jobs and income of a region. Economic impact models trace the flow of expenditures and show the distribution of impacts between industries, households, and government. Costs are treated as "positive" here, in the sense that increasing costs may increase jobs and income impacts in a region. Both of these tools can be used to assess policies, but provide different metrics.

The second presentation, by Dr. Madeleine Hall-Arber, stressed there is a strong link between economics and other social sciences, but the boundaries of the "other" social sciences can be more fluid. Economic analyses are an important aspect of looking at the effects of regulatory change, but there are other critical issues that need to be considered. One note to make is that social scientists believe that managers do not actually manage fish, but manage people. Managers dictate not only how many fish are taken but also where, when, and how fish can be caught through things like gear constraints or creation of fishing seasons and areas. These management decisions can involve and affect cultural, sociological and economic patterns in society. For example, implementing tradeable quota can have social consequences leading to changes in relationships among different fishing groups, fishing fleet characteristics, and other demographics.

In order for social scientists to inform management, a wide array of social and cultural factors need to be taken into account. Data such as size and demographic characteristics of the fishery work force and community need to be collected and there is a need to develop an understanding of the social structures and organizations related to fisheries, families, and communities. This includes knowing more about crew as well as skippers and their backgrounds (such as whether from a fishing family), what

alternative employment is in the area, etc. Cultural norms, beliefs, and values of fishermen as well as other stakeholders in the community must also be captured.

The challenge that both economists and other social scientists face is the need for complete data sets. The data collected on a regular basis can be very limited. There exists no long-term data stream for fisheries social science as there is for fisheries biology, so fisheries social scientists must work to collect data and analyze it, while recognizing the uncertainty and data limitations.

Social scientists have a variety of methodologies for collecting, analyzing, and confirming data. Ethnography is one method that deals with observing how each person views his/her own society which helps to understand what each subject considers important. Social scientists also use surveys as a good way to refute or corroborate information gathered through ethnography. Using multiple methodologies, social scientists are able to triangulate collected information, testing its reliability. This way, social scientists are not only considering how people allocate their resources, but why.

As regulations are made, it is important to take into account what socioeconomic conditions are likely to be impacted by the changes in policy or what affects no change in policy will hold for the future. Even small changes in regulations may have large cumulative impacts on fishery participants across a region. In addition, these impacts may not be distributed evenly across the fishery participants. Socioeconomics are not campaigning for one policy over another, but rather should be used to increase the understanding of what the potential effects of management actions may be.

For more information, please contact Shanna Madsen, Fisheries Science Coordinator, at smadsen@asmfc.org.

2014 General Election Overview

The 2014 general elections saw Republicans seize control of the Senate and bolster their majority in the House of Representatives. In January 2015 when the 114th Congress officially convenes, it will feature a Senate with 53 or 54 Republicans, a net gain of 8 or 9. In the House, the GOP ranks will swell to at least 244, a net gain of at least 12 and the largest Republican majority since 1928.



Nationwide, Class II Senators who were elected in 2008 were in cycle this year. Among the Commission's member states, Maine, New Hampshire, Massachusetts, Rhode Island, New Jersey, Virginia, North Carolina, South Carolina, and Georgia held Senate elections. While incumbent candidates were largely successful, two freshmen Senators will join the Atlantic coast delegation – Senator-elect Thom Tillis (R-NC) and Senator-elect David Purdue (R-GA). Senator Tim Scott (R-SC) also won a special election to finish the remainder of Senator Jim DeMint's (R-SC) term until 2016.

Elections for the House of Representatives resulted in 24 Atlantic coast freshmen members – hailing from Maine (1), New Hampshire (1), Massachusetts (1), New York (4), New Jersey (3), Pennsylvania (2), Virginia (3), North Carolina (3), Georgia (4), and Florida (2).

Finally, 11 Atlantic coast states held elections for Governor in 2014 including Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, Maryland, South

Carolina, Georgia, and Florida. The 2014 elections resulted in party changes in the Governor offices in Massachusetts, Pennsylvania, and Maryland.

