



Volume 18 Issue 4

TIDEWATER CHAPTER NEWSLETTER

Winter 2003

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President's Corner

It is with great anticipation that I welcome everyone to our upcoming annual meeting at Salisbury University in January. Our President Elect, Ann Barse, has planned a wonderful meeting, complete with top-notch entertainment, a banquet dinner, comfortable facilities, a campus setting, a great raffle, and a diverse program is in the making. Of course the success of this meeting is dependent on our membership's attendance and support. I look forward to yet another successful meeting where we enjoy each other's company and stimulate our scientific interests.

It is exciting to see a new slate of officers as we hold elections for the 2004 Tidewater Executive Committee. Serving as an officer within the Tidewater Chapter provides many opportunities for professional development and leadership. I have thoroughly enjoyed my tenure as president. This opportunity has allowed me to meet and interact with many of you. Each interaction has been pleasurable and I have been continually impressed with the level of commitment of our chapter members and their willingness to contribute to the growth and development of our chapter. I am truly grateful for this experience and especially for the professional growth it has afforded me.

-- James A. Morris, Jr., Tidewater Chapter President

Secretary/Treasurer's Report

Checking Account: \$4,438.40

Savings Account: \$5,671.88

Notes:

The Chapter deposited \$5,091.00 this quarter into our savings account. After a year and half of negotiating and paper work, we received \$5,000.00 for our contribution and support to the 2002 AFS National Meeting, held in Baltimore, Maryland. We also received \$91.00 in membership dues (up to August 2003) from AFS headquarters for members who joined through them. I am still in the motions of finding out who these people are and how AFS schedules membership reimbursements. Not including these unknown members our

2003 Tidewater AFS EXCOM

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President Elect – Ann Barse, Phone 410-543-6073; email ambarse@salisbury.edu.

Secretary/Treasurer – Wesley Patrick, Phone 252-328-2945; email wsp0619@mail.ecu.edu.

Past President- L. Alan Weaver, Phone 804-752-5504; email aeweaver@dgif.state.va.us.

MD Member-at-Large – Erik Zlokovitz, Phone 410-260-8306; email ezlokovitz@dnr.state.md.us.

VA Member-at-Large – Dave Hopler, email hoplerjrda@mail.vcu.edu.

NC Member-at-Large – Neil McNeil, Phone 252-728-8706; email neil_mcneil@noaa.gov.

ECU Student Subunit – Jennifer Cudney (ECU), Phone 252-328-1758, email JLC0213@mail.ecu.edu.

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Historian – Roger Rulifson, contact information as above.

membership number is X. Up X since our last newsletter report.

In our next EXCOM meeting I will be discussing investment options for our savings. Currently, the chapter operates with a budget of \$4,000 a year. This leaves us with an excess of over \$6,000 that we could invest into better interest options. If you have any suggestions on how our interest earned can be improved please contact me via email (wsp0619@mail.ecu.edu) or phone (252-328-2945).

-- Wes Patrick, Tidewater Secretary/Treasurer

18th Annual Tidewater Meeting, January 8-10, 2004

The 18th Annual Tidewater Chapter meeting will be held January 8-10, 2004 at Salisbury University on the eastern shore of Maryland. Please see the Preliminary Program and Registration information at the end of this newsletter. The Arrangements Committee consists of Ann Barse, Chair, Paul Grecay, Ron Klauda, and Dave Secor. Erik Zlokovitz is Raffle Chair.



Holloway Hall, the administrative building of Salisbury University.

Meeting Accommodations

A block of rooms has been reserved at The Ramada Inn and Conference Center, 300 S. Salisbury Blvd., Salisbury, MD, 21801. Phone 410-546-4400 .

This is less than 2 miles from the university. Go to <http://www.ramada.com/> for more information. Rooms (specify smoking or non-smoking) are available with 1 king or 2 queen sized beds. Make your reservations by calling the hotel, provide them with a credit card number, and tell them you are with the Tidewater AFS group. The early deadline for the discounted rate was December 8, but rooms may still be available.

Annual Meeting Raffle

Eric Zlokovitz reports that the Raffle Committee has lots of cool and fun prizes, but encourages everyone to look around his/her office for old or unused books, "items of special interest", etc. for the raffle to add a little interest and humor. Bring whatever you have to the meeting and Eric will be glad to take care of it. Questions? Just give Eric a call or email at the address listed on page 1 of the newsletter.

Membership Committee Report

The Membership Committee put together an electronic membership invitation brochure ("ebrochure") encouraging past members to renew their membership and to invite others to join our ranks. The "ebrochure" was sent to approximately 140 fish and aquatic types from Maryland, Virginia and North Carolina by the Membership Committee (Dave Hopler, Neil McNeill, Erik Zlokovitz, and Alan Weaver – Chair). The ebrochure highlights Tidewater's mission statement, history, current and upcoming events, benefits of membership and some fun facts about the Chapter (e.g. Chapter Mascot – Oyster Toadfish). The ebrochure also encourages a visit to our web site and to the parent society's web site. Hopefully this effort will generate increased visibility of our Chapter and strengthen our membership ranks. I want to use this forum to personally thank the members of the committee for their efforts.

- Alan Weaver, Membership Committee Chair

Vote for Tidewater Officers

Ballot will be by email, or you can go to the Tidewater Chapter website at www.sdafs.org/tidewater and register your vote.

