



ASMFC

Volume 16, Issue 1
January/February 2007

FISHERIES *focus*

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 Tautog Board Approves Addendum IV Addendum Establishes Stock Rebuilding Program

On January 30, 2007, the Commission's Tautog Management Board approved Addendum IV to the Interstate Fishery Management Plan for Tautog. The Addendum initiates a stock rebuilding program for tautog through the establishment of coastwide target and threshold levels for spawning stock biomass (SSB), and a new fishing mortality target. Under the new program, states will be required to reduce fishing mortality by 28%. The recreational sector, which accounts for 90% of tautog harvest, can expect the implementation of more restrictive management measures by January 1, 2008. These measures may include decreased bag limits and seasonal closures.

This action was taken in response to the findings of the 2005 peer-reviewed stock assessment, as well as those of the recently updated virtual population analysis (VPA). The assessment indicates that the tautog resource remains at low biomass levels. Since the mid-1980s, tautog has undergone a substantial decrease in total and spawning stock biomass. Both indicators are currently at levels about one-third their early time series average. Based on the current fishing mortality target ($F = 0.30$) and the recent fishing mortality estimates for the last two years, overfishing is not occurring.



Based on the current fishing mortality target ($F = 0.30$) and the recent fishing mortality estimates for the last two years, overfishing is not occurring.

To allow fisheries managers to assess the status of the stock, the Addendum establishes for the first time a SSB target of 26,800 metric tons and a SSB threshold of 20,100 metric tons. Based on these new reference points, the tautog resource, with an estimated SSB of 10,600 metric tons, is considered overfished. To initiate rebuilding, the Addendum establishes a new fishing mortality target of 0.20, compared to the current fishing mortality rate of 0.28. Under this scenario, states will be required to reduce fishing mortality in their recreational sectors by 28.6%. States will have until January 1, 2008 to fully implement the Addendum. The Board is scheduled to meet in May to review and approve state proposals for their recreational fisheries. A rebuilt stock would provide important benefits to recreational, commercial, and for-hire fisheries.

The Board also received a report from the Commission's Law Enforcement Committee regarding the illegal live fish fishery that has been perceived by some as increasing in magnitude throughout the Mid-Atlantic region. The Board expressed its concern about this issue and committed to closely monitor enforcement efforts on the tautog fishery.

Copies of the Addendum will be available by early February and can be obtained by contacting the Commission at (202) 289-6400 or via the Commission's website at www.asmf.org under Breaking News.

Inside This Issue

Species Profile: Atlantic Menhaden Page 4

Collaborative Menhaden Research Efforts Underway Page 6

American Eel Board Initiates Addendum Page 6

Weakfish Board Adopts Addendum II & Approves Draft Addendum III for Public Comment Page 7

Science Highlight: ASMFC Stock Assessment Training Workshop Series Page 8

ASMFC Comings & Goings Page 9

New York Implements SAFIS Page 10

ASMFC Employee of the Quarter Named Page 11

ASMFC Technical Committee Meeting Week Schedule Page 12

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 a deliberative body of the Atlantic coastal states, coordinating the conservation and management of nearshore fishery resources, including marine, shell and anadromous 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

George D. Lapointe (ME), Chair
Robert H. Boyles, Jr., (SC), Vice-Chair

John V. O'Shea, Executive Director
Robert E. Beal, Director, Interstate Fisheries Management Program
Megan E. Caldwell, Science Director
Laura C. Leach, Director of Finance & Administration

Tina L. Berger, Editor
tberger@asmfc.org

(202)289-6400 Phone • (202)289-6051 Fax
www.asmfc.org

Upcoming Meetings

3/5 (10 AM - 4:30 PM):

ASMFC Northern Shrimp Technical Committee, New Hampshire Fish & Game, 225 Main Street, Durham, New Hampshire.

3/13 (Noon - 5 PM) - 14 (8 AM - 1 PM):

ASMFC Committee on Economics and Social Sciences, Quorum Hotel, 700 North Westshore Boulevard, Tampa, Florida.

3/20 (7:00 - 11:00 PM):

Public Hearing on Draft of Amendment 14 to the Interstate FMP for Summer Flounder, Scup, and Black Sea Bass, NYDEC, Bureau of Marine Resources Conference Room, 205 Belle Mead Road, East Setauket, New York.

3/21 (7:00 PM):

Public Hearing on Draft of Amendment 14 to the Interstate FMP for Summer Flounder, Scup, and Black Sea Bass, CT DEP, Marine Headquarters, Main Building Library, 333 Ferry Road, Old Lyme, Connecticut.

3/22 (6:00 PM):

Public Hearing on Draft of Amendment 14 to the Interstate FMP for Summer Flounder, Scup, and Black Sea Bass, RI Div. of Fish & Wildlife, Stedman Government Center, 4808 Tower Hill Road, Wakefield, Rhode Island.

3/26 (7:00 PM):

Public Hearing on Draft of Amendment 14 to the Interstate FMP for Summer Flounder, Scup, and Black Sea Bass, NJ Div. of Fish & Wildlife, Ocean County Administration Building, Room 119, 101 Hooper Avenue, Toms River, New Jersey.