This new composition on Capitol Hill will present the Commission with new challenges and opportunities over the next two years. Chief among those will be reauthorizing the Magnuson-Stevens Act. Significant progress was made over the past two years, but will have to begin anew at the start of the 114th Congress. While legislation written in the 113th Congress

will serve as a stepping stone, new membership on the House and Senate committees of jurisdiction will have a major impact the future of Magnuson-Stevens.

Another familiar challenge is the ongoing uncertainty surrounding federal appropriations, which continues to affect US fisheries managers including the Commission. Since the beginning of fiscal year (FY) 2015, the federal government has been operating under a continuing appropriations resolution (CR) at 2014 levels. The current CR is in effect until December 11, 2014. Congress is expected to address further appropriations in the lame duck session before the CR expires. In addition, automatic budget cuts known as the sequester were averted in FY 2014 and 2015 but will return in FY 2016 unless Congress finds a way to offset them again. For more information, please contact Deke Tompkins, Legislative Assistant, at dtompkins@asmfc.org.



From left: 2013 Melissa Laser Award recipient William Goldsborough, Emily Greene, and ACFHP Steering Committee Chair Kent Smith

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through her tremendous work with the Partnership. Her contributions and talent for building successful collaborations embody Melissa's own dedicated approach towards fish habitat conservation.

The Melissa Laser Award was established in 2012 in memory of Dr. Melissa Laser, a biologist with the Maine Department of Marine Resources and active member of both the Atlantic States Marine Fisheries Commission's Habitat Committee and the Atlantic Coastal Fish Habitat Partnership Steering

Committee. Melissa dedicated her career to protecting, improving, and restoring aquatic ecosystems both locally in Maine and along the entire Atlantic coast. Her contributions to these committees and to her home state were tremendous.

ASMFC Comings and Goings



JAYRAN FARZANEGAN

In November, Jayran Farzanegan joined the Commission staff as its new Accounting Manager, handling payroll, accounts

receivable, and grants processing. For the past 5 1/2 years, Jayran worked as Controller for Systar, a performance management software provider. Jayran earned her Bachelor of Science in Accounting from George Mason University. Welcome aboard, Jayran!

**Atlantic States Marine
Fisheries Commission**

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implementing management measures within its jurisdiction to ensure the sustainability of the American eel population residing within state boundaries. Increasing demand for eel by Asian markets and domestic bait fisheries, coupled with concern about declining eel abundance and limited assessment data, spurred development of the first Interstate Fishery Management Plan in the mid-1990s.

Through Addenda III and IV, the Commission and the states seek to reduce mortality and increase conservation of American eel stocks across all life stages. Addendum III, approved in 2013, increased the commercial yellow eel minimum size to 9 inches, reduced the recreational bag limit to 25 fish/day, prohibited silver eel fisheries except in the Delaware River (NY), and implemented fishery-independent and fishery-dependent monitoring requirements. Addendum IV, approved in 2014, established the first ever coastwide quota for yellow eel fisheries, set at 907,671 pounds, along with specific management action if the quota is exceeded. Specifically, the Addendum establishes two management triggers: (1) exceeding coastwide quota by more than 10% in a given year, or (2) exceeding the coastwide quota for two consecutive years regardless of the percent overage. If either one of the triggers are met then states would implement state-specific allocation based on average landings from 2011-2013. Addendum IV also sets Maine's glass eel quota at 9,688 pounds (a 17.5% reduction from the 2014 quota). Maine will maintain its daily trip level reporting and require a pound-for-pound payback in the event of quota overages in its glass eel fishery. Additionally, the state will implement a fishery-independent life cycle survey covering glass, yellow and silver eels within at least one river system. The Addendum specifies these requirements would also be required for any jurisdiction with a commercial glass eel fishery harvesting more than 750 pounds.

Addendum IV provides states/jurisdictions the ability to request limited participation in the glass eel fishery based on conservation programs enacted after January 1, 2011, and given there is an overall benefit to American eel populations. Examples of conservation programs include, but are not limited to, habitat restoration projects, fish passage improvements, or fish passage construction. The Addendum also provides opportunities for a limited glass eel harvest for domestic aquaculture purposes and allows the continuation of New York's Delaware River silver eel weir fishery under a transferable license cap, limited to nine permits annually. For more information, please contact Mike Waine, FMP Coordinator, at mwaine@asmfc.org.