



ASMFC

# FISHERIES *focus*

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Atlantic States Marine Fisheries Commission • 1444 Eye Street, N.W. • Washington, D.C.

*Working towards healthy, self-sustaining populations for all Atlantic coast fish species or successful restoration well in progress by the year 2015*

## **ASMFC Approves American Shad Amendment State Water Fisheries to be Closed by January 1, 2013 unless Sustainability is Demonstrated; Promotes Catch and Release Recreational Fisheries**



At its Winter Meeting, the Atlantic States Marine Fisheries Commission approved Amendment 3 to the Interstate Fishery Management Plan (FMP) for Shad and River Herring (American Shad Management). The Amendment establishes a coastwide commercial and recreational moratorium, with exceptions for sustainable systems. Sustainability is determined through state specific management plans, and applies to systems that demonstrate their commercial and/or recreational fishery will not diminish the potential future stock reproduction and recruitment. The Amendment allows for any state or jurisdiction to keep their waters open to a catch and release recreational fishery. States or jurisdictions without an approved sustainability management plan in place by January 1, 2013 will be closed (with the exception of catch and release recreational fisheries).

The Amendment was developed in response to the findings of the 2007 benchmark stock assessment for Ameri-

can shad, which indicates that American shad stocks are currently at all-time lows and do not appear to be recovering. It identified the primary causes for the continued stock declines as a combination of excessive total mortality, habitat loss and degradation, and migration and habitat access impediments. Although improvement has been seen in a few stocks, many remain severely depressed compared to historic levels.

To improve data collection, the Amendment implements additional required fisheries-independent and dependent monitoring for some states or jurisdictions. This includes monitoring of juvenile and adult American shad stocks; hatchery production; and commercial, recreational, and bycatch fisheries. Additionally, the Amendment increases coordination of monitoring activities for river systems under shared jurisdictions, as well as between freshwater and marine agencies. The Amendment also promotes collaboration between the Commission and the New England and Mid-Atlantic Fishery Management Councils as the Councils work to develop bycatch reduction strategies for shad and river herring through Amendment

5 (Atlantic Herring) and Amendment 14 (Squid, Butterfish and Mackerel). American shad were once considered the most important commercial food fish. Along with river herring, American shad are a valuable cultural and social resource with many community festivals occurring during the spring spawning migration. As a forage fish, American shad play an important ecological role in freshwater, estuarine, and marine environments.

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

*Atlantic States Marine Fisheries Commission*

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## Upcoming Meetings

**3/3 (begins at 1 PM) & 4 (ends at 5 PM):**

National Fish Habitat Board, Ducks Unlimited Headquarters, 1 Waterfowl Way, Memphis, Tennessee.

**3/8 - 12:**

SouthEast Data and Assessment Review Workshop, Atlantic Croaker and Atlantic Menhaden (SEDAR 20), Hilton Garden Inn, 5265 International Boulevard, North Charleston, South Carolina. For more information, please contact Patrick Campfield at pcampfield@asmfc.org.

**3/24 (9 AM - 5 PM):**

ASMFC Atlantic Striped Bass Technical Committee, Radisson Plaza Lord Baltimore, 20 West Baltimore Street, Baltimore, Maryland.

**3/25 (9 AM - 5 PM):**

ASMFC Assessment Science Committee, Radisson Plaza Lord Baltimore, 20 West Baltimore Street, Baltimore, Maryland.

**4/1 (6:00 PM):**

ASMFC Public Hearing on Atlantic Herring Draft Addenda II & III, Maine Department of Marine Resources, Casco Bay Lines Ferry Conference Room, 56 Commercial Street, Portland, Maine. For more information, contact Terry Stockwell at (207) 624-6553.

**4/12 (7:00 PM):**

ASMFC Public Hearing on Atlantic Herring Draft Addenda II & III, New Hampshire Fish and Game, Urban Forestry Center, 45 Elwyn Road, Portsmouth, New Hampshire. For more information, contact Doug Grout at (603) 868-1095.

**4/12:**

2010 Northeast Regional Social Science Symposium, University of New Hampshire, Durham (<http://extension.unh.edu/Marine/NRSSS/NRSSS-Temp.htm>).

**4/13 (9 AM - 3 PM):**

ASMFC Committee on Economics and Social Sciences, Durham, New Hampshire.

**4/13 - 15:**

Mid-Atlantic Fishery Management Council, The Sanderling Resort and Spa, 1461 Duck Road, Duck, North Carolina; 252/261-4111.

**4/27 - 29:**

New England Fishery Management Council, Hilton Hotel, Mystic, Connecticut.

## New Leader -- New Support

Eric Schwaab, Maryland Deputy Secretary of Natural Resources, has been appointed as Assistant Administrator (AA) for the National Marine Fisheries Service. This is good news in the fisheries world for a number of important reasons. The short time span from when Dr. Jane Lubchenco announced Mr. Schwaab's selection to his official arrival at NOAA Fisheries Service six days later belies the deliberate and time-consuming process that led to his appointment.

