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ASMFC
FISHERIES focus
Vision: Sustainable and Cooperative Management of Atlantic Coastal Fisheries

INSIDE THIS ISSUE

ASMFC Atlantic Menhaden Board Approves TAC for 2021-2022

The Commission's Atlantic Menhaden Management Board approved a total allowable catch (TAC) of 194,400 metric tons (mt) for the 2021 and 2022 fishing seasons, which represents a 10% reduction from the 2018-2020 TAC level. The 2021-2022 TAC was set based on the ecological reference points (ERPs) approved by the Board in August, and reaffirms the Board's commitment to manage the fishery in a way that accounts for the species role as a forage fish.

"This TAC represents a measured and deliberate way for this Board to move into the realm of ecosystem-based management," said Chair Spud Woodward of Georgia. "The TAC strikes a balance between stakeholder interests to maintain harvest on menhaden at recent levels, while also allowing the ERP models to do what they are intended to do."

Based on projections, the TAC is estimated to have a 58.5% and 52.5% probability of exceeding the ERP fishing mortality (F) target in the first and second year, respectively. The TAC will be made available to the states based on the state-by-state allocation established by Amendment 3 (see accompanying table for 2021 and 2022 based on a TAC of 194,400 mt).

2021-2022 ATLANTIC MENHADEN QUOTAS

		Metric Tons	Pounds
TAC		194,400	428,578,637
1% Set Aside*		1,944	4,285,786
TAC After Set Aside		192,456	424,292,851
STATE	ALLOCATION	QUOTA (MT)	QUOTA (LBS)
ME	0.52%	995	2,194,080
NH	0.50%	962	2,121,582
MA	1.27%	2,453	5,407,708
RI	0.52%	996	2,196,488
CT	0.52%	993	2,188,342
NY	0.69%	1,330	2,931,091
NJ	10.87%	20,925	46,131,966
PA	0.50%	962	2,121,464
DE	0.51%	986	2,174,821
MD	1.89%	3,634	8,011,402
PRFC	1.07%	2,066	4,554,267
VA	78.66%	151,392	333,761,875
NC	0.96%	1,840	4,056,588
SC	0.50%	962	2,121,464
GA	0.50%	962	2,121,464
FL	0.52%	997	2,198,250
TOTAL	100%	192,456	424,292,851

*1% of the TAC is set aside for episodic events, the remaining TAC is allocated to the states per the provisions of Amendment 3. Quotas may be adjusted pending final 2020 landings and the redistribution of any relinquished quota.

In determining which level to set the TAC, the Board also considered recent updates to the fecundity (FEC) reference points, and current stock condition. According to the latest assessment results, the 2017 estimate of fecundity, a measure of reproductive potential, was above both the ERP FEC target and threshold, indicating the stock was not overfished. A stock assessment update is scheduled for 2022 which will inform the TAC for 2023 and beyond.

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.

November 16 - 18
Jonah Crab Data Workshop Webinar, visit http://www.asmfc.org/calendar/11/2020/Jonah-Crab-Data-Workshop/1623 for more information

November 30 - December 3
American Eel Stock Assessment Data Workshop Webinar, visit http://www.asmfc.org/calendar/12/2020/American-Eel-Stock-Assessment-Data-Workshop-/1612 for more information

December 1 - 3
New England Fishery Management Council Webinar, visit https://www.nefmc.org/calendar/december-2020-council-meeting for more information

December 7 - 11
South Atlantic Fishery Management Council Webinar, visit https://safmc.net/december-2020-council-meeting-details/ for more information

December 15 - 17
Mid-Atlantic Fishery Management Council Webinar, visit https://www.mafmc.org/council-events/december-2020-council-meeting for more information

January 26 - 28
New England Fishery Management Council, Sheraton Harborside, Portsmouth, NH; visit https://www.nefmc.org/calendar/january-2021-council-meeting for more information

February 1 - 4
ASMFC 2021 Winter Meeting Webinar, visit http://www.asmfc.org/calendar/2/2021/ASMFC-2021-Winter-Meeting/1481 for more information

February 9 (begins 9 AM) - 11 (ends at 1 PM)
Mid-Atlantic Fishery Management Council, Durham Convention Center, 301 West Morgan Street Durham, NC; visit https://www.mafmc.org/council-events/2021/february-2021-council-meeting for more information

March 1-5
South Atlantic Fishery Management Council Meeting, Jekyll Island, GA

April 6 (begins at 9 AM) - 8 (ends at 1 PM)
Mid-Atlantic Fishery Management Council, Seaview: a Dolce Hotel, 401 South New York Road, Galloway, NJ; visit https://www.mafmc.org/council-events/2021/april-2021-council-meeting for more information

April 13 - 15
New England Fishery Management Council, Hilton Hotel, Mystic, CT; visit https://www.nefmc.org/calendar/april-2021-council-meeting for more information

May 3-6
ASMFC Spring Meeting, The Westin Crystal City, 1800 S. Eads Street, Arlington, VA; visit https://www.asmfc.org/calendar/5/2021/ASMFC-2021-SpringMeeting/1482 for more information

June 14-18
South Atlantic Fishery Management Council Meeting, Ponte Vedra, FL

June 22 - 24
New England Fishery Management Council, Sheraton Sable Oaks, South Portland, ME; visit https://www.nefmc.org/calendar/june-2021-council-meeting for more information

Report from the Chair

For this issue, we are dedicating this space to Commission Chair Patrick C. Keliher and the speech he presented to Commissioners at our 79th Annual Meeting Webinar.

As I look back over this past year and try to characterize it in a word or phrase, I would have to say it has truly been an extraordinary year of firsts for the states, our federal partners, and stakeholders. It is the first time in over a hundred years that we as a nation and a global community have had to face a life-threatening pandemic that has yet to run its course. We have all had to change the way we live and work. State and federal agencies had to adapt their telecommuting policies to allow for full-time telecommuting. Large gatherings and celebrations have been postponed and in-person meetings have shifted to meetings via webinar. Notably, this Annual Meeting is the first time in the Commission's 79-year history we are not gathering in one of our member states to conduct important fisheries business and celebrate the contributions of the Captain David H. Hart Award recipient to the sustainable and cooperative management of Atlantic coastal fisheries. It is my hope we will all be able to come together again next October.

The Commission's Executive Committee, composed primarily of state directors, has never been more engaged, with weekly meetings that give us an opportunity to share our challenges and seek solutions. I have great faith in our ability to tackle the obstacles before us and come out the other side even stronger and more resilient.

Closer to home, I've witnessed the devastating effect of the pandemic to our marine fisheries across all sectors, to our state budgets and revenue streams, and to our fishery-dependent and independent monitoring activities. The commercial fishing industry, dealers, and processors, as well as for-hire businesses have suffered during the pandemic. Passage of the CARES Act offered some relief in the form of $300 million divided among all the states along the Atlantic, Gulf, and Pacific coasts.

Since April, the Commission has worked closely with its member states and NOAA Fisheries to coordinate development of state spend plans and, based on a state's preference, assist in the disbursement of funds to affected stakeholders. To date, spend plans have been approved for the majority of Atlantic coastal states and much-needed money is beginning to get into the hands of the fishing industry. While aid to fishermen through the CARES Act is a step in the right direction, available funds are not sufficient to meet all of the needs of our coastal fishing communities as they struggle to maintain their livelihoods and businesses. As Congress deliberates on additional assistance to help reduce the financial impacts of COVID-19, I will continue to work with my fellow Commissioners in urging our Congressional representatives to consider the impacts to fisheries and fishing communities as part of any pending legislation.

