

Winter 2015 Volume 30, Issue 1

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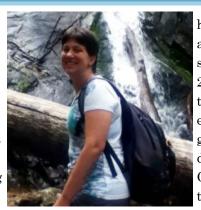
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President's Corner | Jessica Thompson

Greetings Tidewater Chapter members! I'm writing this article on the last day before my university officially closes for winter break, and it is eerily quiet. I think I might be the last "man" standing at this point, but I'm taking advantage of the peace and quiet to catch up on

Tidewater business before heading off to spend the holidays with my kids.

By the time you read this, the holidays will be behind us, which means we will all be looking forward to the Tidewater meeting this spring! The 29th Annual Meeting of the Tidewater Chapter of AFS will be held from March 5-7, 2015, at the North Carolina Aquarium at Pine Knoll Shores. Scott Baker, Tidewater's President-Elect, has done a lot of work to ensure yet another fabulous Tidewater meeting, so please extend your thanks to him when you see him in March. The 2015 meeting will also be the last time that Ron Klauda will oversee the awards proceedings. Ron



has chaired the Awards and Scholarship Committee since its founding almost 20 years ago. I would like to take this opportunity to express our genuine gratitude for his amazing dedication to the Tidewater Chapter and would suggest that you raise a toast to Ron when you see him at

the annual meeting!

The Tidewater executive committee has been working on a number of issues this fall. A continuing issue is the state of the Tidewater listserv. Although one potential avenue for updating the listserv has fallen through, we are now in communication with AFS to determine if one of the options available through the parent society would be a good fit for our needs. Our original timeline for updating the listserv has, therefore, been extended, but we hope to have more information on the listsery to share with the membership at the annual meeting. We have also heard back from AFS on the revision of the

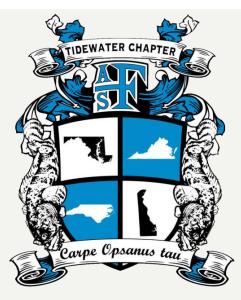
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President's Corner, continued from page 1

Chapter bylaws. Since they requested some additional changes, we will need to call for Chapter members to vote on the bylaws again. Please keep an eye out for more information on the bylaws this spring.

As always, the Tidewater executive committee is open to any suggestions from our members to help make the Chapter stronger and to better meet your professional needs. Please feel free to contact any one of your Tidewater officers with ideas, and I'm looking forward to seeing everyone at the meeting in March.





2015 Tidewater Chapter Annual Meeting March 5-7, 2015

Join us for the 29th annual Tidewater Chapter meeting! This year will be hosted by President-elect, Scott Baker, in Pine Knoll Shores, North Carolina.

The meeting will take place at the North Carolina Aquarium at Pine Knoll Shores. The meeting will begin with an optional continuing education course, Comparing and Selecting Growth Models, on Thursday afternoon. The Thursday evening poster social will likely feature an eastern NC BBQ and access to the "Freshwater Galleries" and Soundside Hall. The presentations on Friday and Saturday will take place in Soundside Hall. The Friday evening banquet will happen at the Saltwater Gallery with catering by Beaufort Grocery.



DEADLINES:

- Early registration: 5pm, Friday, Jan. 30
- Abstract submission: 5pm, Friday, Jan. 30
- Hotel group rate: Thursday, Feb. 5

COSTS:

- Early registration (includes all days and socials)
 - Student: \$60
 - Professional: \$100
- Hotel group rate: \$65.90/night

HOTEL:

- DoubleTree by Hilton
 - 2717 West Fort Macon Road, Atlantic Beach, NC
 - 252-240-1155

Registration costs will increase by \$10 after January 30. Please register ASAP if you plan to attend. Oral and poster abstracts need to be submitted during the early registration period. Make sure to include your chapter dues (\$10) when registering.