Nominations are:

- President – Ann Barse (MD)
- President-Elect – Chip Long (VA)
- Secretary-Treasurer – Wes Patrick (NC)
- MD Member-at-Large – Erik Zlokovitz
- VA Member at-Large – David Hopler
- NC Member at-Large – Neil McNeil

Biographies of Nominees –

Ann Barse – President

I was raised in Bethesda, Maryland, but spent most summers in Bethany Beach, Delaware. I moved to that area after graduating from high school, and spent the next 5 years working primarily as a plumber in winter, and a mate on charter sportfishing boats in summer, fishing primarily for

Boston mackerel, bluefish, tunas (bluefin, yellowfin, bigeyes and albacore), and white marlin. At 23, I continued the sportfishing job, but traded in the plumbing job to work towards a biology degree at the University of Delaware in Georgetown DE (Parallel Program), and then Newark, DE. My Master's and PhD were earned at the University of Maryland, Horn Point Laboratory in 1988 and 1994, respectively. My M.Sc. thesis was on the feeding habits and helminth parasites of white marlin off the Delaware and Maryland coast. My dissertation was on the community ecology of parasites living on the gills of mummichogs. I was a Visiting Assistant Professor from 1994-1998 at Salisbury University. I began my tenure-track position here in 1998. The regular lectures and laboratories that I teach here are: general zoology for biology majors, parasitology, invertebrate zoology, coral reef biology in Honduras, and biology seminar. I have also taught ecology, microbiology lab, and our non-majors biology lecture and labs. Most semesters, I have 1 or 2 undergraduates doing research in my lab for biology credits. We have done research on parasites of the American eel, various species of tunas and marlin, the mud snail (*Ilyanassa obsoleta*), the fourspine stickleback, stargazers and the striped searobin.

I am honored to be elected as your next President, and look forward to working with you and seeing you here in 3 weeks!

Christopher C. "Chip" Long – President-Elect

Greetings... I'm Chip... Born and raised in Lakeville Indiana (no wonder I'm a fisheries biologist)... Went to school for what seemed like an eternity to earn my B.S. in biology from Manchester College in 1996. Through and after college I worked here and there for the Indiana Department of Natural Resources and gained my first fisheries experience... Off to graduate school in Arkansas (University of Arkansas, Pine Bluff) where I worked on a human dimensions project geared towards urban fishing and youth recruitment into recreational fishing... finally obtaining my M.S. degree in 2003.

I began working in southeast Virginia for DGIF in January 2002. My district responsibilities include a wide variety of fisheries; small impoundments, municipal water-supply reservoirs, warm-water streams, and monitoring of anadromous fishes. The latter has inspired me to become more involved with the Tidewater AFS chapter. I hope to become better informed of the issues related to our coastal fisheries and increase awareness of the general public and other chapter members concerning these topics.

I am fully aware of the responsibilities of being chapter president and look forward to meeting the challenges of the position.

Wes Patrick – Secretary-Treasurer

Currently I live in Greenville, North Carolina where I am pursuing my Ph.D. in Coastal Resources Management at East Carolina University. I received my B.S. in Biology at the University of North Carolina at Wilmington in 1999 and my M.S. in Biology at East Carolina University in 2002. My research has centered on anadromous and catadromous fisheries, with a particular emphasis in striped bass population dynamics and genetics. I have been a member of the American Fisheries Society since 1999 and a Tidewater member since 2000. In 2001, I was elected vice-president of the AFS East Carolina University Student Subunit. During the years of 2001-2003 I served as your North Carolina Member at Large for the Tidewater Chapter. In 2003 I was elected secretary/treasurer for the Tidewater Chapter and hope to serve the chapter again for 2004-2005 year as your secretary/treasurer. Thank you.

Erik Zlokowitz -- MD at-Large Member

Erik was born and raised on Long Island, NY. As a kid, I worked at the historic Cold Spring Harbor Fish Hatchery and as a deckhand on party fishing boats in Long Island Sound and along the NY/NJ Atlantic Ocean Coast. I earned my Bachelors degree (B.S.) in Marine Biology at Southampton College (Long Island University System-LIU), in 1994 and my Master's degree (M.S.) in Marine, Environmental, and Estuarine Science at University of Maryland in 1999. As a master's student, I worked as a research assistant under Dr. Dave Secor at Chesapeake Biological Laboratory, Solomon's Island, MD. My thesis title was "Effect of habitat use and migration on PCB contamination in Hudson River striped bass" (this was measured using otolith chemistry to draw links between migration patterns, saltwater/freshwater habitat use, and level of PCB body burden in striped bass).

In 1995, I worked as a NMFS contracted fishery observer on gillnetters, draggers, and offshore longliners along the mid-Atlantic coast from Montauk, NY to Chincoteague, VA. During years 1998-2000, I worked for Dale Weinrich at Maryland DNR-Fisheries Service MULTIFISH project based on Kent Island. This program monitored populations and fisheries of shad, perch, catfish, and other bay species with creel, experimental fyke net, and fishery-dependent surveys. I also assisted with tagging of American shad at Conowingo Dam tailrace (Susquehanna River). Currently (since 2000) I work for the Maryland DNR- Striped Bass project at Tawes headquarters, Annapolis, MD.

My reason for involvement in the chapter is to encourage communication and exchange of ideas with other fishery biologists in the mid-Atlantic, recruit new members, and create a networking environment for grad students.

David Hopler – VA at-Large Member

I grew up in Bethlehem, PA, and obtained my B.S. in Fisheries from the University of Alaska, Fairbanks, in the spring of 1995. Currently I am working on my M.S. in Biology at Virginia Commonwealth University in Richmond, which is expected for spring 2004.

My work history is primarily in Alaska and Virginia. From 1991-1993 I was a Fisheries Technician with LGL Alaska Research Assoc. In 1994 I worked as a hatchery technician with Prince William Sound Aquaculture. I worked for state government from 1994-1996 as a fisheries technician with the Alaska Dept. of Fish & Game, and 1997-2002 as an Asst. Fisheries Biologist Supervisor with VA Dept. Game & Inland Fisheries. Currently I am an age and growth specialist at VCU. My hobbies are hunting, fishing, and Civil War history.