While many state fishery agencies have navigated budget cuts for several years, the pandemic and the lack of revenue streams will take an even deeper cut to our budgets. This, in turn, will further constrain our abilities to perform necessary fisheries management and monitoring activities. Luckily, my fellow state marine fishery agency directors are highly resourceful, finding ways to get the greatest bang for the buck by seeking efficiencies in the way they do business and prioritizing management and monitoring activities for species with the greatest need. Some relief has been provided in the form of additional funds from the Commission, since much of the Commission's meeting and travel budget have gone unspent this year.

The Commission's Executive Committee, composed primarily of state directors, has never been more engaged, with weekly meetings that give us an opportunity to share our challenges and seek solutions. I have great faith in our ability to tackle the obstacles before us and come out the other side even stronger and more resilient.

The pandemic also impacted critical marine fisheries data collection programs. Recreational harvest data was not collected for several months; the full impacts of which are still being calculated. Certainly, the lack of recreational harvest estimates for 2020 will hinder our ability to make informed decisions about fishery performance and setting management measures for 2021 and beyond. Several fishery-independent surveys were cancelled this year, which will create data gaps in some long-standing surveys and may have repercussions to stock assessments for years to come. Addressing the issues posed by these data gaps will take the concerted effort of scientists and technical staff. Given the talent level and the cumulative years of experience of our technical staff, I have no doubt that they will find workable solutions to these issues.

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A Tale of Two Stocks

Introduction

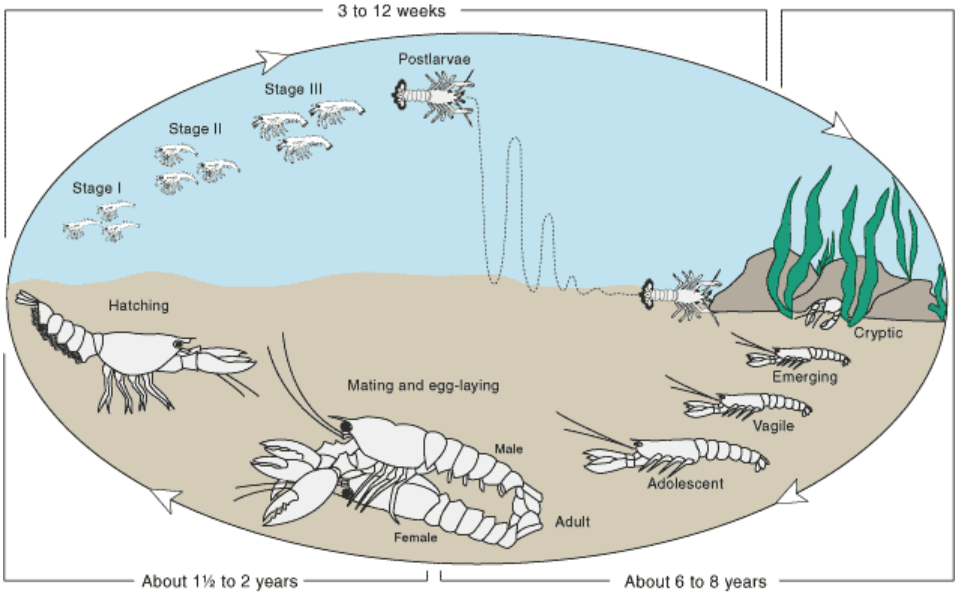
The recently released 2020 American Lobster Benchmark Stock Assessment presents contrasting results for the two American lobster stock units, with record high abundance and recruitment in the Gulf of Maine and Georges Bank stock (GOM/GBK) and record low abundance and recruitment in the Southern New England stock (SNE) in recent years. The GOM/GBK stock is not overfished nor experiencing overfishing. Conversely, the SNE stock is significantly depleted with poor prospects of recovery.

In October, the American Lobster Management Board accepted the Benchmark Stock Assessment and Peer Review Report for management use, adopted the new reference points as recommended by the assessment, and committed to considering management responses to the assessment findings at its next meeting in February 2021. In addition, the Board intends to continue development of Addendum XXVII to proactively increase resilience of the GOM/GBK stock.

Life History

American lobster is a bottom-dwelling crustacean that is widely distributed over the continental shelf of North America. In the inshore waters of the U.S., it is most abundant from Maine through New Jersey, with abundance declining from north to south. Offshore, it occurs from Maine through North Carolina. The species was previously divided into three biological stock areas which included GOM, GBK, and SNE. However, data showing evidence of significant seasonal migrations of large female lobster between GOM and GBK suggests these two stocks are not closed populations. As a result, the GOM and GBK were combined into a single biological unit (GOM/GBK).

Lobster are solitary and territorial, living in a variety of habitats as long as there is a burrow or crevice where they can take cover. They usually remain within a home range of about 5-10 square km. In offshore areas, large mature lobster make seasonal migrations inshore to reproduce. In southern inshore areas, large lobster may move to deeper, cooler waters seasonally or permanently.



American lobster reproduction and life cycle.
Image (c) http://www.maine.gov/dmr/science-research/species/lobster/guide/index.html

Species Snapshot

American Lobster
Homarus americanus

Management Unit
Maine to New Jersey

Interesting Facts

- Lobster smell food with small hairs covering their bodies and 4 small antennae.
- Lobster teeth are in their stomachs.
- Lobster molt in order to grow. In the first year, a lobster molts 10 times to reach a length of 1 - 1 ½ inches.
- A lobster that has lost one claw is called a cull. One that has lost 2 claws is called a bullet. Lobster can regenerate new claws.
- Lobster teeth are in their stomachs.
- Only 1 out of 2 million caught lobster is blue in color.

Largest and Oldest Recorded

- 44 pounds

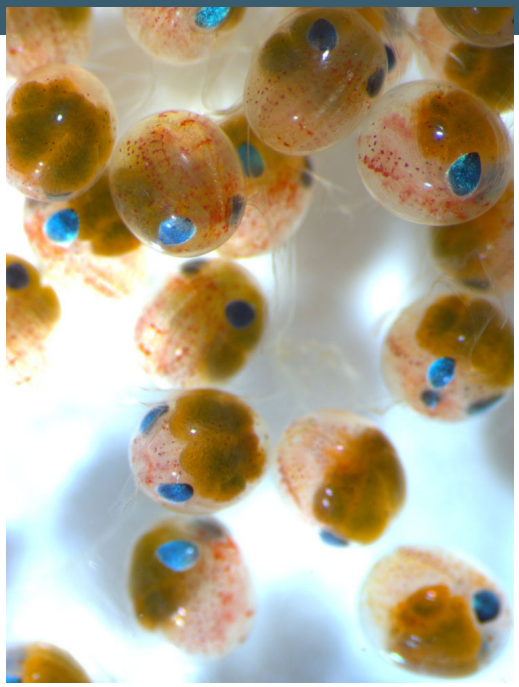
Maximum Age

- A method to determine the exact age of a lobster has not been discovered.
- Based on knowledge of body size at age, the maximum age attained may be 100 years old.