The head of the Fisheries Service is one of the thousands of politically appointed positions filled when a new administration takes office. Given the increasingly high ethical and professional standards expected of political appointees, and the visceral public reaction to the few who have fallen short of those standards, it is understandable that the appointment process takes time. Although the fisheries position does not require Senate confirmation, potential appointees go through a vetting process including consultation with key members of Congress and relevant interest groups.

It is important to realize that the AA does not have as free a hand to manage U.S. fisheries as some might think. The AA's primary job is to run the agency, providing executive leadership to some 2,800 full-time employees and to administer a nearly one billion dollar budget. NMFS' mission is to manage, protect, and restore our nation's living marine resources and to provide the science needed to make fisheries management decisions. The standards and procedures the agency are required to follow are determined by Congress and described in law.

Mr. Schwaab's appointment has had the immediate effect of providing a sense of stability to NMFS employees and fisheries stakeholders by ending the speculation, uncertainty and, for some, angst over who the next AA would be. With the Administration's person in place, NMFS can begin to move forward on the politically volatile issues confronting the agency.

For those who do not know Mr. Schwaab, he brings an impressive skill set to these challenges from more than 25 years of experience in natural resource management. He first joined Maryland DNR as an enforcement officer, working through the organization to positions of greater responsibility. As Director of Maryland's Fisheries Service for four years, he supervised a staff of fisheries managers, scientists, and field personnel, and interacted with diverse stakeholder groups. As Deputy Secretary of Maryland DNR, he provided executive leadership to some 1,300 state

employees and helped administer a \$248.6 million budget. From his work on Chesapeake Bay issues he understands the important linkage of habitat and water quality to healthy fisheries. As Director and later as Deputy Secretary he earned a solid reputation for his ability to work with diverse interest groups from the recreational, commercial, and environmental communities.

Mr. Schwaab served as Maryland's Administrative Commissioner to the ASMFC for four years, demonstrating his strong conservation ethic while helping lead the expansion of the Commission's multispecies and ecosystem-based approaches for use in fisheries management. Through the Commission forum, he developed a deep understanding of the fisheries issues and challenges faced by his fellow state directors from Maine to Florida. He understands the provisions of the Atlantic Coastal Act and their relevance to the Commission process. He also knows the importance our states place on the funding the Act provides them through the NOAA budget.

Mr. Schwaab's experience in federal fisheries includes his membership on the Mid-Atlantic Fishery Management Council, where he dealt with controversial species such as summer flounder and black sea bass. This Council manages surf clams and ocean quahogs through one of the first federal IFQ programs developed in the country. In fact, the largest ocean clam company in the U.S. is located in Maryland and operates its fleets from the Mid-Atlantic to New England.

Since 2003, Mr. Schwaab has served on NOAA's Marine Fisheries Advisory Committee (MAFAC), along with more than 20 other commercial, recreational, and environmental fisheries experts from around the U.S. As a member of MAFAC, charged with providing fisheries advice the Secretary of Commerce, he has developed a sound understanding of the most important fisheries issues affecting the various regions and stakeholder groups in the U.S. Among committee members he is respected for his quick mind, willingness to listen, and proven ability to work with others.

Given the political volatility of the issues under NMFS' jurisdiction and the broad geographic area impacted by agency actions, it makes sense that the new Administration would want to take the time to get this appointment right. In deciding on Mr. Schwaab that time was well spent. His selection is good news for the fish and for the fishermen. For that reason, we should support him. Hopefully, that is something we can all agree to do.

*From the Executive Director's Desk*



**Horseshoe Crab**  
*Limulus Polyphemus*

**Management Unit:** Maine - Florida

**Common Name:** Horseshoe crab; once called “horse-foot crabs” because of their semblance to a horse’s hoof.

**Interesting Facts:**

- \* Horseshoe crabs have existed for up to 400 million years, predating flying insects, dinosaurs and man.
- \* Horseshoe crabs are more closely related to spiders than crabs.
- \* A female horseshoe crab will lay 90,000 eggs or more during a spawning cycle. From so many eggs, it is estimated that only about 10 horseshoe crabs will make it to adulthood.

**Stock Status:** Unknown

## Species Profile: Horseshoe Crab

### New Assessment Finds Trends in Horseshoe Crab Populations Vary by Region

#### Introduction

Horseshoe crabs are at the epicenter of one of the most interesting marine resource management issues along the Atlantic coast. They play a vital ecological role in the migration of shorebirds from South America to the Arctic, as well as providing bait for commercial American eel and conch fisheries along the Atlantic coast of the United States. Additionally, their unique blood is used by the biomedical industry to produce Limulus Amoebocyte Lysate (LAL), an important tool for detecting contaminated medical devices and drugs. The challenge of fisheries managers is to ensure that horseshoe crabs are managed to meet all these diverse needs, while conserving the resource for the future. The recent stock assessment and external peer review concluded precautionary management is still warranted and that a new Adaptive Resource Management (ARM) framework should be used to inform managers’ decisions.

