



# The Lateral Line

Arkansas Chapter of the American Fisheries Society

*Spring 2018 Edition*

## President's Message from Mike Eggleton

Greetings to everyone. I expect this newsletter will find you gearing up for another field season, or possibly already neck-deep in it. I am extremely honored to serve as your Chapter president this year. Thus far, the job has been very interesting and I am certainly gaining another perspective for my career. My sincerest thanks to Eric Brinkman, Tate Wentz, Jessie Green, and Casey Cox, who have all helped me along.

Before coming to Arkansas in 2003, I'd already spent 15 years in three other AFS chapters – Tennessee, Mississippi, and Oklahoma. As I reflect on the 15 years since, as a member of the Arkansas Chapter, I continue to be thoroughly impressed with our State and Chapter, due in no small part to the diversity of our aquatic resources and our high-caliber people.

I continue to be amazed at the diversity of fish and fisheries that we have here in Arkansas. I frequently tell prospective UAPB students and faculty that Arkansas is a great place to study and work in fisheries because we have [nearly] the entire spectrum of North American fauna here. If it can live in this part of the country, we likely have it in Arkansas. We have major warmwater and coldwater fisheries. We have numerous fisheries in small ponds, wadeable streams, reservoirs of all types, and large rivers. Within an hours' drive from almost any point in the state, one can find a high-quality fishery. This newsletter edition's "Featured Article" is a perfect example of the state's diversity.

I am equally impressed with the quality and diversity of fisheries and aquatics professionals we have around Arkansas. I've always known that we have many great biologists around the state. However, at the recent Chapter meeting at UAPB, the high quality and overall excellence from state and federal agencies, universities, and NGOs was obvious. There were the usual talks geared at black bass and crappie management. There were several program updates and overviews – one supported with survey findings. There are always a few talks on threatened and endangered species along with some water quality talks. This year, we had additional talks on brown trout, hybrid striped bass, walleye, and even sauger (I don't recall ever hearing a sauger talk at this meeting – my apologies if I'm mistaken). Additionally, there seems to be an increasing number of talks each year on aquatic habitat. We're also hearing more and more about Asian carps and we'll most likely be hearing more about snakeheads in the future. Unmanned aerial vehicles appear to be all the rage right now, as we are still exploring their potential uses. The biggest surprise for me was the diverse array of talks on fish genetics, physiology, and diseases. Much of this is probably related to the natural evolution of the discipline or tied to recent legislation, new regulations, or even new sources of funding. In any event, it is apparent to me that Arkansas has kept up with emerging trends and that our Chapter continues to evolve and expand in lockstep with the field. Everyone deserves kudos for this.

Clearly, the fisheries and aquatics resources of the Natural State are in good hands. That's a great characteristic for those thinking of studying or working here. At the end of the day, I am very proud to have watched this growth and had this experience as part of the Arkansas Chapter. Thanks to everyone for all that you do for Arkansas and the Chapter. I wish everyone a safe and productive summer. I hope everyone takes the opportunity to spend some time enjoying the natural resources of the Natural State.

## *Also in this Edition:*

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**Past-President's Message- Eric Brinkman**

I want to begin by congratulating current president, Michael Eggleton, and everyone else involved, for hosting a great annual meeting in Pine Bluff this year. These meetings are a unique annual opportunity for the fisheries professionals of Arkansas to come together, learn about research in the state, and catch up with each other in general. I personally look forward to them each. I'm grateful to all those who have stepped up to provide the Chapter with great meetings year after year. It's a task that rarely receives the recognition it deserves.

As part of my Past-President duties, I will be soliciting officer and award nominations in our fall newsletter. However, I would appreciate early nominations for the Joe Hogan Award for Individual Achievement or Robert M. Jenkins Award for Outstanding Conservation Achievement, please email me at [eric.brinkman@agfc.ar.gov](mailto:eric.brinkman@agfc.ar.gov) with your nominations.