3/27 - 29:

ASMFC Technical Committee Meeting Week, Holiday Inn – Inner Harbor, Baltimore, Maryland (see page 12 for meeting schedule).

4/10 - 11:

NOAA Chesapeake Bay Office Fisheries Symposium, Patuxent Wildlife Refuge Visitor Center, 12100 Beech Forest Road, Laurel, Maryland. For more information, please contact Braddock Spear at (202) 289-6400.

4/10 - 12:

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

4/12:

ASMFC Atlantic Menhaden Technical Committee, Patuxent Wildlife Refuge Visitor Center, 12100 Beech Forest Road, Laurel, Maryland.

Last month President Bush signed the reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act, last revised in 1996. The legislation submitted to the President was the result of a significant effort by Alaska's Senator Ted Stevens and others to get a fisheries bill through both the Senate and House in the final lame duck minutes of the last Congress.

The new law was drafted against the backdrop of the findings of the Pew Oceans Commission and the U.S. Commission on Ocean Policy, two bodies that have framed the current debate on improving U.S. ocean and fisheries governance. House and Senate subcommittees had collected input on much of the contents of the law during hearings here in Washington and in coastal cities over the last several years.

The Magnuson-Stevens Act, renamed in 1996 in recognition of Senator Stevens' lifelong work on fisheries legislation, guides America's fisheries policy and gives NOAA Fisheries Service authority to manage the nation's \$62 billion fishing industry. Alaska is the source for more than half of the nation's commercial catch, which explains the state's and Senator Stevens' great interest in national fisheries policy.

President Ford signed the first Magnuson Act into law in 1976. The legislation created the U.S. exclusive economic zone establishing federal jurisdiction over fisheries resources in the area from three to 200 miles off our coasts. (On the Atlantic, the waters from the coast out to three miles remain under the jurisdiction of the states and are managed under the Atlantic Coastal Fisheries Cooperative Management Act of 1993.)

The Magnuson Act created a system of eight regional fishery management councils to assist the Secretary of Commerce in managing fisheries in the newly claimed area. The Act specified how the councils were to be organized and the standards by which U.S. marine fisheries resources were to be managed. The Magnuson Act provided the tools to bring foreign fishing off of our coasts under tight control, and eventually, to an end. It set the stage for the "Americanization" of our fisheries, attracting large investments in harvesting and processing capacities. While foreign fishing is long gone, the challenges brought by the development (some might say overdevelopment) of U.S. fishing capacity remain.

Let's fast forward now to some of the highlights of the reauthorized Act. It requires councils to develop catch

limits that do not exceed the limits recommended by their scientific advisors. Furthermore, Councils must set catch limits that end overfishing for fisheries where overfishing is occurring by 2010 and establish procedures to ensure that overfishing does not occur in all other fisheries by 2011.

Within two years of an overfishing determination, a council must prepare and implement a plan to end overfishing immediately. The rebuilding timeline of 10 years (and related exceptions) remains unchanged, except the Secretary of Commerce is granted authority to extend the rebuilding timeframe for summer flounder provided overfishing is not occurring and biomass is increasing.

The new Act authorizes councils to design and implement limited access privilege programs (LAPPs). It provides national standards and guidelines for the establishment of LAPPs (the collective term describing management schemes such as individual fishing quotas, sector allocations, harvesting cooperatives, etc.) It also contains provisions to facilitate the sharing of information collected from vessel monitoring systems with state enforcement agencies.

For recreational fisheries, the Act includes an important provision requiring the Secretary to implement eight regional registries of recreational anglers for the purpose of improving catch and effort data collection. While there will be no fee for the registry before January 2011, there is a provision for the Secretary to allow state saltwater license programs to stand in place of the federal registry provided the state programs meet certain criteria with regard to data collection.

Implementing the 235 pages of the Act will require a significant effort by the Secretary and the NOAA Fisheries Service, with the bill requiring a number of reports to Congress on a variety of fisheries issues. In response to that tasking, a website has been established at www.nmfs.noaa.gov/msa2007/ where you can get more details on the Act and monitor actions implementing the new provisions.

The new Act is a clear step forward for fishermen and fish. It keeps the existing council system in place while strengthening the requirements to use scientific advice and catch limits to end overfishing and maintain sustainable harvests of healthy fisheries. Putting more fish in the water should be the end result. Hopefully, that is something we can all support.

Species Profile: Atlantic Menhaden

Increased Demand for Omega-3 Fatty Acids May Lead to Increased Harvest

Introduction

Omega-3 is expected to be one of 2007's hottest food additives. It has been shown to cut risks of heart disease and possibly other diseases such as Alzheimer's. Atlantic menhaden, a small, oily, schooling fish, is a major source of omega-3 fatty acids. Harvest of this species may increase as omega-3 fatty acids are increasingly being added to foods such as orange juice, cereal, and butter substitutes. The species also plays an important role in marine ecosystems as both a forage fish to larger predators and a filter feeder.