Neil McNeil – NC at-Large Member

I was born and grew up in Morehead City, NC. My early influences were from my brother and father who both had an interest in marine biology, weather, and all things unusual. I attended Methodist College where I majored in biology with an emphasis on the aquatic side of things. After graduating from Methodist, I held several short-term jobs working for a graduate student, doing a 2-year study of Cedar Island Marsh, running a small weather balloon launching station for Operation GALE, and working briefly for a scientist at the Institute of Marine Science in Morehead City.

I have held my present job working for the Population Dynamics Team at the NOAA Beaufort Lab since 1989. I am a biological science technician working primarily with Atlantic and Gulf menhaden. My duties include collecting dockside samples and catch information from the Menhaden commercial fishery and running a cast net survey for juvenile menhaden in local high salinity creeks.

I am married and have a 2-year old daughter. My interests include sailing, aquariums, woodworking and anything to do with the water. I enjoy working with the Tidewater Chapter because it keeps me up on current events in the field. I also enjoy helping students when I can who are working on their degrees and need help or advice.

Student Subunit News

East Carolina University

Happy Holidays from all the fish heads at East Carolina University!

Business meetings this semester were held on the first Wednesday of each month. The subunit experimented with a

new meeting format this semester to include a post-meeting social with guest speakers at a local pub. Guest speakers that presented research to students included Dr Joseph Flood (ECU Department of Recreation & Leisure Studies), who spoke on wilderness management and conflict resolution. Members participated in Get-A-Clue (campus organizational fair), and took over the organization of Big Sweep when the event was cancelled by the county due to Hurricane Isabel. ECU-AFS sponsored the event, resulting in collecting over a ton of trash from urban creeks. The subunit organized a web design workshop for the Department of Biology in mid October.

In November, four graduate students and one undergraduate attended the 3rd Annual Student Colloquium hosted by West Virginia University in Morgantown, West Virginia. Attendance included over 100 students representing schools from Massachusetts to Florida and Arkansas. Four schools expressed interest in hosting next year's student colloquium: East Carolina University, Auburn University, University of Florida, and College of Charleston. The location for the 4th Annual Student Colloquium will be announced this week (December 8). We have many ideas for activities and will undoubtedly be calling on the Tidewater Chapter for support if selected to be the host school.

On November 21, 2003 the student subunit welcomed professionals from across eastern North Carolina at the ECU-AFS 5th Annual Meeting. The event included a social, a judged poster session, and a delicious catered dinner of grilled chicken, pork chops and vegetables from a local restaurant (Lee's Country Kitchen, Greenville, NC). 1st, 2nd and 3rd place winners in the student poster session were Chad Coggins ("The effects of Hurricane Isabel on the abundance of juvenile *Alosa* in the lower Roanoke River"), Jennifer Cudney ("Population Demographics of American eel, *Anguilla rostrata*, in northwestern Pamlico Sound and Lake Mattamuskeet, North Carolina"), and Charlton Godwin ("The rise and fall of an alewife *Alosa pseudoharengus* population in Lake Mattamuskeet National Wildlife Refuge, North Carolina"). The guest speaker at the meeting was Dr. Dan Baird, head of the Department of Zoology at the University of Port Elizabeth in South Africa and the appointed East Carolina University Rivers Chair of International Studies. Dr. Baird's presentation was on "The Irreversibility of Fishing". James Morris also spoke about Tidewater Chapter events and the upcoming meeting in Salisbury MD.

The next business meeting of the ECU student subunit is January 14, 2004. If you are interested in attending a meeting, holding a forum with ECU students, or showing off your research please contact the student subunit! We look forward to hearing from you!

-- Jennifer Cudney, President, ECU-AFS Student Subunit.

Maryland News

Striped Bass Juvenile Index

Staff biologists from the Striped Bass Stock Assessment (SBSA) Project of Maryland DNR-Fisheries Service completed the Juvenile Index beach seine survey on young-of-the-year striped bass, white perch, shad, and several other species by September 15. Maryland's 2003 striped bass juvenile index was 25.8, the fifth highest mark in the survey's 50-year history. The long-term average is 11.9. The survey historically has been a good predictor of future striped bass populations along the Atlantic Coast.

In this year's survey, the Upper Bay index was the highest documented since 1970. Reproduction in the Potomac and Choptank Rivers was more than double their historic averages. Reproduction in the Nanticoke River was slightly above average.

Most anadromous fish showed very poor reproduction during the drought conditions of 2002. This year, they apparently benefited from the spring rains, higher freshwater flow, and moderate temperatures. Besides striped bass, yellow perch in the Upper Bay reproduced at near-record levels while white perch spawned highly successfully in all areas surveyed. American shad reproduction in the Potomac River and Upper Bay was high for the fourth consecutive year.

Other Striped Bass News

SBSA staff completed the summer/fall pound net tagging project in Early November, 2003. Approximately 5500 adult striped bass with cooperating pound net fishermen during the period June-November 2003. Pound net catches of legal sized (>18 inches) striped bass were down during July and August, and landings were expected to increase during fall, based on historical data. Unfortunately, Hurricane Isabel damaged many pound nets, docks and marinas, and cost most Maryland Watermen at least 1-2 weeks of fishing time. Many watermen were able to minimize damage to pound nets by lifting out the mesh and leaving only pound net poles prior to the storm. Watermen have observed an abundance of small (10-15 inch) striped bass, which are probably fish from the large 2001 year class.

SBSA staff completed checkstation monitoring of commercial hook-and-line and pound net landings on the day before Thanksgiving. We obtained length, weight, and scale age data on about 450 striped bass from the November pound net and hook-and-line fisheries. (Over 1500 fish were sampled at checkstations during the entire June-November pound net & hook season).

A new striped bass diet/stomach content study was initiated in June of 2003. Approximately 200 stomach samples were collected from Solomons north to the Susquehanna flats with gillnet and hook gear.