To register, visit the meeting website at http://www.sdafs.org/tidewater/AFSTidewater/
Annual_Meeting.html

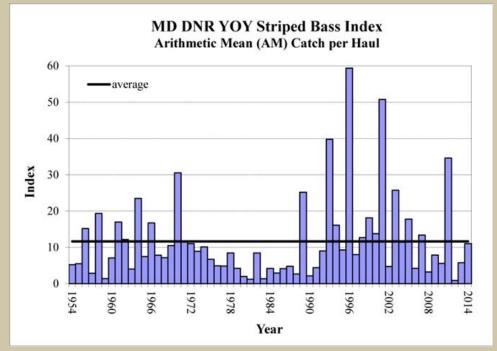
Maryland State Update | Bob Murphy



Striped Bass

The Maryland Department of Natural Resources recently announced that the 2014 juvenile index—a measure of Striped Bass spawning success in Chesapeake Bay—is 11.0, nearly equal to the 61year average of 11.7. According to DNR, the results indicate a healthy level of reproduction for Maryland's state fish. "These findings reinforce that, although the coastal Striped Bass population has recently decreased from historically high levels, the spawning stock in the Chesapeake Bay is capable of producing healthy year-classes as defined in the Atlantic States Marine Fisheries Commission (ASMFC) Striped Bass Management Plan," said DNR Fisheries Service Director Tom O'Connell.

The ASMFC's management framework includes measures to conserve spawning-aged female Striped Bass to ensure adequate reproduction over time. Because the survival of Striped Bass eggs and larvae is largely influenced by environmental factors such as water temperature, salinity and flow rates, the annual juvenile index naturally varies with occasional strong year classes, as observed in 2011, intermixed with



average and below average indices.

DNR biologists survey 22 sites in the four major spawning systems—the Choptank, Nanticoke, and Potomac rivers, and the Upper Bay. The crews visit each survey site three times during the summer, collecting fish samples with two sweeps of a 100-foot beach seine. To calculate the indices, fish are counted and then averaged by number of samples. State fisheries biologists have conducted Maryland's Juvenile Striped Bass Survey every year since 1954 to track the highly-variable reproductive success of these and other species including American Shad and White Perch, which also had successful spawning seasons. The Virginia Institute of Marine Science's Juvenile Striped Bass Survey returned similar results to Maryland this year.

Menhaden Research

Alex Atkinson, a Master's student at the University of Maryland's Chesapeake Biological Laboratory, is conducting her research on juvenile Atlantic Menhaden in tributaries of Chesapeake Bay, particularly the Choptank River. Atlantic Menhaden are sought after for their high oil content which is used to produce fertilizers, pet feeds, and supplements for human consumption. As filter feeders, Atlantic Menhaden are also a vital link in the food web, transferring primary production to higher trophic levels. They are an important food source for Striped Bass, Bluefish, tuna, and seabirds. Alex, working in the lab of Dave Secor, is particularly interested in the effect of winter temperature on the hatch dates of juvenile Atlantic Menhaden.

Maryland, continued

Historically, Chesapeake Bay served as the central nursery habitat for the shelf-spawning Atlantic Menhaden, but over the past two

decades juvenile production has fallen to < 20%of its former level. Otolithderived hatch dates have indicated that most recruits originate from spring-ingressed

larvae, rather than larvae entering in varying winter temperatures and early- and mid-winter. Alex hypothesized that prolonged exposure to low winter temperatures and low food availability in the Chesapeake was sub-lethal to larvae, shaping

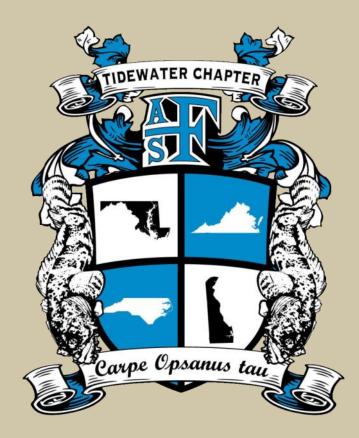
subsequent recruitment patterns. Hatch dates and back-calculated growth rates of juvenile menhaden from 2010 and 2013, years with

observed in seine-collected samples from 2010 and 2013 and hatch date distributions were not significantly different. Trawl-collected samples will be added to

the otolith analysis along with samples from 2011 and 2012 for added comparisons. Alex will be examining hatch dates and growth rates in

conjunction with other environmental variables such as phytoplankton abundance and river flow.

chlorophyll phenology, were compared. Average winter temperature in 2010 was 6.4°C and in 2013 was 8.8°C. Thus far, hatch dates earlier than January have not been



