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President's Message

Summer is here and many of us have just finished up the weirdest spring we have ever had. For some of us life has not changed that much, for others it has changed drastically. Hopefully, you are comfortable in your current situation and have been able to come out of your cocoon a bit now that North Carolina is in Phase 2.

Most of us have some sort of modified work schedule. Many field biologists are not in the field as much, and if you are used to an office, it is likely that you are still adjusting to working from home. The world is different, and I urge you to take this opportunity to think differently. Since we are already out of our comfort zone, this is the perfect time for out-of-the-box thinking. What projects have we put off planning that we can now map out? What skills can we develop? How can we help aquatic resources more? How can we connect with constituents better? Now is the time to do the things you have always wanted to do if you could find the time.

Conversely, some of us are desperately behind because of postponements and shutdowns. This can be terribly frustrating and overwhelming. All the adaptations we have had to make recently have created a bottleneck for some of us and now that the state is opening back up "it's like drinking from a fire hose." No matter where you are in your career, I would ask that you are patient with folks, communicate with your work team, and make reasonable plans to climb the mountain of work that some of us have.

Continued on page 2...

In the spring newsletter, I mentioned how we are a fisheries family. Please remember—if you need us, reach out.

Be safe and keep up the good work,

Ben

Submitted by Ben Ricks, NCAFS President

Treasurer's Report

Balances as of June 24, 2020:

NCAFS Wells Fargo Checking Account: \$8,753.80

RRCC Wells Fargo Saving Account: \$4,044.85

Edward Jones Ichthus (Student) Fund: \$27,526.82

Edward Jones General Fund: \$57,808.57

We had an application deadline of April 1, 2020 for all donation requests. Thank you to all of those who applied! Congratulations to the following Chapter members for receiving donations on behalf of various programs or projects:

Quentin Nichols (\$750) - To purchase equipment needed to sample Striped Bass eggs from the Roanoke River in relation to climate change.

William Seaman (\$750) - To fund water quality tests to aid the Montreat Landcare Committee in the restoration of Flat Creek. This is part of a larger community effort to restore habitat in Flat Creek to aid in the future conservation of Brook Trout and the Eastern Hellbender.

Morgan Raley (\$750) - To aid HydroGenomics in their effort to develop microsatellite DNA markers for the Carolina Creekshell by funding consumables that will be used in the initial phases of the development of these microsatellite markers through next-generation sequencing technology.

Bryn Tracy (\$600) – To help fund the publication of the manuscript “*Ghost Sightings Made by Ichthyologists Past: Lepomis megalotis, Longear Sunfish, in North Carolina*” by Bryn Tracy, Gabriela Hogue, and Fritz Rohde in the Southeastern Naturalist. (*This was approved during the November 1, 2019 deadline but only recently funded*).

Congratulations again to Riley Gallagher for receiving the NCAFS Best Student Paper Award at the 2020 NCAFS Annual Meeting! Riley received \$300 for his award and the remaining \$300 was donated to the NCSU Student Fisheries Society, per request.

Lastly, congratulations to Clint Morgeson for receiving the 2020 free AFS membership (\$65) as part of the annual drawing for chapter members who vote in our elections.

All the above donations and awards came from the Wells Fargo Checking Account. The Ichthus and General funds have rebounded from the stock market dip in March and are now continuing to grow. For any questions regarding finances, donations/awards, or procedures, please contact Kelsey Roberts at kelsey.roberts@ncwildlife.org.

Submitted by Kelsey Roberts, NCAFS Secretary/Treasurer

White Bass Acoustic Telemetry



Kelsey Roberts with a trophy White Bass.

The Eno and Flat rivers, two major tributaries for Falls Lake, host one of North Carolina's most sought-after White Bass *Morone chrysops* populations. Every spring, anglers flock to the Eno and Flat rivers to fish what has become a staple in the culture of Durham Country, the White Bass run. What makes this run so popular is the sheer volume of fish that become highly concentrated and the sport of trying to determine when the peak spawning days will occur. While there are many theories, by the angling and scientific community, as to which environmental factor plays the largest role in determining when White Bass will spawn (river flow, water temperature, cloud cover, moon phase, photo period, etc.) or whether it will be a successful spawn, there have been no studies that track the movement, timing, and habitat selection of White

Bass during their run in relation to various environmental factors.