MULTIFISH Project

Staff biologists at the MULTIFISH Project of DNR-Fisheries Service (Kent Island Field Office) are preparing for the fourth annual upper bay winter trawl survey. This survey will begin in mid-December and uses otter trawl gear to track winter abundance and distribution of yellow perch, white perch, catfish, and striped bass in the upper Chesapeake Bay. Age structures (otoliths) will be collected from yellow and white perch

MULTIFISH staff completed the first year of field work on a new study that investigates the impact of urbanization and impervious services on the fish communities of Chesapeake Bay. Trawls and beach seines are being used in most of the upper Western Shore urban tributaries and the more rural Eastern Shore systems. Preliminary data indicates a very high abundance of young-of-the-year striped bass in many rivers where no spawning is known to occur. Yellow perch populations are also being monitored. Numbers of adult and young-of-the year yellow perch have been depressed in recent years in the more urban western shore tributaries.

MULTIFISH staff completed field work on monitoring of pound net landings and collect data on summer flounder, spot, croaker, bluefish, perch, menhaden, and other species with cooperating watermen in the Point Lookout and Hooper Island regions.

Shellfish

The news is grim on both oysters and blue crabs in Maryland tidewaters. Most crabbers experienced a poor season and will be compensated with emergency financial assistance from a federal aid program. The program distributes a \$500.00 check to crabbers in the mid-Atlantic/Chesapeake region who logged at least 100 days of fishing. Oyster season for patent tongs and divers was open October 1-31. Skipjacks (dredge gear under sail) will be allowed to fish from November 3-March 31. Preliminary data indicates that oyster landings (measured in bushels) for the fall 2003 season may be the lowest on record.

-- Erik Zlokovich, MD At-Large Member

Virginia News

Virginia Bluefin Tuna Record Falls Twice

The state record for bluefin tuna was topped two times in less than a week during the recent run of big fish off Virginia Beach.

On November 5, 2003, Dr. James C. Wright of Virginia Beach boated a 393-pound fish that was certified as the new Virginia state record by the Virginia Saltwater Fishing Tournament. A scant 6 days later on November 11th, E.K. Morrison of Nags Head, NC landed a 398 lb., 8 oz. fish to set the latest record.

Dr. Wright caught his fish at The Fingers off Virginia Beach while fishing with his son, Capt. David Wright, on the charterboat High Hopes. The bluefin, which measured 92 inches in length and had a girth of 62 inches, struck a ballyhoo trolled from an 80 pound class rod and reel spooled with 130 pound test line.

E. K. Morrison was chunking with butterfish baits at The Fingers while fishing with Capt. Don White on the charterboat O-Four. Morrison's fish, which measured 94 inches in length and has a girth of 63 inches, was taken on an 80 pound class rod and reel spooled with 120 pound test line. Morrison was reeling the butterfish bait in to check it when the bluefin struck and a battle lasting almost 5 hours ensued.

The prior state record of 357 pounds was caught southeast of the Cigar off Virginia Beach by Eddie Surratt, of Julian, NC on June 6, 2003. (VMRC Newsbrief).

-- David Hopler, VA At-Large Member

Chesapeake Bay Oysters Need Help!

The NOAA National Sea Grant Program, in conjunction with the Virginia and Maryland Sea Grant programs, held a conference in September, 2003 to assess the current understanding of oyster disease and the overall progress of restoration programs. Scientists, resource managers, and industry representatives from around the country developed and prioritized research objectives. A complete summary of the conference and findings may be found on the Maryland Sea Grant web site,

<http://www.mdsg.umd.edu/oysters/meeting>.

Hurricane Isabel Wields a Heavy Hand in Virginia

Coastal facilities around the state received extensive damage, which likely will take months to clean up. According to the Virginia Sea Grant Tideline newsletter, the VIMS campus suffered extensive damage. A nine-foot storm surge caused extensive damage to the seawater lab and oyster hatchery, and

destroyed two piers. Damage can be viewed at http://www.vims.edu/isabel_images.html.

Virginia Tech's Hampton lab also suffered extensive damage. The lower level was flooded with five feet of water, which ruined laboratory facilities and caused cobia and flatfishes to die as a result of aerators losing electrical power.

-- VA Sea Grant Tideline newsletter

North Carolina News

Hurricane Isabel Smashes Coastal North Carolina

In September, 2003, Hurricane Isabel severely pounded Northeastern North Carolina, Virginia, and Maryland. More people died in Isabel than from the Category 5 hurricane Andrew in 1992. Twenty-three people died in Virginia; at least seven Maryland. In Bertie County, N.C., almost 80 percent of homes were damaged. Bertie County had damages upwards of \$15 million. Hyde County, N.C., had damages more than \$13 million. Four North Carolina counties had damages of more than \$10 million. Twelve-foot surges slammed Edenton, N.C. In Harlowe, North Carolina, downstream of New Bern, dozens of homes suffered major damage and at least six were destroyed when eight- to 10-foot waves leapt over the banks of the Neuse River. North Carolina police said the worst damage was likely on southern Hatteras Island and Ocracoke Island, where sustained winds reached 105 mph. "The worst impact was down in North Carolina along the Outer Banks," Federal Emergency Management Director Michael Brown told national news networks. An aerial survey estimated the damage in Dare County, which includes the Outer Banks, at \$545 million, with \$313 million of that on Hatteras Island.

James Morris, Tidewater Chapter president, reported that his parents mariculture facility in Sea Level, NC, (NE of Beaufort/Morehead City) was completely destroyed when the storm surged topped Core Banks (Cape Lookout National Seashore), which allowed the full brunt of the ocean storm waves to reach the area. James related that his parents evacuated their home on a jet ski when the eye of the hurricane passed over their area. All clams were washed out of their nursery trays completely destroying crops for this year and for years to come.

