



ASMFC

# FISHERIES *focus*

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Atlantic States Marine Fisheries Commission • 1050 N. Highland Street • Suite 200A-N • Arlington, VA

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

## **ASMFC Summer Meeting August 7 - 9, 2012**

**Crowne Plaza Hotel Old Town  
901 North Fairfax Street  
Alexandria, Virginia**

### **Final Schedule**

The agenda is subject to change. The agenda reflects the current estimate of time required for scheduled Board meetings. The Commission may adjust this agenda in accordance with the actual duration of Board meetings. Interested parties should anticipate Boards starting earlier or later than indicated herein. Meeting materials can be obtained on the Commission website at <http://www.asmfc.org/summer2012Mtg.htm>.

#### August 7, 2012

8:30 - 10:30 AM Atlantic Herring Section

- Welcome/Call to Order (*D. Pierce*)
- Public Comment
- Consider Draft Addendum V for Final Approval Final Action
  - Review Options
  - Review Public Comment Summary
  - Technical Committee Report (*M. Cieri*)
  - Advisory Panel Report (*J. Kaelin*)
  - Law Enforcement Committee Report (*J. Marston*)
  - Consider Final Approval of Draft Addendum V
- Review New England Fishery Management Council Amendment 5 Selected Measures
- Atlantic Herring SAW 54 Benchmark Assessment
  - Stock Assessment Report (*M. Cieri*)
  - Peer Review Panel Report (*M. Cieri*)
- Other Business/Adjourn

10:45 AM - 12:30 PM American Lobster Management Board

- Welcome/Call to Order (*D. Grout*)
- Public Comment
- Consider Draft Addendum XVIII for Final Approval (*T. Kerns*) Final Action
  - Review Public Comment
  - Review Options
  - Consider Final Approval of Draft Addendum XVIII
- Discussion of Lobster Conservation Management Area 1 V-notch Definition
- Technical Committee Report (*T. Kerns*)
- Other Business/Adjourn

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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*

Paul J. Diodati (MA), Chair  
Dr. Louis B. Daniel, III (NC), Vice-Chair

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## Upcoming Meetings

**8/7 - 9:**

ASMFC Summer Meeting, Crowne Plaza Old Town Alexandria, 901 N. Fairfax Street, Alexandria, Virginia; 703.683.6000.

**8/10 (10 AM - 3 PM):**

ASMFC Horseshoe Crab Adaptive Resource Management Working Group, Patuxent Wildlife Research Center, 12311 Beech Forest Road, Laurel, Maryland.

**8/14 - 16:**

Mid-Atlantic Fishery Management Council, Marriott Courtyard Philadelphia Downtown, 211 N. Juniper Street, Philadelphia, Pennsylvania.

**9/5 & 6:**

ASMFC Delaware Bay Ecosystem Technical Committee, ASMFC Offices, 1050 N. Highland Street, Suite 200A-N, Arlington, VA; 703.842.0740.

**9/5 - 7:**

ASMFC American Lobster Stock Assessment Life History Workshop, Maine Department of Marine Resources, West Boothbay Harbor Office, 194 McKown Point Road, West Boothbay, Maine.

**9/10 - 14:**

South Atlantic Fishery Management Council, The Charleston Marriott Hotel, 170 Lockwood Boulevard, Charleston, South Carolina; 800.968.3569.

**9/17 - 21:**

ASMFC Technical Meeting Week, location to be determined.

**9/25 - 27:**

New England Fishery Management Council, Radisson Hotel, Plymouth, Massachusetts.

**10/16 - 18:**

Mid-Atlantic Fishery Management Council, Ocean Place Resort, One Ocean Blvd., Long Branch, New Jersey; 732.571.4000.

**10/21 - 25:**

ASMFC 71st Annual Meeting, Radisson Plaza – Warwick Hotel, 220 S. 17th Street, Philadelphia, Pennsylvania; 215.735.6000.

**11/13 - 15:**

New England Fishery Management Council, Newport Marriott, Newport, Rhode Island.

**11/13 - 16:**

ASMFC Intermediate Stock Assessment Training Series: A Mock Assessment Workshop – Part II, Providence, Rhode Island. For more information, please contact Genny Nesslage at gnesslage@asmfc.org.

## Charting A Future Course

The following article was provided by Robert E. Beal, Acting Executive Director.

Change in life or business often brings uncertainty, stepping from the known to the unknown. However, change also brings opportunity. The Commission's current transition in leadership has provided me with the opportunity, privilege, and responsibility of serving as the Acting Executive Director. I am grateful and excited about taking on the challenges that comes with the position.

During my 15 years at the Commission, I have been very fortunate to have learned from two strong leaders – Jack Dunnigan and Vince O'Shea. Jack and Vince approached the Executive Director position with different styles and strengths, but both were effective in advancing the Commission toward its goal. Jack was a visionary strategic leader, a "big picture guy," and a team builder, while Vince focused more on process, science-based management decisions, and the Commission's long-term financial stability.

