



ASMFC

FISHERIES *focus*

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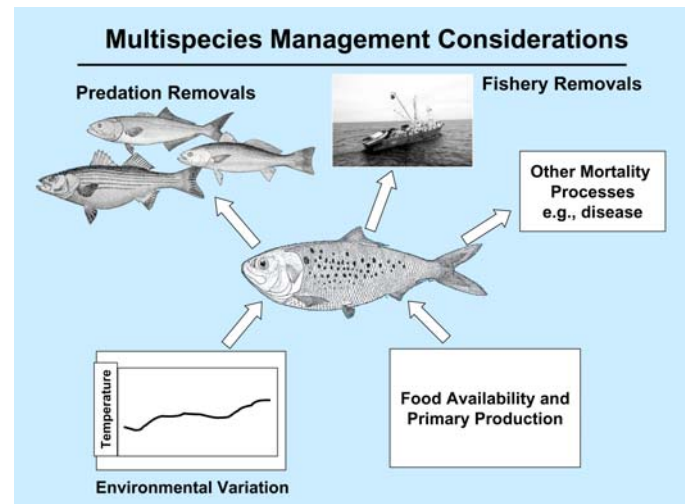
Atlantic States Marine Fisheries Commission • 1444 Eye Street, N.W. • Washington, D.C.

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

Improving Single Species Management Decisions through Multispecies Assessments

Marine fisheries management along the U.S. Atlantic coast is currently conducted through single species approaches by the Commission, the Regional Fishery Management Councils, and individual state marine fishery agencies. Over the past several years, advances and improvements in stock assessment methodologies have led to successful management of several Atlantic coastal species, including striped bass and summer flounder. These single species assessment and management approaches, however, lack consideration of predator/prey relationships, the impacts of environmental factors, relationships among various components of the ecosystem (i.e., habitat, primary and secondary productivity), and the ability of the ecosystem to sustain high resource abundance.

In 1999, in an effort to begin to address the impacts of these factors on fishery resources, the Commission began exploring the feasibility of conducting multispecies assessments in order to supplement single species management approaches.



The latest milestone in this effort has been the endorsement of the Commission's first multispecies model (the Expanded Multispecies Virtual Population Analysis or MSVPA-X) by the Northeast Regional Stock Assessment Review Committee (SARC) in December 2005. Since then, Commission staff have been working with members of its Management & Science Committee to develop guidelines on how to incorporate multispecies information into the management decision-making process.

Model Background

The MSVPA-X, developed by Dr. Lance Garrison, builds upon earlier versions of the MSVPA, which was developed by the International Council for the Exploration of the Seas (ICES). It has the ability to include "tuned" VPA models (similar to the ADAPT), improve the feeding model, and include predators without age-structured assessment data (i.e., biomass dynamic models).

The model links single-species assessments based on predator-prey interactions (i.e., feeding). It has two main types of species in the model: predators (e.g., striped bass, bluefish, and weakfish) and prey (e.g., menhaden). In addition to the data inputs used in single-species stock assessments, this model requires information on predator and prey interactions (who eats who, how much and when). An important output of this model is the estimation of age-specific natural mortality rates attributed to predation of menhaden by the predator species.

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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.

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Upcoming Meetings

7/12 (10 AM - 4 PM):

ASMFC Tautog Technical Committee, Radisson Plaza Lord Baltimore, 20 West Baltimore Street, Baltimore, Maryland; 410/539-8400.

7/19 (10 AM - 4 PM):

ASMFC Coastal Sharks Advisory Panel, Radisson Plaza Lord Baltimore, 20 West Baltimore Street, Baltimore, Maryland; 410/539-8400.

7/25 (10 AM - 4 PM):

ASMFC Coastal Sharks Technical Committee, Radisson Plaza Lord Baltimore, 20 West Baltimore Street, Baltimore, Maryland; 410/539-8400.

8/1 - 3:

Mid-Atlantic Fishery Management Council, Sheraton Society Hill, Philadelphia, Pennsylvania.

8/2 - 3:

ACCSP Operations Committee, Hotel Providence, 311 Westminster Street, Providence, Rhode Island.

8/14 - 17:

ASMFC Meeting Week, DoubleTree Hotel Crystal City, 300 Army Navy Drive, Arlington, Virginia; 703/416-4100 (see preliminary agenda on page 9).

8/28 - 9/1:

ASMFC Technical Committee Meeting Week, location to be determined.

9/10 - 14:

American Fisheries Society 135th Annual Meeting, Lake Placid, New York.