Finally, we will be hosting a free workshop later this summer funded by revenues from the 143rd Annual Meeting. Chapter members voted to utilize funds from the meeting to provide free continuing education opportunities. I will send out a pole soon to gather ideas for workshop topics. Please provide any and all ideas you may have regarding your continuing education needs. I look forward to working with EXCOM to develop additional continuing education opportunities for our members at the annual meeting early next year.

**Treasury Report**

<b>Description</b>	<b>Debits</b>	<b>Credits</b>
Interest Deposits		\$10.46
In stream Flow Council Donation	\$500.00	
Certification Reimbursement	\$95.00	
SDAFS CMTC Donation	\$500.00	
Science Fair Winner	\$100.00	
SDAFS 2020 Seed Money	\$5,000.00	
Wild Apricot Subscription Fee	\$964.00	
Tax Preparation	\$75.00	
<b>Totals</b>	<b>\$7,234.00</b>	<b>\$10.46</b>

**Balance on Hand June 8, 2018: \$17,011.37**

*Prepared by Casey Cox, Treasurer*

**Education Committee**

THANK YOU to this year's science fair judges, Andy Yung, Ginny Adams, Clint Coleman, Justin Stroman, and members of the UAPB, UCA, UA, and ASU Subunits. Without all of your time and expertise there is no way that we would be able to provide positive feedback for the great work these students are doing in fisheries and aquatics. Once again, THANK YOU SO MUCH!!!

I am still maintaining my quest of seamless communications between the chapter and the subunits and things are improving. I feel this mission not only serves our chapter but the students as well. As always, any ideas from the subunits or the Chapter on things they want to see come out of the Education Committee, please don't hesitate to contact me.

*-JJ Gladden, Education Committee Chair*

**2018 Meeting Announcements**

**148<sup>th</sup> Annual Meeting of the American Fisheries Society**

Atlantic City, New Jersey

August 19<sup>th</sup>-23<sup>rd</sup>, 2018

<https://afsannualmeeting.fisheries.org/>

**72<sup>nd</sup> Annual Conference of the Southeastern Association of Fish and Wildlife Agencies**

Mobile, Alabama

October 21<sup>st</sup>-24<sup>th</sup>, 2018

<http://www.seafwa.org/conference/>

**SAVE THE DATE:**

**2019 Arkansas Chapter Meeting**

February 20<sup>th</sup>-22<sup>nd</sup>, 2019

*Arlington Resort Hotel and Spa,  
Hot Springs, Arkansas*

**Raffle Committee**

As usual, we had another successful annual meeting this year in Pine Bluff. The Raffle/Silent Auction was also a great success; these 2 events were able to raise a total of \$2,153 for the chapter. If you remember, I had asked for some help from a few members across the state to help in soliciting items from vendors in other regions of the state, and this year, Matt Schroeder, Dylan Hann, and Sean Saunders stepped up to the plate! Thanks to them for their time and dedication to our chapter. Also, I was very impressed with the support that our chapter members provided with obtaining items for this year's event. I was overwhelmed and over-joyed at the in-flow of items coming to the Silent Auction Table. This sent me struggling to find open space on tables to put everything, but that is a great problem to have. I believe that we had a great representation of products from vendors around the state, and I would love to continue into the future meetings with the same representation.

Looking ahead, it is never too early to start working on gathering items for the next meeting. If you see the opportunity to obtain a product, or even to grease the wheels of vendors for future purposes, please feel free. If you have any questions, comments, concerns, or even advice on how we can improve on the Raffle/Silent Auction process, please contact me, or one of the other chapter officers. Again, Great work in supporting your state chapter. It is members like you that make the AR Chapter, one of the best chapters in AFS!

-Eli Powers, Raffle Committee Chair  
[Justin.Powers@agfc.ar.gov](mailto:Justin.Powers@agfc.ar.gov)

**Ideas for next Lateral Line?**

Thanks to everyone who provided information for this edition of the LL. As always, I encourage you, Chapter members, to give me ideas and share your suggestions for future editions. This fall, I'd like to get more information on subunit activities (especially pictures!) and information to do featured articles again. Chapter members are doing a lot of good work- Let's share it! Thanks!

