



President's Message, *Greg Whitlege*

Happy New Year!

I hope that you all had a great holiday season and have had an opportunity to reflect on your accomplishments and the good memories you collected in 2018. In my experience, New Year's resolutions often have a life span of about a week (as evidenced by exercise equipment now gathering dust, etc.), but nonetheless I still think this is a good time to consider goals and opportunities for the upcoming year and beyond.

One opportunity to consider if you haven't already done so is renewing your membership or becoming a member of AFS at the national level. As AFS Executive Director Doug Austen indicated at our 2017 Chapter meeting, there are several benefits of AFS membership at the national level, including free access to all AFS journals. There are also financial incentives for chapters in which at least 50% of the Chapter members are also members of AFS at the national level.

Now is the time to make plans to attend the Illinois Chapter's 57th Annual Meeting, to be held February 26-28, 2019 at the Hilton Garden Inn in Champaign. Thanks to IL AFS Past-President Jim Lamer and to Jeremy Tiemann for making arrangements for the meeting. The IL AFS meeting is the highlight of the year in the life of the Chapter, and this year's meeting promises to be yet another informative and

fun event. Abstract submission is open through February 8th, so there's still plenty of time to write an abstract and prepare a talk or poster to let the Chapter know about the work you've been doing – we want to hear from you! Following a successful tradition initiated by former Chapter President Steve Pescitelli at the 2017 meeting, the ExCom has once again identified three speakers for a "Management Session" to kick off the 2019 meeting. Doug Blodgett will give a presentation on the Emiquon Preserve and Vic Santucci will speak about fisheries management in Lake Michigan. Mike McClelland, recently promoted to IDNR Fisheries Division Chief (congratulations Mike!) has also agreed to talk about the future of IDNR Fisheries and the IDNR hiring process (if you're a student with aspirations of obtaining a position with IDNR, you won't want to miss this). As always, we will have our annual raffle (chaired by Rebekah Anderson this year) that supports student travel and research awards, so be thinking of items you could donate yourself or coerce from potential donors. See the raffle donation request letter in this newsletter.

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Chapter Objectives:

- Promotes training of fisheries professionals.
- Provides education outreach to the citizens of Illinois.
- Fosters research in fisheries and aquatic sciences.
- Provides sound fisheries policy information.
- Enhances communication and synergistic relationships amongst fisheries professionals.

Chapter Officers and Chairpersons

President: Greg Whitledge

President-Elect: Phil Willink

Secretary: Blake Ruebush

Treasurer: Rich Lewis

Past President: Steve Pescitelli

Excom Members at Large: Karen Rivera/Kevin Irons

Committee Chairpersons:

Archival: Nathan Grider

Arrangements: Steve Pescitelli

Awards: Steve Pescitelli

Continuing Education: Ben Lubinski

Environmental Concerns: Karen Rivera/
Randy Sauer

IL Environmental Council: Diane Shasteen

IL Wildlife Action Team: Trent Thomas

Membership: Josh Sherwood

Newsletter: Brian Metzke/Jason DeBoer

Raffle: Rebekah Anderson

Resolutions: Rob Hilsabeck

Student Concerns: Dan Grigas

Student Subunits:

Eastern Illinois: Hanna Kruckman

Southern Illinois: Alex Loubere

University of Illinois: David Boggs

Western Illinois: Eli Lampo

Website: Brian Metzke

NCD Committee Reports Representatives:

Centrarchid: Josh Sherwood

Esocid: Rob Colombo

Ictalurid: Jeremy Tiemann

Rivers and Streams: Trent Thomas/Steve Pescitelli

Walleye: Jason DeBoer/Mike Garthaus



Illinois Council
Trout Unlimited



If you or someone you know is interested in supporting our organization, please contact the membership committee chairman, Josh Sherwood (jsherwo2@illinois.edu), for more information.

President's Message, cont'd, Greg Whitledge

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And speaking of awards, we will be announcing a proposed new award to support student registration in continuing education courses, such as those held in conjunction with the national AFS meeting. And, of course, there is always an opportunity to enjoy a cold beverage (thanks to PACRAM) while socializing with fellow fish-heads at the annual meeting – what more incentive do you need to attend?