Just up the beach, Pea Island received a new inlet south of Cape Hatteras several hundred yards wide and 20 feet deep, effectively cutting off the village of Hatteras and leaving hundreds of residents stranded. One local Hatteras fisherman related that, while his home sustained minor damage, his neighbors on both sides lost their homes from deepwater storm surge, which were swept into Pamlico Sound. For a brief period, neighbors climbed into the trees to escape being swept

away. The harbor at Hatteras Village is still filled with sediment and debris, making it tough on the commercial fishermen. The only remaining motels in the village have been taken over by U.S. Army Corps of Engineers personnel, who worked day and night to close the new inlet.



The new inlet formed by Hurricane Isabel between Hatteras Village and Frisco, NC. Note Highway 12 is completely gone. The inlet has since been filled in by the USACOE and Highway 12 has been restored.

North of Oregon Inlet, Chris Batsavage, a former Tidewater Chapter president, reported that Jeannette's Pier and Kitty Hawk Pier were totally destroyed. Beachfront at Kitty Hawk had over 200 homes condemned and the beach road was completely washed out in certain locations. Most of the damage was to beachfront homes and hotels, and considerable shoaling in navigation channels. Oregon Inlet has shoaled, which affected the flounder season because the trawlers could not get into the port of Wanchese during a 10-day harvest period. Water quality in Roanoke and Chowan rivers was very poor for several weeks after the hurricane, and numerous fish kills were reported. Commercial fishing for fall roe mullet was mediocre at best. Apparently many of the roe mullet left the estuarine and nearshore waters before the storm, evidently a common response by this species to heavy storm events. The hurricane also affected the southern flounder pound net fishery. People who set out early lost some gear and as a result

landings were lower. Fishermen speculate that flounder may have left early as well.



Going, going, gone. Local resident Luke Lucas of Southern Shores, NC, captured the demise of the Kitty Hawk fishing pier during the height of Hurricane Isabel's fury.

To find out more about predicted storm surge in coastal North Carolina try this interesting website: <http://www.ncstormsurge.com>. From there you can click on individual counties to see the effects of Category 1-5 hurricanes on land acreage and individual buildings. For Hurricane Isabel damage click on the counties of Hyde, Bertie, Dare, and Carteret.

-- Editor

North Carolina Division of Marine Fisheries

MOREHEAD CITY – Help is on the way for North Carolina's hard-hit crabbing industry thanks to federal disaster relief money allocated by Congress. Crabbers, along with seafood dealers and processors who handled or caught blue crabs will soon receive a check from the state Division of Marine Fisheries to compensate for economic losses and declining landings. Earlier this year, Congress authorized a federal aid package for the crab industry impacted by excessive foreign imports and reduced harvest for 2000, 2001 and 2002. Funding was divided among states based on historical landings, with N.C.'s portion of the aid package amounting to \$1.8 million. While crabbing is still the state's most profitable fishery, with 36.4 million pounds landed in 2002, harvest numbers are still well below the 47.8 million pound five-year average and the record high of 65.6 million pounds caught in 1996. The price crabbers, dealers and processors have gotten for their product has also sharply declined in recent years due to the surge of cheap foreign imports.

Fish Stocks Show Continued Signs of Improvement -- Red drum, North Carolina's official state saltwater fish, has been upgraded from overfished to recovering based on a recent

stock status report issued by the state Division of Marine Fisheries. Other stocks showing improvement include summer flounder, which moved from recovering to viable, black sea bass north of Cape Hatteras, which advanced from overfished to viable, and scup, which was elevated from overfished to recovering.

"North Carolina continues to move forward in protecting and restoring our coastal and saltwater fisheries," said Dr. Louis Daniel, Division of Marine Fisheries (DMF) scientist in charge of the state's annual stock status report.

"Once again, this progress shows fishery management plans work. Summer flounder, red drum, black sea bass north of Cape Hatteras, scup, gag grouper, striped bass in the ocean and Albemarle Sound area, weakfish, Spanish and king mackerel, and bluefish have all recently recovered, or are on the road to recovery, based on the fishery management plan process at both the regional and state level," said Daniel.

Fishery Management Plans (FMPs) map out proactive long-term recovery strategies for fisheries. North Carolina is developing FMPs for all of its major fisheries.

The news is not all good for Tar Heel stocks, black sea bass south of Cape Hatteras and striped bass in central and southern state waters were both downgraded from concerned to overfished. Stricter size and bag limits issued by the South Atlantic Fishery Management Council should help address the decline in sea bass stocks, while development of a new FMP including striped bass in all coastal waters should eventually turn that stock around in the central and southern area.

All other species covered in the report have remained the same. The DMF's annual stock status report evaluates the health of North Carolina's important coastal fisheries, spotlighting successes, as well as areas of concern. Of the 40 stocks listed, 16 fall into the viable and recovering categories, nine are listed as concerned, nine are listed as overfished, and six are listed as unknown. The North Carolina Marine Fisheries Commission uses this report to decide priority development of the state's FMPs.

To determine the status of Tar Heel fisheries, the DMF collects data and analyzes long-term trends in the length, weight, age, catch, and fishing effort for each stock. It also evaluates the total weight of the fish in a stock that are old enough to spawn, the number of juvenile or immature fish, fishing mortality, natural mortality, migration, size and age at maturity, regulatory impacts and bycatch. Several stocks were not upgraded but continue to show strong signs of improvement under the FMP process.

Fish and shellfish stocks considered viable are black sea bass north of Cape Hatteras, striped bass in the Albemarle Sound and the ocean, dolphin/wahoo, summer flounder, gag grouper,

king and Spanish mackerel, Atlantic menhaden, spot, spotted seatrout (speckled trout), shrimp and weakfish.