9/18 - 22:

South Atlantic Fishery Management Council, Town & Country Inn, 2008 Savannah Highway, Charleston, South Carolina; 800-334-6660.

9/19 - 21:

New England Fishery Management Council, Courtyard by Marriott, Portsmouth, New Hampshire.

10/10 - 12:

Mid-Atlantic Fishery Management Council, Hilton Garden Inn, Kitty Hawk, North Carolina.

10/22 - 26:

ASMFC 65th Annual Meeting, Sheraton Atlantic Beach Oceanfront Hotel, Atlantic Beach, North Carolina.

I think most of us enjoy hearing about others working in a positive way to solve problems and make the world a better place. It is even better when we learn of efforts to seek out these people and recognize their special contributions. This is especially true in the often complex and contentious world of fisheries management. To its great credit, NOAA has initiated its Sustainable Fisheries Leadership Awards Program to do just that.

The program recognizes outstanding performance, achievements, and leadership by industries, organizations, and individuals whose contributions to science and management have promoted best stewardship practices for the sustained use of living marine resources. The awards cover six categories encompassing the elements necessary for promoting public stewardship and for assisting NOAA in fulfilling its stewardship mission.

Earlier this month the 2006 award recipients were recognized at a formal dinner ceremony here in Washington, DC, by Vice Admiral Lautenbacher, Under Secretary of Commerce for Oceans and Atmosphere. The accomplishments of those selected to be the first winners for these awards are truly impressive.

The *Pollock Conservation Cooperative* received the Stewardship and Sustainability Award for voluntarily dividing the overall harvest quota among fishing companies engaged in the Alaska pollock fishery. This arrangement has ended the wasteful "race for fish" and led to significant reductions in fishing capacity. There has been a 50 percent increase in the amount of saleable products made from each pound of fish as well as a voluntary bycatch reduction effort that complements federal fishery management measures.

Holland American Line received the Conservation Partnership Award for its initiative in developing and adopting whale avoidance measures as the international cruise industry standard. It has made its avoidance measures and crew training program available to the public and the cruise line industry to promote the adoption of this effective stewardship practice.

Ed Melvin from the Washington State Sea Grant Program was presented the Science, Research, and Technology Award for his contributions to cooperative research with fishermen to develop and promote the use of innovative methods to reduce seabird bycatch in Alaska's longline fisheries. These measures have reduced seabird mortality by at least 80 percent and have inspired adoption of seabird avoidance measures around the world.

The *Gulf of Mexico Foundation* received the Coastal Habitat Restoration Award for its successful implementation of 33 habitat restoration projects in the five Gulf states. These projects are expected to restore 14,000 acres of valuable coastal habitat important to the long-term health of living marine resources. The Foundation manages a partnership of volunteers working on habitat restoration projects that foster civic service, public education, and local ownership of these important coastal resources.

SeaShare was presented with the Public Education, Community Service, and Media Award for its work with the fishing industry to develop an innovative hunger relief program. Since 1994, SeaShare has partnered with hunger relief agencies and 60 seafood companies to donate 20 million pounds of food to 96 locations in 31 states. This program has allowed the fishing industry to put its bycatch to good use without compromising sound fisheries management.

Finally, *Senator Ted Stevens* from Alaska received the Special Recognition Award for his tireless work throughout his long and successful career in Congress to craft meaningful and effective federal laws to protect, conserve, and manage our nation's living marine resources. A member of the Senate for 37 years, Senator Stevens has consistently advocated for science-based management, keeping the sustainable uses of these resources at the forefront of the nation's agenda.

During the awards dinner, as people stepped forward to receive their awards, their brief comments reflected the common themes of stewardship and commitment to work in a collaborative manner with NOAA and its Fisheries Service to protect and manage marine resources. Each is working to make the world a better place.

During his introductory remarks, Vice Admiral Lautenbacher pointed out that there are many people in the fisheries and oceans business who care deeply about the resources under our collective stewardship. They are working hard on a daily basis to get things right and it is important for us all to recognize their good work. NOAA has taken on the laudable task of recognizing those actions and getting the word out to others. Although this was just the first year of the program, NOAA intends to make this an annual and important event. What a great message. Praising the good is something I would hope we could all agree to do.