-Christy Graham, Newsletter Editor

***ATTENTION CHAPTER MEMBERS: VOTE NOW!!  
SDAFS 2018 Elections***

Follow the link below to cast your vote for SDAFS Vice-President, Secretary-Treasurer, and Student Representative. One of our very own Chapter members is a candidate for VP, so let's show him our support! **Voting closes August 1, 2018 at 11:59 pm.** You must have paid your 2018 AFS Society dues to be eligible to vote. Vote only once. Only students are eligible to vote for the Student Representative. Additional information on the candidates is available in the 2018 SDAFS summer newsletter.

**Vice-President Candidates:**

Chris Racey

Cindy Williams

**Secretary-Treasurer Candidates:**

Jessica Baumann

Jason Schooley

**Student Representative Candidate:**

Sarah Walsh

Here is the voting link:

<https://www.surveymonkey.com/r/SDAFS2018>

You can copy and paste the link in a browser if needed.



***Don't Forget!*** At this year's Business meeting the Chapter voted to approve an extension for the \$50 reimbursement for

any professional receiving new or renewing AFS Associate Fisheries Professional or Certified Fisheries Professional to include 2018. So please fill out your applications and send your receipts and proof of certification to Casey Cox!

***Update from the SDAFS 2020 Planning Committee***

The AFS Southern Division-Little Rock 2020 Planning Committee is officially formed and moving forward. The Planning Committee structure is organized similar to that of AFS Little Rock 2013 due to convenience and established relationships. However, we are always looking for new volunteers to step-up. Ben Batten has taken the lead as General Meeting Chair, with Chris Racey, Charlie Gagen, Ginny Adams, and Tate Wentz filling out the rolls of Co-Chairs. Steve Lochmann will be our Program Chair and is currently constructing his team.

Our first meeting was recently held at the Little Rock Marriott for a facility tour and review of assignments for the next six months. Although 21 months away seems like the distant future, there are a lot of details that will require attention now. Chris Racey and his team are actively pursuing website design and meeting logo options. Ginny Adams and her team are reviewing local entertainment options. Again, plenty of opportunities for new Chapter members to step-up and assist any of these Co-Chairs in their respective roles. Below you will find a full list of assignments, please feel free to contact any of the Chairs if you would like to assist.

**Local Arrangements**

<b>Committee Co-Chairs</b>	<b>Committees</b>	<b>Chapter Member</b>
Ben Batten	Budget and Finance	Mike Eggleton
	Master Scheduler	
	Raffle	Tim Burnley
		Eli Powers
	Trade Show	Kyle Swallow
		Sean Saunders
Tate Wentz	Spawning Run	
	Welcome & Protocol (photography, publicity)	
	Fundraising	
Ginny Adams	Breaks	
	Banquet	
	Socials	JJ Gladden
	Entertainment	Kent Coffey
Charlie Gagen	Hospitality	
	Accommodations	
	Audio Visual Aids	
	Students	Jacob Martin
Chris Racey	Communications	Uttam Deb
	Printing (oversight and coordinate with AFS)	
	Signs	Justin Homan
	Promotions	Paul Port
	Registration	Dylan Hann

**SDAFS Annual Meeting**

**Little Rock 2020**

*President:*  
Scott Bonar

*Southern Division*

*President:*  
Wes Neal

*Chapter President:*  
TBD

*Chapter Past-President:*  
Matt Schroeder

*General Meeting Chair:*  
Ben Batten

*Program Chair:*  
Steve Lochmann

*Note: Gray boxes denote positions still open to volunteers. Contact Chairs if you are interested!*