Virginia State Update | Willy Goldsmith



Harvell Dam Removed from the Appomattox River

Harvell Dam was removed from the Appomattox River in Petersburg, VA during the summer of 2014. The removal phase began in early July and was completed in early September. As the first obstruction on the river, the dam had long been deemed the most critical fish passage site on the Appomattox and one of the highest priority sites for migratory fish restoration in Virginia. This project secures fish passage access to 127 miles of upstream habitat for migratory fish, such as American and Hickory shad, American Eel, and River Herring. The removal is also expected to enhance recreational boating and fishing, providing an economic boost to the area. The project was a collaborative effort of the Virginia Department of Game and Inland Fisheries (VDGIF), U.S. Fish and Wildlife Service (Service), National Oceanic and Atmospheric Administration (NOAA), American Rivers, and the Harvell Dam Corporation, with support from the City of Petersburg. The project was designed by Froehling & Robertson and the removal was performed by K&K Contracting and Tolsons.



The removal of the Harvell Dam on the Appomattox River in Petersburg, VA will provide critical access to upstream spawning and rearing grounds for species such as American Shad, Hickory Shad, Alewife, Blueback Herring, and American Eel (Photo courtesy of Alan Weaver).

Access to spawning and rearing grounds within the Bay watershed is a critical component in the effort to restore valuable migratory fish species. The Harvell Dam was originally built (circa 1890) for mill power and navigation and was then used for hydropower from circa 1930 to the early 2000s. It is the sixteenth dam removed within the Chesapeake Bay drainage in Virginia since 2004. Its removal contributes to the nearly 1,000 miles of river and stream habitat already reopened to migratory and resident fish species, and helps to attain the Chesapeake Bay fish passage overall goal of opening an additional 1,000 stream miles by 2025.

Funding for dam removal implementation was made possible by grants from the Service's National Fish Passage Program and NOAA's Open Rivers Initiative program. Feasibility and additional

engineering funding was provided by VDGIF and the EPA Chesapeake Bay Program.

VDGIF's Fish Passage Project has been conducting anadromous fish monitoring since the 1990s and also conducted full community sampling pre-removal both upstream and downstream of the dam. Post removal monitoring will be conducted to document upstream passage of target species and to investigate the effects of the removal on the resident fish community.

For more information contact Alan Weaver, VDGIF Fish Passage Coordinator,

<u>alan.weaver@dgif.virginia.gov</u>, (804) 367-6795.

VIMS Continues Paired-Tow Calibration Experiments for New Trawl Survey Program Vessel

Last April, Virginia Institute of

Virginia, continued

Marine Science (VIMS) Trawl Survey Program staff began conducting paired-tow calibration experiments with the program's new research vessel, the R/V Tidewater, which will replace the R/V Fish Hawk. The program, which began in 1955, conducts monthly assessments of juvenile fish and blue crab abundance in Virginia's estuaries, and is currently directed by Dr. Mary Fabrizio and managed by Dr. Troy Tuckey at VIMS. To permit continuation of the long-term time series of recruitment data for Virginia, catches of the R/V Tidewater must be calibrated with those of the R/V Fish Hawk. Calibration factors are species-specific; each species requires development of an individual calibration factor.

During the calibration experiments, side-by-side 5-minute tows are conducted at every station sampled by the program in the waters of Chesapeake Bay and the James, York, and Rappahannock rivers, provided suitable space for the two vessels is available (most paired tows are completed with no more than 40 m between the two vessels). This "whole survey" strategy ensures that the trawls sample the range of habitats typically encountered when surveying, and avoids extrapolating findings to stations and conditions outside those that are sampled. This approach results in up to 111 stations being sampled monthly by both vessels. As of the end of October 2014, 505 paired tows had been completed. Fabrizio and Tuckey expect that calibration experiments will be

completed by April 2015. The study is The most recent coast-wide funded by NOAA's Chesapeake Bay assessment by the Atlantic Office, the Virginia Marine Resources Marine Fisheries Commission (VMRC), and VIMS. (ASMFC) in 2013 concluded

VIMS Fisheries Genetics Team Tackles Tautog Stock Structure

Tautog (*Tautoga onitis*) support an important recreational fishery along the U.S. east coast from Massachusetts to North Carolina. However, their slow growth rate and easy catchability due to their structure-oriented behavior makes