Horseshoe Crab
Limulus polyphemus

Common Names:
horseshoe crab; once called “horsefoot crabs” because of their resemblance to a horse’s hoof

Interesting Fish Facts:

- Adult females can extrude up to 20,000 eggs per spawning episode
- Crabs can increase size by up to 25% after each molt

Uses:

- Bait for conch and American eel fisheries
- Provides important food source for migrating shorebirds, finfish & sea turtles
- Supports production of LAL, which is used to detect human pathogens in patients, drugs and intravenous devices

Age at Maturity/Life Span: 9- 12 years/17 - 20 years

Stock Status: Unknown

Species Profile: Horseshoe Crab

Management Plan Seeks to Conserve Resource for Multiple Uses

Introduction

Horseshoe crabs provide the backdrop for one of the most interesting marine resource management issues along the Atlantic coast. They play a vital ecological role in the migration of shorebirds along the entire Atlantic seaboard, as well as providing bait for commercial American eel and conch fisheries along the coast. Additionally, their unique blood is used by the biomedical industry to produce Limulus Amoebocyte Lysate (LAL), an important tool in the detection of contaminants in patients, drugs, and other medical supplies. The challenge of fisheries managers is to ensure that horseshoe crabs are managed to meet all these diverse needs, while conserving the resource for its self-perpetuation.

Life History

Although they are called horseshoe “crabs,” they are neither a decapod nor a crustacean but are in their own class that is more closely related to the arachnids (i.e., spiders). Horseshoe crabs have existed for more than 200 million years; however, some identify the evolutionary existence of horseshoe crabs to be over 400 million years.

Horseshoe crab distribution extends along the Atlantic coast from northern Maine to the Yucatan Peninsula and the Gulf of Mexico. Along the U.S. Atlantic coast, horseshoe crabs are most abundant between Virginia and New Jersey, with the Delaware Bay at the center of the species distribution and the location of the largest population. Horseshoe crabs are typically associated with estuarine habitats. Adults either remain in the estuary 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 shallow, subtidal flats.

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 88,000 eggs per year in different egg clusters.

The eggs play an important ecological role in the food web for migrating shorebirds and finfish. The Delaware Bay Estuary is the largest staging area for shorebirds in the Atlantic Flyway and 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. Horseshoe crabs also provide an important food source for Atlantic loggerhead turtles.

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. Molt- ing occurs several times during the first



two 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).

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, more data are becoming available as several of the most powerful surveys for detecting changes in abundance have now been in place for more than five years. The Horseshoe Crab Stock Assessment Subcommittee plans to explore population models to establish a baseline of population estimates, fishing mortality rates, and recruitment estimates.

Findings from beach spawning surveys conducted in the Delaware Bay region over the last seven years suggest that spawning activity remains stable or has slightly declined at a rate of three percent or less per year. Delaware's trawl survey (including preliminary 2005 data) indicates that juvenile (young-of-the-year and crabs less than 160 mm) abundances are at or near record highs for the last three years, and since 1998 there has been a significant increase in juveniles. It could be inferred that the increases in juveniles suggests an increase in eggs and better survival of juveniles. Additional information is being gathered from a Mid-Atlantic benthic trawl survey, which began in the Delaware Bay region in 2001 and has been expanded north and south. The survey is expected to generate data that will feed into a model that produces coastwide estimates of abundance. The table (below left) provides regional trends in horseshoe crab abundance based on the 2004 peer-reviewed stock assessment. The next benchmark horseshoe crab stock assessment is scheduled for 2008.

Commercial Fisheries & Biomedical Harvest

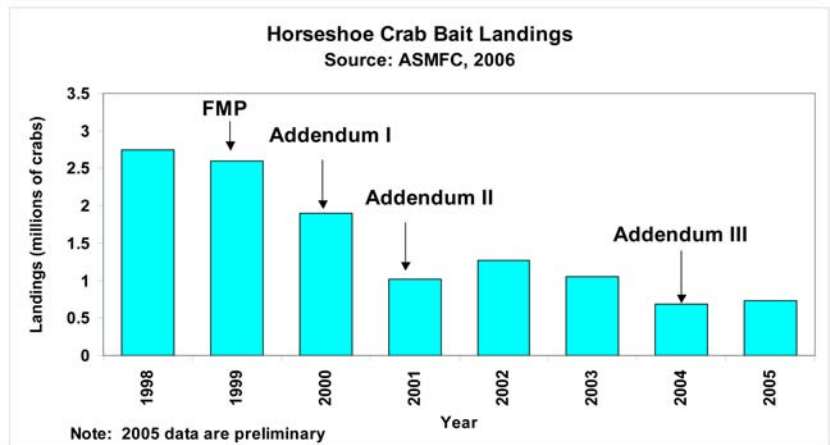
Regional Trends in Horseshoe Abundance

Source: ASMFC Horseshoe Crab Stock Assessment Report, 2004

Region	Sub-region	Time series duration of longest dataset	Conclusion about population change
Southeast		1995-2003	Stable
Delaware Bay		1988-2003	Declined
New York	W. Long Island Sound, various bays	1987-2003	Stable or increased
	E. Long Island Sound, Peconic Bay	1980-2003	Declined from peak levels in early to mid 1990s, but consistent with mid 1980s levels
New England	Cape Cod	1978-2002	Declined or stable
	Narragansett Bay	1975-2002	Declined

From the 1850s to the 1920s, between 1.5 and four million horseshoe crabs were harvested annually for fertilizer and live-stock feed. By the 1960s, only 42,000 horseshoe crabs were reported to be harvested annually.