Life History

Atlantic menhaden, *Brevoortia tyrannus*, are found in estuarine and coastal waters from northern Florida to Nova Scotia and serve as prey (food) for many fish, sea birds and marine mammals. Adult and juvenile menhaden form large, near-surface schools, primarily in estuaries and nearshore ocean waters from early spring through early winter. By summer, menhaden schools stratify by size and age along the coast, with older and larger menhaden found farther north. During fall-early winter, menhaden of all sizes and ages migrate south around the North Carolina capes to spawn.

Sexual maturity begins just before age three, with major spawning areas from the Carolinas to New Jersey. The majority of spawning occurs primarily offshore (20-30 miles) during winter. Buoyant eggs hatch at sea and larvae are carried into estuarine nursery areas by ocean currents. Juveniles spend most of their first year of life in estuaries, migrating to the ocean in late fall. Adult and juvenile menhaden migrate south in fall-winter, and adult menhaden migrate north in spring.

Menhaden feed by straining plankton from the water, their gill rakers forming a specialized basket to efficiently capture tiny food. Menhaden provide a link between primary production and higher organisms by consuming plankton and providing forage (food) for species such as striped bass, bluefish, and weakfish, to name just a few.

Commercial Fishery

The Atlantic menhaden commercial fishery consists of both a reduction fishery and a bait fishery. The reduction fishery first began in New England during the early 1800s and spread south after the Civil War. The purse seine was introduced after the Civil War allowing the fishery to expand. Major technological innovations led to further expansion of the fishery coastwide. As a result, landings and fishing effort increased from 1940 through the late 1950s, declined precipitously during the 1960s when the population was overfished, and then increased significantly during the late 1970s and early 1980s. Currently, there is one remaining reduction plant in operation on the Atlantic coast processing menhaden into fishmeal and oil. The fishmeal



Photo courtesy of John Surrick, Chesapeake Bay Foundation



Atlantic Menhaden *Brevoortia tyrannus*

Common Names:
menhaden, bunker, moss-bunker, poggy, fatback, bugfish, skipjack

Family: Clupeidae, which include herring, sardine and shad species

Interesting Fish Facts:
•Menhaden travel in large schools which may number in the millions

Special Uses:
•Fishmeal, fish oil (high in omega-3 type fatty acids), fish solubles

Age at Recruitment:
Fully recruited at age 2 (9 - 10", 1/2 lbs.); 50% recruited at age 1 (6", 2-3 oz.)

Life Span: 10 - 12 years, with maximum length/weight of 20"/3 lbs.

Stock Status: Not overfished & overfishing is not occurring on a coastwide basis

is used as fertilizer and animal feed. The fish oil is used in many commercial products and in omega-3 supplements for human health. The coastwide bait fishery supplies fishermen with bait for popular commercial and sport fish.

The 2005 harvest of Atlantic menhaden for reduction was 146,900 metric tons, which was a decrease from the 2004 season (183,400 mt), and 20.5 percent below average landings for the previous five years (184,880 mt). Eleven reduction purse-seine vessels landed Atlantic menhaden during the 2005 season.

The bait fishery for menhaden has become increasingly important from North Carolina to New England. The major portion of bait landings in recent years has been harvested from Virginia and New Jersey waters, followed by Maryland, the Potomac River, and North Carolina. Bait landings for 2005 were 38,200 metric tons, 5.8 percent above the average landings for the previous five years (35,980 mt).

Status of the Stock

The 2006 stock assessment update found that on a coastwide basis Atlantic menhaden are not overfished and overfishing is not occurring.

The current coastwide estimate of fishing mortality is near the lowest of the time series (1955-2005). However, a recent decline in juveniles seen in Chesapeake Bay seine surveys is a cause for concern. The Technical Committee has provided research recommendations in the past to better understand poor recruitment in Chesapeake Bay. Several projects are ongoing to address this issue (see side-bar).

The current stock assessment model has several limitations. Currently, it can only evaluate the status of menhaden on a coastwide basis. The Technical Committee has developed a list of research priorities to examine the possibility of localized depletion in the Chesapeake Bay. In addition, the model is not capable of addressing questions of multispecies interactions. Many ongoing research projects are being conducted and the Commission's multispecies model is being implemented to provide more information to answer those questions.

Atlantic Coastal Management Considerations

The Commission approved Amendment 1 to the Interstate Fishery Management Plan (FMP) for Atlantic Menhaden in 2001. Management authority is vested in the states because the vast majority of landings come from state waters. The goal of Amendment 1 is "to manage the Atlantic menhaden fishery in a manner that is biologically, economically, socially and ecologically sound while protecting the resource and those who benefit from it." Amendment 1 established new overfishing/overfished definitions based on fishing mortality and spawning stock biomass.