Dr. Hamish Small of the VIMS collects a fin clip sample from a tautog caught off the Virginia coast. Fin clips will be used to identify genetic markers that are critical for delineating tautog stock structure (Photo courtesy of Ken Neill).

them highly susceptible to overfishing and slow to rebuild following overfishing. Tautog are currently assessed and managed as a single stock from Massachusetts to North Carolina due to the lack of knowledge about appropriate management units.

assessment by the Atlantic States Marine Fisheries Commission (ASMFC) in 2013 concluded that the stock is overfished and experiencing overfishing. Understanding the stock structure is a critical first step towards delineating appropriate management units and subsequent management actions. Tagging studies indicate that Tautog undergo limited movements, with an inshore-offshore pattern of migration but no evidence of either long-range or north-south migration, suggesting that distinct stocks likely exist along the Atlantic coast. Such stock structure, if present, would have significant implications for the management of this species along the coast. The identification of genetic markers to investigate stock structure offer a potential means by which to better delineate the population structure of this species along the coast.

An ongoing study by VIMS researchers Dr. Jan McDowell and Dr. Hamish Small aims to address the lack of available genetic markers and assess stock structure for Tautog. The research began in January 2014 and will continue through 30 June 2015. This work represents a collaborative effort among VIMS scientists, members of the ASMFC Tautog Technical Committee, and commercial and recreational fishermen, with the latter being instrumental in collecting tautog fin clips for genetic analysis. McDowell and Small have recently developed a panel of 22 multiplexed microsatellite markers to investigate the

Virginia, continued

independence of Tautog populations off the coast of Virginia. This study is being funded by the VMRC Virginia Saltwater Recreational Fishing Development Fund. In addition to developing a suite of microsatellite loci, the VMRC-funded study will compare Tautog collected from three collection locations off Virginia, representing an inshore-offshore gradient, to samples taken north of Virginia. A recently submitted Saltonstall Kennedy proposal, if funded, would extend the study along the entire U.S. east coast. Preliminary data indicate that fish from Virginia are significantly different from those samples in Massachusetts. Analysis of samples from Maryland and the remainder of the Virginia samples is underway.

VIMS Researchers Investigate Speckled Trout Population Connectivity in the Mid-Atlantic

VIMS fisheries scientists are working to untangle the stock structure of Speckled Trout in Virginia waters. Prior to this study, there had been no genetic studies of Virginia's Speckled Trout; as a result, there is no information available regarding genetic connectivity among locations either within Chesapeake Bay or between Chesapeake Bay and other locations. It is unknown if populations in Virginia are selfrecruiting or to what extent recruitment relies on input from other geographic areas. Moreover, there has been no genetic comparison of Virginia Speckled Trout with those taken from North Carolina; they are currently assumed to be a single stock



It is unknown whether Speckled Trout caught in Virginia waters, such as this large specimen, are self-recruiting, or if they are part of a larger mid-Atlantic population. Virginia Institute of Marine Science researchers are employing genetic techniques to better understand the extent of population connectivity among Speckled Trout in the region (Photo courtesy of Hunter Southall).

due to tagging data, but that assumption is based on a limited number of tag recaptures. Determining the extent of connectivity is especially pressing in light of cold-stun events (fish kills) that occurred in Chesapeake Bay in the winter of 2014, which caused Virginia to temporarily close the recreational fishery for several months in 2014 as a precautionary measure aimed at preserving the spawning stock. The magnitude of the increase in natural mortality that results from these events is unknown and since the stock structure of Speckled Trout in Virginia is also unknown, there is no way to estimate the impact that a cold-stun event in one region has on other regions.

The VIMS team, which includes Dr. Jan McDowell, Susanna Musick, and Heidi Brightman, has joined

forces with recreational fishermen who have been tagging Speckled Trout as part of the Virginia Gamefish Tagging Program to collect fin clips. Fin clips are currently being collected from several Chesapeake Bay sub-estuaries including Mobjack Bay, York River, James River, Elizabeth River, Ware River, Rappahannock River, and the Chesapeake Bay side of the Eastern Shore of Virginia. These samples are being compared to collections taken from North Carolina and South Carolina. Molecular markers are being used to analyze DNA isolated from these fin clips to further the understanding of the stock structure of Speckled Trout. The results of these analyses can be used to more effectively manage this important recreational angling resource.