Currently, horseshoe crabs are harvested primarily as bait for use in traps designed to catch American eel and conch. Preliminary coastwide commercial landings for bait in 2005 are approximately 730,000 horseshoe crabs, close to a fourfold reduction in landings since 1998. The reduction is partly due to regulation and partly because of decreased demand. Commercial fishermen have adopted new gear such as bait bags and cups allowing them to catch the same amount of eel and conch while using as little as a tenth of the bait.



Horseshoe crabs are also collected by the biomedical industry to support the production of LAL, 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. The current estimate of medical usage is between 250,000 and 300,000 horseshoe crabs per year on the Atlantic coast. While crabs are bled and released live generally within 72 hours of capture, up to 15 percent do not survive the procedure.

Atlantic Coastal Management Considerations

In 1998, the Commission approved the Interstate Fishery Management Plan (FMP) for Horseshoe Crabs. Prior to this FMP, states individually managed the species. The goal of the FMP is to conserve and protect the horseshoe crab resource to maintain sustainable levels of spawning stock biomass in order to ensure its continued role in the ecology of coastal ecosystems, while providing for continued use over time. The FMP maintained horseshoe crab harvest control measures put in place by New Jersey, Delaware and Maryland to protect horseshoe crab spawning within and adjacent to the Delaware Bay.

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Species Profile: Horseshoe Crab (continued from page 5)

It also directed the Horseshoe Crab Management Board to implement a cap on bait landings in 2000.

In order to improve our understanding of the resource and the demands placed upon it, the FMP also required states to implement mandatory monthly reporting of commercial landings, conduct benthic sampling programs, and identify important habitat areas.

Addendum I to the FMP, approved in February 2000, established individual state caps on horseshoe crab bait landings at 25 percent below the reference period landings for states with horseshoe crab fisheries. States with more restrictive harvest levels were encouraged to maintain those restrictions to provide further protection to the population. As a result of these restrictions, Atlantic coastal horseshoe crab landings were reduced in 2002 by approximately 45 percent below the coastwide quota of 2.3 million crabs. The Addendum also recommended that the National Marine Fisheries Service (NMFS) prohibit the harvest of horseshoe crabs in federal waters off of Delaware. The Carl N. Shuster Jr. Horseshoe Crab Reserve, encompassing nearly 1,500 square miles of federal waters off the mouth of the

Delaware Bay, was established by the NMFS on March 7, 2001.

In April 2001, the Horseshoe Crab Management Board approved Addendum II to provide for the voluntary transfer of harvest quotas between states to alleviate bait shortages on a biologically responsible basis. These voluntary quota transfers will require both Technical Committee review and Management Board approval. To date, no state or jurisdiction has requested a quota transfer under this Addendum.

In March 2004, the Board approved Addendum III to the FMP 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. It reduced harvest quotas and implements seasonal bait harvest closures in New Jersey, Delaware, and Maryland, and revises monitoring components for all jurisdictions.

Approved by the Board this past May, Addendum IV further restricts bait harvest in New Jersey, Delaware, Maryland, and Virginia. It is designed to maxi-



mize 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. For more information, please contact Braddock Spear, Fisheries Management Plan Coordinator, at (202) 289-6400 or <bspear@asmfc.org>.

ASMFC Comings & Goings

Staff:

Cindy Robertson -- In May, Cindy Robertson joined the Commission staff as its Administrative Assistant. Relocated from upstate New York in 2000, Cindy came to the DC area to work at the National Association of Foreign-Trade Zones, where she was responsible for planning meetings, coordinating membership, and overseeing publications. Cindy has three grown daughters and one grand-



child. In less than one month, she has already proved her worth, providing valuable staff assistance in the preparation of the Spring Meeting Week CD-ROM Briefing Materials and on other projects. Welcome aboard, Cindy!