Addendum I to Amendment 1, approved in August 2004, revised the biological reference points, changed the frequency of stock assessments, and updated the habitat section. The new biomass target and threshold are based on fecundity (or the

Figure 1. Atlantic Menhaden Landings by Reduction & Bait Fisheries
Source: ASMFC Atlantic Menhaden Technical Committee, 2006

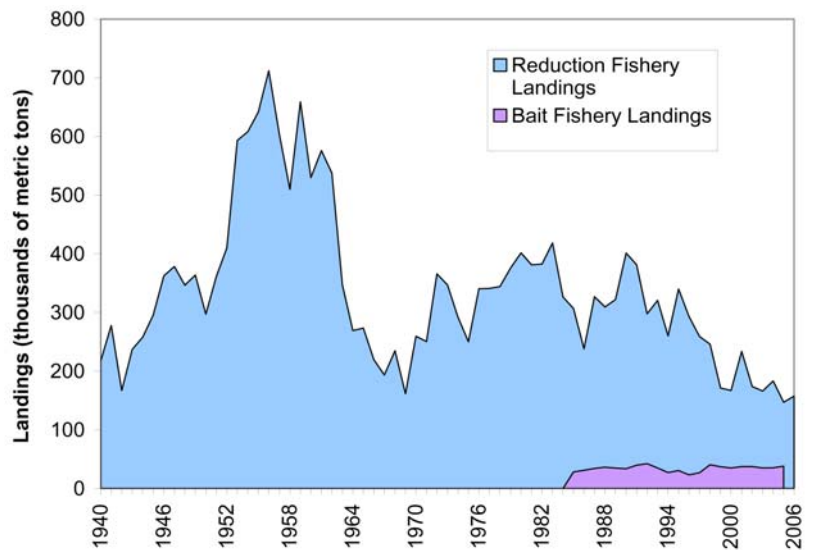
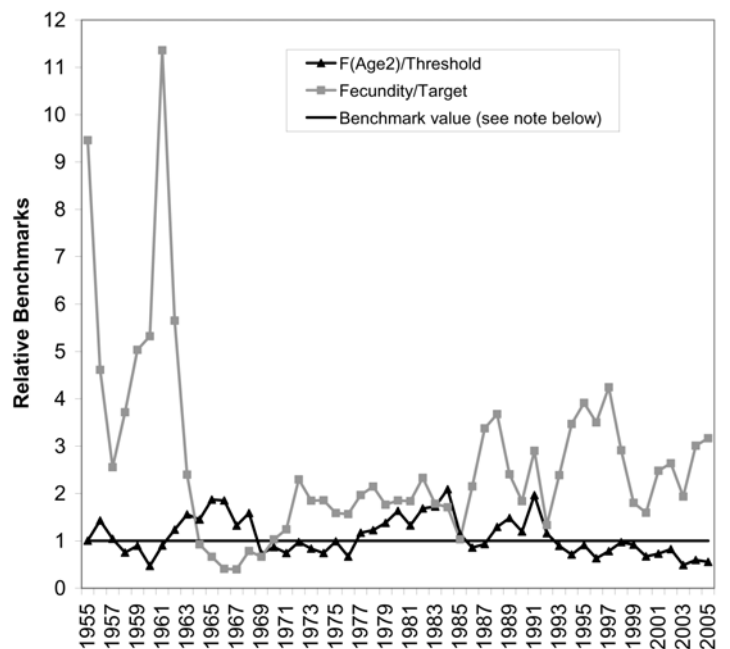


Figure 2. Atlantic Menhaden Fishing Mortality Relative to Threshold Benchmark ($F_{Age 2}/Threshold$) and Population Fecundity Relative to Target ($FEC/Target$)*

Source: ASMFC Atlantic Menhaden Technical Committee, 2006



NOTE: The graph provides a relative index of fishing mortality versus its FMP threshold and fecundity (measured in the number of mature ova) versus its FMP target. Management action will be triggered when $F_{Age 2}/Threshold$ is above the relative benchmark value of 1 (as indicated by solid black line) or $FEC/Target$ falls below the relative benchmark value of 1.

continued on page 6

Atlantic Menhaden Species Profile (continued from page 5)

number of mature or ripe eggs/ova) instead of spawning stock biomass. A new fishing mortality target and threshold were also adopted. Stock assessments will now take place every third year instead of annually. However, the Technical Committee is required to meet annually to review the previous year's landings and indices.

Recent Activities

In October 2006, the Atlantic Menhaden Management Board approved Addendum III to Amendment 1 to the Atlantic Menhaden FMP. It establishes a five-year annual cap on reduction fishery harvests in Chesapeake Bay of 109,020 metric tons, a number derived from the average of harvests from 2001 – 2005. The cap was implemented in 2006 and will extend through 2010. Harvest for reduction purposes will be prohibited in the Chesapeake Bay when 100% of the cap is landed. Overharvest in any given year would be deducted from the next year's quota. The Addendum also includes a provision allowing under-harvest in one year to be credited only to the following year's harvest, not to exceed 122,740 metric tons.

Please check the ASMFC website (www.asmfc.org) and future issues of *Fisheries Focus* to stay abreast of upcoming menhaden activities. For more information, please contact Braddock Spear, Senior FMP Coordinator for Policy, at (202)289-6400 or <bspear@asmfc.org>.

Collaborative Menhaden Research Efforts Underway

Over 15 research projects are being conducted to study Atlantic menhaden. Most of the research is focused on the Chesapeake Bay region. This aggressive research program was initiated through the Commission's Addendum II to Amendment 1 of the Atlantic Menhaden FMP, with funding provided by the states and the federal government.