### ***Environmental Committee Report***

**Committee Members: Jessie Green, Jim Peterson, Forrest Payne, and Steve Filipek**

The Environmental Concerns Committee submitted comments on behalf of the AR Chapter –AFS (the Chapter) to the 1) Department of the Interior regarding amendments being proposed by the Bureau of Safety and Environmental Enforcement (BSEE) to relax safety regulations for oil, gas and sulfur operations on the outer continental shelf; 2) Honorable Bruce Westerman to co-sponsor H. R. 4647 the “Recovering America’s Wildlife Act (RAWA)””; 3) Arkansas Department of Environmental Quality (ADEQ) to clarify Regulation No. 37 “Arkansas Nutrient Water Trading Regulations”; and 4) to Arkansas Senator John Boozman (Member of the Committee on Environment and Public Works – Fisheries, Water, and Wildlife Subcommittee), Wyoming Senator John Barrasso (Chair of the Committee on Environment and Public Works), and Pennsylvania Congressman Bill Shuster (Chair of the Transportation & Infrastructure Committee) requesting inclusion of language from the Lower Mississippi River Feasibility Study into the 2018 renewal of the Water Resources Development Act (WRDA). *[For a copy of the letters sent to Senator Boozman, Senator Barrasso, and Congressman Shuster, please contact a representative of the Environmental Committee].*

The BSEE is considering the relaxation of safety regulations that were adopted under a 2016 Final Rule entitled “Oil, Gas and Sulfur Operations on the Outer Continental Shelf - Oil and Gas Production Safety Systems. These safety regulations were written in response to the Deepwater Horizon explosion and resulting oil spill. The Chapter requested that the BSEE reconsider relaxing the regulations. The Chapter expressed its support for H.R. 4647 the Recovering America’s Wildlife Act which would dedicate \$1.3 billion annually for state fish and wildlife agencies to implement proactive, voluntary, and incentive-based conservation of imperiled species. Of the \$1.3 billion, the bill would direct an additional \$15.4 million to the Arkansas Game and Fish Commission to use for State Wildlife Grant funds. In addition to expressing support for H.R. 4647, the Chapter requested Representative Westerman consider co-sponsoring the bill. This letter may have been successful in that Representative Westerman did become a co-sponsor of H.R. 4647 in April, which followed Congressman French Hill becoming a co-sponsor in March.

ADEQ recently approved a petition to implement rulemaking for Regulation No. 37 “Arkansas Nutrient Water Trading Regulations”. This regulation allows for projects that decrease nutrients to be used as credits for discharges that are having difficulty meeting nutrient limits. For an example, credits generated by a nonpoint source nutrient reduction project in a watershed could be used by a point source discharge to meet its discharge limits. The Chapter is concerned about the lack of detail in the implementation and assessment of the plan and whether agencies charged with evaluating whether or not reductions have occurred have the appropriate resources. The Chapter requested additional clarification on the structure of the proposed Regulation No. 37 including all details for the monitoring and assessment plan.

In the case of the 2018 renewal of the Water Resources Development Act (WRDA), the Chapter requested inclusion of specific language from the recently completed Lower Mississippi River Feasibility Study. A report containing this and other information entitled “Lower Mississippi River Resource Assessment – Final Assessment in Response to Section 402 of WRDA 2000” was delivered to Congress in 2016. Through this report, six states and non-profit organizations in the Lower Mississippi River basin outlined 14 recommendations and were preparing to advance three of the major recommendations. All the work outlined in the report was compatible with commercial navigation and flood risk management.

The Chapter requested that certain language from the report be included in the upcoming renewal of the WRDA.

**Featured Article: Protecting Arkansas's Aquatic Heritage**

*Dustin Lynch, Aquatic Ecologist, Arkansas Natural Heritage Commission*

With its astonishing variety of aquatic habitats, Arkansas is one of the most amazing places that an aquatic biologist could ask for to work. This state offers everything from fast-flowing highland streams full of darters and madtoms, to cypress-tupelo swamps where pirate perch and amphiumas dwell, and even underground cave streams where you might find cavefish, cave crayfish, and grotto salamanders adapted to life in perpetual darkness. Since the acquisition of its first property in 1976, the Arkansas Natural Heritage Commission (ANHC)'s System of Natural Areas has been serving its mission to protect the best of the last remaining vestiges of Arkansas's Natural Communities. ANHC currently manages 73 Natural Areas that can be found in every natural division of the state. These lands are specifically managed to preserve, and sometimes restore, the very best of our irreplaceable natural communities. This provides us with a lot more than just a glimpse into the past; it helps us better understand how our ecosystems originally functioned. This invaluable information has become increasingly important as we struggle to address environmental issues in Arkansas, particularly with the rapid development that parts of the state have seen in recent years.