Jessie Thomas -- This June, Jessie joined the staff as the new Habitat Coordinator, filling the position that Julie Nygard helped staff for the past 18 months. Jessie has a Master of Science in Natural Resources from Delaware State University, where she worked on American eel habitat utilization. She received a Bachelor of Science in Biology from Mary Washington College. Since January, Jessie interned at the Natural

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Improving Single Species Management Decisions through Multispecies Assessments (continued from page 1)

Independent Peer Review

The SARC Panel was asked to evaluate the MSVPA-X's formulation, function and use of data according to five terms of reference developed to guide its review. The Panel found that each term of reference was "well met." The Panel agreed with the Commission's assessment that the MSVPA-X was developed "with the objective of aiding understanding of the dynamics rather than providing advice or recommendations for ecosystem management." In other words, the model can provide insight on complex predator and prey interactions, but it is not ready to replace single-species models or provide binding biological reference points for use in management.

The Commission has worked with the University of Miami to develop a spatial fishery ecosystem model that brings a new approach to Atlantic coast fishery assessments by directly linking the productivity of a species and its fishery yields to spatial and temporal patterns of fishing, other predator and prey populations, ocean hydrodynamics, and environmental changes. This approach has the potential to bring resolution to questions pertaining to changing fish abundance over time and on a relatively fine spatial scale. The next step in model development is to configure and tune the model to be fully operational at the coastwide scale.

Next Steps

ASMFC Commissioners met in May 2006 to discuss ways the Commission may incorporate information from its multispecies modeling and research efforts into the current fisheries management process. Commissioners agreed that multispecies models should be used to provide additional information to single species assessments. Multispecies assessments are not expected to replace single species management, but rather expand the scope of understanding for decision-making. In general, these models are able to provide biological reference points similar to single species assessment models, but provide varying levels of information on trophic interactions and insight at more detailed spatial scales.

Overall, Commissioners supported the development of a formal multispecies decision-making process, including the incorporation of multispecies management issues and activities within the Commission's interstate fisheries management planning process. Specific recommendations included tasking staff to explore the logistics of developing a Multispecies Technical Committee; adding multispecies issues as a standing agenda item for the Interstate Fisheries Management Program Policy Board; and requesting that the Atlantic Menhaden, Striped Bass, Bluefish and Weakfish Management Boards task Technical Committees with identifying the most significant technical and management issues related to multispecies management. For more information, please contact Patrick Kilduff, Fisheries Research Specialist, at pkilduff@asmfc.org.

How Can Multispecies Assessments Enhance Fisheries Management Decision-making?

Gain perspective on the relative impacts of mortality caused by predation and fishing effort

Current single species assessments use a constant rate of natural mortality across all age groups. This approach, however, does not address the fact that the highest levels of mortality for most fish species occur in the early life stages (egg, larval, juvenile). Multispecies/ecosystem models can provide detailed information on the natural mortality rate for all life stages, thus, providing a more realistic benchmark to evaluate the relative impacts of natural mortality and fishing mortality on different life stages.

Identify and assess the multiple uses of forage and predator species

Multispecies/ecosystem assessments can segment out the various demands placed upon a fishery resource. Using Atlantic menhaden as an example, there are multiple demands placed upon this resource as both a forage base and for human use. Menhaden are prey for other species of fish, seabirds, and marine mammal populations. They also support important bait and reduction fisheries. Multispecies assessments can identify and quantify these various uses so that they can be explicitly addressed by fishery managers when assessing stock status and developing management strategies.

Evaluate carrying capacity of the ecosystem relative to sustaining high population abundance levels

Multispecies and ecosystem models provide an overall perspective on the maximum quantity of fish an ecosystem can support (i.e., carrying capacity). Currently, single species management strives to maximize abundance levels for all species without regard to the ability of the ecosystem to sustain these high abundance levels. By integrating information on habitat, environmental quality, predator/prey relationships and species abundance, multispecies/ecosystem assessments provide a much clearer picture of the ecosystem's carrying capacity.