Looking a bit farther down the road, Illinois will be hosting the 80th Midwest Fish and Wildlife Conference (MFWC) January 26-29, 2020 in Springfield. The conference co-chairs (Ann Holtrop and Mark Alessi [IDNR], Scott Beckerman [IL Chapter of the Wildlife Society] and myself) are looking for volunteers to assist with hosting the meeting. If you haven't already done so, please consider helping; see the call for volunteers in this newsletter. The MFWC is also a great opportunity to share your work with a broader, regional audience without having to travel a long distance. The ExCom has discussed holding our annual business meeting and raffle at the 2020 MFWC and potentially offering additional student and professional travel awards to support attendance at the 2020 MFWC by Chapter members.

For you catfish types, the third international catfish symposium (Catfish 2020) will be held February 18-20, 2020 in Little Rock, AR. Several of our Chapter members are already at work on conference committees. This is another great opportunity to showcase and publish any of your work on catfishes here in Illinois.

Thanks to all of the officers, committee chairs, and members who have continued to make Illinois AFS an outstanding organization. It has been a pleasure and an honor to serve as President, and I look forward to continuing to serve the Chapter as Past-President in the upcoming year. I hope to see you at the Annual Meeting in Champaign.

Cheers,
Greg

Snapshot of Graduate Student Research, *Seth Bogue, EIU*

Greetings fellow Illinois AFS members! My name is Seth Bogue and I am a second-year graduate student in Robert Colombo's lab at Eastern Illinois University. My research focuses on altered fin morphology of fish in the Sangamon River downstream of Lake Decatur. As some of you may remember, I presented some preliminary research at our annual meeting last year in Grafton, Illinois. I wanted to take the opportunity to give an update on the current status of my research.



The Sangamon River flows approximately 250 miles through central Illinois and is a major tributary of the Illinois River. It is mostly free flowing except in the city of Decatur where it is impounded for municipal use. The Sanitary District of Decatur (SDD) is located approximately three miles downstream of Lake Decatur. Medical, residential, and commercial waste is treated at SDD before being released into the Sangamon River. Discharge from the Lake Decatur dam is significantly reduced during periods of low precipitation. As a result, the stretch of the Sangamon River below SDD is dominated by wastewater effluent for much of the year.

Various fish species living in this stretch of the river have been documented with abnormal fin morphology. However, Catostomids (Buffalo and Carpsucker spp.) have the most obvious fin abnormalities. Anecdotal evidence indicates that well over half of these fish have fin deformities to some extent. Fin abnormalities in these fish include various degrees of elongation, asymmetry, and erosion. The caudal fin is most commonly affected; however, abnormalities have been observed in all other fins as well.

Based on the high abundance of fin abnormalities in fish from this stretch of the river, I hypothesized that SDD effluent was the cause. To test my hypothesis, I designed and implemented a microcosm experiment during the summer of 2018. My project encompassed SDD, the Charleston, Illinois Wastewater Treatment Plant (CWTTTP) and control tanks using de-chlorinated tap water on EIU's campus.

SDD disinfects their wastewater using a combination of chlorine and ammonia while CWTTTP disinfects using a UV light system. Due to the chemical nature of wastewater disinfection at SDD, I was interested in comparing fin lengths of fish exposed to effluent before and after this procedure. To do this, a pre and a post-disinfection treatment was setup at SDD and CWTTTP using wastewater that was pumped into plastic 350-gallon microcosm tanks. Two hundred 2-day post hatch (DPH) Fathead minnows were randomly allocated to each experimental treatment. Fish were fed the same amount between treatments and were placed in fine mesh enclosures to prevent supplemental feeding on various insects and algae present in the wastewater.

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Snapshot of Graduate Student Research, Seth Bogue, EIU

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Four fish were sampled from each treatment weekly. Weight, total length, standard length, and length of all fins were recorded for each fish. Water samples were also collected weekly for subsequent analysis. Fin lengths were standardized by the standard length of each fish to account for the effect of body size. Relative condition (K_n) was calculated using length – weight data from all treatments. Data was analyzed using Analysis of Variance (ANOVA) and Tukey's post-hoc HSD.

All fins of Fathead minnows in both SDD treatments were significantly longer than those from all other treatments. There was no difference in fin lengths between CWTP and control treatments. Furthermore, there was no difference in relative condition between any of the treatments. Results were indicative of a causal relationship between SDD wastewater effluent and fin elongation of fish residing in the Sangamon River. Nutrient concentration, alkalinity, and hardness were consistently higher in SDD water samples than all other treatments. While nutrient concentration is not the likely cause of fin elongation, it is indicative of the vast chemical makeup of the wastewater effluent being discharged into the Sangamon River.