As part of the research initiative, the NOAA Chesapeake Bay Fisheries Research Program is soliciting proposals through its competitive funding process to address the following priorities: (1) determine menhaden abundance in the Chesapeake Bay; (2) determine estimates of menhaden removal by predators; (3) evaluate the rate of exchange of menhaden between the Bay and coastal systems; and (4) conduct larval studies to determine recruitment to the Bay. Proposals consisting of partnerships between fishermen, academia and/or NOAA staff are highly encouraged. Interested parties should submit a letter of intent for proposal submittal as soon as possible to Derek Orner at Derek.Orner@noaa.gov. **Final proposals are due by March 12, 2007.** For more information, please visit <http://noaa.chesapeakebay.net/fundingopportunities.aspx>.

In addition, the NOAA Chesapeake Bay Office is hosting its Annual Fisheries Symposium April 10 - 11, 2007. The symposium, which is being held at the Patuxent Wildlife Refuge Visitor Center in Laurel, Maryland, will showcase menhaden research on April 11. For more information, please contact Derek Orner at Derek.Orner@noaa.gov.

American Eel Board Initiates Addendum

On January 30, 2007, the Commission's American Eel Management Board approved the development of Draft Addendum II to the Interstate Fishery Management Plan for American Eel. The Draft Addendum will propose a number of management options to facilitate an increase in the number of adult American eel (also known as silver eel) that are able to out-migrate to the ocean and spawn. Specific options include gear and size restrictions, seasonal closures, management triggers based on juvenile abundance indices, and recommendations to protect the upstream and downstream migration of American eel.

The Board initiated the Addendum due to continued concern for the American eel population. While the status of the stock is uncertain, the latest stock assessment information indicates the abundance of yellow eel (a juvenile life-stage of the American eel) has declined in the last two decades and the stock is at or near low levels. Further, relative abundance is likely to continue to decline unless mortality decreases and/or recruitment increases. As such, the primary management objective of the Draft Addendum will be to facilitate escapement of silver eel on their spawning migration with the intent of halting any further declines in juvenile recruitment and eel abundance.

The Draft Addendum will be available for Board consideration at either the Commission's Spring or Summer Meeting in Alexandria, Virginia. If approved, it will be made available for public comment in the summer, with final Board approval anticipated for fall 2007. For more information, please contact Erika Robbins, Fisheries Management Plan Coordinator, at (202) 289-6400 or erobbins@asmfc.org.

Weakfish Board Approves Addendum II: Addendum to Control Expansion of the Fishery

On February 1, 2007, the Commission's Weakfish Management Board approved Addendum II to Amendment 4 to the Interstate Fishery Management Plan (FMP) for Weakfish. Under the Addendum, the states of Massachusetts through North Carolina will be required to implement a six fish creel limit at their current size limit for the recreational fishery. South Carolina, Georgia, and Florida, because of their insignificant weakfish landings, will maintain their current creel and size limits. The Addendum establishes a coastwide commercial landings limit of approximately 3.7 million pounds (based on the average landings for 2000-2004). The Addendum also reduces the allowable bycatch limit from 300 pounds to 150 pounds per day or trip.

The Board's action was taken in response to a significant decline in stock abundance and increasing total mortality since 1999. As a result of weakfish's depleted stock size, the Board is required under Amendment 4 to adjust the management program to help rebuild spawning stock biomass. This issue is compounded by the fact that natural mortality, rather than fishing mortality, has been indicated as the lead cause for stock decline.

In order to provide a greater probability of the stock rebounding, the Board has implemented a more conservative recreational creel limit, a commercial bycatch limit, and an annual commercial landings limit. These management measures will be reevaluated when ei-

ther the coastwide commercial landings equal or exceed 80% of the commercial landings limit or any single state's landings exceed its five-year mean by more than 25% in any single year.

States are required to fully implement the Addendum by October 29, 2007. Copies of the final Addendum will be available by March via the Commission's website at www.asmfc.org under Breaking News or by contacting the Commission at (202) 289-6400.

For more information, please contact Nichola Meserve, Fisheries Management Plan Coordinator, at (202)289-6400 or nmeserve@asmfc.org.

Weakfish Board Solicits Public Comment on Draft Addendum III to the Weakfish Plan: Addendum Proposes Revision to BRD Requirements

The Weakfish Management Board also approved sending forward for public comment Draft Addendum III to Amendment 4 to the Interstate Fishery Management Plan (FMP) for Weakfish. The Draft Addendum seeks to resolve an inconsistency in bycatch reduction device (BRD) requirements between the Commission's Amendment 4 and the South Atlantic Fishery Management Council's Shrimp Amendment 6.

Throughout its history, the weakfish management program has included management measures to reduce the bycatch mortality of weakfish in Southeast shrimp trawl fisheries. These requirements have been implemented to aid in the protection of weakfish stocks and complement bycatch reduction requirements as specified in the South Atlantic Fishery Management Council's Shrimp FMP. In 2004, the Council al-

tered its BRD certification standards, requiring devices to reduce finfish bycatch by a minimum of 30 percent. The Weakfish Management Board supports this action for two reasons. The new protocols will facilitate the certification of new devices to reduce finfish bycatch and retain shrimp catch. Further, weakfish generally react favorably to BRDs and escape from the net as compared to many other finfish species. As such, the 30 percent reduction requirements will likely result in equal or greater protection to weakfish.