#### Life History

Horseshoe crab distribution extends along the Atlantic coast from northern Maine to the Yucatan Peninsula and the Gulf of Mexico. The Delaware Bay supports the largest spawning population in the world. Adults either remain in estuaries or migrate to the continental shelf during the winter months. Migrations resume in the spring when the horseshoe crabs move to beach areas to spawn. Juveniles hatch from the beach environment and spend the first two years in nearshore areas.

Spawning usually coincides with the high tide during the full and new moon. Breeding activity is consistently higher during the full moon than the new moon and is also greater during the night. Adults prefer sandy beach areas within bays and coves that are protected from surf. Eggs are laid in clusters or nest sites along the beach with females laying approximately 90,000 eggs per year in different egg clusters.

The eggs play an important ecological role in the food web for migrating shorebirds. The Delaware Bay Estuary is the largest staging area for shorebirds in the Atlantic Flyway. An estimated 425,000 to one million migratory shorebirds converge on the Delaware Bay to feed and rebuild energy reserves prior to completing their northward migration.

Juvenile and adult horseshoe crabs feed mainly on mollusks, although they also prey on a variety of benthic organisms and vascular plants. The horseshoe crab must molt or shed its chitinous exoskeleton to grow and can increase size by up to 25 percent after each molt. Molting occurs several times during the first two



Photo courtesy of Sheila Eyer, USFWS

to three years of a horseshoe crab's life. As it grows larger, more time occurs between molts. It usually takes 17 molts to reach sexual maturity (9 – 12 years).

### Commercial Fisheries & Biomedical Harvest

From the 1850s to the 1920s, between 1.5 and two million horseshoe crabs were harvested annually for fertilizer and livestock feed. Harvest dropped throughout the 1950s and ceased in the 1960s. Between 1970 and 1990, reported commercial harvest ranged from less than 20,000 pounds to greater than two million pounds annually.

Since the mid- to late 1990s, commercial harvest has been sold primarily as bait for the American eel and whelk pot fisheries. Increased need for bait in the whelk fishery likely caused an increase in horseshoe crab harvest in the 1990s, with a peak of nearly six million pounds in 1997. Coastwide commercial landings for bait in 2009 were approximately 717,888 horseshoe crabs, almost a fourfold reduction in landings since 1998 (Figure 1). The reduction is partly due to regulation and partly because of decreased demand. Commercial fishermen have adopted new

## Horseshoe Crab Assessment Q&A

### What Data Were Used?

The horseshoe crab assessment used both fishery-dependent and independent data as well as information about horseshoe crab biology and life history. Fishery-dependent data come largely from commercial bait and biomedical fisheries, while fishery-independent data are collected through scientific research and surveys.

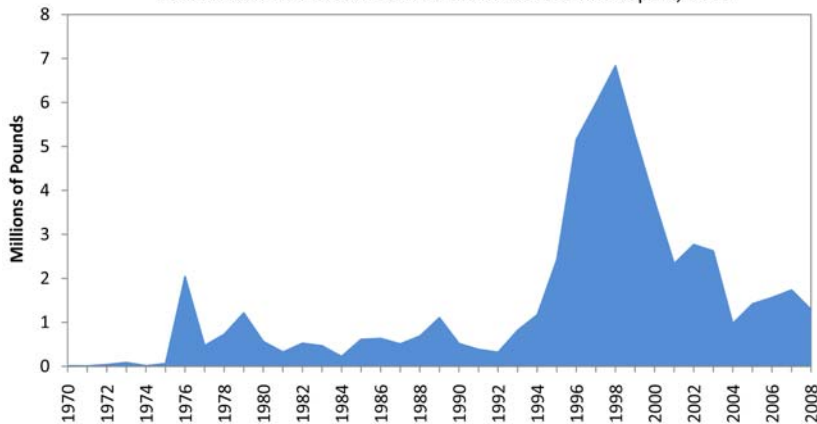
With regards to fishery-independent data, the horseshoe crab assessment used over 30 state and federal surveys to characterize trends in abundance of horseshoe crab. Nine surveys were located in the New England Region, six in the New York Region, 11 in the Delaware Bay Region, and five in the Southeast Region. The National Marine Fisheries Service trawl survey was associated with the Delaware Bay Region because the data used corresponded to tows taken south of Long Island and north of Albemarle Sound.

### What Models Were Used?

Two trend-based methods (Trend Analysis and Autoregressive Integrated Moving Average) were used to assess all four regional stocks, with the peer review panel supporting ARIMA as the preferred stock assessment method for tracking horseshoe crab trends coastwide. Two additional methods (Surplus production model and Catch-survey analysis) were used to assess the Delaware Bay Region. The peer review panel supported catch-survey analysis as the preferred stock assessment method for horseshoe crab in Delaware Bay, but data limitations preclude its use in the other three geographic regions.