The N.C. Wildlife Resources Commission (Commission) started an acoustic tagging project to track White Bass during the spawning run as part of an ongoing conservation effort by the Commission. The main goals of the project are to evaluate micro- and macro-habitat use during spawning/staging and to evaluate movement patterns during the spawning run in relation to various environmental factors. In spring 2020, 50 White Bass were surgically implanted with acoustic transmitters. Passive receivers equipped with temperature loggers were deployed in various habitats throughout the Eno and Flat rivers as well as Falls Lake. Although active locating



Passive acoustic receiver.

of fish via active tracking was severely limited this April due to Covid-19, the Commission plans to tag and track additional fish in the spring of 2021.

The results of this project will help biologists better predict when and where actual spawning occurs. This information will improve the Commission's ability to collect brood stock and survey populations in these and other rivers throughout the state. It is the first step toward better understanding specific spawning dynamics of this wonderful fish in North Carolina.

If you catch a tagged White Bass (tagged fish also have an external Floy Tag) please write down the fish ID and the phone number on the tag and release the fish. Help spread the word about this project by sharing this article with any of your friends or family that share a love for White Bass.



Submitted by Kelsey Roberts



New Website: North Carolina's Freshwater, Estuarine, and Marine Fishes

Scott Smith and Team continue to make updates, adding diagnostic pictures and text for identifications, and in the future, distributional maps, to the NCFishes.com webpages. For example, the page for the Carolina Pygmy Sunfish *Elassoma boehlkei* is starting to take shape with these types of information (Note: actual web page will appear differently):

| Family | Scientific Name | Author | Year | Common Name |
|---------------|--------------------------|-----------------|------|------------------------|
| Elassomatidae | <i>Elassoma boehlkei</i> | Rohde and Arndt | 1987 | Carolina Pygmy Sunfish |

Range: Endemic to North and South Carolina. In North Carolina it is restricted to the Waccamaw basin in Brunswick and Columbus counties.

Status: State Threatened.





Unique Characters: Usually 12 or 13 narrow dark bars on the sides. No postocular stripe or shoulder blotches. Scales absent on top of head.

Similar Species:


Everglades Pygmy Sunfish
Elassoma evergladei

No bars on sides except there may be some faint ones in the caudal peduncle region. Scales present on top of head.



Banded Pygmy Sunfish
Elassoma zonatum

Usually 9 wide, dark bars on the sides. Postocular stripe present and 1-3 shoulder blotches (often faint in life).

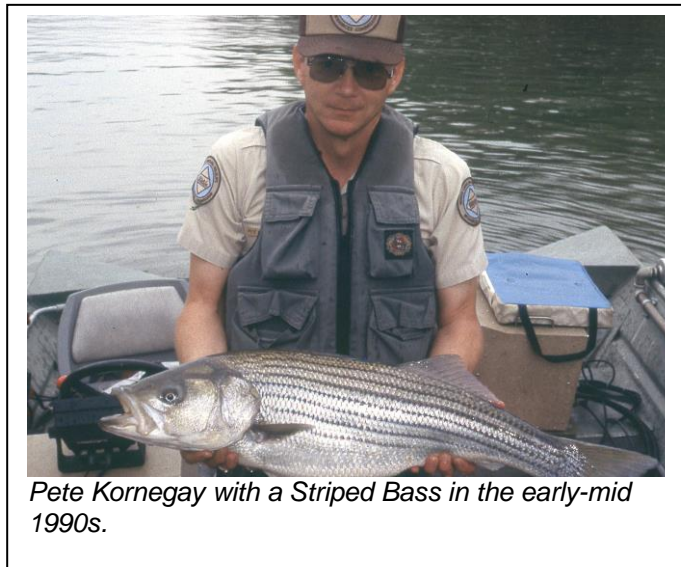


Scott and Fritz have been traveling state-wide as they capture some amazing images of the live colors of North Carolina's diverse fish fauna. If you know some hot spots where they can find fish when they are "hot", please let them know. If you would like to contact the Team, you may send them an e-mail at: fishesofnc@gmail.com. Lastly, the web page also hosts a blog: <https://ncfishes.com/blog/> - check it out and submit a post!