The Board is scheduled to meet in May to review public comment on the Draft Addendum and consider it for final approval. Copies of the Draft Addendum can be obtained by contacting the Commission at (202) 289-6400 or via the Commission's website at www.asmfc.org under Breaking News.

Public comment will be accepted until **5:00 PM on March 31, 2007** and should be forwarded to Nichola Meserve, Fisheries Management Plan Coordinator, 1444 'Eye' Street, NW, Sixth Floor, Washington, DC 20005; (202) 289-6051 (FAX) or at comments@asmfc.org (Subject line: Weakfish). For more information, please contact Nichola Meserve at nmeserve@asmfc.org.



Photo courtesy of Ron Redington

Science Highlight: ASMFC Continues Stock Assessment Training Workshop Series

2006 marked another busy year for the Commission's stock assessment training workshop series, providing quality training to state and federal fisheries biologists seeking to improve their knowledge of stock assessment and fisheries science applications. Last year's workshops included Basic/Technical Fish Stock Assessment; Fish Tagging Studies: Theory, Design, and Application; and Surveys of Fishery Resources (Part I): Fishery Independent Surveys.

Basic Stock Assessment Training

Each year the Commission's Science Program organizes multiple stock assessment training workshops to meet the specific training needs identified to support Commission stock assessments. The Basic Stock Assessment Training Workshop, taught by Dr. Joseph T. DeAlteris of the University of Rhode Island, covers the basic principals of fisheries science and stock assessment using a combination of lectures and hands-on computer exercises. The course, which is two weeks in length, covers topics such as growth, mortality, gear selectivity, yield and spawning stock biomass per recruit, stock-recruitment, surplus production models, biomass dynamic models, age-based models, and biological reference points. The workshop was held in October and December 2006 and is scheduled to be offered again in late 2007. Since 2004, a total of 49 participants, representing nearly all of the Commission's member states have attended these workshops.

Fish Tagging Studies: Theory, Design and Application

The workshop on Fish Tagging Studies: Theory, Design, and Application, held in August 2006, provided a comprehensive overview of the theory, design, and analysis of tag-

ging studies utilizing several case studies. The course instructors brought extensive experience on tagging study theory, design, and data analysis. The Commission was fortunate to have Dr. Kenneth J. Pollock (North Carolina State University), Dr. Joseph E. Hightower (North Carolina Cooperative Fish and Wildlife Research Unit), Dr. Robert J. Latour (Virginia Institute of Marine Science), Gary R. Shepherd (National Marine Fisheries Service), and Dr. Steven X. Cadrin (NOAA/University of Massachusetts Cooperative Marine Education and Research Program) serve as instructors for the course.

The workshop began with Dr. Cadrin's presentation on Strategic Planning for Tagging Studies, which covered the logistical considerations that need to be addressed in the planning stages of these studies, including assessing program objectives, identifying hypotheses to test, evaluating and presenting the results, evaluating types of tags to use, estimating the number of fish to tag, developing protocols to minimize tagged-fish handling time, and developing an effective recovery and reward system.

Drs. Pollock, Hightower and Latour taught the section on the theory and design of tagging studies developed to estimate mortality rates for marine fish populations. They provided several case studies (lake trout, blue crab, red drum, and striped bass) to demonstrate applications from existing data sets. They stressed the impor-

tance of conducting ancillary studies to collect information such as reporting rate in order to increase confidence in the data and to enhance the information that can be derived from these studies. After the theory behind the Brownie model was presented, Gary Shepherd demonstrated a simple spreadsheet version of the Brownie model. The spreadsheet model allowed students to see the details of how this model functions. The workshop concluded with Dr. Cadrin providing an overview of the theory behind the migration and movement of fish, initial exploratory analyses methods, and quantitative



movement and migration models. Gary Shepherd presented a case study on movement and migration of black sea bass while Dr. Cadrin reviewed studies on skip jack tuna and bluefin tuna.

Twenty-three individuals, representing 12 state agencies and the U.S. Fish and Wildlife Service, participated in the workshop. Several participants were currently involved with Commission or agency-specific tagging projects. Four participants - Ted Switzer, Florida Fish and Wildlife Conservation Commission,

continued on page 11

ASMFC Comings & Goings

Commissioners

Dr. Louis Daniel — On February 1st, with his appointment as Director for the North Carolina Division of Marine Fisheries, Dr. Louis Daniel became the state's new Administrative Commissioner to the ASMFC. Dr. Daniel replaces Preston P. Pate, Jr., who has served as the Division's Director and ASMFC Commissioner since 1997.

Dr. Daniel began working with the Division of Marine Fisheries as a Biological Supervisor in 1995. For the past nine years, he has served as Executive Assistant to the Division Director working extensively with the South Atlantic Fishery Management Council and the Atlantic States Marine Fisheries Commission on federal and interstate fisheries management issues. Dr. Daniel has also had oversight of the Division's fishery management plan process, coordinating development of long-term management strategies for North Carolina's most economically significant fisheries. He also has worked closely with the North Carolina Marine Fisheries Commission, serving as a technical advisor on numerous issues. Prior to joining the Division, Daniel worked with the U.S. Fish and Wildlife Service.