Recovering stocks include bluefish, red drum and scup. Stocks listed as concerned include Atlantic croaker, striped mullet, white and yellow perch, reef fish, American shad, bay scallops, oysters and blue crabs. Black sea bass south of Cape Hatteras, striped bass (in waters other than the ocean, Albemarle and Roanoke sounds), southern flounder, river herring in the Albemarle Sound, monkfish, sharks, spiny dogfish, Atlantic sturgeon and tautog are listed as overfished. In North Carolina, all overfished stocks either have regulations in place, or proposed regulations being developed, to stop overfishing and allow the populations to rebuild. The rebuilding process can take many years, especially if it is a long-lived species like red drum. Even if a species is recovering, it stays in the overfished category until a clear and consistent recovery trend is evident and it is declared recovering or viable. The DMF does not have sufficient data to conduct appropriate assessments on the status of some stocks. These stocks are listed as unknown and include catfishes, American eel, river herring outside of Albemarle Sound, kingfishes (sea mullet), hickory shad and hard clams. The DMF is collecting the necessary assessment information for these important fisheries and will be moving many of these stocks into the appropriate categories over the next few years. Visit the DMF's Web site at: <http://www.ncdmf.net/stocks/index.html> to view the new stock status report, along with species profiles and a glossary of fisheries terms. For more information about this stock status assessment, please contact Dr. Louis Daniel, DMF - Morehead City, by e-mail at Louis.Daniel@ncmail.net or by phoning at 1-800-682-2632 or 252-726-7021.

NOAA Beaufort Lab

Nutrient Limitation Increases Climate-active Compound in Marine Diatoms NCCOS/CCFHR scientists report that limitation by a variety of nutrients (particularly nitrogen) can increase intracellular DMSP (dimethylsulfoniopropionate) concentrations in diatoms by up to 60-fold. The significance of this finding is related to DMSP's role as an antioxidant and a grazing deterrent in marine algae. DMSP is enzymatically cleaved to the volatile sulfur compound dimethylsulfide (DMS), which, upon oxidation in the atmosphere, provides a major source of sulfate-based cloud condensation nuclei. Thus, processes that regulate DMSP in phytoplankton, can influence cloud formation and climate, and through effects on zooplankton grazing, may influence marine food web dynamics. The results point to the importance of nutrient limitation in enhancing DMSP concentrations in marine algae, and to potential unforeseen linkages between nutrients, global climate, and planktonic food web dynamics. This information is published by Drs. Eva Bucciarelli and William Sunda in the November issue of Limnology and Oceanography. For more

information contact Dr. William Sunda [Bill.Sunda@noaa.gov] at (252) 728-8754.

NCCOS/CCFHR researchers collaborated with a UNC Institute of Marine Science doctoral student to develop a video sampling method for comparing seagrass coverage between areas closed to commercial clam harvest (via the kicking method) versus areas that are open to harvest in Core Sound, North Carolina. Using equipment and methods that have proven successful in CCFHR's benthic habitat mapping project in the Dry Tortugas, CCFHR researchers designed an appropriate technique and assisted in its implementation. This effort represents a portion of the student's dissertation project whose aim is to model the spatial patterns of clam recruitment associated with closed and open harvesting areas at local and regional scales. For more information, contact Amy Uhrin [Amy.Uhrin@noaa.gov] at (252) 728-8778.

Announcements

The AFS Southern Division Spring Meeting will be held February 26-29, 2004 in Oklahoma City, OK. The second call for papers is out. Instructions are on the website at www.sdafs.org. The Southern Division Awards Committee is seeking nominations for Best Chapter. So nominate the Tidewater Chapter online!

The 58th annual Southeastern Association of Fish and Wildlife Agencies (SEAFWA) will be held in Hilton Head, SC, October 30 – November 3, 2004. The first call for papers is out.

Next Tidewater Chapter Newsletter

The winter newsletter will be coming out in March, so please send any newsworthy items to the editor at rulifsonr@mail.ecu.edu. Any graduate students graduating? New position title? Change of address? Sampling stories? Interesting pictures? Things new at your lab? Send us your news and make this a membership-based newsletter.



Your current EXCOM (L to R): A. Weaver, D. Hopler, J. Morris, N. McNeil, A. Barse, W. Patrick, E. Zlokovitz, R. Klauda, and R. Rulifson.

XVIII Annual Meeting of the Tidewater Chapter, American Fisheries Society

**Salisbury University, Salisbury, Maryland,
January 8-10, 2004**

Preliminary Program

Thursday January 8

1500	Check-in at the Ramada Inn starts
1500 - 1700	Tidewater EXCOM meeting Calvert Room, Commons Bldg., SU
1500 - 1700	Poster Setup, Worcester Room*, Commons Bldg, SU
1700 - 1800	Registration outside Worcester Room*, Commons Bldg, SU
1800 - 2100	Welcoming Reception/Poster Session, Worcester Room*, Commons Bldg, SU (cash bar)

* The room may change depending on the number of people attending, but it will definitely be in the Commons Building

Friday January 9

0800 – 1200	Registration continues outside Henson Science Hall (HS) Rm 243
0730 – 1200	Continental breakfast followed by oral scientific presentations in HS 243
1200 – 1330	Lunch – on your own - restaurant and campus dining guide will be provided
1330 – 1600	Scientific presentations continue
1700 – 1800	Presentation of student awards & Tidewater Chapter Business Meeting, HS 243
1800 – 2200	Dinner Social at the Brew River Restaurant on the riverfront - Roast beef, fried oysters, pasta station with seafood and vegetarian toppings; plus a keg of Sam Adam's beer. Live music will be provided by Chris English's "Brother Lowdown," a local, traditional blues duo, with Chris on vocals, guitar and harmonica, and Leo on bass. The drawing for the annual TWC raffle will take place here. Everyone is invited/encouraged to bring fishing/camping gear, books, etc. or a cheap "gag gift" to donate to the raffle!

Saturday January 10

0730 – 1200	Scientific platform presentations continue in HS 243
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Scientific Platform - Abstracts are still coming in, but here are some of them:

Invited Speakers

Dr. Kennedy Paynter will be presenting a talk on the Asian oyster.