For several of the above methods, 1998 was used as the benchmark year for comparison of survey trends, assuming that abundance was relatively low in the year preceding implementation of the FMP. Not all surveys were used in each assessment method. Note that traditional age-based methods could not be used because there is no technique available to measure the ages of horseshoe crabs.

**Figure 1. Horseshoe Crab Coastwide Landings**  
Source: ASMFC Horseshoe Crab Stock Assessment Report, 2009

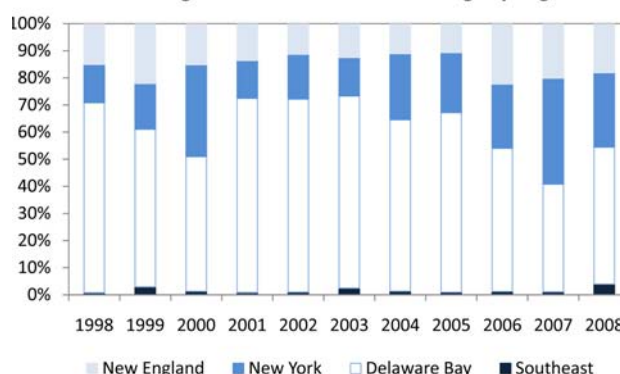


gear such as bait bags and cups allowing them to effectively catch eel and conch while using as little as a tenth of the bait.

The majority of horseshoe crab harvest comes from the Delaware Bay Region, followed by the New York, New England, and Southeast Regions (Figure 2). Trawls, hand harvests, and dredges make up the bulk of commercial horseshoe crab bait landings. Discard mortality occurs in various dredge fisheries and may vary seasonally with temperature, impacting both mature and immature horseshoe crabs; however, the actual rate of discard mortality is unknown.

Some states allow a minimal number of

**Figure 2. Percent of Total Landings by Region**



*continued on page 6*

## Species Profile: Horseshoe Crab (continued from page 5)

crabs to be retained for personal use, but landings are not quantified. The limit for personal use is typically 25 crabs/person/day.

Horseshoe crabs are also collected by the biomedical industry to support the production of LAL (short for *Limulus* amoebocyte lysate), a clotting agent that aids in the detection of human pathogens in patients, drugs, and intravenous devices. No other procedure has the same accuracy as the LAL test. Blood from the horseshoe crab is obtained by collecting adults, extracting a portion of their blood, and releasing them alive. Following bleeding, most crabs are returned to the waters where they were captured. However, since 2004, states have the ability to enter bled crabs into the bait market and count those crabs against the bait quota. In recent years, the total estimate of horseshoe crabs

caught for medical usage is around 500,000 per year on the Atlantic coast. Estimated mortality on biomedical crabs not counted against state bait quotas has increased from about 45,000 in 2004 to 63,000 in 2008.

### Stock Status

The status of the stock is unknown largely due to the lack of long-term data sets for commercial landings and stock abundance. However, the 2009 peer-reviewed benchmark stock assessment indicates that the Delaware Bay horseshoe crab population is experiencing positive population growth. Increasing trends were most evident for juveniles, followed by adult males. A significant increase in adult females was

observed in the Virginia Tech Benthic Trawl Survey. These patterns are indicative of population recovery, given that horseshoe crab females take longer to mature than males. Positive trends in horseshoe crab numbers are also being seen in the Southeast region.

In contrast, the stock assessment showed declining abundance in New York and New England. Declines in the New England population were also apparent

**Regional Trends in Horseshoe Crab Abundance**

| Region       | Time series duration of longest dataset | Conclusion about population change |
|--------------|---|------------------------------------|
| New England  | 1978 - 2008                             | Declined                           |
| New York     | 1987 - 2008                             | Declined                           |
| Delaware Bay | 1988 - 2008                             | Increased                          |
| Southeast    | 1993 - 2009                             | Increased                          |

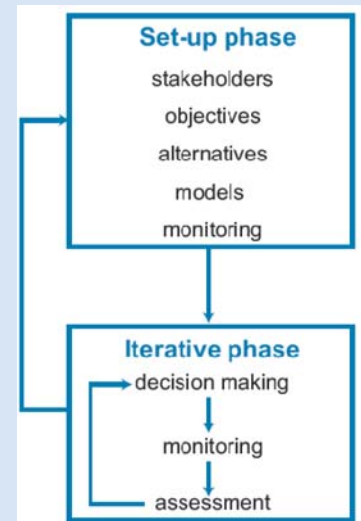
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## Adaptive Resource Management Framework

Horseshoe crab eggs are considered essential food for several shorebird species in the Delaware Bay, the second largest migratory staging area for shorebirds in North America. The 2004 horseshoe crab assessment suggested a framework be developed that linked management of horseshoe crab harvest to multispecies objectives, particularly red knot shorebird recovery. In 2007, the Commission Horseshoe Crab and US Fish and Wildlife Service Shorebird Technical Committees met jointly and formed a working group that was tasked with development of a multispecies Adaptive Resource Management (ARM) framework for Delaware Bay. The goal of the ARM framework was to transparently incorporate views of stakeholders and utilize predictive modeling to assess the potential consequences of multiple, alternative management actions in Delaware Bay.