Since I began my work with ANHC last July, one of my main objectives has been to conduct biological inventories of the aquatic habitats found throughout the System of Natural Areas. Working in such a wide variety of habitats has provided many challenges, but it ensures that the job is always interesting. During my very first week at ANHC, I took part in an inter-agency, inter-state team searching for the rare and declining Leopard Darter (*Percina pantherina*) at Cossatot River State Park-Natural Area. The Cossatot population of this species has declined over the last decade to the point that 2016 surveys failed to locate a single individual. We were fortunate to find a few during the 2017 snorkeling survey. During backpack electrofishing and snorkeling surveys of one of ANHC's newest Natural Areas on the Alum Fork of the Saline River, I've found a population of Ouachita Madtoms (*Noturus lachneri*; pictured right), a rare and endemic tiny catfish known only from a few streams in Arkansas. I participated in cave surveys of Slippery Hollow Natural Area in Marion County, where we found such interesting cave-adapted aquatic fauna as Grotto Salamanders (*Eurycea spelaea*; pictured right) and Cave Isopods (*Caecidotea* sp.) that live only in these unique underground karst systems. Protection and proper management of all of these vulnerable habitats is crucial to our mission, and assessing what species are actually found there is a critical step in that process. (continued on Page 7...)



*Stargazing Darter (Percina uranidea); Little Missouri River*



*Ouachita Darter (Percina brucethompsoni); Little Missouri River*



*Ouachita Madtom (Noturus lachneri); Alum Fork Natural Area*



*Grotto Salamander (Eurycea spelaea); Slippery Hollow Natural Area*



## *The Student Subunit Section*

### **UAPB Subunit:**

Our Subunit had a productive spring semester. The Club held three general meetings, which occurred in February, March, and April. Dr. Pam Moore from the UAPB study abroad program to Columbia, Kendall Moles with the Arkansas Game and Fish Commission (AGFC), and Kristi Williams and Brianna Olsen from the Arkansas Department of Environmental Quality (ADEQ) attended our February, March, and April Subunit meetings to share their work and professional experiences.

The student subunit was involved in this year's Arkansas Chapter meeting for the American Fisheries Society (AFS). The meeting was held on campus, and students from the subunit helped out with set-up and take down for the conference. The Aquaculture/Fisheries Club (AFC), which comprises the AFS

subunit and the United States Aquaculture Society (USAS) subunit, donated \$500.00 towards sponsoring one of the conferences breaks. Additionally, many students within the subunit gave presentations at the conference.

Our Subunit also volunteered at the AGFC sponsored kid's fishing derby held on the Martin Luther King Jr. Park pond. Subunit members assisted with baiting hooks, running the archery range, and helping land fish. Additionally, some of us attended the Southeast Arkansas Regional Science Fair at the University of Arkansas at Monticello on March 8th. Nikita Rohila (advisor: Mrs. Katherine Yancy) won the senior high division with her project entitles "Do Wetlands in Arkansas Have the Optimal Water Quality for Wildlife?" and Ms. Anslee Hayes (advisor: Mrs. Sydney Day) won the junior high division with the project entitles "Going Green as you Clean?"

We also hosted several activities for members to learn how to use standard fisheries techniques (i.e. Boat-mounted electrofishing, gill-nets, trap-nets, etc.). With our electrofishing demonstration this past fall, students had the opportunity to set mini-fyke and trap nets on Lake Saracen this semester. When asking undergraduate students whether they had had these experiences before, they said no and would be interested in continuing to learn new techniques for sampling fish. We also held several events that traditionally occur in the spring semester, such as the annual UAPB White Bass Bonanza fish tournament and the continuation of an annual UAPB Asian Carp Cook-off. Elections this spring have named these individuals as officers for the upcoming year. The new president will be Alex Kiser, vice-president Doug Zentner, and treasurer is Jeremiah Salinger.