The next question I wanted to address was how fin elongation and deformities affect swimming performance and metabolic rate of fish from the Sangamon River. I decided to work with Smallmouth buffalo due to their high abundance and prevalence of fin abnormalities. Using a variable speed flow tank and a dissolved oxygen probe, I swam fish at increasing speeds for ten-minute time intervals until exhaustion. Critical swimming speed is calculated based on how long the fish swam at the highest speed reached. Mass corrected metabolic rate is calculated from the dissolved oxygen depletion data collected during the course of the experiment. Preliminary results suggest that there is a positive relationship between critical swimming speed and caudal fin size while there is a negative relationship between caudal fin size and metabolic rate. These results suggest that fish in the Sangamon River are actually benefitting from their abnormal fin morphology.

Over the course of the next few years, we plan to greatly expand research on the Sangamon River to encompass all aspects of stream health and impacts of wastewater effluent. This will provide opportunities for new graduate students to expand upon my research and hopefully pinpoint the exact mechanism of fin elongation in fish exposed to SDD wastewater effluent.



*Fathead minnows from SDD (above)
and CWTP (below)*



IL AFS award winners announced, *Dan Grigas, student concerns chairman*

The Illinois Chapter of the American Fisheries Society is pleased to announce the winners of the Joan Duffy winner for 2018-2019 and the Larimore Student Research Grant winners for 2018-2019.

As a reminder, the Duffy award is a \$200 travel grant matched by the North Central Division of the American Fisheries Society, which provides \$400 for a fisheries student to attend the Midwest Fish & Wildlife Conference, January 37-30, 2019 in Cleveland, OH.

Our winner for the Joan Duffy Award from the Illinois Chapter of the American Fisheries Society is:

Sam Schaick - Eastern Illinois University

The purpose of the Larimore Student Research Award is to provide financial incentives for outstanding student research projects to promote the conservation, development, and wise use of the Illinois fisheries. Up to four grants are awarded annually, and each grant is eligible for up to \$500 depending on the quality of the proposal.

Our winners for the Larimore Student Research Grants from the Illinois Chapter of the American Fisheries Society are:

Storm Kettelhut – UIUC

Kellie Hanser – EIU

Greg King - UIUC

Dominique Turney – WIU

Congratulations to all of our winners!

IL AFS ExCom news bits, Greg Whitledge, SIU, IL AFS President

Blake Ruebush has stepped down as chapter secretary, and Karen Rivera has accepted a nomination to become the next chapter Secretary. This will open an at-large position on the ExCom, and Rebekah Anderson has agreed to a nomination for that position. Brief bio's for Karen and Rebekah are featured below.

Karen Rivera first began working in fisheries in 1978 as a sophomore in college, when she was hired by Woodward Clyde Consultants to assist with Environmental Impact Assessments on several streams in both Illinois and California. This work, which lasted three years, instilled in her a love of fisheries and aquatics in general. Karen then went on to receive her B.S. and M.S. from Eastern Illinois University. Her thesis involved examining the food habits of Redfin Shiners in the Embarras River Drainage. After earning her Master's Degree, she completed another Bachelor's degree in Medical Technology from Lakview School of Medical Technology. Karen worked as a Medical Technologist for two years before gaining employment with the Illinois Department of Natural Resources in the Wetlands Planning Program in Springfield. In 1988 Karen moved to Southern Illinois to work as an Interpreter at Pere Marquette State Park, and to start a family. The family then moved to Region I and Karen began working as the Urban Fishing Program Coordinator. In 2001 she finally realized her dream job as the Region I Streams Program manager. In this capacity she is responsible for the management of sport fish populations in streams, conducting basin wide fish population surveys as well as endangered species assessments, and fish contaminant sampling along with a myriad of other duties. She holds this same position today.