After setting objectives and identifying alternative management actions, ARM involves several steps: 1) building models that make predictions about how a system will respond to management actions, 2) implementing management actions based on those predictions, 3) monitoring the ecosystem to evaluate the accuracy of model predictions, 4) inserting new data into the models to generating updated predictions, and 5) revising management actions as necessary to reflect the latest state of knowledge about the ecosystem. ARM is an iterative process that evolves continuously as new information is gathered and the effects of management actions are evaluated.

Within this ARM framework, a set of alternative multispecies models have been developed for the Delaware Bay Region to predict the optimal horseshoe crab harvest strategy that would still allow enough eggs to be available for red knot population needs. These models incorporate uncertainty in model predictions and will be updated with new information as monitoring progresses. Above figure illustrates the double loop learning process of adaptive management.



## **ASMFC Sets Spiny Dogfish 2010/2011 Fishing Year Quota at 15 Million Pounds**

In February, the Commission's Spiny Dogfish and Coastal Sharks Management Board (Board) approved a 15 million pound quota with a maximum possession limit of 3,000 pounds for the 2010/2011 fishing year (May 1 – April 30). Under Addendum II, the quota will be allocated with 58% to states from Maine through Connecticut, 26% to New York through Virginia, and 16% to North Carolina.

The 2009 Northeast Fisheries Science Center assessment update indicates that the spiny dogfish are not overfished and overfishing is not occurring. The 2009 spawning stock biomass is estimated to be 360 million pounds, which is 2.7% below the target biomass of 370 million pounds and well above the threshold of 184 million pounds. Total removals in 2008 were approximately 23.9 million pounds corresponding to an F estimate of 0.117, well below the overfishing threshold of  $F = 0.39$  and essentially equivalent to  $F_{rebuild} = 0.11$ . Among the sources of removals, U.S. commercial landings comprised 9.1 million pounds, Canadian commercial landings were 3.5 million pounds, and total (US and Canadian) dead discards were 10.9 million pounds, of which recreational dead discards were 228,000 pounds.

While the stock is considered rebuilt, the assessment update contains a number of caveats. These caveats include a size frequency of the female population that is concentrated between 75 and 95 cm with very few fish above 100 cm or below 70 cm; low numbers of juvenile male and female dogfish that imply that the population will fluctuate over time decreasing around 2017; a continued skewed sex ratio; and the use of assumptions about pup survivorship and selectivity of gear. After reviewing the assessment update, the Technical Committee recommended that the Board take

a precautionary approach and set a quota based on  $F_{rebuild}$  of 0.11 = 10.7 million pounds.

The Technical Committee recommended status quo possession limits at a maximum of 3,000 pounds, noting that under the 3,000 pound possession limit, target fishing mortality target rates have not been exceeded and fishermen have been able to harvest the entire quota. The Technical Committee urged that possession limits should be set at a level that minimizes discards. Discards are associated with both high and low possession limits.

The Board also approved a 33 fish possession limit for sharks in the large coastal sharks (LCS) species group (silky, tiger, blacktip, spinner, bull, lemon, nurse, scalloped hammerhead, great hammerhead, and smooth hammerhead sharks) for 2010. The Coastal Sharks Technical Committee recommended continuing with a 33 fish LCS possession limit in 2010 to maintain consistency between state and federal limits.

For more information, please contact Christopher Vonderweidt, Fishery Management Plan Coordinator, at (202)289-6400.

### **ASMFC Finds New Jersey Out of Compliance with the Interstate FMP for Atlantic Coastal Sharks**

In February, the Atlantic States Marine Fisheries Commission found the State of New Jersey out of compliance with the mandatory management measures contained in the Interstate Fishery Management Plan (FMP) for Atlantic Coastal Sharks. The Commission notified the Secretaries of Commerce and the Interior of its finding. This action was taken pursuant to the provisions of the Atlantic Coastal Fisheries Cooperative Management Act of 1993.

The State of New Jersey has not implemented the regulations of the Interstate FMP for Atlantic Coastal Sharks. The implementation of these regulations is necessary to rebuild depleted shark stocks, ensure sustainable harvest of others, and provide protection for sharks in state nursing and pupping grounds. The Technical Committee has identified Delaware Bay as one of the most important nursing grounds for depleted sandbar sharks on the Atlantic coast. Included in the 22 commercial and recreational regulations in the FMP is a seasonal closure from Virginia north through New Jersey to protect pupping sandbar sharks.