Like UAPB AFC on Facebook at: <https://www.facebook.com/UAPBAFC/>  
 And check us out on the web at: <http://farrisg5848.wixsite.com/uapbafc>

-Joe Kaiser, President, UAPB Subunit



*UAPB members "Running the ranges" at the "Get Kids Outdoors" event held by AGFC in Pine Bluff this Spring Semester.*

**UCA Subunit:**

Our Subunit had a productive semester of outreach. We were asked to volunteer at a fishing derby at Carl Stewart Middle School in Conway on April 20th. We brought 6 members to help students cast and take fish off hooks. Some students had never fished before this event, so it was a good way for our subunit to give back to the community. We also celebrated Earth Day at UCA on April 23<sup>rd</sup>. The morning before the event, we went to Stone Dam Creek at UCA and collected 6 fish species, assorted macroinvertebrate species and 2 turtles for students to see the diversity we have on our campus. We also invited Lori Monday with Arkansas Game and Fish to bring native Arkansas snakes, a snapping turtle, and an alligator for students to see. We had 14 volunteers at Earth Day. Our goal at this event was to educate the general student population about the diversity both on campus and in our state. We also focused on conservation and management.

The final event of the semester was Girl Power in STEM. Both current members and alumni participated in the event as Team Leaders and as Breakout Speakers for the 300, 8th grade girls. The event was a huge success!

This summer several of our members are participating in internships with Arkansas Game and Fish Commission, the White River Waterkeeper and other organizations. Field research is already well underway for undergraduate and graduate student members for the summer. We will be volunteering at the Fishing Derby at Lonoke Fish Hatchery as well as volunteering with the White River Waterkeeper at Harrison Crawfish Days.

*Jennifer Main- President, UCA Subunit*



*Above, UCA Subunit members assisting with Earth Day 2018;*

*Below, Subunit members assisting with the Carl Stewart Middle School Fishing Derby.*



***ATTENTION SUBUNIT OFFICERS!***

Remember to e-mail JJ ([JJ.Gladden@agfc.ar.gov](mailto:JJ.Gladden@agfc.ar.gov)) ASAP with any changes to your list of current subunit officers. Please remember to take **pictures** at subunit events so we can include them in the LL!

***Hey Students!*** Do you want to share your research in future editions of the Lateral Line? Your project doesn't have to be complete to share with others- if you are excited about your project, others will be too. I'll be looking for a project to highlight in the Fall 2018 edition- first come first serve! If interested, let me know! [Christy.Graham@agfc.ar.gov](mailto:Christy.Graham@agfc.ar.gov)

***Student Section Featured Article: Habitat Usage and Diet Composition of hybrid Striped Bass *Morone saxatilis* x. *chrysops* and Largemouth Bass *Micropterus salmoides* in DeGray Lake***

*Jeremiah Salinger, University of Arkansas Pine Bluff*

The Arkansas Game and Fish Commission (AGFC) has funded my research into the potential for habitat and diet overlap between hybrid Striped Bass and Largemouth Bass, as well as the population dynamics of hybrid Striped Bass on DeGray Lake. My project partners include the University of Arkansas at Pine Bluff, the US Fish and Wildlife Service, and the US Army Corps of Engineers. The objectives of this project are to assess the habitat usage and diet composition of hybrid Striped Bass and Largemouth Bass on a seasonal basis, as well as to evaluate rates of fishing and natural mortality of hybrid Striped Bass. This research will also examine survival of hybrid Striped Bass fingerlings immediately after stocking. The research will culminate with a bioenergetics model-based simulation of the effects of removing hybrid Striped Bass from the lake on the production of Largemouth Bass. The diet composition and fingerling survival studies will be conducted in 2019.

Interactions between these two fishes have not been well studied, and have not been attempted anywhere in North America within the past 30 years. These fishes are both economically and recreationally important to anglers in southwest Arkansas, making this research even more necessary. We collected 50 hybrid Striped Bass and 50 Largemouth Bass from DeGray Lake in the winter of 2017/2018 using gillnetting and boat electrofishing. Radio transmitters were then implanted in the captured fishes. The radio transmitters in the hybrid Striped Bass are equipped with a sensor that detects the fish's internal temperature, which we use as a proxy for ambient water temperature in the area the fish is occupying at the time of detection. The water temperature data collected will be used to help parameterize a bioenergetics model used in the aforementioned simulation effort.