Dr. Gus Rassam or someone else will be coming from AFS Headquarters to talk about parent society initiatives.

Contributed Papers/Posters

Osprey tissues from Lake Mattamuskeet, North Carolina, show mercury accumulation. H. Alderman* and R.A. Rulifson, Department of Biology, East Carolina University, Greenville, NC.

Development of a food web model of a coral reef ecosystem at Calabash Caye. D. Chagaris* and J.J. Luczkovich, East Carolina University, Greenville, NC.

Hurricane Isabel's Effect on juvenile *Alosa* within the Lower Roanoke River, North Carolina. C. Coggins* and R.A. Rulifson, Institute for Coastal and Marine Resources, East Carolina University, Greenville, NC.

Fishery biology of the kingfishes (*Menticirrhus* spp.) off the coast of North Carolina, W.R. Collier II^{1,2}, T.E. Lankford¹, F.S. Scharf¹, F.C. Rohde², 1. University of North Carolina at Wilmington, Wilmington, NC, 2. North Carolina Division of Marine Fisheries, Wilmington, NC.

A molecular genetic marker for the taxonomic identification of kingfishes, *Menticirrhus* spp. (Perciformes: Sciaenidae). W.R. Collier II^{1,2}, T.E. Lankford¹, A.E. Wilbur¹, F.C. Rohde², 1. University of North Carolina at Wilmington, Wilmington, NC; 2. North Carolina Division of Marine Fisheries, Wilmington, NC.

Predicting the effects of dam removal on aquatic communities in the Salmon River, New York. J.E. Cooper, J. Toner and J.M. Farrell, College of Environmental Science and Forestry, SUNY, Syracuse, NY.

Abundance and distribution of anadromous larval fishes in the Roanoke River, North Carolina. I.A. Coulson*, B. Moroz, A.S. Overton, and R.A. Rulifson, Institute for Coastal and Marine Resources, East Carolina University, Greenville, NC.

Population demographics of American Eel (*Anguilla rostrata*) captured in Lake Mattamuskeet, NC. J.L. Cudney* and R.A. Rulifson, Institute for Coastal and Marine Resources, East Carolina University, Greenville NC.

Patterns in the distribution and demographics of the hogchoker, *Trinectes maculatus*, in the Chesapeake Bay. K.L. Curti and T.J. Miller, University of Maryland Center for Environmental Science, Chesapeake Biological Laboratory, Solomons, MD.

The rise and fall of an alewife *Alosa pseudoharengus* population in Lake Mattamuskeet National Wildlife Refuge, North Carolina, C.H. Godwin* and R.A. Rulifson, Institute for Coastal and Marine Resources, East Carolina University, Greenville, NC.

Fecundity of American shad, *Alosa sapidissima*, in the Delaware and Hudson rivers, USA. R. Jesien¹ and T. Piper², 1. Maryland Coastal Bays Program, Berlin, MD; 2. National Oceanic & Atmospheric Administration, Office of Ocean Exploration, Silver Spring, MD.

Coupling science with outreach: Maryland's Stream Waders Program. R.J. Klauda, D.M. Boward and R.M. Bruckler, MD Department of Natural Resources, Annapolis MD.

Measurement of silver perch (*Bairdiella chrysoura*) sound pressure levels using a ROV. J.J. Luczkovich and M. Sprague, East Carolina University, Greenville, NC.

Environmental PCR targets algal components using new phytoplankton-specific primers. A. McClanahan* and J. Stiller, Department of Biology, East Carolina University, Greenville, NC.

Evaluation of method for determination of nursery habitat based upon chemical analysis of micro-milled portions of adult otoliths. S. McGuire, D. Secor and J. Rooker, Chesapeake Biological Lab, Solomons, MD.

Use of polyculture to increase survival of juvenile cultured marine fishes when released in nature. J.A. Morris, J.S. Burke, and J. Kenworthy, National Ocean Service, NOAA, Beaufort, NC.

Catch survey analysis and biological reference points for white perch in Choptank River, Maryland. P.G. Piavis, R.A. Sadzinski, and J.H. Uphoff, Jr., MD DNR, Stevensville, MD.

Maryland fish kills 1985-2003: Emphasis on low dissolved oxygen-induced events in Chesapeake Bay. C. Luckett and C. Poukish, Maryland Department of Environment, Annapolis, MD.

Preliminary growth rate estimates for juvenile (age 0 to 1) blue crab, *Callinectes sapidus*. B. Puckett and D. Secor, Chesapeake Biological Laboratory, Solomons, MD.

Comparisons of macroinvertebrate assemblages on restored and unrestored oyster (*Crassostrea virginica*) reefs in Chesapeake Bay. W. Rodney* and K.T. Paynter, University of Maryland, College Park, MD.

Preliminary analysis of age 1+ striped bass feeding and prey selectivity in the Chowan River, NC. P. Rudershausen, North Carolina State University, Raleigh, NC.

Age and growth of dolphinfish caught in North Carolina waters. K. Schwenke and J. Buckel, North Carolina State University, Center for Marine Science and Technology, Morehead City, NC.

Telemetry as a tool for understanding patterns of movement and habitat utilization in yellow-phase American eels in the St. Johns River, Delaware. C.T. Jessie, D.A. Fox, and M.A. Reiter, Delaware State University, Dover, DE.

Causes and consequences of divergent recruitment pathways in Chesapeake Bay white perch. D.H. Secor and R.T. Kraus, Chesapeake Biological Laboratory, Solomons, MD.

Long-term assessment of thin-layer dredge spoil on *J. roemerianus*-dominated marsh. C. Voss*, J.J. Luczkovich, and D. Knowles, East Carolina University, Greenville, NC.

A century in 15 minutes: history of striped bass fisheries in Maryland tidewaters. E.R. Zlokowitz[†], M.L. Tarnowski, and D.H. Secor, I. Maryland DNR-Fisheries Service, Annapolis, MD.