In order to come back into compliance the State of New Jersey must implement all measures contained in the FMP. Upon notification by the Commission, the Secretary of Commerce has 30 days to review the recommendation and determine appropriate action, which may include a federal moratorium on fishing for all 40 species of coastal sharks managed under the FMP in New Jersey's state waters.

# ASMFC Atlantic Herring Section Sets Specifications for 2010 – 2012

The Commission's Atlantic Herring Section has set optimal yield (OY) for the 2010 – 2012 fishing seasons at 91,200 metric tons (mt). For all three years, the OY will be distributed to the three Atlantic herring management areas and two sub-areas as follows: Area 1A = 26,546 mt, Area 1B = 4,362 mt, Area 2 = 22,146 mt, and Area 3 = 38,146 mt. In addition, the three year specifications allow for the allocation of 3,000 mt to Area 1A in November and December if landings in the New Brunswick fishery are below 9,000 mt by October 15. The Area 1A TAC will be distributed seasonally for the 2010 fishing season with 72.8% (19,325 mt) available from June 1 – September 30 and 27.2 % (7,220 mt) available from October 1 – December 31.

Optimal yield was reduced by 53,800 mt below the 2008 and 2009 amount (145,000 mt) because of a retrospective pattern that has overes-

timated biomass on average of 40% over the last several years. The specifications are consistent with those sent to NOAA's Northeast Regional Administrator by the New England Fishery Management Council. The table below outlines the Commission's final herring specifications for 2010-2012, as well as those sent to the Regional Administrator.

The Section also approved Draft Addendum II and III for public comment. Draft Addendum II proposes changes

to the specification definitions, administrative process and annual paybacks for overages in a management area. Draft Addendum III proposes exemptions from 'days out' for small mesh bottom trawl vessels fishing in Area 1A. Both Draft Addenda will be released for public comment in early March 2010 and public hearings will be held in March and April 2010. Information on the addenda's availability and public hearing schedule will be released in early March (visit [www.asmf.org](http://www.asmf.org) for details).

**Summary of ASMFC and NEFMC Atlantic Herring Specifications for 2010-2012. Specifications are for 2010 – 2012 with the exception of allowable biological catch. Values are provided in metric tons.**

| SPECIFICATIONS   | ASMFC  | NEFMC Recommended                                  |
|--|--|--|
| Allowable Biological Catch (May become OFL in ASMFC Addendum II and NEFMC Amendment 4) | 145,000 – 2010<br>134,000 – 2011<br>127,000 - 2012 | 145,000 – 2010<br>134,000 – 2011<br>127,000 – 2012 |
| U.S. Optimal Yield   | 91,200   | 91,200   |
| Border Transfer (BT)   | 4,000  | 4,000  |
| TAC Area 1A  | 26,546   | 26,546   |
| TAC Area 1B  | 4,362  | 4,362  |
| TAC Area 2   | 22,146   | 22,146   |
| TAC Area 3   | 38,146   | 38,146   |
| Research Set-Aside   | None   | None   |
| Fixed Gear Set-Aside (1A)  | 295  | 295  |

## ASMFC Comings & Goings

### Staff

Edith S. Carr -- This past December, Edith Carr, the smiling face and professional voice of the Commission to visitors and callers, retired after more than 12 years of dedicated and faithful service to the Atlantic States Marine Fisheries Commission.



As Staff Assistant, Edith earned a reputation for her efficient and careful processing of travel vouchers, ensuring the Commission's many participants receive quick reimbursement for travel and meeting expenses. Edith provided administrative support to staff while also coordinating the weekly mailings to Commissioners, helping them stay informed on key issues. Beyond attending to her assigned duties, she was always willing to lend a helping hand to others. For all her outstanding efforts, Edith was named the first ASMFC Employee of the Quarter in 2003.

Edith earned the respect and admiration of the Commission staff over the years for her kind heart and gracious dignity, always willing to lend a listening ear or, when asked, to provide gentle words of wisdom. In all that she did, Edith distinguished herself as a trusted and valuable employee, and a good friend to many. While she will be greatly missed, we wish her long, healthy, and happy retirement.

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## Horseshoe Crab Species Profile (continued from page 6)

in the 2004 assessment. However, declines in New York represent a downturn from the 2004 assessment. The Technical Committee believes decreased harvest quotas in Delaware Bay encouraged increased harvest in nearby regions. The Technical Committee recommends continued precautionary management to address effects of redirected harvest from Delaware Bay to outlying populations. Since the 2008 fishing season, New York and Massachusetts continue to adjust their regulations to address recent increased harvest in their respective waters. (See side-bar for additional information on the data and models used in the recent assessment.)