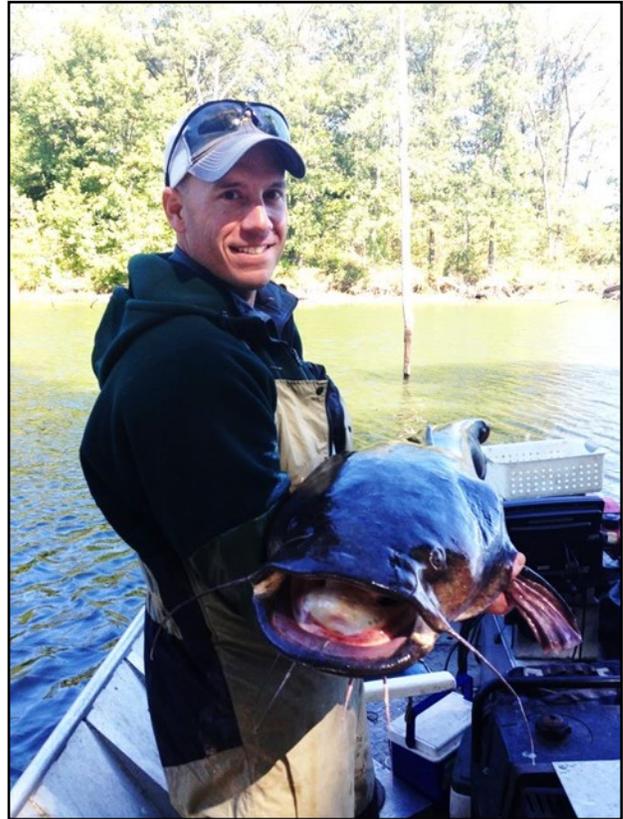
Karen has been involved with the Illinois AFS since 1996. Through the years she has helped with the AFS Raffle as well as AFS projects. Most recently she has held the position of Member at Large, as well as the Chair of Environmental Concerns. In her spare time Karen loves to garden, fish, train and show her spaniels, work on arts and crafts, and train and compete with her son in Taekwondo.

Rebekah has been actively involved with the Illinois chapter of AFS since 2013. As a graduate student, she was the co-founder and president of the Western Illinois University student chapter, presenting research and competing against other student subunits to gather the most raffle donations. After a 2-year stint with INHS, she currently works with the IL DNR Aquatic Nuisance Species Program in Yorkville managing Asian carp populations in the Illinois River. In her free time she enjoys spending time with her husband Cory, bow hunting (with her prized IL AFS bow), and renovating their new home near the tiny town of Serena.



Illinois DNR appoints new Chief of Fisheries

Mike McClelland was appointed the Chief of Fisheries for the Illinois Department of Natural Resources Division of Fisheries on September 16, 2018. Mike received his BS in Biology with a Zoology concentration in 1996 and MS in Biology focusing on Aquatic Ecology in 2005 from Western Illinois University. His MS thesis evaluated fish community structures along the longitudinal gradient of the Illinois River as part of the Long-Term Illinois River Fish Population Monitoring Program. Mike began his fisheries career with the Illinois Natural History Survey at the Illinois River Biological Station in Havana, IL where he served 14 years, initially starting as a technician for the Long-Term Resource Monitoring Program Fisheries Component, then moving on to a coordinator and PI for the IDNR – DJ Sportfish Restoration funded Long Term Illinois River Fish Population Monitoring Program for 11 years. Mike began his career with the IDNR Fisheries Division on the Asian Carp Program stationed in Yorkville, IL in 2011 before becoming the Impoundments Program Manager at the IDNR Havana Field Office in 2012, then taking on a temporary assignment position as the Fish Management Section Head in Springfield in 2017. He and his wife Nerissa live in northern Schuyler County where he grew up and his family still farms. In his free time, he enjoys deer hunting, occasionally hunting various game out west, and making arrows for his bowhunting friends and family.



Announcement: Fulton-Mason County Eagle Day

**Fulton
Mason EAGLE DAY**

Come experience Fulton-Mason County Eagle Day which features multiple kid-friendly activities at five locations centered around the Illinois River Valley near Havana and Lewistown, Illinois. This is a **free** annual event hosted by a collaboration of natural resource partners including Illinois River Biological Station, Forbes Biological Station, The Nature Conservancy, University of Illinois-Springfield Therkildsen Field Station, USFWS Illinois River Refuges Complex, USFWS Carterville FWCO-Wilmington Substation, Illinois Department of Natural Resources, and Illinois State Museum-Dickson Mounds. This event is sponsored by many agencies, the local communities, and volunteers all partnering to present a fun, educational event open to all!



The day will feature indoor and outdoor activities with outreach and education components from many organizations including live-flight raptor shows, bird watching, traveling science center, hands-on activities for children, and Asian carp tasting. A full list of events, times, and locations can be found at: experienceemiqon.com/events/upcoming_events.