Under Jack's leadership, the states worked with Congress to develop and implement the Atlantic Coastal Fisheries Cooperative Management Act (ACFCMA), recognizing no single government agency has the authority to manage coastal migratory marine resources throughout their range. ACFCMA formalized the long-standing, partnerships among the states, and between the states and federal agencies, to conserve and manage Atlantic coast fishery resources. Building upon the enormous success of the Atlantic Striped Bass Conservation Act, ACFCMA provided the states with the tools and resources, through congressional funding, to support the restoration of Atlantic coast fisheries. In 1994, Jack and three other visionaries conceived the concept for the Atlantic Coastal Cooperative Statistics Program (ACCSP). Twenty three coastal resource agencies came together to form ACCSP and establish coastwide data collection standards to support a comprehensive data warehouse for fishery-dependent data along the Atlantic coast.

During Jack's tenure, the states also initiated the Commission's current strategic planning process. ASMFC's first five-year strategic plan, completed in 1998, firmly established the Commissioners' shared vision of restoring Atlantic coast fish species by 2015, as well as the near- and long-term goals to achieve that vision. Today, the Commission operates under its third five-year strategic plan.

During the past decade with Vince as Executive Director, the Commission has made significant advances in science-

based fisheries management and data collection. Vince's leadership resulted in the establishment of the Northeast Area Monitoring and Assessment Program (NEAMAP) to improve the coordination of fishery-independent data collection from Maine to Cape Hatteras, as well as address the lack of nearshore sampling coverage in the Mid-Atlantic Bight. An independent peer review panel supported the NEAMAP design and operation, and the Program has collected a robust time-series of data that is being used to support stock assessments.

In response to diminishing state resources and increased complexity of fisheries stock assessments, Vince increased the stock assessment capacity of the Commission staff. These staff members are now providing significant contributions to the Commission's technical and stock assessment committees as evidenced by the recent endorsement of Commission benchmark stock assessments for American eel and river herring by an independent panel of scientists. This is particularly noteworthy given that the prior assessments for both species had not been approved for management use. Vince believed strong science is the foundation of good fisheries management decisions.

Vince's most visible and tangible contribution was the purchase of the ASMFC office space, ensuring the long-term financial stability of the Commission. In less than 10 years with full payment of the mortgage, the Commission will have greater flexibility to reprogram funds to more directly support fisheries management along the Atlantic coast.

The teamwork and support of the 45 Commissioners combined with the vision, hard work, and leadership of Jack and Vince has resulted in numerous fishery management success stories. While we all can be proud of these accomplishments, there is a lot of work still to do. The Commission's task of managing finite marine resources grows more complex with the consideration of predator/prey interactions, habitat, and water quality, in addition to the more traditional considerations of stock maintenance, rebuilding, and the allocation of fisheries resources. Also, the level of scrutiny of stock assessments will continue to grow, demanding better data, more refined assessment models, and talented assessment scientists. The Commission will have to contend with this increased complexity in a climate of reduced fiscal resources. These issues will need to be addressed as the states develop the Commission's next Strategic Plan for 2014 – 2018. The Commission's new Executive Director will need Jack's vision and Vince's fiscal responsibility to build upon our past successes and chart the future course of the Commission.



## Weakfish *Cynoscion regalis*

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

**Interesting Facts:**

\* Weakfish are members of the drum family (Sciaenidae), which also includes spotted sea trout, croaker, spot and red drum. The males of these fish species are all noted for the drumming noise they produce, particularly during spawning periods.

\* The name weakfish refers to the tender, easily torn membrane of the fish's mouth, rather than its fighting ability.

\* Delaware declared weakfish its state fish in 1981.

**Largest Recorded:** 38 inches, 19 lbs and 2 oz. (Delaware Bay, 1989)

**Maximum Age:** 17 years

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

**Stock Status:** Depleted, overfishing is not occurring

# Species Profile: Weakfish *Recovery of Historically Important Species Hindered by High Natural Mortality*

## Introduction

Weakfish, *Cynoscion regalis*, have supported fisheries along the Atlantic coast since at least the 1800s. However, in recent years, commercial and recreational fishermen alike have had increasing difficulty landing weakfish. In 2010, total weakfish harvest reached an all time low of 278,000 pounds. For comparison, total harvest was greater than 31 million pounds in 1986.

The reduction in harvest reflects a drastic decline in weakfish biomass since 1996. Over the last 14 years, while fishing mortality has been modest and stable, natural mortality (deaths due to predation, starvation, and other natural causes) has increased to levels previously unseen. The result is a weakfish stock that is not subject to overfishing, but is depleted.