Evaluate the feasibility of managing all species at MSY estimated from single species assessments

Species are currently managed to achieve maximum sustainable yield (MSY), which is the larg-

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Laura Leach Fishing Tournament: Helping to Ensure that Future Generations Learn About Fishing

Did you ever wonder what Laura Leach does with the money raised from her Annual Fishing Tournament held each year during the Commission's Annual Meeting? Each year the Laura Leach Fishing Tournament provides funds for worthy causes in the host state of the Commission's Annual Meeting. In 2004, the meeting was held at the Wentworth by the Sea Hotel in Newcastle, N.H. and one of the two beneficiaries of those funds was the 17th Annual Newmarket Fishing Derby, held each year on the Saturday preceding Father's Day. In 2005, the event was held under sunny skies, though not always the case, and more than 250 boys and girls from the ages of 3 to 15 enjoyed a day of trout fishing with their parents at Herb and Ruth Richmond's ponds. These young people competed for prizes in numerous categories, ensuring that nearly every participant took home not only the fish but fishing rods and reels, tackle boxes, backpacks, gift

certificates at sporting goods stores, and various other fishing-related items donated to the Derby. Last year's event hosted the largest number of participants who had the opportunity to try their luck at catching the more than 600 rainbow and brook trout recently stocked in the three ponds on the property. Hopefully, the event will spawn more young fishers and the generosity of ASMFC members and guests will help ensure that future generations will enjoy the outdoors and fishing, as so many of our members do.

The success of the Newmarket Fishing Derby, like so many other others, is carried on the shoulders of a few hard working individuals. For the

past 17 years, Mr. Richard Shelton has been the principal organizer along with NOAA Special Agent Chris Schoppmeyer. They have made the Derby a successful one for children in our small community. A special thank you to the ASMFC for making the 17th Annual Newmarket Fishing Derby a special one.

-- Contributed by Rep. Dennis Abbott



ASMFC Comings & Goings (continued from page 6)



Resources Defense Council in Washington, DC, where she worked on endangered species and legislative issues. Welcome aboard, Jessie!

Other Participants:

Dan Schick -- After more than three decades of service to the State of Maine overseeing its research and monitoring programs for northern shrimp, lobster, scallops, and sea urchins, Dr. Dan Schick retired this July from the Maine Department of Marine Resources. Most notable from the Commission's perspective are Dr. Schick's efforts to improve our un-

derstanding of the Gulf of Maine's northern shrimp resource. Since the mid-70s he has been an active participant on the Commission's Northern Shrimp Technical Committee and Plan Development Team, chairing the Technical Committee for a number of years. He has been the principal investigator for Maine's shrimp port sampling program and summer shrimp assessment cruise; the latter survey was to become the Gulf of Maine Northern Shrimp Trawl Survey (see April 2006 issue of *Fisheries Focus*). He is widely recognized for his strong working relationship with Maine's commercial fishing industry. Long before "cooperative fisheries research" became buzzwords in the marine fisheries arena, Dr. Schick had been working closely with the fishing industry to understand their needs and concerns, and find ways to involve them in the state's data collection and management activities. His belief in clear and open communication has earned him the respect of fishery scientists, managers, and fishermen alike. We wish him a healthy and happy retirement.



ASMFC Summer Meeting August 14 - 17, 2006

**Doubletree Hotel Crystal City
300 Army Navy Drive
Arlington, Virginia**

Preliminary Agenda

The preliminary agenda is subject to change. The agenda reflects the current estimate of time required for scheduled meetings. The Commission may adjust this agenda in accordance with the actual duration of meetings. Interested parties should anticipate meetings starting earlier or later than indicated herein. The detailed agenda will be released two weeks prior to the meeting.

Monday, August 14, 2006

Noon - 3:00 PM American Lobster Management Board

10:15 AM - 11:45 AM Atlantic Menhaden Management Board

3:15 PM - 5:45 PM Atlantic Herring Section

1:00 PM - 2:00 PM Atlantic Sturgeon Management Board

Tuesday, August 15, 2006

8:30 AM - 11:30 AM Spiny Dogfish & Coastal Sharks Management Board

2:15 PM - 4:30 PM Atlantic Striped Bass Management Board

1:00 PM - 2:30 PM Shad & River Herring Management Board

Thursday, August 17, 2006

8:00 AM - 10:45 AM Weakfish Management Board

2:45 PM - 5:45 PM Tautog Management Board

11:00 AM - 2:30 PM ISFMP Policy Board
(Buffet Lunch for Commissioners & Proxies)

Wednesday, August 16, 2006

8:00 AM - 10:00 AM South Atlantic State/Federal Fisheries Management Board

2:30 PM - 3:00 PM Business Session

How Can Multispecies Assessments Enhance Fisheries Management Decision-making? (continued from page 7)

est average catch that can be taken on a sustainable basis from a stock under average environmental conditions. MSY is determined for each individual species based on information specific to that species alone. By incorporating information for all species, multispecies/ecosystem models may redefine MSY within the context of the entire ecosystem. This will provide fisheries managers with a more realistic view of the interrelationships among individual species and the environment. Inherent in this approach is the understanding that these redefined MSY values may be very different from those that are developed through the single species approach.