Dr. Daniel received his doctorate in marine science from the College of William and Mary, his master's degree in marine biology from the College of Charleston, and his bachelor's degree in biology from Wake Forest University. Welcome aboard, Dr. Daniel!



Preston P. Pate, Jr. — This January, concurrent with his retirement from the North Carolina Division of Marine Fisheries, Preston P. Pate, Jr. stepped down as North Carolina's Administrative Commissioner to the ASMFC. Mr. Pate served as an ASMFC Commissioner for nine years. Four of those years he served in a leadership position within the Commission, as Vice-Chair from 2003 to 2004 and Chair from 2005 – 2006. During his tenure as Chair, he effectively promoted science-based management, proper use of the precautionary approach, and long-term conservation of species including summer flounder, scup, and black sea bass.

A native North Carolinian, Mr. Pate began his career in coastal and natural resources management in 1971 at the State's Division of Marine Fisheries, an organization he has been the head of since 1997. In that role, he has earned

the great respect of employees, stakeholders, and fellow state directors.

In appreciation for his extraordinary career of service, Mr. Pate was given in 2006 the Order of the Long Leaf Pine, the highest civilian honor in the State of North Carolina. We too appreciate Mr. Pate's leadership and friendship, and wish him the very best in the future.

Staff

Dr. Genevieve Nesslage — In January, Dr. Genny Nesslage joined the Commission staff as its new Senior Stock Assessment Specialist. Dr. Nesslage comes to us from Clarion University in Pennsylvania where she taught population dynamics, ecology, wildlife biology, and zoology at the undergraduate and graduate levels. She has a Ph.D. in Fisheries and Wildlife from Michigan State University, an M.S. in Wildlife Biology and Management from SUNY-ESF at Syracuse, and a B.S. in Biology from Cornell University.

Although Dr. Nesslage's background has been on the terrestrial side, she pursued the Commission because of her interest in the challenges of fisheries population dynamics. As she explains, "Whether it is estimating herds of deer or schools of fish, it all comes down to numbers and that is something that I really like." Welcome aboard, Dr. Nesslage!





New York Implements SAFIS; Recreational Data Queries Improve Analysis Capabilities

New York State Department of Environmental Conservation Implements SAFIS

In December 2006, the ACCSP Director and Information Systems Manager traveled to Long Island to discuss the use of the Standard Atlantic Fisheries Information System (SAFIS) by the New York State Department of Environmental Conservation (NYSDEC). They gave a demonstration of SAFIS and answered questions from the NYSDEC staff, as well as industry representatives. The NYSDEC then decided to implement SAFIS in January 2007.

Before implementing SAFIS, the NYSDEC and the National Marine Fisheries Service's Northeast Region, in association with the Cornell University Cooperative Extension Marine Program, established a paper-based program in 2002 to collect and process landings information by all commercial harvesters of food fish and crustaceans, and purchases by federally and state permitted dealers. Though all of the data collected from state-licensed dealers and commercial harvesters existed at the trip level and met ACCSP standards, New York saw an opportunity to improve reporting compliance with the use of SAFIS. All New York data are now reported through SAFIS, and direct use of SAFIS is offered on a voluntary basis to state dealers who wish to report electronically. Its implementation is expected to facilitate more rapid uploading of New York dealer data to the Data Warehouse.

New York is one of many partners to implement SAFIS in since 2003. The Rhode Island Department of Environmental Management was the first state

to pilot the application in 2004, then Massachusetts, Connecticut, New Jersey, Maryland and Maine implemented SAFIS, either partially or for all reporting. Additionally, the National Marine Fisheries Service Northeast Region mandated that its nearly 700 permitted seafood dealers report trip-level landings electronically through SAFIS beginning in May 2004.

New ACCSP Recreational Data Queries Improve Analysis Capabilities for Stock Assessment Biologists

In January, the ACCSP deployed an additional recreational catch and effort web query that provides properly weighted directed trips (number of trips targeting a selected species and/or catching that species) and bag limit distributions (number of people catching 0 fish, 1 fish, 2 fish, etc.) for 45 selected species for the years 1981 through 2005.

The query uses Marine Recreational Fisheries Statistical Survey (MRFSS) estimates of effort, combined with shoreside intercept interviews of fishermen completing their trips. Directed trip and bag limit information are used to predict impacts of management regulations. The new query allows rapid summarization using a variety of definitions of directed trips, thus allowing for flexibility in the way data are analyzed. These types of analyses were not available previously on any websites for the Atlantic coast and were done through specialized *ad hoc* SAS analyses by the MRFSS staff. Providing a standardized web-based query allows easy and rapid access to MRFSS data to answer management questions about bag limits and seasonal closures.

Like all ACCSP achievements, development of this query was a collaborative effort. The MRFSS staff worked closely with ACCSP staff to ensure the statistical verity and numerical accuracy of the queries. The Recreational Technical Committee provided input on the definitions of directed trips, the selection of the list of species, as well as feedback on the workings of the actual query.

Non-confidential users are required to request a new account via the ACCSP website in order to use the new query. For more information, please check the Users Guide. Questions may be directed to support@accsp.org.