In response to these findings, the Commission's Weakfish Management Board implemented more restrictive management measures in 2010 intended to reduce the level of harvest without creating a large amount of discards, posing the stock for recovery should natural mortality decrease in the future.



## Life History

Weakfish occur along the Atlantic coast of North America from Nova Scotia to southeastern Florida, but are more common from New York to North Carolina. Warming of coastal waters in the spring prompts an inshore and northerly migration of adults from their offshore wintering grounds between Chesapeake Bay and Cape Lookout, North Carolina to nearshore sounds, bays, and estuaries. Spawning occurs shortly afterwards, peaking from April to June, with some geographical variation in timing. Females continuously produce eggs during the spawning season and release them over a period of time rather than once. In the fall, an offshore and southerly migration of adults coincides with declining water temperatures. Feeding on microscopic animals, larval weakfish journey from spawning areas to nursery areas, located in deeper portions of coastal rivers, bays, sounds, and estuaries. They remain in these areas until October to December of their first year, after which the juveniles migrate to the coast. Growth in weakfish is especially rapid in the first year and they mature at a young age. Size at age-1 is variable but most fish are 10 to 11 inches long. As adults, weakfish are often found near the periphery of eelgrass beds, perhaps because weakfish feed primarily on shrimp, other crustaceans, and small fish that are found near these grass beds.

## Recreational & Commercial Fisheries

Weakfish have supported fisheries along the Atlantic coast since the 1800s. Over the last 15 years, however, fishermen have had increasing difficulty landing weakfish. From 1950 to 1970, commercial landings fluctuated without trend, ranging from three to nine million pounds. The early 1970s began a period of tremendous growth in the fishery, with landings peaking at 36 million pounds in 1980.

The commercial fishery declined steadily throughout the 1980s, dropping to a low of six million pounds in 1994. Following an increase in abundance due to management measures, commercial harvest increased slowly through 1998. Beginning in 1999, commercial landings began to decline again, and by 2008, were reduced to

less than 500,000 pounds. Commercial landings in 2010 reached an all-time historic low of less than 200,000 pounds (see Figure 1). The primary commercial gears for weakfish are trawls and gillnets, although weakfish are also landed using pound nets and haul seines.

Recreational landings have followed a similar trend to that of commercial landings. After several harvests above 10 million pounds in the early 1980s, landings decreased to two million pounds by 1989, and hovered between one and two million pounds through the early 1990s. Harvest then increased to over four million pounds by the late 1990s, before exhibiting a decline like that in the commercial fishery. The 2011 recreational harvest is also at an historic low of below 37,000 pounds.

### Stock Status

Based on the latest benchmark stock assessment, which was conducted and peer reviewed in 2009, the weakfish stock is depleted, with spawning stock biomass (SSB) estimated at 10.8 million pounds (compared to 62 million pounds in 1996). While the decline in the stock primarily results from a change in the natural mortality of weakfish in recent years, it is further exacerbated by continued removals by commercial and recreational fisheries.

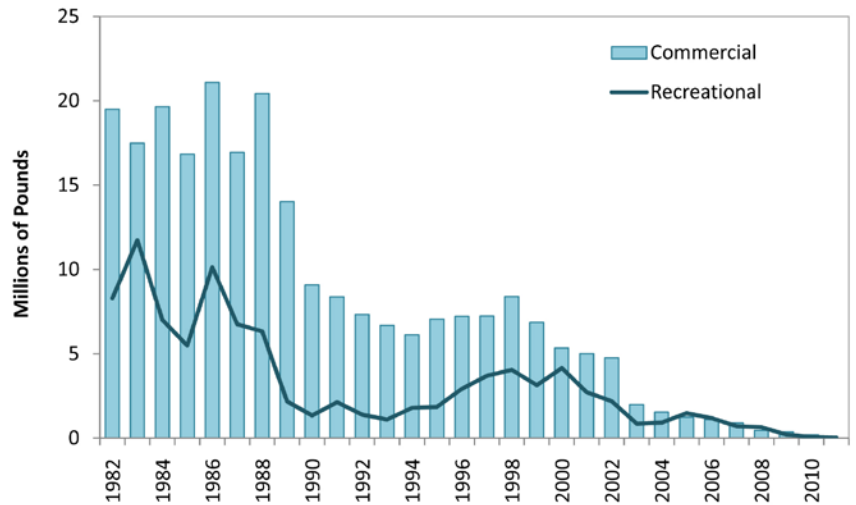
Natural mortality has risen substantially since 1995, with factors such as predation, competition, and changes in the environment having a stronger influence on recent weakfish stock dynamics rather than fishing mortality. Given current high natural mortality levels, stock projections indicate that the stock is unlikely to recover rapidly. In order to rebuild the stock, total mortality will need to be reduced, although this is unlikely to occur until natural mortality decreases to previous levels.