Stock Status

- Gulf of Maine/Georges Bank: Not overfished and not experiencing overfishing
- Southern New England: Depleted and not experiencing overfishing

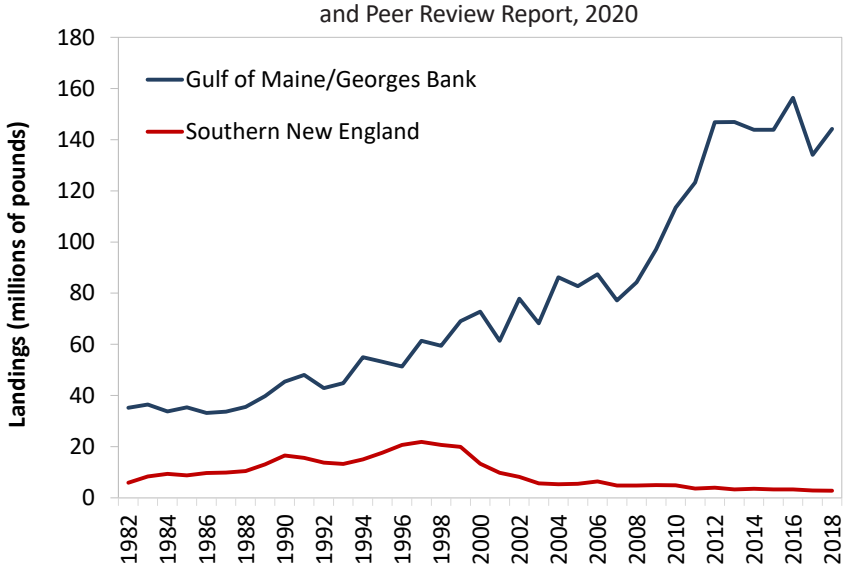
Reproduction and growth are linked to the molting (shedding of the lobster's exoskeleton or shell) cycle. Lobster periodically shed (or molt) their shell to allow for growth and mating to occur. Sperm is deposited in "soft" (recently molted) females and stored internally until the eggs are released (technically referred to as extrusion), which can be as long as two years. When extruded, the eggs are fertilized and attached to the underside of the female, where they are carried for 9 to 11 months before hatching. Females hatch their eggs from mid-May to mid-June. Once hatched, lobster larvae transition through five stages. For the first four stages larvae are planktonic, swimming at or near the water surface. At the fifth larval stage, juveniles sink to the ocean floor where they remain for the rest of their lifetime (see infographic on previous page). Lobster reach market size in about 4 to 9 years, depending on water temperature and other biological factors.



Late stage American lobster (Homarus americanus) eggs photographed with digital dissecting microscope. Image (c) Alicia Miller, NEFSC/NOAA

Temperature is an important factor influencing lobster metabolism, spawning, development, and growth. When a female lobster extrudes eggs, temperature directly impacts the length of time the eggs are carried until hatching occurs, when surface water temperatures are above 12°C. Lobster generally avoid water temperatures below 5°C and above 18°C. Prolonged temperatures above 20.5°C can induce respiratory stress in lobster and have been shown to increase the incidence of shell disease.

Figure 1. American Lobster Landings by Area
Source: ASMFC American Lobster Benchmark Stock Assessment and Peer Review Report, 2020



Recreational & Commercial Fisheries

The American lobster fishery is one of the most valuable fisheries along the Atlantic coast. In 2019, approximately 126 million pounds of lobster were landed coastwide, representing $630 million in ex-vessel value. The vast majority of these landings came from GOM/GBK, where the stock is at record high abundance. In contrast, there has been an overall decrease in the percentage of landings from the SNE stock, which is depleted and experiencing recruitment failure (Figure 1).

Total U.S. landings in the fishery have steadily increased in the past 35 years. Between 1950 and 1975, landings were fairly stable around 30 million pounds; however, from 1976 – 2008 the average coastwide landings tripled, reaching 92 million pounds in 2006. Since then, landings have continued to increase, reaching 117 million pounds in 2010 and peaking at 159 million pounds in 2016.

Lobster pots are the predominant commercial gear, with a small percent of the landings caught by trawls. Lobster is also taken recreationally with pots and by hand while SCUBA diving. The overall quantity of recreational landings is unknown but is likely a negligible source of removals.

Status of the Stock

The 2020 American Lobster Benchmark Stock Assessment and Peer Review Report indicates record high stock abundance and recruitment in GOM and GBK, and record low abundance and recruitment in SNE. The GOM/GBK stock is not overfished and not experiencing overfishing. Conversely, the SNE stock remains severely depleted with poor prospects of recovery.

Given extensive research showing the connections between environmental conditions and American lobster life history and population dynamics, the 2020 assessment applied new methods to account for changing environment influences when assessing the lobster stocks. Environmental data time series included water temperatures at several fixed monitoring stations throughout the

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Atlantic Cobia

The South Atlantic States/Federal Fisheries Management Board approved Addendum I to Amendment 1 to the Interstate Fishery Management Plan for Atlantic Migratory Group Cobia. The Addendum modifies: (1) the allocation of the resource between the commercial and recreational sectors, (2) the methodology to calculate the commercial trigger for in-season closures; and (3) and commercial and recreational *de minimis* measures.

The Addendum changes the allocation of the resource between the recreational and commercial fisheries from 92% and 8%, respectively to 96% and 4%, respectively. The change was primarily based on new recreational catch estimates that resulted from changes in survey methodology by the Marine Recreational Information Program. The new catch estimates were, on average, about two times higher than previously estimated, impacting the allocation between the two sectors. In considering the new allocation percentages, the Board took into account the increase in the recreational catch and the harvest levels of the commercial fishery in recent years. The new commercial allocation allows the fishery to operate at its current level with some room for landings to increase as the stock range expands further north.

The Addendum also modifies calculation of the commercial trigger, which determines when an in-season coastwide commercial closure occurs. The approved trigger is set up to provide states with enough time to close the fishery via their administrative processes without exceeding the quota.

Changes to *de minimis* measures, which are applied to states with relatively small commercial or recreational harvest, include adjusting the commercial allocation set aside and recreational regulations. For *de minimis* measures, the Addendum establishes a commercial *de minimis* set aside of 4% of the commercial quota with a maximum cap of 5,000 pounds to account for potential landings in *de minimis* states not tracked in-season against the quota. States that are *de minimis* for their recreational fisheries may choose to match the recreational management measures implemented by an adjacent non-*de minimis* state (or the nearest non-*de minimis* state if none are adjacent), or limit its recreational fishery to 1 fish per vessel per trip with a minimum size of 33 inches fork length (or an equivalent total length of 37 inches).

States are required to implement the new measures by January 1, 2021. For more information, please contact Savannah Lewis, Fishery Management Plan Coordinator, at slewis@asmfc.org.