Announcement: Midwest 2020, Save the Date and call for volunteers



CALL FOR COMMITTEE CHAIRS AND VOLUNTEERS!

80th Midwest Fish and Wildlife Conference

“Bringing Science Back to the Forefront of Resource Management”

January 26-29th, 2020 in Springfield, IL

The Conference Steering Committee is looking for eager volunteers willing to devote their time and talent to assist Illinois in hosting the 80th Midwest Fish and Wildlife Conference at the Bank of Springfield Center in downtown Springfield. This conference is an excellent opportunity to meet and to interact with professionals and students in the natural resources field. Scientific papers from the Midwest will be featured.

We do not currently have the various committees needed identified; however, at this time we are recruiting volunteers so that when we do identify the committees we can work with known volunteers. If you are interested in helping, please complete the information below. Completed forms should be returned to midwest2020@illinois.gov. If you have questions, please contact Conference Co-Chairs, Ann Marie Holtrop (217) 785-4325; ann.holtrop@illinois.gov, Scott Beckerman (217) 241-5726; sc.beckerman@usda.gov, Greg Whitledge (618) 453-6089; gwhit@siu.edu, or Mark Alessi (217) 557-0475; mark.alessi@illinois.gov.

Name: _____

Affiliation: _____

Address: _____

City: _____ Illinois Zip: _____

Phone: _____ Email: _____

Specific Interests and/or skills to assist with:

Donation request letter for raffle items for upcoming IL AFS meeting

The American Fisheries Society (AFS) was founded in 1870, and is a nonprofit professional and scientific organization of approximately 10,000 international fisheries scientists. The AFS is the oldest and largest organization dedicated to strengthening the fisheries profession, advancing fisheries science, and conserving the fishery resources. The mission of the AFS is to promote scientific research and enlightened management of fisheries resources for optimum use, and encourage comprehensive education of fisheries scientists and continued on-the-job training.

The Illinois Chapter of the AFS (IL/AFS) is holding their 57th annual meeting February 26-28, 2019 at the Hilton Garden Inn in Champaign. We are expecting about 100 fisheries professionals including researchers, managers, culturists, and students from across the state. The meeting is one of the largest gatherings of outdoor enthusiasts in Illinois. The purpose of this letter is to invite you to take part in our annual fundraiser. We greatly appreciate donations given in the past and are grateful for future donations. Proceeds from the fundraiser are used to assist the IL/AFS in promoting our fisheries resources and provide scholarship funds for deserving students. For example, the IL/AFS annually gives several hundreds of dollars in awards for travel to scientific meetings, best paper/poster presentations, and outstanding undergraduate and graduate students. Your donation is tax deductible, and recognition of your support will be acknowledged during the meeting and in the Illinois Chapter newsletter, which is read by over 250 people. Ways to donate include merchandise contributions for the annual raffle/auction (e.g., Chicago Cubs T-shirt, fishing equipment, clothing, outdoor gear, etc.) or cash contributions. All donations greater than \$35.00 may be accompanied by a literature display at no additional charge. Checks should be made payable to the Illinois Chapter of the American Fisheries Society. We thank you for your assistance and concern about the future of our fishery resources.

If you have any questions, please feel free to contact me at (630) 538-5624 or rebekah.anderson@illinois.gov.

Thanks again for your support.
Rebekah Anderson, Fisheries Biologist, Illinois Department of Natural Resources

The Illinois Chapter of the American Fisheries Society
Federal Identification Number 23-7226683 - Tax Exemption Number 54-0683803

Please mail donations to:
Rebekah Anderson
Illinois American Fisheries Society
Silver Springs Fish and Wildlife Area
13608 Fox Rd
Yorkville, IL 60560

Announcement:

You're invited to attend and present your catfish science!



"I have seen a Mississippi catfish that was six feet long and weighed two hundred and fifty pounds" -Mark Twain

June 19-22, 2010 – St. Louis, Missouri

The symposium will focus on exchanging information about the conservation, ecology and management of worldwide catfish populations and their habitats.

Visit www.catfish2010.org for updated information, guides for oral and poster presentations and symposium deadlines.

Submitted manuscripts will be peer-reviewed and published by AFS Books as the

Proceedings of the 2nd International Catfish Symposium.

Co-hosted by the Ictalurid Technical Committee of the North Central Division and the Catfish Management Technical Committee of the Southern Division of the American Fisheries Society