On a positive note, juvenile abundance surveys indicate that young-of-the-year weakfish continued to be present in numbers similar to previous years, suggesting that recruitment at this point has not been severely impacted despite low stock size. The next benchmark stock assessment is scheduled for 2014.

### Atlantic Coast Management

In 1985, as a result of population declines and limited biological information, the Commission developed an Interstate Fishery Management Plan for Weakfish. While the goals of the plan and its two subsequent amendments were well intentioned, rebuilding of the stocks did not occur until the mid-1990s when the states implemented more restrictive regulations, first voluntarily, and then for compliance purposes once the Atlantic Coastal Fisheries Cooperative Management Act enabled implementation of a mandatory plan (Amendment 3). A subsequent stock assessment showed a weakfish resource that had experienced modest growth, which prompted the development of Amendment 4 to build upon these gains. Amendment 4 was implemented in 2003 to establish appropriate biological reference points, set a rebuilding schedule if limits were exceeded, revise the reference period on which recreational management options were based, increase the bycatch allowance, and establish a biological sampling program.

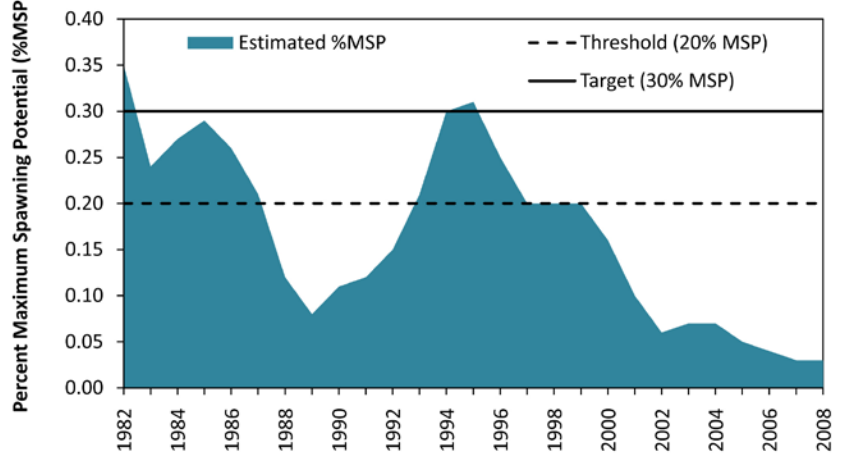
**Figure 1. Commercial and Recreational Weakfish Landings**  
Source: Personal communication from the National Marine Fisheries Service, Fisheries Statistics Division, 2012



Timeline of Management Actions: FMP (1985); Amendment 1 (1991); Amendment 2 (1995); Amendment 3 (1996); Amendment 4 (2002); Addendum I (2005); Addenda II & III (2007); Addendum IV (2009)

**Figure 2. Weakfish Maximum Spawning Potential**

Source: ASMFC Weakfish Technical Committee, 2009



Timeline of Management Actions: FMP (1985); Amendment 1 (1991); Amendment 2 (1995); Amendment 3 (1996); Amendment 4 (2002); Addendum I (2005); Addenda II & III (2007); Addendum IV (2009)

# ASMFC Summer Meeting Final Agenda (continued from page 1)

## 1:30 - 3:30 PM Atlantic Striped Bass Management Board

- Welcome/Call to Order (*T. O'Connell*)
- Public Comment
- Consider Draft Addendum III for Final Approval **Final Action**
  - Review Draft Addendum III (*K. Taylor*)
  - Review Public Comment (*K. Taylor*)
  - Consider Final Approval of Draft Addendum III
- Virginia Request for Alternative Management (*J. Travelstead*)
- Technical Committee Report (*A. Sharov*)
- Other Business/Adjourn

## 3:45 - 4:45 PM Shad & River Herring Management Board

- Welcome/Call to Order (*M. Duval*)
- Public Comment
- Update on NEFMC Amendment 5 and MAFMC Amendment 14 Action (*K. Taylor*)
- Review of NOAA Fisheries Proposed Endangered Species Act Listing of River Herring (*K. Taylor*)
- Discuss Rhode Island Request for River Herring Bycatch Fishery (*R. Ballou*)
- Other Business/Adjourn

## 5:00 - 6:00 PM Winter Flounder Management Board

- Welcome/Call to Order (*D. Simpson*)
- Public Comment
- Review Addendum I Management Measures
- Review SARC 52 Gulf of Maine Results and Technical Committee Recommendations
- Review Massachusetts Gulf of Maine Winter Flounder Request (*D. Pierce*) **Possible Action**
- Other Business/Adjourn

### August 8, 2012

#### 7:30 - 9:30 AM

#### Executive Committee

*The Executive Committee will meet in closed session to discuss issues related to the Executive Director position.*