The 2009 peer review also included an evaluation of the multispecies Adaptive Resource Management (ARM) framework. The ARM framework includes modeling that links management of horseshoe crab harvest to multispecies objectives, particularly red knot shorebird recovery. It was developed jointly by the Commission, U.S. Fish and Wildlife Service, and U.S. Geological Survey in recognition of the importance of horseshoe crab eggs to several shorebird species in the Delaware Bay. Within the ARM framework, a set of alternative multispecies models have been developed for the Delaware Bay to predict

the optimal horseshoe crab harvest strategy that would address the needs of red knot population as well as the fishing industry. Both the peer review panel and Horseshoe Crab Management Board accepted use of the ARM framework as a tool to provide guidance for the multispecies management of horseshoe crab. (See side-bar on page 6 for additional information on ARM Framework.)

### Atlantic Coastal Management

In 1998, the Commission approved the Interstate Fishery Management Plan (FMP) for Horseshoe Crabs. The goal of the FMP is to conserve and protect the horseshoe crab resource by maintaining sustainable levels of spawning stock biomass, which ensures that the species can continue to occupy its role in the ecology of coastal ecosystems and provide for its continued use over time. Addendum I to the FMP, approved in February 2000, established individual state caps on horseshoe crab bait landings and recommended a harvest area closure in federal waters off of Delaware. On March 7, 2001, NOAA Fisheries established the Carl N. Shuster Jr. Horseshoe Crab Reserve, which encompasses nearly 1,500 square miles of federal waters off the mouth of Delaware Bay.

In March 2004, the Horseshoe Crab

Management Board approved Addendum III in response to recommendations made by the U.S. Fish and Wildlife Service Shorebird Technical Committee. The addendum furthered the conservation of horseshoe crab and migratory shorebird populations in and around the Delaware Bay. Approved in May 2006, Addendum IV further restricted bait harvest in the Mid-Atlantic region. It was designed to maximize egg availability to migratory shorebirds in the Delaware Bay by prohibiting harvest of horseshoe crab prior to and during the peak spawning season for the crabs as well as the peak feeding period for shorebirds. Addendum V extends Addendum IV's provisions through fall of 2010.

In February 2010, the Management Board initiated a new addendum to establish a management program after Addendum V expires. The Draft Addendum will propose options to extend the current management measures under Addendum V as well as incorporate a number of options that have been included in the ARM framework. The Board will meet during the Commission's Spring Meeting in May 2010 to consider approval of the Draft Addendum for public comment.

## ASMFC Comings & Goings (continued from page 8)

**Jessie Thomas-Blate** -- In February, the Commission said good-bye to Jessie Thomas-Blate as she left to pursue the position of Most Endangered Rivers Coordinator with American Rivers. In her 3 1/2 years with the Commission as Habitat Coordinator, Jessie demonstrated a steadfast commitment to the protection, restoration, and enhancement of fish habitats through partnerships, policy development, and education. She strengthened partnerships through revitalization of the Habitat Committee and development of the Atlantic Coastal Fish Habitat Partnership, both of which are geared toward promoting healthy habitats for Atlantic coast fish species. Jessie raised awareness of current issues of concern for aquatic habitat along the Atlantic coast through the quarterly publication of *Habitat Hotline Atlantic* and aided fish and habitat managers in conserving vital fish habitat through the publication three important documents: (1) *The Importance of Habitat Created*

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## ACCSP Funds Marine Fisheries-dependent Data Projects for 2010

The Atlantic Coastal Cooperative Statistics Program (ACCSP) has allocated nearly two million dollars to its state and federal partners for new and ongoing projects to improve data for coastal fisheries in 2010.

- Maine Department of Marine Resources (DMR) received \$88,895 for the maintenance project to continue portside bycatch sampling and commercial catch sampling of the Atlantic herring (*Clupea harengus*), Atlantic mackerel (*Scomber scombrus*), and Atlantic menhaden (*Brevoortia tyrannus*) fisheries. Also, DMR received \$298,875 to continue to manage dealer and harvester reporting in Maine.
- Massachusetts Division of Marine Fisheries received \$120,162 to continue collecting trip-level reports for all Massachusetts commercial permit holders.
- Rhode Island Department of Environmental Management received \$160,298 to maintain and coordinate fisheries-dependent data feeds to ACCSP from the state.
- New York Department of Environmental Conservation received \$184,017 to continue and expand the fishery-dependent data collection and biological sampling in the state.
- New Jersey Department of Environmental Protection received \$191,913 to further develop biological characterization and implementation of the Standard Atlantic Fisheries Information System (SAFIS) for New Jersey commercial fisheries.
- South Carolina Department of Natural Resources received \$56,937 to continue to sample hard parts for aging from offshore commercial fisheries in South Carolina, and, \$96,945 to continue instituting a collection method for ACCSP commercial module in South Carolina.
- The Recreational Technical Committee of the ACCSP received funds for two maintenance projects and one new project. The first maintenance project was awarded \$133,153 to reduce catch and effort variances for important managed recreational fisheries on the Atlantic coast (New Hampshire through Georgia). The second was

awarded 354,093 to increase intercept sampling levels for the Marine Recreational Information Program (MRIP) for-hire methodology of the charter boat and headboat fishery on the Atlantic coast (New Hampshire through Florida). The new project "Pilot Wave 1 Telephone Survey to Expand MRFSS/MRIP in New York, New Jersey, Delaware, Maryland, and Virginia" was awarded \$61,307.