Evaluate trade-offs in single species management decisions
Currently, management decisions are made on a species-by-species basis, with little consideration of the interactions among species. Multispecies/ecosystem models can provide fishery managers with additional information on

the impacts that changes to one species management program may have on other managed species. The integration of this information will require managers to clearly define species priorities, management goals and objectives.

Ability to evaluate various management scenarios through forward projection tools for multiple species

Currently, scientists have the ability to make future projections based on a suite of management options for a single species. This same ability is also available to multispecies/ecosystem modelers. Using forward projection tools, scientists will be able to project the possible consequences of management decisions for multiple species, thereby, providing fishery managers with a powerful tool to evaluate management effects among interrelated species. Again, this speaks to the need for managers to clearly define species priorities and management goals.

Annual Coordination Meeting for ACCSP and Gulf FIN Staff Held



The ACCSP staff met with Gulf FIN staff in St. Petersburg after the annual Gulf FIN meeting held on June 14-15. This annual coordination meeting allows us to catch up on the progress of the two programs and identify opportunities to leverage each other's work. Areas discussed included electronic reporting systems; registration tracking; recreational catch and effort data collection; status of recreational fishing licenses; biological sampling and otolith processing; InPort population; confidentiality; and the data warehouses. Some of the mutual areas of interest are described below.

The Gulf states have established complete trip tickets for Florida and Alabama and partial trip tickets for some species in Mississippi and Louisiana. The implementation of trip tickets for all species in Texas is expected to be completed this year. They are using the SCBI software for some electronic reporting and continue to encourage dealers to use that application. The Gulf FIN has been unable to establish a complete registration tracking system due to problems with obtaining state registration files, but are continuing to address this issue. ACCSP will provide them software for eliminating redundant records for individual vessels, fishermen, and dealers. Each of the GulfFIN partners do their own auditing but there was some interest in the ACCSP's process of establishing best practices across all partners, therefore, the ACCSP will provide copies of its SAFIS auditing software.

The Gulf FIN has Marine Recreational Fishery Statistics Survey (MRFSS) catch and effort estimates in its data warehouse, but it has not developed new queries. Gulf FIN plans to link to the queries that ACCSP is currently developing. Both groups will work together to build an automatic process to check MRFSS data for file changes and initiate uploads to refresh our data. Gulf

FIN will soon work to bring the Southeast Head Boat Logbook Survey legacy data into its data warehouse and the ACCSP will benefit from that effort. Gulf FIN has not yet fully implemented head boat sampling in the Gulf (Texas and Florida are conducting on-board observer sampling). ACCSP plans to stay coordinated as its Recreational Technical Committee begins work on the evaluation study for head boat sampling and fine-tuning of methods and sample sizes for the charter boat sector. Gulf FIN will work with the National Marine Fisheries Service in 2007 to conduct a survey using state recreational licenses as sampling frames in a side-by-side study against the random digit dialing telephone survey.

The Gulf has implemented biological sampling, but is using a new process to set sampling target levels. ACCSP will consider incorporating the newer sampling theories. The Gulf FIN IT staff began requirements analyses to develop a web-based application for entering biological data from field collection, eventually allowing data entry for lab processing (otolith aging, etc.). ACCSP has been interested in developing such an application and agreed to work with Gulf FIN on the requirements analysis and stay coordinated as it continues the programming. ACCSP will provide Gulf FIN information on improvements ACCSP made to biological database structures during development of the lobster database, as well as provide the conversion factor spreadsheet ACCSP has been compiling.

Both groups discussed creation of a one-stop shopping web page to compile all references on aging otoliths and other fisheries aging structures. ACCSP will take the lead on compiling that web page and GulfFIN will provide their references. ACCSP will coordinate with ASMFC staff to obtain their known references.

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.

New Staff

In May 2006, Ellen Lovelidge joined the ACCSP staff as its new Assistant Program Coordinator. Ms. Lovelidge earned her Bachelor of Science in Biology from Pennsylvania State University. As a research assistant with Penn State's Horticulture Department of Small Fruits, Ms. Lovelidge experienced numerous aspects of the biological research process, including farm management, editing of documents, proposal preparation, and data analysis. In 2005, Ms. Lovelidge illustrated the Mid-Atlantic Berry Guide for Commercial Growers for Penn State University. She has a strong interest in fishing and marine ecology, and is an avid fisherwoman, going out of Lewes for tuna, black sea bass, and other species.

A search is still ongoing for the ACCSP Outreach Coordinator.