- Welcome/Call to Order (*P. Diodati*)
- Public Comment
- Discussion of Executive Director Position
  - Qualifications
  - Search Process/Timeline
- Other Business/Adjourn

#### 9:45 AM - 12:45 PM Atlantic Menhaden Management Board & 1:45 - 2:45 PM

- Welcome/Call to Order (*L. Daniel*)

- Public Comment
- 2012 Atlantic Menhaden Stock Assessment Update **Action**
  - Presentation of Stock Assessment Report (*E. Williams*)
  - Technical Committee Report (*J. Brust*)
  - Consider Final Approval of Stock Assessment Update Report for Management Use
- Consider Approval of Draft Amendment 2 for Public Comment **Action**
  - Review Draft Amendment Options (*M. Waine*)
  - Advisory Panel Report (*W. Windley*)
- Multispecies Technical Committee Report on Potential Multiple Management Objective Decision Analysis (MODA) Funding Sources
- Other Business/Adjourn

#### 3:00 - 4:30 PM Sturgeon Management Board

- Welcome/Call to Order (*R. Allen*)
- Public Comment
- Atlantic Sturgeon Endangered Species Listing
  - Technical Committee Report on Listing Methodology and Potential Bycatch Reduction Strategies (*B. Post*) **Possible Action**
  - Technical Committee Report on Delisting Proposal (*B. Post*) **Possible Action**
  - Section 10 Application Update
- Other Business/Adjourn

#### 4:45 - 6:15 PM Interstate Fisheries Management Program (ISFMP) Policy Board

- Welcome/Call to Order (*P. Diodati*)
- Public Comment
- Review of Stock Rebuilding Performance (*T. Kerns*)
- Habitat Committee Update (*R. Beal*) **Action**
  - Approval of Offshore Wind Habitat Document
  - Discuss Future Direction of Habitat Program
- Atlantic Coastal Fish Habitat Partnership Report (*E. Greene*)
- Technical Orientation and Guidance Document Update (*T. Kerns*)
- Other Business/Adjourn

### August 9, 2012

#### 8:00 - 10:00 AM

#### American Eel Management Board

- Welcome/Call to Order (*T. Stockwell*)
- Public Comment
- Technical Committee Report on Potential Management Options (*B. Chase*) **Possible Action**
  - Discuss Potential Management Options for American Eel
- Update on Proposed American Eel Endangered Species and CITES Petitions (*K. Taylor*)
- Other Business/Adjourn

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## 10:15 AM - 12:45 PM Spiny Dogfish & Coastal Sharks Management Board

- Welcome/Call to Order (*D. Simpson*)
- Public Comment
- Consider Spiny Dogfish Draft Addendum IV for Final Approval **Final Action**
  - Review Options (*D. Chesky*)
  - Review Public Comment Summary (*D. Chesky*)
  - Technical Committee Report (*D. Chesky*)
  - Advisory Panel Report (*D. Chesky*)
- Massachusetts Spiny Dogfish 2011 Unreported Landings (*D. Pierce*)
- Technical Committee Review of New Jersey Smooth Dogfish Request (*B. Winner*) **Possible Action**
- Discuss State Shark Fin Possession Prohibition Bills
- Other Business/Adjourn

## 1:15 - 2:45 PM South Atlantic State/Federal Fisheries Management Board

- Welcome/Call to Order (*L. Daniel*)
- Public Comment
- Atlantic Croaker Technical Committee Report (*J. Grist*) **Possible Action**
- Spot Plan Review Team Trigger Report (*J. Grist*)
- Draft Black Drum Interstate Fishery Management Plan
  - Review Comment on Public Information Document (*D. Chesky*)
  - Provide Guidance to the Plan Development Team (*L. Daniel*)
  - Consider Fishery Management Plan Reviews and State Compliance (*D. Chesky*) **Action**
- Review Nomination for South Atlantic Species Advisory Panel (*D. Chesky*)
- Other Business/Adjourn

## 2:45 - 3:15 PM ISFMP Policy Board (continued)

- Welcome/Call to Order (*P. Diodati*)
- Public Comment
- Review of Non-compliance Findings (if necessary)
- Other Business/Adjourn

## 3:15 - 3:45 PM Business Session

- Welcome/Call to Order (*P. Diodati*)
- Public Comment
- Review of Non-compliance Findings (if necessary)
- Consider Approval of Fishery Management Plans/Amendments (if necessary) **Final Action**
- Other Business/Adjourn

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## ASMFC Comings & Goings

### Commissioners

Representative William L. Wainwright -- With gratitude for his public service and condolences to his friends and family, we sadly report that North Carolina State Representative William L. Wainwright died on July 17, 2012 at the age of 64. He served as North Carolina's Legislative Commissioner to the ASMFC from October 2005 until his passing.