Tracking of transmitter-equipped fishes takes place on the lake five days a week every two weeks, and will continue through the end of 2018. During this period, the AGFC is funding a reward program for anglers who harvest transmitter-equipped hybrid Striped Bass and return the transmitter to the Hot Springs Regional Office. This enables us to generate an estimate of annual fishing mortality, which will be used in conjunction with estimates of natural mortality to generate an estimate of total annual mortality.

Personnel assisting with my project include Dr. Steve Lochmann of UAPB and Brett Hobbs and Sean Lusk of AGFC.



*Above, Jeremiah poses at Arlie Moore Boat Ramp on DeGray Lake with a transmitter-equipped Largemouth Bass. Below, Surgery is completed! Now off to recovery...*



## ***GARkansas: An open letter of Support for Alligator Gar to be the Official State Fish of Arkansas***

*By Alex Kiser and Uttam Deb*

Did you know that Arkansas is one of only four states that do not recognize a symbolic fish? State symbols are a depiction of culture, heritage and national treasures unique to each state, and have been since the 1893 Chicago World's Fair. The "National Garland of Flowers" made of representative flowers from each state started a trend of naming state natural symbols from trees to fossils. Children have often been instrumental in the choosing of our state symbols. Students in Alaska initiated the adoption of the state dog, 3<sup>rd</sup> graders in Alabama helped to make the endangered Red Hills Salamander the state amphibian. Even here in Arkansas Fayetteville student Mason Oury helped to officially declare the state dinosaur. Why do we have a state dinosaur, but not a state fish? 10-year-old Henry Foster from Vandergriff Elementary decided to do something about this. He petitioned state representatives with his personal choice *Lepisosteus spatula*, commonly known as the Alligator Gar.

Henry implored that Arkansas's state fish should not be the Largemouth Bass as others have suggested, because it is already the state fish of Alabama, Georgia, Mississippi and Tennessee. Currently no state has the Alligator Gar as their official state fish. He listed some reasons that he thought the Alligator Gar was a better choice such as; they can get up to 300 pounds, can grow to 10 feet long and can be found throughout Arkansas. Henry also said that if we make the official state fish the Alligator gar, "people will be more willing to protect it". The last one is especially important because the once prolific animal is now threatened due to habitat loss and over fishing. Some of us here at the School of Aquaculture and Fisheries at the University of Arkansas at Pine Bluff agree with Henry that the Alligator Gar should be the Arkansas state fish.

We put forward some other amazing facts for your consideration. Alligator Gar is the fifth largest freshwater fish in the world and second largest in North America. Considered a living fossil, Alligator Gar have been around since the Cretaceous Period. These fierce unique fish have two rows of sharp canine like teeth that are excellent for piercing fish. The double row of teeth is unique only to the Alligator Gar and separates it from other gar species. They use these fearsome teeth to catch and manipulate prey. Their torpedo like bodies enables them to reach quick powerful bursts of speed. Because their swim bladder is attached to the pharynx by a pneumatic duct, they can survive in extremely low oxygenated water for long periods of time. In poor conditions, they can gain as much as 70 percent of their needed oxygen by gasping at the surface. The strong ganoid scales overlap like chainmail and are so strong that Native Americans were known to use them as arrowheads. Like the American Alligator the Alligator Gar gets its name from, the spine and neck of this ancient fish fit together in a series of ball and socket joints. This allows the fish to move its head like an Alligator, thrashing and shaking its prey. A long-lived fish, adult Alligator Gar can easily reach 50 years old, with record gar estimated to be over 90 years.

Alligator Gar habitat used to include most of the large slow rivers in the lower portion of the Mississippi River Basin. However due to habitat loss from dams, the reduction of the flood plain critical for reproduction and over harvest, populations are now limited. Healthy populations are still alive in Texas and Louisiana, but Arkansas numbers are declining. The support of Alligator Gar from making them our state fish may help awareness and encourage research and restoration to these giant creatures.