Horseshoe Crab

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 2021 season. Based on the allocation mechanism established in Addendum VII, the following quotas were set for the States of New Jersey, Delaware, and Maryland and the Commonwealth of Virginia, which harvest horseshoe crabs of Delaware Bay origin:

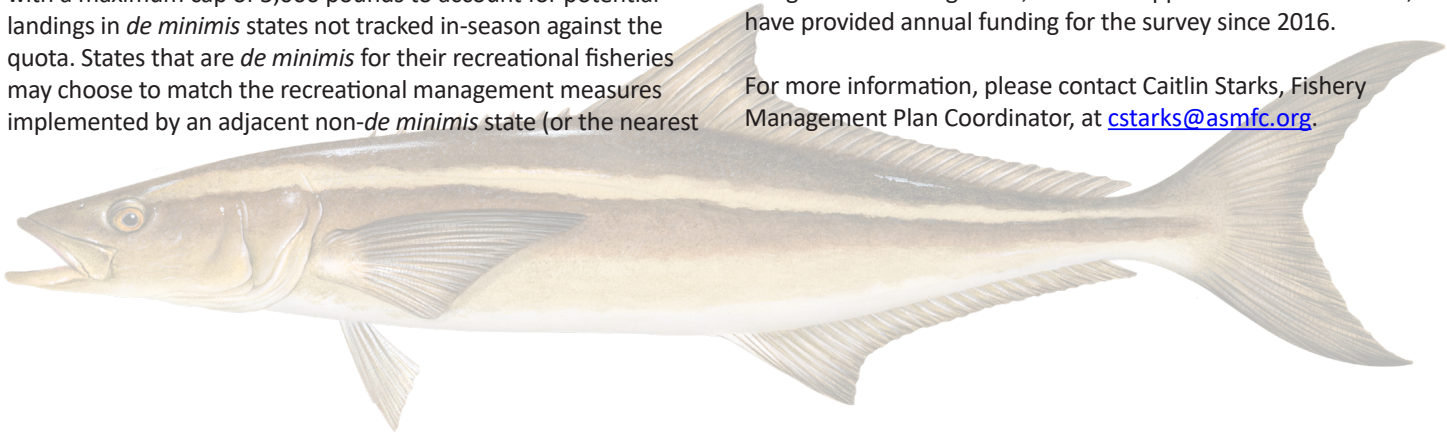
	2021 Delaware Bay Origin Horseshoe Crab Quota (no. of crabs)	2021 Total Quota**
State	**Male Only**	**Male Only**
Delaware	162,136	162,136
New Jersey	162,136	162,136
Maryland	141,112	255,980
Virginia*	34,615	81,331

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

** Total male harvest includes crabs which are not of Delaware Bay origin.

The Board chose a harvest package based on the recommendations of the Delaware Bay Ecosystem Technical Committee and ARM Subcommittee. 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 was based on data from the Benthic Trawl Survey conducted by Virginia Polytechnic Institute (Virginia Tech). This survey, which is the primary data source for assessing Delaware Bay horseshoe crab abundance, does not have a consistent funding source. Members of the Delaware and New Jersey U.S. Congressional Delegations, with the support of NOAA Fisheries, have provided annual funding for the survey since 2016.

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



Spiny Dogfish

The Spiny Dogfish Management Board approved a commercial quota of 29.6 million pounds for the 2021/2022 and 2022/2023 fishing years (May 1–April 30). The quotas are consistent with the measures recommended to NOAA Fisheries by the Mid-Atlantic Fishery Management Council (Council). State-specific allocations are provided in below table.

Although the Board had previously set multi-year specifications for 2019-2021, in December 2019, the Council approved a new Risk Policy with the intent that 2021/2022 specifications would be revised to reflect the new policy. As such, the Council's Scientific and Statistical Committee recommended increasing the acceptable biological catch (ABC) for 2021 from 35.4 million pounds to 38.6 million pounds. Based on this revised ABC recommendation, the Council approved a commercial quota of 29,559,580 pounds, which is an 8% increase compared to the previously set 2021/2022 quota. The Council also voted to extend these same specifications to the 2022 fishing year to align with the timing of the 2022 research track assessment. The Board works cooperatively with the Council in managing the spiny dogfish fishery in order to have consistency in state and federal waters. Neither the Board nor the Council recommended trip limit changes but the Council has plans in 2021 to conduct socioeconomic analyses of potential trip limit changes.

The Commission's actions are final and apply to state waters (0-3 miles from shore). The Mid-Atlantic and New England Fishery Management Councils will forward their recommendations for federal waters (3 –200 miles from shore) to NOAA Fisheries Greater Atlantic Regional Fisheries Administrator for final approval.

For more information, please contact Toni Kerns, ISFMP Director, at tkerns@asmfc.org.

Spiny Dogfish State Allocations (in pounds) for the 2021-2023 Fishing Seasons

	Northern Region (ME-CT)	NY	NJ	DE	MD	VA	NC
Possession Limit	6,000	To be specified by the individual southern region states					
Allocation	58%	2.707%	7.644%	0.896%	5.92%	10.795%	14.036%
2021/22	17,144,556	800,413	2,259,728	264,866	1,749,935	3,191,020	4,149,062
2022/23	17,144,556	800,413	2,259,728	264,866	1,749,935	3,191,020	4,149,062

* Any overages in the above quotas will be deducted from that region's or state's quota allocation in the subsequent year. Similarly, any eligible rollovers from one season can be applied to that region's or state's quota allocation the following year.

ISFMP Policy Board Replaces South Atlantic Board with a Coastal Pelagics Board & Sciaenids Board

Based on the growing number of species under the purview of the South Atlantic State/Federal Fisheries Management Board, the Policy Board agreed to divide its species among two newly created boards: a Coastal Pelagics Board, which will oversee the management of Atlantic cobia and Spanish mackerel, and a Sciaenids Board, which will oversee the management of spot, red drum, black drum, Atlantic croaker, and spotted sea trout. This division will allow each Board to provide the appropriate amount of time and attention to its respective species, without compromising its focus on other species due to time limitations. Additionally, given the expanding ranges of some species, the new Board configuration will allow more northern states to effectively engage on species management programs for which they have a declared interest. As part of the new board structure, the South Atlantic Fishery Management Council is invited to join both Boards to ensure continued collaboration between state and federal management.

AMERICAN LOBSTER, continued from page 5

lobster's range, average water temperatures over large areas such as those sampled by fishery-independent surveys, oceanographic processes affecting the environment, and other environmental indicators such as lobster prey abundance. Environmental time series were analyzed for regime shifts, which indicate a significant difference in the lobster's environment and population dynamics from one time period to another and can impact the stock's capacity for recruitment and supporting different levels of catch. The assessment also quantified the effect of temperature on the catchability of lobster in surveys, and corrected trends in estimated abundance by accounting for these effects.

Model-estimated abundance time series were also analyzed for shifts that may be attributed to changing environmental conditions and new baselines for stock productivity. Regime shifts were detected for the GOM/GBK stock in 1996 and 2009 and one shift was detected for the SNE stock in 2003. New reference points were developed to account for the changing regimes.