Representative Wainwright, a presiding elder in the African Methodist Episcopal Zion church, first joined the Legislature in 1991 and was elected House speaker pro tempore in 2007. He served in the post for four years. A former House Finance Committee chairman, Representative Wainwright became deputy minority leader when the Republicans took over the House in 2011. Representative

Wainwright "conducted his business at the General Assembly with as much passion as anyone I encountered during my time in office," said House Minority Leader Joe Hackney, who was speaker when Representative Wainwright was speaker pro tempore. "He was a talented negotiator motivated only by what was best for the people of his district."

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## Weakfish Species Profile (continued from page 5)

Two subsequent addenda in 2005 and 2007 replaced Amendment 4's biological sampling program and bycatch reduction device certification requirements for the southern penaeid shrimp trawl fishery.

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



Juvenile weakfish captured during a MD DNR survey.

In response to the findings of 2009 stock assessment, which concluded that stock rebuilding can only occur if total mortality (fishing plus natural) is reduced, the Board implemented further harvest reductions in 2010 through Addendum IV. The implemented measures include a one fish recreational creel limit, 100 pound commercial trip limit, 100 pound commercial bycatch limit, and 100 undersized fish per trip allowance for the finfish trawl fishery. Further, all other management measures previously adopted to conserve the stock and reduce bycatch were maintained. The Addendum also established percentage based biological reference points with an overfished/depleted threshold of 20% SSB and a target of 30% SSB, relative to an unfished stock (100% SSB would be the SSB of an unfished stock).

In August 2010, the Weakfish Board approved a conservation equivalency proposal from North Carolina to implement commercial regulations allowing 10% bycatch of weakfish up to 1000 pounds, in place of the 100 pound trip limit. Analysis of North Carolina commercial data for 2005-2008 indicated that the alternative regulations would result in an equivalent landings

## Understanding Natural Mortality

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

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

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

Fisheries scientists attempt to include natural mortality in stock assessment calculations, because it is known that not all fish losses are due to fishing and that in some situations natural losses may be of greater significance to a population than fishing losses. Classically, there are two methods for deriving natural mortality, one involving a constant rate of mortality among ages, and another involving age-specific mortality. Constant mortality rate assumes each life stage experiences the same

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# ACFHP Endorses Three Proposed Projects in Support of Atlantic Coastal, Estuarine-Dependent, and Diadromous Fish Habitat Conservation

This spring, the Atlantic Coastal Fish Habitat Partnership (ACFHP) endorsed three new proposed projects that support an ACFHP restoration or protection objective and a subregional priority habitat. These three projects are as follows:

## South Atlantic Aquatic Connectivity Assessment and Tool

Led jointly by The Nature Conservancy, the Southeast Aquatic Resources Partnership (SARP), and the University of Georgia (UGA), the South Atlantic Aquatic Connectivity Assessment and Tool proposes to develop a spatially explicit estimate of small (and large) barriers in the South Atlantic Landscape Conservation Cooperative and use them to conduct an assessment of aquatic connectivity. This project will build on the The Nature Conservancy's Northeast Aquatic Connectivity and Chesapeake Fish Passage Prioritization projects, SARP's recent flow alteration work, and UGA's barrier inventory work and will be a major advancement towards a consistent assessment of aquatic connectivity across the entire eastern seaboard. ACFHP views this project as an important precursor and first step towards achieving several objectives noted in its Conservation Strategic Plan, and will serve as a beneficial tool for future decision making. For more information on this project, please contact Erik Martin ([emartin@tnc.org](mailto:emartin@tnc.org)).

## Alewife Outreach and Education

In May 2012, ACFHP issued an endorsement for the education and outreach components of a proposed Alewife Outreach, Research, and Education project, led by Sea Research Foundation, Inc. The overall purpose of the proposed project is to establish a partnership among Sea Research Foundation, the Tributary Mill Conservancy, Inc., and the Connecticut Department of Energy and Environmental Protection to increase public awareness of Connecticut's declining alewife (*A. pseudoharengus*) populations, the

role that river herring play in freshwater ecosystems, and how individuals can support current alewife conservation programs. By conducting workshops at the Tributary Mill Conservancy and Sea Research Foundation's Mystic Aquarium and establishing a permanent Aquarium exhibit on the work, the project will engage the public in conservation work being accomplished through this collaboration and cultivate a new generation of environmental stewards who will protect, conserve, and advocate for Long Island Sound. For more information on this project, please contact Tracy Romano ([tromano@searesearch.org](mailto:tromano@searesearch.org)).