- North Carolina Division of Marine Fisheries (DMF) received \$78,460 for the new project "Fishery Observer Response Team: Phase 1." Also, DMF received \$79,042 for the new project "Age sampling of the commercial snapper/grouper fishery in North Carolina and age structure of black sea bass in the commercial snapper/grouper fishery."

The Program received approximately \$1.5 million as the annual operational administrative grant.

### About ACCSP

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. For more information, please contact Ann McElhatton, Outreach Coordinator, at [info@accsp.org](mailto:info@accsp.org) or (202) 216-5690.



Photo courtesy of Blake Price of NC DENR

## Kate Taylor Awarded ASMFC Employee of the Quarter

In just 17 months, Kate Taylor has made her mark within the Commission, with the completion of two fishery management plan amendments and a river herring status review, and work on an upcoming benchmark stock assessment for river herring. Her efforts have firmly established her as a vital contributor to the Commission's Vision of "healthy, self-sustaining populations for all Atlantic coast fish species or successful restoration well in progress by the year 2015." In recognition of her accomplishments, Kate was named Employee of the Quarter for the first quarter of 2010. The award is intended to recognize contributions and qualities in the areas of teamwork, initiative, responsibility, quality of work, positive attitude, and results.

During her short time with the Commission, Kate has made important contributions to the management of shad and river herring, both extremely complex management programs due to their extensive geographic range and multiple threats to the populations. As Chair of the Plan Development Teams for both shad and river herring, Kate oversaw the completion of Amendments 2 (River Herring Management) and 3 (Shad Management) to the Interstate Fishery Management Plan for Shad and River Herring. Due to concerns regarding stock status, both amendments establish coastwide commercial and recreational moratoria, with exceptions for sustainable systems, by January 1, 2013.

Despite the considerable amount of effort she spent on the shad and river herring amendments, Kate has been able to make substantial progress on the development of the benchmark stock assessment for river herring. In 2009, she worked closely with the Commission's Science Department to complete the River Herring Status Review. As a result of their combined efforts, the assessment team is on track to complete the river herring benchmark assessment a year early. She has also taken the initiative to begin work on the American eel benchmark assessment to ensure its completion in 2011 as scheduled.

Kate's enthusiastic and cheerful attitude, clear and focused work products, and commitment to effective teamwork not only make her a great employee and coworker but an invaluable asset to the Commission's fisheries management program. Kate has a Master's in Environmental Management from the Nicholas School of the Environment at Duke University and a Bachelor of Science in Environmental Science from the University of San Francisco. As an Employee of the Quarter, she received a \$500 cash award, a small gift, and a letter of appreciation to be placed in her personnel record. In addition, her name is on the Employee of Quarter Plaque displayed in the Commission's lobby. Congratulations, Kate!



## Loran-C Termination

On February 8, 2010, in accordance with the 2010 Department of Homeland Security Appropriations Act, the U.S. Coast Guard terminated the transmission of all U.S. LORAN-C signals. The US-Canadian signal (the 5930 chain) is bound by a bilateral agreement and will continue to transmit for a longer period. The estimate right now is that this signal will cease transmitting in June 2010. For more information, please go to the Internet links provided below:

<http://edocket.access.gpo.gov/2010/pdf/2010-84.pdf> (Record of Decision (ROD) on the U.S. Coast Guard Long Range Aids to Navigation (Loran-C) Program 2010-00084 [Docket No. USCG-2007-28460])

<http://edocket.access.gpo.gov/2010/pdf/2010-83.pdf> (Terminate Long Range Aids to Navigation (Loran-C) Signal 2010-00083 [Docket No. USCG-2009-0299])

<http://www.navcen.uscg.gov/Loran/default.htm> (general Information on Loran-C Termination)

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## **ASMFC Comings & Goings (continued from page 9)**

*by Molluscan Shellfish to Managed Species along the Atlantic Coast of the United;* (2) *Atlantic Coast Diadromous Fish Habitat: A Review of Utilization, Threats, Recommendations for Conservation, and Research Needs;* and (3) *Living Shorelines: Impacts of Erosion Control Strategies on Coastal Habitats*. Jessie also played a key role in overseeing two Commission workshops — one on the Impacts of Liquefied Natural Gas and Alternative Energy Development on Fishery Resources and the other on Fish Passage Issues Impacting Atlantic Coast States. Through her accomplishments she enhanced the ability of the Commission's Habitat Program to make significant progress in improving Atlantic coast fish habitats.

Jessie will now channel her passion about the environment and natural resources into her new position with American Rivers. We wish Jessie the very best in all her future endeavors!

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