Figure 2. Abundance for GOM/GBK Relative to Reference Points

Source: ASMFC American Lobster Benchmark Stock Assessment and Peer Review Report, 2020

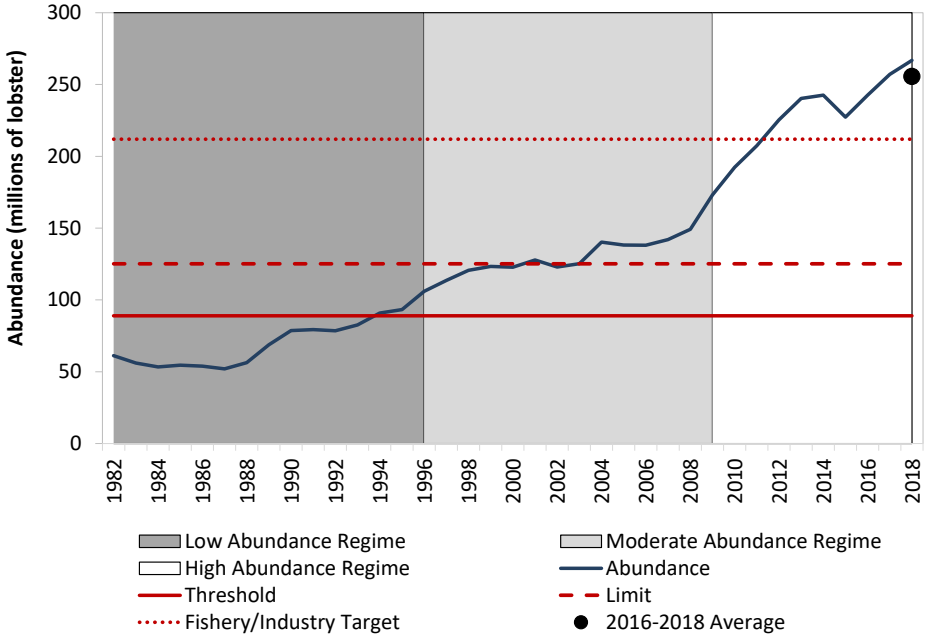
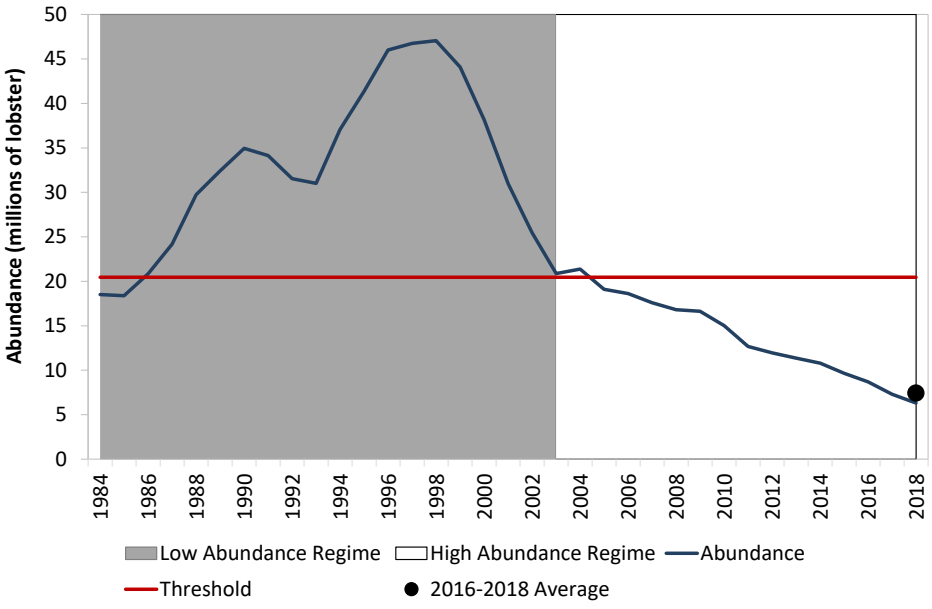


Figure 3. Abundance for SNE Relative to Reference Points

Source: ASMFC American Lobster Benchmark Stock Assessment and Peer Review Report, 2020



The 2020 assessment used three reference points to characterize stock abundance (Figure 2). The abundance threshold is calculated as the average of the three highest abundance years during the low abundance regime. A stock abundance level below this threshold is considered significantly depleted and in danger of stock collapse. This was the only abundance reference point recommended for the SNE stock due to its record low abundance and low likelihood of reaching this threshold in the near future (Figure 3). The abundance limit is calculated as the median abundance during the moderate abundance regime. Stock abundance that falls below this limit is considered depleted because the stock's ability to replenish itself is diminished. The fishery/industry target is calculated as the 25th percentile of the abundance during the high abundance regime. In this case, when abundance falls below this target, the stock's ability to replenish itself is not jeopardized, but it may indicate a degrading of economic conditions for the lobster fishery.

Two reference points are used to evaluate the fishing mortality condition of the stocks. The exploitation threshold is calculated as the 75th percentile of exploitation during the current abundance regime. The stock is considered to be experiencing overfishing if exploitation exceeds the exploitation threshold. The exploitation target is calculated as the 25th percentile of exploitation during the current abundance regime.

Gulf of Maine/Georges Bank

GOM/GBK stock abundance has increased since the late 1980s, and at an accelerated pace since 2008. The GOM/GBK stock shifted from a low abundance regime during the early 1980s through 1995 to a moderate abundance regime during 1996-2008, and shifted once again to a high abundance regime during 2009-2018 (Figure 2). Current spawning stock abundance and recruitment and are near record highs. Exploitation (commercial landings relative to stock abundance) declined in the late 1980s and has remained relatively stable since.

The GOM/GBK stock is in favorable condition based on the recommended reference points. The average abundance from 2016-2018 was 256 million lobster, which is greater than the fishery/industry target of 212 million lobster. The average exploitation from 2016-2018 was 0.459, below the exploitation target of 0.461. Therefore the GOM/GBK lobster stock is not depleted and overfishing is not occurring.

Southern New England

SNE stock abundance increased from the early 1980s, peaked during the late 1990s, then declined steeply through the early 2000s to a record low in 2018. Additionally, recent recruitment estimates are the lowest on record. The assessment regime shift analysis indicates the SNE stock shifted from a high abundance regime during the early 1980s through 2002 to a low abundance regime during 2003-2018 (Figure 3).

Declines in population abundance are most pronounced in the inshore portion of the stock where environmental conditions have remained unfavorable to lobster since the late 1990s. The contraction of the SNE stock has continued since the last assessment and is now becoming apparent in the offshore portion as well, according to survey encounter rates. It is believed the offshore area of SNE depends on nearshore larval settlement and offshore migration as the source of recruits (e.g., young of the year lobster).

Based on the new abundance threshold reference point, the SNE stock is significantly depleted. The average abundance from 2016-2018 was 7 million lobster, well below the threshold of 20 million lobster. However, according to the exploitation reference points the SNE stock is not experiencing overfishing. The average exploitation from 2016-2018 was 0.274, falling between the exploitation threshold of 0.290 and the exploitation target of 0.257.

Peer Review Panel Recommendations

The Panel endorsed the stock assessment findings that the GOM/GBK stock is not depleted and the SNE stock is significantly depleted, and recommended the assessment be used for management advice. In particular, the Panel recommended significant management action be taken to provide the best chance of stabilizing or improving abundance and reproductive capacity of the SNE stock.

The Panel also recognized a major advancement in the assessment was the consideration of environmental and climatic drivers on stock dynamics. Given rapidly changing environmental conditions, the Panel recommended changes to stock abundance and settlement indices be monitored through an annual data update process to allow for more timely reactions to any concerning trends in the interim between the next stock assessment. The Benchmark Stock Assessment and Peer Review Report, as well an overview of the assessment findings, can be found on the Commission website on the American lobster page, under *Stock Assessment Reports*.