North Carolina State Update | Jacob Boyd



North Carolina Observer Program

The North Carolina Division of Marine Fisheries (NCDMF) runs a statewide Observer Program covering all inshore coastal waters from the Virginia line in Currituck Sound to the South Carolina border in Shollotte Sound. With all species of sea turtles that are found in North Carolina's waters (Loggerhead—Caretta caretta, Green—Chelonia mydas, Kemp's Ridley—Lepidochelys kempii, Leatherback—Dermochelys coriacea, and Hawksbill— Eretmochelys imbricate) being on the Endangered Species List and with the addition of Atlantic Sturgeon (Acipenser oxyrinchus oxyrinchus) in April of 2012, the NCDMF applied for and received Incidental Take Permits (ITP) for both Atlantic Sturgeon and sea turtles. These ITPs cover both the large and small mesh gill-net fisheries in North Carolina and set allowable takes of the protected species ensuring that the fisheries can continue to operate within the boundaries of federal law. In order to stay in compliance with the ITPs, the NCDMF created the Observer Program to conduct observer trips to characterize the fisheries and to record the number of protected species interactions that occur.

Observers go out with fishermen on their vessels recording biological data on everything that is caught. Observers also go out on NCDMF vessels to observe the fisheries. Not only are the data used to stay in compliance with the ITPs, but they are valuable information used for stock assessments and Fishery Management Plans for important finfish species. North Carolina has taken many proactive steps by applying and receiving ITPs to protect its fisheries, safeguard protected species, and stay within federal law.

North Carolina Sea Grant

Sea Grant received a grant to produce a video for a day in the life of an observer explaining the ins and outs of the Observer Program to be used as an educational tool to better communicate the goals that the NCDMF has for its Program. Sea Grant went out with a crew from the NCDMF and took some great footage of an observer trip near Adam's Creek off of the Neuse

River. It was a

beautiful day for filming and the crew (including the fishermen) had a great time and learned a lot. Look for the video in the spring on NC Sea Grant's website http://ncseagrant.ncsu.edu/

New State Record Skipjack Tuna

A new state record Skipjack Tuna was reeled in on August 31, 2014 while fishing the Gulf Stream south of Hatteras Inlet weighing a whopping 32 pounds!! The previous state record for Skipjack Tuna weighed 22 pounds, 3 ounces and was caught back in 1979. The world record for Skipjack Tuna weighed 45 pounds, 4 ounces and was caught off Baja California, Mexico in 1996. The fish was caught on a Gloomis Pelagic Series rod with a Shimano Torsa 30 reel using a Zuker Feather Lure on 30-pound test line. It measured 34 inches from the tip of the nose to the tip of the fork in the tail and had a 24inch girth.



University of Maryland Chesapeake Biological Laboratory Student Subunit Update $\mid Alex\ Atkinson$

Events and field trips were abound for the University of Maryland subunit this fall! The annual, student-organized Chesapeake Biological Lab 5k Run for Research went smoothly on a gorgeous September day. All funds raised go to support CBL student travel for research presentations.

In October, the subunit volunteered at the Patuxent River Appreciation Days, an event that Chesapeake Biological Laboratory

attends each year. The rainy weather did not deter us and fit well with our display theme which focused on educating patrons about water runoff and the role of wetland habitats in coastal watersheds. The facilities department at CBL helped to construct an impressive working watershed model that simulated high rain events over developed and undeveloped land. Also in October, the subunit was present at the St. Mary's

Oyster Festival. We featured the watershed model and shared fun facts with visitors about the animals that call the Bay home. We talked with many members of the public from the

neighboring states, all of them interested in understanding and helping the Chesapeake Bay.

Because of our close proximity to the Omega Protein reduction facility and because several students in the subunit study Atlantic Menhaden, we arranged a field trip to Reedville, VA to learn more about how they convert menhaden into fish meal and oil. Omega Protein produces fish meal and oil from Atlantic Menhaden caught by purse seines for use in

From upper left to lower right: Cara Simpson gives kids at Patuxent River Appreciation

Days a hands-on look at the impact of impervious surface in watersheds. "The Menhaden Crowd" in front of the Omega Protein fleet in Reedville. The gang puts safety first and Black Sea Bass.

during a visit to Reedville with their stylish hard hats. Gray Redding shares facts about Oyster populations in Chesapeake at the Oyster Festival.