## Grassy Flats Estuarine Habitat Restoration Project

Grassy Flats Estuarine Habitat Restoration Project is a collaborative effort among six partners aimed to cap approximately 30,000 cubic yards of muck sediments at the main source of sedimentation in the Lake Worth Lagoon and enhance/restore 19.5 acres of Subregional Priority Habitats, including 18.8 acres of seagrass and 0.61 acre of mangrove wetlands. To provide structural complexity and ecological diversity, 1.5 acres of salt marsh, 0.51 acre of tidal flat habitat, and 0.93 acre of oyster/artificial

reef habitat will also be provided. The project supports the restoration objectives of the ACFHP by restoring Subregional Priority Habitats and providing long-term water quality benefits to the Lake Worth Lagoon. For more information on this project, please contact Erin McDevitt ([Erin.McDevitt@MyFWC.com](mailto:Erin.McDevitt@MyFWC.com)) or Julie Mitchell ([JMitchell@pbcgov.org](mailto:JMitchell@pbcgov.org)).

## For More Information

ACFHP is a coastwide collaborative effort to accelerate the conservation of habitat for native Atlantic coastal, estuarine-dependent, and diadromous fishes. Interested in seeking an ACFHP letter of endorsement and having ACFHP as a formal partner on your project? Endorsement application and guidelines can be found at <http://www.atlanticfishhabitat.org/Endorsement.cfm>.



### Grassy Flats

A Lake Worth Lagoon Restoration Project

**Lake Worth Lagoon**

- 20 miles long, stretching from North Palm Beach to Ocean Ridge.
- Largest estuary in Palm Beach County.
- Separated from the ocean by Singer Island and Palm Beach Island.
- Two permanent, man-made inlets.

**Project Location**

- East side of Lake Worth Lagoon, between Southern Boulevard and Lake Avenue, in the Town of Palm Beach.
- Directly adjacent to Par 3 Golf Course.

**Problems**


- Organic (muck) sediment has accumulated over time, resulting in poor water quality and reduced habitat value.

**The Solution**


- Cap muck sediments with sand.
- Create seagrass, salt marsh, mangrove, and oyster habitat.

**Benefits**


- Increased food and nursery habitat for fish and other aquatic species.
- Increased abundance and diversity of invertebrates, which benefits fish, wading birds, and shorebirds.
- Long-term water quality benefits.
- Improved habitat for recreational opportunities, including fishing and kayaking.




**Seagrass (10 acres)**




**Salt Marsh (1.5 acres)**




**Red Mangroves (0.7 acres)**




**American Oystercatcher**



**Florida Manatee**




**Hermit Crab**



**Project Overview**

- Place approximately 73,000 cubic yards of sand over 12.2 acres to cap muck sediments and construct three islands.
- Create 10 acres of seagrass habitat, 1.5 acres of salt marsh, and 0.7 acre of mangrove habitat.
- Place approximately 8,500 tons of limestone rock to stabilize the three islands and provide a hard surface for the growth of oysters.
- Plant approximately 3,000 red mangroves and 35,000 plugs of smooth cordgrass.
- Estimated commencement date, Summer/Fall 2013.



Palm Beach County Board of County Commissioners  
 Department of Environmental Resources Management  
 2300 North Jog Road - Fourth Floor, West Palm Beach, FL 33411  
 Phone: 561-233-2400 www.pbcgov.com/ern

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## ACCSP Schedules Data Warehouse Webinar for August 15

On August 15, the Atlantic Coastal Cooperative Statistics Program (ACCSP) will be hosting a webinar on 'What You Need to Know to Navigate the Data Warehouse.' The ACCSP Data Warehouse harmonizes data received from all program partners into one integrated set of codes for variables such as species, gear, and fishing area, and gives users the ability to query and retrieve Atlantic coast commercial and recreational fisheries data dating back to 1950.

The webinar will present an overview on how to effectively gain access to and navigate within the Data Warehouse. It will identify how to cite ACCSP data, as well as provide an in-depth look at the caveats that exist within the Data Warehouse. The webinar will also cover ways in which the data have been used in the past and how to go about the custom data request process. To register for the webinar please visit: <https://www3.gotomeeting.com/register/386461326>.

If you would like to familiarize yourself with the Data Warehouse, a user manual

is available at [http://www.accsp.org/documents/ACCSP\\_DataWarehouse\\_UserMan\\_072811.pdf](http://www.accsp.org/documents/ACCSP_DataWarehouse_UserMan_072811.pdf).

### What Data are Currently Available via ACCSP?

The ACCSP updates data within the Data Warehouse quarterly. The most up-to-date commercial catch and effort, recreational catch and effort, and biological data can be found <http://www.accsp.org/login.htm>.

The following is the current status of available data as of summer 2012:

- **Commercial Landings and Commercial Catch and Effort (Trip Reports)** -- Commercial landings data represent the best compilation of state and federal landings submitted by both dealers and fishermen. Total pounds and dollar value are complete, but some effort information (area/gear) may be lacking. Commercial catch and effort (trip reports) are fisherman reports, or logbooks that typically have good effort data (area and gear) but in most cases do not



represent 100% of the fishing activity (pounds landed).