Atlantic Coastal Management

American lobster is managed under Amendment 3 to the Interstate Fishery Management Plan (FMP) and its Addenda (I - XXVI). The goal of the American lobster management plan is to maintain a healthy lobster resource and a management regime which provides for continued harvest, opportunities for participation, and cooperative development of conservation measures by all stakeholders. Amendment 3 establishes seven lobster conservation management areas (LCMAs): Inshore and offshore GOM (Area 1), Inshore SNE (Area 2), Offshore Waters (Area 3), Inshore and offshore Northern Mid-Atlantic (Area 4), Inshore and offshore Southern Mid-Atlantic (Area 5), Long Island Sound (Area 6) and Outer Cape Cod). Lobster Conservation Management Teams (LCMTs), composed of industry representatives, were formed for each management area. The LCMTs are charged with advising the American Lobster Board and recommending changes to the management plan within their areas. The commercial fishery is primarily controlled through minimum/maximum size limits, trap limits, and v-notching of egg-bearing females.

After the 2009 and 2015 assessments indicated the critically depleted condition of the SNE stock, the Board approved Addenda XVII - XXII, which implemented a suite of measures to reduce exploitation and allow the SNE stock to rebuild.

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Photo (c) ME DMR

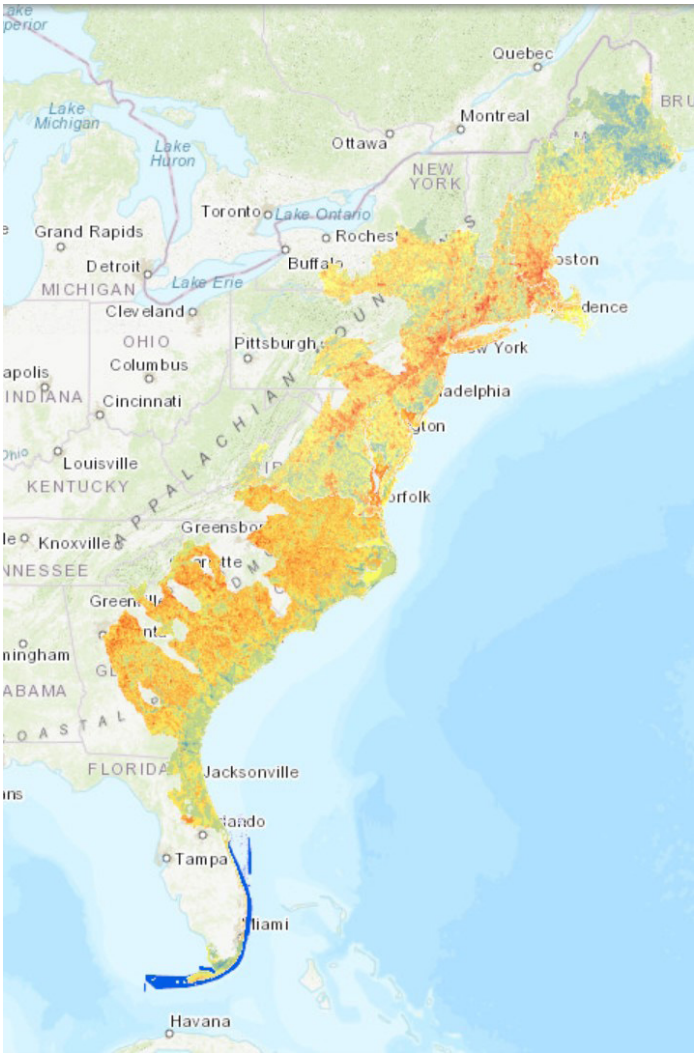
ACFHP Launches Fish Habitat Conservation Area Mapping and Prioritization Project

In September, the Atlantic Coastal Fish Habitat Partnership (ACFHP or Partnership) launched its newest science product: the Fish Habitat Conservation Area Mapping and Prioritization Project. ACFHP worked with The Nature Conservancy and Southeast Aquatic Resources Partnership to create static maps of conservation opportunity areas for diadromous, estuarine, and coastal habitat from Maine through Florida. The Southeast maps were funded by NOAA Southeast Regional Office, and the Northeast maps were funded by NOAA Greater Atlantic Regional Fisheries Office.

The map results will help ACFHP, its partners, and various stakeholders better identify locations in need of habitat conservation – both "Areas of Excellent Fish Habitat" that could benefit from land and watershed protection and expansion, and "Restoration Opportunity Areas" that would most benefit from on the ground restoration. It is not intended to be used as guidance for regulatory purposes. ACFHP plans to include the results of this project in the evaluation criteria for FY2021 National Fish Habitat Action Plan/U.S. Fish and Wildlife Service funding.

There are a total of eight maps, or analyses, addressing all of ACFHP's priority habitats within each of its four subregions (North, Mid- and South Atlantic, and South Florida). The diadromous analyses were conducted in the North, Mid- and South Atlantic and address ACFHP's riverine priority habitat in those subregions. The estuarine analyses cover the entire coast, addressing ACFHP's shellfish beds, submerged aquatic vegetation, and tidal vegetation priority habitats. The coastal analysis in South Florida covered that subregion's coral and live/hard bottom priority habitat.

For both the diadromous and estuarine analyses, 7-8 metrics which describe some aspect of the suitability or condition of the habitat were calculated. Impervious surface, point and non-point source pollution, potential for species access, riparian buffer extent, and more were included in the diadromous analyses. Habitat coverage, proximity to development and protected habitat, water quality, and hardened shorelines were some of the variables included in the estuarine analyses. The South Florida Coastal Analysis was not scored like the diadromous and estuarine analyses; instead, coral extent and Habitat Area of Particular Concern designations were mapped.



The map shows all eight habitat analyses in ACFHP's Fish Habitat Conservation Area Mapping and Prioritization Project. In general, cooler colors denote areas best suited for protection, while warmer colors denote areas where ACFHP recommends no action. Yellow and green areas highlight the best opportunities for habitat restoration.

For links to the maps, final report, user guide, and a video on how to view the maps on Databasin, visit the science and data section of the ACFHP website: https://www.atlanticfishhabitat.org/science-and-data-projects/. For more information, or to recommend data for future updates, please contact Lisa Havel, ACFHP Coordinator, at lhavel@asmfc.org.

ACFHP is a coastwide partnership of fish habitat resource managers, scientists, and communications professionals from 35 different state, federal, tribal and non-governmental agencies who have established a commitment to work together for the benefit of aquatic resources. It's mission is to accelerate the conservation, protection, restoration, and enhancement of habitat for native Atlantic coastal, estuarine-dependent, and diadromous fishes through partnerships between federal, tribal, state, local, and other entities.

U.S. Congress Advances Marine Debris & Conservation Bills; Ocean Climate Bill Introduced in House

Over the past few months, Congress made notable progress on a pair of bills that should be of interest to recreational anglers, commercial harvesters and conservation interests alike. The two bills address fish and wildlife conservation, and marine debris. New legislation was also introduced in the U.S. House of Representatives to address ocean related impacts of climate change.

America's Conservation Enhancement Act

America's Conservation Enhancement (ACE) Act is an omnibus fish and wildlife conservation package that codifies the National Fish Habitat Partnership program, reauthorizes the Chesapeake Bay Program, authorizes funding to combat invasive species, and limits regulation of lead sport fishing tackle. The ACE Act was signed into law by the President on October 30, 2020.

Save Our Seas 2.0 Act

The Save Our Seas 2.0 Act is a follow up to the Save Our Seas Act (enacted in 2018); both of which aim to curb marine debris. Title I of the Save Our Seas 2.0, "Combating Marine Debris," establishes and authorizes funds for a nonprofit Marine Debris Foundation, an innovation prize competition to reduce plastic waste, and new marine debris research. Title II, "Enhanced Global Engagement to Combat Marine Debris," addresses international cooperation on marine debris. Title III, "Improving Domestic Infrastructure to Prevent Marine Debris," seeks to limit domestic marine debris through infrastructure improvements and studies of waste management and mitigation.