Summer Flounder, Scup and Black Sea Bass.

Students witnessed the management

agricultural feeds, pet foods, cosmetics and human supplements. We got a tour of the reduction facility and got to see the warehouse where the final processed solid menhaden protein stored until it is ready to be shipped out. We also got to see the oil refinery where crude menhaden oil is refined through multiple processes using filtrations and clay presses. All in all, it was a great (and not that stinky) day in Reedville, VA.

Four subunit members participated in Mill Creek Middle School's career day in November. We talked with students about the reasons to attend graduate school and our individual journeys into the field

of fisheries science. Each session got to visit with "Freddie the freeze dried juvenile Sturgeon" and some were more enthused than others. Hopefully, we sparked an interest in some to pursue degrees in science.

Finally, in December several subunit members traveled to Baltimore, MD to sit in on the Mid-Atlantic Fisheries Management Council meeting. The meeting discussed management of Summer Flounder, Scup, and Black Sea Bass. Students witnessed the management development process and

the opportunity also provided students with ideas for potential career options beyond their graduate work.

Duke University Student Subunit News | Julia Livermore

DukeFish, the Duke University student subunit of AFS, members had a busy semester full of volunteering and fundraising for spring events.

This October, DukeFish kicked off its year with an extremely successful North Carolina Seafood Festival! Graduate student members sold over 1,000 seafood tacos containing sustainably harvested Spanish Mackerel caught in Core Sound and brown shrimp harvested in Pamlico Sound. All of our seafood was sourced through Walking Fish, the Community-Supported Fishery created by DukeFish members in 2008. Thus, the Seafood Festival also served as an opportunity to promote Walking Fish shares and sustainable seafood purchasing in general. Over 25 students volunteered to work at the festival over three days to sell tacos and provide Carteret County community members with sustainable seafood information. dining guides, and recipes.

The North Carolina seafood festival has generally been the capstone event of annual DukeFish activities. While this year was immensely successful, we hope to hold an even larger event this spring, with a little help from the NC State University Chapter. DukeFish has arranged, through the Nicholas School of the Environment Dean's Office, an opportunity to host renowned author Paul Greenberg for a public

talk to the Triangle community about the state of American seafood and his new book *American Catch:*The Fight for our Local Seafood.

Mr. Greenberg has been featured in the New York Times, National Geographic Magazine, GQ, The Times (London), and Vogue magazine. We hope to host Mr. Greenberg in March to start a conversation in the Triangle about the importance of local seafood in North Carolina and how consumers have the power to support coastal





communities' economies. In addition to a speaking event, we aim to host a community book reading and discussion, a sustainable seafood dinner, and a book signing and reception. If you are interested in attending this event, check the DukeFish website (http://sites.nicholas.duke.edu/dukefish/) for updates.

This spring, DukeFish members will also be involved in the second annual Ocean Awareness Week (OAW), a joint effort with the Duke University Ocean Policy Working Group, the Student Association for Wetland Scientists, and the Duke Chapter of the Coastal Society to get the larger Duke community thinking about marine issues. Plans for Duke's OAW are still up in the air but may include visiting speakers, film screenings, and photography exhibits.

Other upcoming events include a webinar on marine bycatch with Dr. Larry Crowder (the science director at the Center for Ocean Solutions and professor of biology at Stanford's Hopkins Marine Station), Earth Day festivities involving public discourse regarding sustainable fishing, and a fishing trip for DukeFish members.

We are looking forward to holding officer elections in March and welcoming new leadership with a fresh perspective on fisheries management. Current officers will be completing their degrees in May 2015 and will be presenting their master's research in April at the public Nicholas School of the Environment master's project symposium. Inquiries can be emailed to Julia Livermore at julia.livermore@duke.edu.



Current Financial Report Checking: \$11,158.25 Mutual Fund: \$ 1,598.59 Total: \$12,756.84

Treasurer's Report | Stephanie McInerny

The current checking account balance includes liability insurance for the Chapter (\$150) and costs for the upcoming annual meeting (\$2,500 for Aquarium and \$500 deposit for Friday night social).