Coastal migration of spiny dogfish, *Squalus acanthias*, overwintering in North Carolina coastal waters. R.A. Rulifson, East Carolina University, Greenville, NC.

5 years of excellence: ECU-AFS, Tidewater Chapter, American Fisheries Society. R.A. Rulifson and A.S. Overton, East Carolina University, Greenville, NC.

Fish parasite biodiversity: the case of the fourspine stickleback (*Apeltes quadratus*). A.M. Barse, Salisbury University.

Directions to the Tidewater Chapter Meeting

Salisbury University is located on a lovely 140-acre campus in the city of Salisbury in Wicomico County on Maryland's Eastern Shore, a part of the Delmarva Peninsula. SU is part of the University of Maryland System. If you are looking for something to do before or after the meeting, the city of Salisbury lies 30 miles west of the resorts at Ocean City, Maryland, and the Assateague Island National Seashore. It is also approximately 45 miles ESE of the Blackwater National Wildlife Refuge. Salisbury is 115 miles southeast of

Baltimore, Maryland, and Washington, DC, 125 miles south of Philadelphia, Pennsylvania, and 125 miles north of Norfolk, Virginia.

Salisbury is at the conjunction of east-west U.S. Route 50 and north-south U.S. Route 13. Salisbury University is positioned on U.S. Route 13 at the southern edge of the city of Salisbury.

Flying to Salisbury

It is possible to fly all the way here, landing at the Salisbury-Wicomico County Regional Airport (SBY).

Driving to Salisbury University

From the west:

From the Chesapeake Bay Bridge: Follow route 50 east to the city of Salisbury (roughly two hours). U.S. Route 50 passes west-east through Salisbury. Salisbury is located approximately 30 miles east of Cambridge, Maryland. As you approach the Salisbury area, there will be a split in the highway, with the new Rt. 50 bypass (for beach-bound travelers) splitting to the left. Stay to the right, on BUSINESS Route 50 (designated BUS 50). Follow this for several miles and go over a small drawbridge. Stay in the right lane as you go over the bridge, and make your first right after the bridge. This road becomes Camden Ave. Go straight on Camden for about 3/4 of a mile. You will come to the intersection of College Ave. and Camden Ave. which marks the northwest corner of the SU campus. (The university will be ahead of you and on your left). Continue south on Camden Ave. past College Ave. You should pass the main hall (Holloway) which is the large old building on your left with the clock tower on top of it. Proceed past the entrance of the first parking lot and past several dormitory buildings to the second parking lot entrance. Go left into the second parking lot and park anywhere. At this turnoff, you will see the very large Commons Building on the far side of this entrance. Go in the main entrance of the Commons Building and follow the signs for the "AFS-Tidewater meeting."

From the north:

U.S. Business Route 13 passes north-south through Salisbury. In fact, it borders the eastern edge of the Salisbury University campus. We are less than three hours south of the Philadelphia, Pennsylvania, area. When you enter Maryland from Delaware from this direction, you should proceed about 7.5 miles to the Salisbury University Campus. Look for the intersection of College Ave. and Route 13. There is a large water tower on your left side at this intersection and the campus will be ahead and to your right. Make a right turn on College Ave. and proceed to the next light. This is the intersection of College Ave. and Camden Ave which marks the northwest corner of the SU campus. (The university will

be on your left). Make a left turn on Camden Ave. and proceed south. You will pass the main hall (Holloway) which is the large old building on your left with the clock tower on top of it. Proceed past the entrance to the first parking lot and past several dormitory buildings to the second parking lot entrance. Go left into the second parking lot and park anywhere. At this turnoff, you will see the very large Commons Building on the far side of this entrance. Walk in the main entrance of the Commons Building and follow the signs for the "AFS-Tidewater meeting."

From the south:

U.S. Business Route 13 passes north-south through Salisbury. In fact, it touches the eastern edge of the Salisbury University campus. We are less than three hours north of the Norfolk, Virginia, area. Proceed into Salisbury on route 13. Soon after entering Salisbury you will see the university on your left. Continue to the light at College Ave. There is a large water tower on your right side at this intersection and the campus will be on your left. Make a left turn on College Ave. and proceed to the next light. This is the intersection of College Ave. and Camden Ave which marks the northwest corner of the SU campus. Make a left turn on Camden Ave. and proceed south. You will pass the main hall (Holloway) which is the large old building on your left with the clock tower on top of it. Proceed past the entrance to the first parking lot and past several dormitory buildings to the second parking lot entrance. Go left into the second parking lot and park anywhere. At this turnoff, you will see the very large Commons Building on the far side of this entrance. Go in the main entrance of the Commons Building and follow the signs for the "AFS-Tidewater meeting."

From the east:

Park your submarine at the Ocean City public landing, then take U.S. Route 50 west to Salisbury. In Salisbury, follow the signs to campus. You will exit route 50 on Beaglin Park Drive. Follow Beaglin Park Drive to its intersection with route 13 (you will see a water tower on your right). At this intersection Beaglin Park Drive becomes College Ave. Go across route 13 onto College Ave. and proceed to the next light. This is the intersection of College Ave. and Camden Ave which marks the northwest corner of the SU campus. (The university will be on your left). Make a left turn on Camden Ave. and proceed south. You will pass the main hall (Holloway) which is the large old building on your left with the clock tower on top of it. Proceed past the entrance to the first parking lot and past several dormitory buildings to the second parking lot entrance. Go left into the second parking lot and park anywhere. At this turnoff, you will see the very large Commons Building on the far side of this entrance. Go in the main entrance of the Commons Building and follow the signs for the "AFS-Tidewater meeting."

Travel to the Ramada Inn

In Salisbury, route 13 is also known as Salisbury Blvd. The Ramada Inn is located at 300 S. Salisbury Blvd., just north of the intersection of E. Carroll St., and 1.1 miles north of Salisbury University.