Submitted by the NCFishes.com Team

Methuselah Striped Bass Recovered in Roanoke River

The N.C. Division of Marine Fisheries (NCDMF) administers a tagging program in North Carolina's coastal waters and received a surprising call this spring. An angler caught and released a tagged 40-inch (~1,000 mm) Striped Bass *Morone saxatilis* in the Roanoke River in the vicinity of Hamilton (Halifax County) on April 29, 2020. Staff from NCDMF and the N.C. Wildlife Resources Commission (NCWRC) thoroughly perused Striped Bass tagging data and discovered the fish was originally tagged by NCWRC biologists Pete Kornegay and Joe Jernigan on May 8, 1995 in Weldon, NC when the male fish was ~ 21 inches (539 mm). Scales were not removed from that fish, but other males collected that year and of similar size were mostly age 6 (with a few age 5). Assuming the fish was age 6 at the time of tagging in 1995, it would be 31 years old in 2020! If so, it is tied with a scale-aged fish from Chesapeake Bay for the oldest Atlantic Striped Bass on record.



Submitted by Jeremy McCargo

Longear Sunfish in North Carolina



Longear Sunfish, *Lepomis megalotis*, courtesy of Scott A. Smith.

On behalf of Fritz, Gabriela, and myself, we would like to thank the EXCOM and all the members of the Chapter for helping to defray some of the page charges for our publication: Tracy, B. H., Rohde, F. C., and G. M. Hogue. 2020. Ghost sightings made by ichthyologist past: *Lepomis megalotis*, Longear Sunfish, in North Carolina. *Southeastern Naturalist*. 19:297-307.

We would have been unable to publish our findings, which were presented at the 2018 meeting of the Southeastern Fishes Council and at

the 2019 NCAFS Chapter meeting, it not for the generous contribution by the Chapter. All members are encouraged to publish the results of their research. If you are unable to secure publication funding from your employer, then please consider applying to the Chapter for a grant that may help defray some of its page charges (<https://nc.fisheries.org/awards/forms-applications/>). Members who would like a pdf copy of our publication may contact us at: fritz.rohde@noaa.gov, gabriela.hogue@naturalsciences.org, and bryntracy12558@att.net.

Submitted by Bryn H. Tracy

News from the N.C. Wildlife Resources Commission

2019 Wildlife Diversity Program Annual Report

The Commission's Aquatic Wildlife Diversity (AWD) Program is responsible for surveys and research on the state's nongame and endangered species. A [report](#) summarizing AWD's activities in 2019 is available, and includes staff profiles.

Wildlife in North Carolina Magazine Photography Competition

The [16th annual photo competition](#) is currently underway and accepting entries through September 1. Winning photographs will be published in the January-February 2021 issue of the magazine.

New Executive Director

North Carolina Wildlife Resources Commission Executive Director Gordon Myers is retiring after a 12-year stint leading the agency. Myers had a 17-year career in the Engineering Services Division prior to his role as Executive Director and oversaw the design and construction of boating and fishing infrastructure across the state. Succeeding him is Major Cameron “Cam” Ingram, a 23-year veteran of the Commission’s Law Enforcement Division. Ingram is the first Executive Director from the Enforcement Division since 1980.

Submitted by the NCAFS Newsletter Review Team

Virtual Conferences

Precautions to preserve public health have necessitated adaptations to professional conferences. The American Fisheries Society is proceeding with the 2020 [Annual Meeting](#) on September 14–25 as a live virtual conference that includes all of the special events of the typical conference (including the spawning run and carcass crawl). [Registration](#) is open now.