The Save Our Seas 2.0 Act was approved by the Senate in January 2020. In early October, the House approved the Senate's bill with minor amendments and sent it back to the upper chamber. The Senate is expected to approve the House amendments during the lame duck session and then send it to the President for his signature before 116th Congress adjourns in January 2021.

Ocean-Based Climate Solutions Act

Just beginning the legislative process is the Ocean-Based Climate Solutions Act, introduced in the U.S. House of Representatives on October 20, 2020. The 15-part omnibus bill addresses the ocean impacts of climate change and modifies federal ocean management policy to account for climate mitigation. A section-by-section summary and fact sheet are available on the Natural Resources Committee website.

Continuing Resolution

Finally, the federal government is operating under a Continuing Resolution at Fiscal Year 2020 funding levels through December 11, 2020. In July, Congress' lower chamber approved an omnibus appropriations package funding NOAA Fisheries for Fiscal Year 2021. The House-approved legislation includes funding for the Commission and the states to carry out the Atlantic Coastal Fisheries Cooperative Management Act, Fisheries Information Networks (including ACCSP), North Atlantic right whale research and monitoring, the Mid-Atlantic Horseshoe Crab Trawl Survey, and provisions of the Climate-Ready Fisheries Act. The bill also rejects the President's request to eliminate funding for joint enforcement agreements, Sea Grant, and the National Estuarine Research Reserve System. The U.S. Senate's Committee on Appropriations has not introduced or considered any Fiscal Year 2021 appropriations bills.

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

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These measures included a v-notching program, trap reductions, closed seasons for certain areas, and trap consolidation/transferability programs. The Board also considered a suite of management measures to achieve a 5% increase in egg production; however, it decided not to pursue this management change given concern that the proposed measures would not significantly improve the stock. The Board continues to discuss future management of the SNE stock in light of environmental changes.

In 2018, the Board approved Addendum XXVI. The Addendum addresses concerns regarding deficits in existing reporting requirements by expanding the mandatory harvester reporting data elements, improving the spatial resolution of harvester data, establishing a 5-year timeline for implementation of 100% harvester reporting, and prioritizing the development of electronic harvester reporting. In addition, the Addendum improves biological sampling requirements by establishing a baseline of ten sampling trips per year in the American lobster/Jonah crab fishery, and encourages states with more than 10% of coastwide landings in either the lobster or Jonah crab fisheries to conduct additional sampling trips.

Following its review of the 2020 Benchmark Stock Assessment and Peer Review Report, the Board reinitiated development of Draft Addendum XXVII, with the goal of increasing the resiliency of the GOM/GBK stock by considering the standardization of management measures across LCMAs. This management action is intended to be proactive in response to signs of reduced larval settlement and juvenile recruitment.

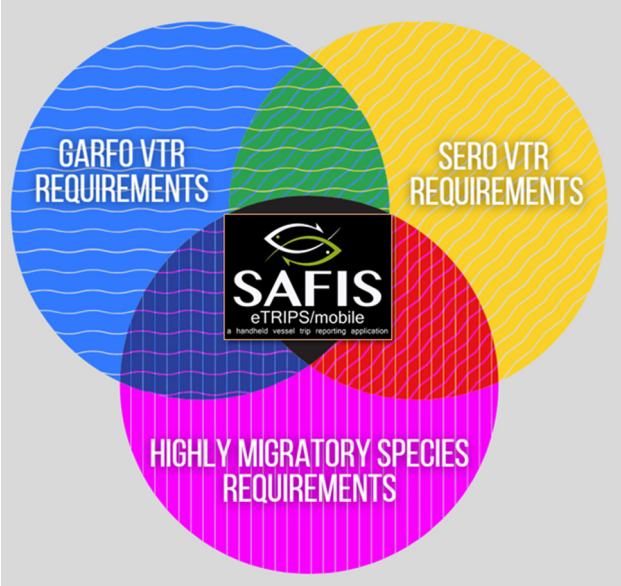
For more information, please contact Caitlin Starks, Fishery Management Plan Coordinator, at cstarks@asmfc.org.

ACCSP Facilitates "Compromise" for Meeting Federal Dual-permitted VTR Requirements

When the Atlantic Coastal Cooperative Statistics Program (ACCSP) was created in 1995, the Program established four basic principles to ensure that fishery-dependent statistics are complete, accurate, consistent, and compatible:

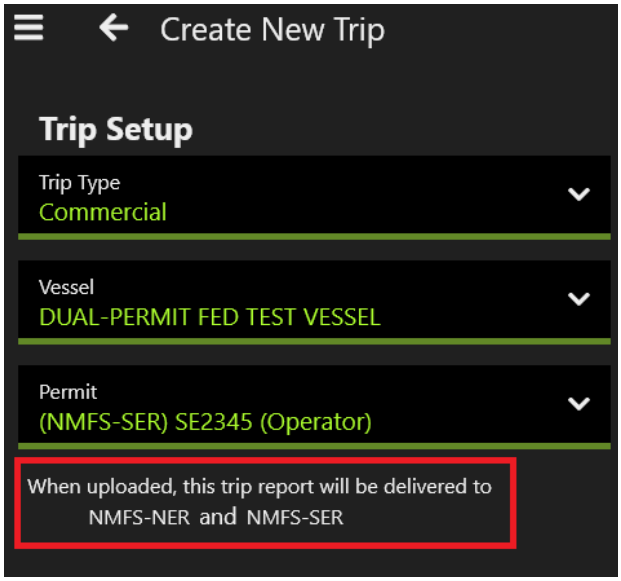
1. Cooperative development and implementation across jurisdictional lines
2. Coastwide data collection standards and a single, integrated data management system
3. Data on all fishing activities (e.g., commercial, recreational, and for-hire fisheries)
4. Modular design for data collection and data management projects

These principles still underlie ACCSP's mission, vision and activities. In accordance with this philosophy of cooperative coastwide standards, ACCSP has spent a little over a year facilitating multiple meetings with NOAA Fisheries Greater Atlantic Regional Office (GARFO), Northeast Fisheries Science Center (NEFSC), Southeast Regional Office and Science Center (SERO and SEFSC, respectively) and the Division of Highly Migratory Species (HMS) to define new business rules for how future data should be collected for dual-permitted federal vessels via the SAFIS eTrips harvester reporting application. The goal of this multi-agency coordination is to develop a creative "compromise" solution for meeting the complete VTR requirements for multi-permitted vessels in a single harvester reporting form. This coordination will be fundamental to reducing the reporting burden on industry while achieving the coastwide data collection goals for all partners.



A federal vessel that is multi-permitted is expected to report to both GARFO and SERO in order to fulfill the unique VTR requirements for each agency. Normally, this would result in increased burden on the captain to submit multiple reports for each trip:

- One report to fulfill the GARFO VTR requirements,
- Second report to fulfill the SERO VTR requirements,
- Possibly even a third report for any HMS encountered.



Beginning in 2021, SAFIS eTrips will be able to automatically identify a federal multi-permitted vessel and will dynamically generate a harvester form that utilizes the "compromise" solution defined by GARFO, SERO, and HMS. The form will display the appropriate lists of GARFO and SERO-approved species, gears, markets, and grades for the captain to choose from. The form only asks the questions needed to fulfill the captain's complete federal reporting requirements within a single report. Once the report is submitted, a copy of the record is immediately made available to both GARFO and SERO systems, while it is simultaneously processed into the SAFIS database.