About the ACCSP

The ACCSP is a cooperative state-federal program to design, implement, and conduct marine fisheries statistics data collection programs and to integrate those data into a single data management system that will meet the needs of fishery managers, scientists, and fishermen. It is composed of representatives from natural resource management agencies coastwide, including the Commission, the three Atlantic fishery management councils, the 15 Atlantic states, the Potomac River Fisheries Commission, the DC Fisheries and Wildlife Division, NOAA Fisheries and the U.S. Fish & Wildlife Service. For further information please visit www.accsp.org or call 202.216.5690 during business hours.

Patrick Kilduff Awarded ASMFC Employee of the Quarter

In his three years with the Commission, Patrick Kilduff has become a vital part of the Commission's Science Program, significantly contributing 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 his value, Patrick was named Employee of the Quarter for the first quarter of 2007. The award is intended to recognize special contributions and qualities in the areas of teamwork, initiative, responsibility, quality of work, positive attitude, and results.



Over the past year, Patrick has provided critical continuity to the Science Department as it experienced staff and programmatic changes. His experience, institutional knowledge, and willingness to lend a helping hand ensured that projects stayed on track and enabled new staff to get up to speed quickly. Patrick's dedication to increasing his expertise with stock assessment models and methodologies has benefited the Commission and the states in several ways. His coordination of the Commission's basic and advanced stock assessment training courses has provided valuable training to nearly 50 state scientists, substantially advancing their understanding and use of stock assessment models and methods. Over the last few months, he helped several of the states with staff shortages complete their shad assessment work in preparation for the peer review this year. Furthermore, through his outstanding efforts he has built strong ties to the stock assessment community, facilitating many of the Commission's stock assessment initiatives.

Patrick has a Bachelor of Science in Biology from the University of West Florida and a Master of Science in Marine Science from the College of William and Mary, Virginia Institute of Marine Science. As an Employee of the Quarter, he received a \$500 cash award, a small gift, and a letter of appreciation for his personnel record. In addition, his name will be engraved on the Employee of Quarter Plaque displayed in the Commission's lobby. Congratulations, Patrick!

Science Highlight: ASMFC Continues Stock Assessment Training Workshop Series (continued from page 8)

Charlton Godwin, North Carolina Division of Marine Fisheries, Bob Sadzinski, Maryland Department of Natural Resources, and Brian Murphy, Rhode Island Division of Fish and Wildlife -- presented current or planned tagging projects and received valuable feedback from the panel and workshop participants on ways to improve their studies.

The workshop on Surveys of Fishery Resources: Fishery Independent Survey was held in December 2006. The goal of the workshop was to provide a practical course in survey design methods for both fisheries-independent sampling. Dr. Patrick J. Sullivan (Cornell University) and Dr. Michael J. Fogarty (National Marine Fisheries Service) served as instructors for the workshop. Nearly 30 participants, representing 14 state fishery agencies, the Mid-Atlantic Fishery Management Council, and Commission staff, attended the workshop. The instructors began by covering the importance of defining survey objectives and the theory of sampling as applied to survey design. This was followed by an introduction to statistical software packages used with hands-on examples and supplemental materials covered in later sections of the course.

The next section of the workshop addressed survey designs (i.e., random, random stratified, systematic, and cluster designs) and their application in measuring fish abundance or obtaining estimates of biological characteristics (e.g., size-at-age and food habits). The final session focused on the standardization and calibration of survey gears when sampling gears or vessels change and how to use survey data in stock assessments. Drs. Fogarty and Sullivan concluded the workshop with a discussion on how to handle "real world" problems facing existing and emerging surveys (e.g., losing sampling locations over time, sampling within and outside of closed areas).

Please check the ASMFC website (www.asmfc.org) and future issues of *Fisheries Focus* to stay abreast of upcoming workshops. For more information, please contact Patrick Kilduff, Fisheries Research Specialist, at (202) 289-6400 or pkilduff@asmfc.org.

**ASMFC Technical Committee
Meeting Week**

March 27 - 29, 2007

**Holiday Inn - Inner Harbor
Baltimore, Maryland**

Assessment Science Committee

Tuesday, March 27 10:00 AM - 5:00 PM

Summer Flounder, Scup, and Black Sea Bass Technical Committee

Tuesday, March 27 10:00 AM - 5:00 PM

Training Session: Holding a Productive Technical Meeting

Wednesday, March 28 9:00 AM - 5:00 PM

Atlantic Coastal Cooperative Statistics Program (ACCSP) Presentation

Thursday, March 29 8:30 AM - Noon

Multispecies Technical Committee

Thursday, March 29 1:00 PM - 5:00 PM

Please note that the Atlantic Sturgeon Bycatch Workshop that was tentatively scheduled has been postponed and will not be held during the Meeting Week.

Correction

On page 11 of the November 2006 issue of *Fisheries Focus* (article - No More Back Door), we erroneously stated that an illegal snook fillet shipment arrived from Guyana, Central America. Guyana is actually located in South America. Thanks to Doug Soper for identifying the error!

Atlantic States Marine Fisheries Commission
1444 Eye Street, N.W., 6th Floor
Washington D.C. 20005

Return Service Requested