If you are unable to attend the Annual Meeting due to the registration fee, or if you are just looking for additional professional development opportunities, check out the free seminars and conferences below.

[USFWS Freshwater Mussel Conservation Webinar Series](#)

[USFWS Standardized Fishing with Electrical Fields](#)

[13th Annual Arthropod Genomics Symposium](#)

[Stay-at-Home RevBayes Workshop](#)

[Online Ecology Conferences](#)

Submitted by the NCAFS Newsletter Review Team

Good Work!

[Archambault J. M. 2020. Contaminant-related ecosystem functions and services of freshwater mussels \(Unionidae\) and public views on nature's contributions to water quality \[lib.ncsu.edu\].](#) Doctoral Dissertation. North Carolina State University, Raleigh, NC.

[Dorsey, L. G. 2020. Assessing angler use and demographics at three small impoundments using trail cameras.](#) Journal of the Southeastern Association of Fish and Wildlife Agencies 7:153-158.

[Penland, T. N., W. G. Cope, T. J. Kwak, M. J. Strynar, C. A. Grieshaber, R. J. Heise, and F. W. Sessions. 2020. Trophodynamics of per- and polyfluoroalkyl substances in the food web of a large Atlantic Slope river.](#) Environmental Science and Technology 54:6800-6811.

[Rash, J. M., A. M. Bushon, D. L. Yow, and A. P. Wheeler. 2020. Using an angler creel survey to supplement a stocked trout fishery evaluation in a North Carolina reservoir.](#) Journal of the Southeastern Association of Fish and Wildlife Agencies 7:13-19.

[Wood, C. J., D. W. Goodfred, and J. M. Rash. 2020. Assessment of stocking advanced fingerling Brown Trout in a North Carolina tailrace.](#) Journal of the Southeastern Association of Fish and Wildlife Agencies 7:1-12.

Stories of Interest

[NOAA Fisheries failed to adequately protect endangered species](#)

Lobster fisheries must reduce interactions with North Atlantic Right Whales

[NOAA Fisheries to open Marine National Monument to commercial fishing](#)

Closing the only U.S. Marine National Monument in the Atlantic

[America's deteriorating dams](#)

A recent dam breach in Michigan highlights the danger

[Dam removal prompts return of fish and wildlife](#)

A trip along Maine's Sebasticook River

[The Sixth Extinction may be accelerating](#)

This look at terrestrial vertebrates might provide insight into their aquatic neighbors

[Only catfish native to Western United States is functionally extirpated](#)

International research and management of the Yaqui Catfish

[Adapting fisheries in the face of climate change](#)

An overview of the projections and flexibility needed for sustainable fisheries

[FAO report suggests overfishing is getting worse](#)

Approximately 34% of world's marine fisheries are overfished

[DNA barcoding identifies mislabeling in NC Seafood](#)

Do you know where your seafood comes from?

[High levels of PFAS found in food chain in Yadkin-Pee Dee](#)

Great work from several NCAFS members researching emerging contaminants

[NCSU researcher fishing for PFAS](#)

The Cape Fear has a lot of PFAS too

Submitted by the NCAFS Newsletter Review Team

Call to Action!

If you want to contribute, have a story idea or would like us to include something in next quarter's newsletter, e-mail Kyle Rachels kyle.rachels@ncwildlife.org or give him a call at 252-548-4938. Also, if you want to become more involved with one of the many great NCAFS committees then please check the link below for information about each one, contacts, etc., <http://nc.fisheries.org/who-we-are/committees/>.

Valuable Links

The [American Fisheries Society Home Page](#) offers a wealth of links to assist you in your fishy endeavors. Information on ordering AFS books, annual meetings, chapter links and joining the AFS can be found there.

[Click to view dates & deadlines](#)

UPCOMING MEETINGS
In Fisheries & Ecology

This and [archived NCAFS newsletters](#), along with links, [chapter information](#), and [upcoming meetings](#), can be found on the [NCAFS website](#).