If you are not currently a member of the Chapter but would like to join, a membership form can be found on the Chapter website or you can email me at Stephanie.McInerny@ncdenr.gov. Annual dues for 2014 are \$10.00. A lifetime membership is available for a onetime fee of \$150.00 and should be sent to:

Stephanie McInerny TWC Secretary/Treasurer 209 Brigantine Ct. Cape Carteret, NC 28584

Please make checks payable to: "Tidewater Chapter AFS."

Current Tidewater Membership by State *

Delaware (2%)

Lori Brown

Timothy Targett

Maryland (23%)

P. Brice

Andre Buchheister

Brian Gallagher

Bill Goldsborough

Lonnie Gonsalves

Reginal Harrell

Edward Houde

David Kazyak

Ron Klauda

Jules Loos

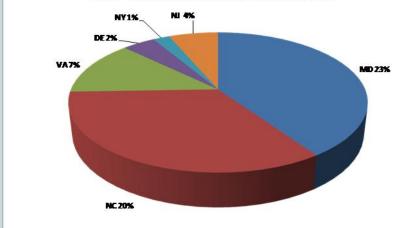
Carlos Lozano

Thomas Miller

Mike O'Brien

David Secor

2014 Dues Paying Membership by State



Suzan Shahrestani **Bradley Stevens** Marek Topolski James Uphoff E. Eugene Williams

North Carolina (20%) Scott Baker

Samantha Binion

Jacob Boyd Jeffrey Buckel Jody Callihan Tim Ellis Ernie Hain Todd Kellison Evan Knight

Stephanie McInerny

Warren Mitchell James Rice

Kyle Shertzer

William Smith

Thomas Thompson

Douglas Vaughan

New Jersey (4%)

Thomas Grothues

Roland Hagan

Jenna Rackovan

New York (1%)

John Cooper

Virginia (7%)

Heather Harwell

John Musick

Lauren Nys

David Rudders

Jessica Thompson

Alan Weaver

^{*} Membership as of 3/23/2014. If you paid dues through the parent society after this date, you may not be included in this list.

AFS Tidewater Chapter Executive Committee

President: Jessica Thompson

President-Elect/ Program Committee

Chair: Scott Baker

Past President/ Nominating Committee

Chair: Mike Wilberg

Treasurer/ Secretary: Stephanie McInerny

At-Large Members

North Carolina: Jacob Boyd

Virginia: Willy Goldsmith

Maryland: Bob Murphy

Student Subunit Presidents

Duke: Julie Livermore

ECU: Nick Tolopka & Zach Gillum

UMCES CBL: Alex Atkinson

UMES: inactive
UNCW: inactive

Awards & Scholarship Committee Chair:

Ron Klauda

Webmaster: Chad Smith

Newsletter Editor: Laura Lee

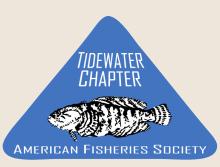
2015 AFS Annual Meeting Heads to Portland!

The Oregon Chapter and Western Division of the American Fisheries Society cordially invite you to attend the 145th Annual Meeting that will be convened in Portland from 16 to 20 August 2015. A diverse program, unconstrained by a single theme, will feature the latest scientific knowledge, management applications, policy implications, and educational pursuits related to freshwater and marine resources.

The city of Portland is blessed with an abundance of diversity and an appealing laid back and relaxed pace. The downtown area of Portland offers unique experiences and endless activities from wine bars in historic buildings to art galleries housed in modern buildings. The city is repeatedly ranked as one of the best walking cities in the United States. It is this walkability that will allow you to easily visit the countless restaurants, food carts, microbreweries, distilleries, and coffee shops that have led to Portland being recognized for its outstanding culinary and beverage scene. Portland and the surrounding Pacific Coast-Wine Country-Cascades-Columbia River Gorge landscapes provide endless opportunities for sightseeing, outdoor adventure, and fishing. The city of Portland and surrounding areas have something for everyone to enjoy in August 2015!

Visit http://2015.fisheries.org for more information.

Get updates via the Chapter LISTSERV



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E-mail to: <u>LISTSERV@LISTSERV.ECU.EDU</u> and enter SUBSCRIBE TIDEWAFS in the body of the e-mail.

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