## Once Again...Chapter members helped with SCIENCE FAIRS!

*Chapter members always devote a lot of time to judging science fair projects at State and Regional fairs in the spring. Here are some of the results:*

The Northeast Arkansas Regional Science Fair was held in March at Arkansas State University in Jonesboro. The winner of the Junior Division was Echo Mitchel of Rural Special. The winner of the Senior Division was Kendall Wilson of Cross County High School.

The North-West Arkansas Regional Science Fair was held in March at The U of A in Fayetteville. The winners were: Junior Division- Tricia Peterson and Aubrey Farmer of Washington Junior High for the project "What Water do Goldfish Thrive In?"; Senior Division- Elizabeth Parham of Alma High School for the project "Eutrophication".

The South-West Regional Science Fair was held in March at Southern Arkansas University in Magnolia. The winners were: Junior Division- Rayne Cranford of Taylor Jr. High School for the project "Effects of Turbidity on Dissolved Oxygen in Pond Water"; Senior Division- Grace McLelland of Taylor High School for the project "Area Business Effects on Water Quality".

The South-East Regional Science Fair was held at Gibson University Center in Monticello. The winners were: Junior Division-Anslee Hayes of Cornerstone Christian Academy for the project "Going Green as You Clean?" Senior Division-Nikita Rohila of Stuttgart High School for the project "Do Wetlands in Arkansas Have an Optimal Water Quality for Wildlife?"

*Right, UAPB members Doug Zentner and Jeremiah Salinger assisted with the SE Regional Science Fair.*

The Central Arkansas Regional Science Fair was held in March at UALR in Little Rock. The winners were: Junior Division- Palaash Pandey of Lisa Academy Chenal for the project "Nanotechnology cleans oil spills"; Senior Division- Hartley Meyer of Central High School for the project "Greens on the River".

The West Central Arkansas Regional Science Fair was held in February at the AR Math and Science School in Hot Springs. The winner of the Senior Division was Rachel Stall for the project "A Comparative Study of the Ricks Pond and Gulpha Creek Area".

The 64th Annual Southwestern Arkansas Science and Engineering Fair was held in March in Conway on The University of Central Arkansas Campus. High School students (grades 9 -12 ) who were winners from regional fairs were invited to exhibit projects on their research in the State Science Fair, which is affiliated with the Society for Science & the Public, Washington, D.C. Recognition for excellence is made in eighteen categories. Teams of professional scientists serve as judges and choose category winners, recipients of special awards, and overall state winners. The winner of the Senior High Division was Rachel Stall of the AR Math and Science School in Hot Springs for her project "A Comparative Study of the Ricks Pond and Gulpha Creek Area". An honorable mention was awarded to Nikita Rohila of Stuttgart High School.



***And Finally...Highlights from the 2018 Arkansas Chapter Meeting***

***The EXCOM would like to congratulate the following Chapter Members on their awards:***

**Outstanding Conservation Achievement**

Bear Creek Bass Club: 2018 Robert M. Jenkins Award

**2017 Outstanding Sub-unit Member Awards:**

Arkansas State University: Brittany McCall

Arkansas Tech University: Jennifer Sloan

University of Arkansas: Jacob Martin

University of Arkansas at Pine Bluff: Joseph Kaiser

University of Central Arkansas: Jennifer Main

**Best Presentations at 2018 Meeting:**

Undergraduate Poster: Chance Garrett (UCA)

Graduate Presentation: Charlie Jordan (ATU)

Professional Presentation: Shannon Smith (UAPB)



*Above, Chapter President Eric Brinkman and Kevin Hopkins presented members of the Bear Creek Bass Club with the 2018 Robert M. Jenkins Award Conservation Achievement Award; and below, Eric presented Shannon Smith with the Award for Best Professional Talk at the 2018 Chapter meeting for her presentation "Modeling range expansion of Northern Snakehead in Arkansas".*



*Above (from left to right, top to bottom) Subunit members Jacob Martin (UA), Brittany McCall (ASU), Jennifer Sloan (ATU), and Joe Kaiser (UAPB), receive their outstanding Subunit member Awards. Right, Mike Eggleton, thanks Jessie Green, for her service as Chapter Secretary.*