News from Our Federal Partners

NOAA Fisheries Issues Requests for Proposals

NOAA Fisheries Service Northeast Region issued a Broad Agency Announcement (BAA) to solicit cooperative research proposals that address research topics relative to fisheries in the Northeast. These topics include studying innovative approaches to (1) collect biological information of harvested fish of specific species captured in statistical areas; (2) collect and report biological information of discarded fish captured during commercial and recreational fishing; (3) research innovative approaches to collect routine economic, social, and cultural information from commercial and recreational fishermen, shore-side workers, and other fisheries related people; and (4) develop educational programs to enhance understanding of marine fisheries science and management among the commercial and recreational fishing communities, fisheries and marine scientists, fisheries managers and others interested in marine resources.

Research proposals must be submitted by July 14, 2006 to be considered for funding. For more information regarding the BAA, visit the Northeast Region's Cooperative Research website at: <http://www.nero.noaa.gov/StateFedOff/coopresearch/>, or contact Earl Merideth at (978) 281-9276.

Southeast - MARFIN Funding Available

NOAA Fisheries is inviting the public to submit research and development projects that will optimize the use of fisheries in the Gulf of Mexico and off the South Atlantic states of North Carolina, South Carolina, Georgia, and Florida. Proposals should involve the U.S. fishing industry (recreational and commercial) and address issues including fishery biology, resource assessment, socioeconomic assessment, management and conservation, selected harvesting methods, and fish handling and processing. Projects may be funded for up to three

years. *Applications are due July 12.* For more information, contact Scot Plank at (727) 824-5324.

NOAA Offers New Rewards for Returned Fish Tags

\$250 Lottery for Black Sea Bass and Scup Tags

NOAA's Northeast Fisheries Science Center (NEFSC) will hold quarterly drawings to award \$250 to fishermen who return tags and provide basic information about tag-bearing black sea bass or scup. The drawings will be held in the Woods Hole Science Aquarium, beginning in late June.

The NEFSC has several ongoing tagging programs to examine the biology and movement of fish. Two programs, the Cooperative Black Sea Bass Tagging Project and the Cooperative Scup Tagging Program, currently offer rewards. Fishermen who call in to report orange tags on black sea bass tags or lime green tags on scup receive an embroidered cap. Fishermen who report tags marked "\$100 Reward" receive a check.

In an effort to boost the number of tags reported, NEFSC scientists are now offering a second choice: fishermen who report tagged black sea bass or scup may choose either an embroidered cap or entry into the drawing for the \$250 prize. Fishermen who capture fish with \$100 reward tags (red for black sea bass, orange for scup) are not eligible for the \$250 drawing.

The first drawing will take place the last week of June in the NEFSC's aquarium in Woods Hole. An aquarium visitor will draw the winning tag. The drawing will offer odds of approximately 1 in 250 for each tag submitted. Fishermen may enter more than one tag. To be

enter the \$250 drawing, fishermen must mail the tag to: NEFSC Cooperative Tag Drawing, NOAA Fisheries, 166 Water Street, Woods Hole, MA 02543, Attn: Moser.

The tags must be accompanied by basic recapture information: name and ad-



Scup were tagged along the dorsal fin in the fall of 2005 — anglers should be encountering these fish in inshore New England waters this summer. Photo courtesy of NOAA NEFSC.

dress of fisherman; date of tag recapture; location of recapture (latitude/longitude, Loran, or the reef/wreck name is preferred).

Tags received after June 23, 2006 will be entered in the second drawing, which will be held in late August 2006. The \$250 lottery program will continue until the NEFSC receives fewer than 100 new entries during a quarter. At that time, the program may be adjusted or discontinued. For more information, please contact George Liles at (508) 495-2378.



Between 2002 and 2004, more than 13,600 black sea bass were tagged with orange tags anchored in their abdomen. Photo courtesy of NOAA NEFSC.

Linda Schwab Celebrates Her 25th Anniversary at the Commission



On June 12, 2006, 25 years to the day that she began working for the Commission, Linda Schwab was honored by Executive Director John V. O'Shea with a special letter commemorating her faithful and dedicated service to the Atlantic States Marine Fisheries Commission. Linda is the first Commission employee to reach this impressive milestone. Linda began her career with the Commission as secretary, handling the administrative needs of then Executive Director, Irwin Alperin, and the other technical staff. For the last twelve years, Linda has been the Commission's Meetings and Membership Coordinator, overseeing the Commission's ambitious meeting schedule and being the first point of contact for new Commissioners. Congratulations, Linda!

Atlantic States Marine Fisheries Commission
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Return Service Requested