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ACCSP is a cooperative state-federal program focused on the design, implementation, and conduct of marine fisheries statistics data collection programs and the integration of those data into a single data management system that will meet the needs of fishery managers, scientists, and fishermen. It is composed of representatives from natural resource management agencies coastwide, including the Atlantic States Marine Fisheries Commission, the three Atlantic fishery management councils, the 15 Atlantic states, the Potomac River Fisheries Commission, the D.C. Fisheries and Wildlife Division, NOAA Fisheries, and the U.S. Fish & Wildlife Service. For further information please visit www.accsp.org.

Employee of the Quarter: Julie Defilippi Simpson

JULIE DEFILIPPI SIMPSON

For the third quarter of 2020, Commission staff recognized Julie Defilippi Simpson for her notable contributions to the Atlantic Coastal Cooperative Statistics Program (ACCSP). As the first ACCSP Deputy Director, Julie has brought strategic guidance to internal and external project management, while also maintaining her position as Data Team Lead for the past year. In all that she does, Julie epitomizes the award's qualities of teamwork, initiative, responsibility, positive attitude, and results.

Julie has played an integral role in developing project management approaches to support partner needs, balanced with internal cross-team implementation of regional software requirements and process improvements. These approaches, in addition to her role in support of the annual ACCSP funding process have positively impacted program effectiveness. Julie is able to navigate the changing needs and schedules of partners from the Southeast For-Hire Integrated Electronic Reporting Program and One Stop Reporting developments. She supported the implementation of the Federal Information Security Management Act (FISMA) through thoughtful process improvements. In addition to these efforts, Julie has dedicated time to ACCSP's outreach activities; specifically, it's monthly Committee Newsletter and has worked to strengthen integration of the ACCSP's outreach activities within the Commission's overall outreach program.

In addition to effectively multi-tasking on these and other important items, Julie has helped lead ACCSP staff growth by demonstrating a keen awareness of the program objectives and stakeholder support. Julie's ability to successfully balance the needs of multiple partners has directly contributed to ACCSP's ability to meet the needs of, and commitments to its partner agencies. As Employee of the Quarter (EOQ), Julie received a cash award and a letter of appreciation to be placed in her personal record. In addition, her name is on the EOQ plaque displayed in the Commission's lobby. Congratulations, Julie!

Staff Comings and Goings

After 5 and a half years as Fishery Management Plan Coordinator, **MAX APPELMAN** has left the Commission to become a Fishery Management Specialist with NOAA Fisheries. A valued team member and co-worker, Max helped the Commission successfully navigate challenges and changes to many Commission species fishery management programs, including addressing overfishing in Atlantic striped bass and developing ecological reference points for Atlantic menhaden. In addition, Max worked with science staff and state and federal scientists to overcome issues facing the Atlantic sturgeon stock assessment and completed a comprehensive amendment to the Northern Shrimp Plan.

Luckily for all of us, one of Max's primary responsibilities in his new position will be working on state/federal partnerships. So, while we wish Max the very best in the next step in his career, we also look forward to continuing to work with him on marine fisheries management issues for years to come.

In October, **COLEBY WILT** moved on from the Commission, having spent the past 5 years as Recreational Data Coordinator for the Atlantic Coastal Cooperative Statistics Program. Coleby played an important role in aiding the states in their implementation of the Access Point Angler Intercept Survey (APAIS) and the For-hire Telephone Survey (FHTS), components of the Marine Recreational Information Program (MRIP).

Coleby's professional experience and personality brought style and grace to implementing the state conduct of two MRIP surveys. Coleby's contributions to the program will remain in the training approach and software used by ACCSP and the state partners for years to come. His dedication to the task at hand, coupled with his contagious laughter, set a high bar for success while addressing challenging issues. Working with team members Alex DiJohnson and Sarah Rains, Coleby tackled mountains of paper before APAIS data entry transitioned to use of tablets, and collaborated with state staff on error checking to consistently deliver high quality data on schedule. Once APAIS state conduct was well underway, Coleby led programming development for the FHTS call system now in use from Maine to Georgia.

We are indebted to Coleby's considerable contributions and wish him only the very best in all his future endeavors.

FROM THE CHAIR, continued from page 3

So let's talk about some of the positives that have resulted from our response to the pandemic. First and foremost, we have found that we are all stronger and more resilient than we believed ourselves to be. Staff at the Commission and within our state and federal agencies quickly shifted to fulltime telecommuting, barely missing a beat in continuing the important work that we do. Meetings, including the Commisison's quarterly meetings, were moved to webinars. With three quarterly meeting webinars under our belt, I've been impressed with the ease with which we now meet via webinar. Don't get me wrong, it's no substitute for meeting in person, but we are productively using this technology to discuss issues and make management decisions. We can't use this pandemic as an excuse not to make import decisions or delay any actions.

Over this past year, we have accomplished some major tasks and initiated some significant management actions. We completed benchmark stock assessments for Atlantic cobia, American shad, and American lobster to guide our decision-making for these three species. In August, the Atlantic Menhaden Board approved the use of ecological reference points in the management of this important forage species. Over ten years in the making, this is an important first step towards ecosystem-based fisheries management, and I am particularly proud of the work of our state and federal scientists and the states' sustained commitment to make this a reality.

Recognizing the distribution and availability of fishery resources are shifting due to changes in water temperature and historic allocations may no longer reflect current conditions, the states and our partners with the Mid-Atlantic Fishery Management Council, are considering changes to state-by-state commercial allocations for black sea bass. Also, with the Council, we are exploring new approaches to managing recreational fisheries for bluefish, summer flounder, scup, and black sea bass that seek to address access to the resource and create more stability in management measures from year to year.

...there is much we can be grateful for: the dedication of our hardworking staff to succeed from a distance; our sustained commitment to one another to seek outcomes that are in the best interest of the resource while striving for equity in our decisions; and the force of character and determination exhibited by our fishing industry and coastal communities to make the best of these challenging times.

Lastly, we initiated a new plan amendment for striped bass. It's been 17 years since we have considered major revisions to the striped bass management program and amending the plan will be a major undertaking.

So, while it's been an incredibly challenging year, there is much we can be grateful for: the dedication of our hardworking staff to succeed from a distance; our sustained commitment to one another to seek outcomes that are in the best interest of the resource while striving for equity in our decisions; and the force of character and determination exhibited by our fishing industry and coastal communities to make the best of these challenging times. Thank you all for the support you have given Spud and me over the past year, and I look forward to working with you in the year ahead.

In addition to serving as Commission Chair, Patrick Keliher is also Commissioner of the Maine Department of Marine Resources.

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If an update is later made to the record to correct an error, that change would be passed throughout the data flow process to ensure that all systems reflect the accurate data.

This coordination has been an excellent opportunity for the ACCSP staff to highlight the Program's role as both facilitator and application developer. While serving as a central cooperative, ACCSP was able to recognize a future need for data collection and assemble the appropriate participants to discuss the issue as a group. Once a solution was defined, the ACCSP Software team along with Harbor Light Software were able to translate those requirements into a technical solution within the SAFIS eTrips application.

For more information, please contact Marisa Powell, ACCSP Program Assistant, at marisa.powell@accsp.org.