### 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. It is composed of representatives from natural resource management agencies coastwide, including ASMFC, the three Atlantic fishery management councils, the 15 Atlantic states, the Potomac River Fisheries Commission, the D.C. Fisheries and Wildlife Division, NOAA Fisheries Service, and the U.S. Fish & Wildlife Service.

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## Weakfish Species Profile (continued from page 5)

reduction as the 100 pound commercial trip limit. Concern that the bycatch allowance may not reduce landings the same amount as a trip limit under a rebuilding weakfish stock prompted the Management Board to request that the Technical Committee annually review the fishery to ensure that conservation equivalency is maintained. The latest Board review of these measures in February 2012 concluded the amount of mortality from North Carolina's bycatch allowance has an insignificant impact on the weakfish total mortality, especially considering the continued decreased in overall weakfish landings.

For more information, please contact Mike Wayne, Fishery Management Plan Coordinator, at [mwayne@asmfc.org](mailto:mwayne@asmfc.org) or 703.842.0740.

## Understanding Natural Mortality (continued from page 8)

rate of loss or same chance of dying from natural causes. Age-specific mortality, on the other hand, assumes that an age-1 fish will die from natural causes at a different rate (generally higher rate) than an age-10 fish. It is estimated by using information on maximum age, growth, temperature, and female reproductive maturity.

Fisheries scientists continue to try and account for all of the components of natural mortality, and their constant fluctuations in amount and impact. They use population modeling, tagging, and general life history characteristics, to better understand of how these natural mortality process functions in managed stocks. In doing so, they continue to strive to develop measures that are based on the best available science. For more information on natural mortality or other fisheries sciences topics, download a copy of the Commission's Guide to Fisheries Science and Stock Assessments at <http://www.asmfc.org/publications/GuideTo-FisheriesScienceAndStockAssessments.pdf>. Printed copies can also be requested at [info@asmfc.org](mailto:info@asmfc.org).

## Katie Drew Awarded ASMFC Employee of the Quarter

During her three and a half years with the Commission, Katie Drew has helped to significantly improve the science upon which the Commission bases its management decisions, contributing 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." Her accomplishments include a peer review panel endorsed benchmark stock assessment for river herring and the development of standardized fish ageing protocols for bluefish, winter flounder, and tautog. In recognition of these achievements, Katie was named Employee of the Quarter for the third quarter of 2012. The award is intended to recognize contributions and qualities in the areas of teamwork, initiative, responsibility, quality of work, positive attitude, and results. This is the second time Katie has received this award.

Over the last three years, Katie worked closely with the Commission's River Herring Stock Assessment Subcommittee to conduct the first ever coastwide river herring stock assessment. The assessment,

which addressed 52 river-specific populations of alewife and blueback herring, was recently endorsed for management use by an independent panel of scientists and will form the basis for future management actions for these two important anadromous species. Through her development of standardized fish ageing protocols and coordinating the exchange of fish ageing samples among different laboratories, Katie has also helped to improve two key data components of stock assessments, namely fish age and growth information.

Katie's dedication to teamwork, creative vision, depth of knowledge, and enthusiasm towards her work make her a true asset to the Commission's Fisheries Science Program and the management programs



it supports. Katie has a Ph.D. in Marine Biology and Fisheries from the University of Miami's Rosenstiel School of Marine and Atmospheric Science and a Bachelor of Science in Biology from Harvey Mudd College in Claremont, California. 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, Katie!

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## ASMFC Comings & Goings (continued from page 7)

Current Speaker Thom Tillis called Representative Wainwright a "dedicated public servant who was known for his deeply-held faith and the passion he brought to every aspect of his life. He was respected by members on both sides of the aisle, and the halls of the General Assembly will not be the same without him."

**Representative Mike Vereb** -- Representative Mike Vereb has been appointed to serve as Pennsylvania's Legislative Commissioner to the ASMFC. He replaces Representative Curt Schroder who stepped down from office earlier this year.

Representative Mike Vereb has represented the 150th Legislative District in Montgomery County, Pennsylvania since

November 2006. He currently serves as a member of the House Republican Leadership team in the position of House Republican Caucus Secretary, where he is responsible for helping to establish a legislative agenda and recording all official legislative activities in the House of Representatives.

As a state lawmaker, Representative Vereb has been one of the leading voices calling for government reform and transparency. In 2008, he was selected to serve on the Speaker's Commission on Legislative Reform to change the way the Legislature conducts business. Representative Vereb has worked to raise House ethics standards, increase the accessibility of government expenditures to the public and

reform the state's procurement policies. Representative Vereb has also worked to eliminate wasteful government spending and duplicative government programs. Welcome aboard, Representative Vereb!



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