

# Lateral Lines

President Message from Drew Holloway:

Writing this message on March 4th and the outside temperature is in the single digits (below zero with wind chill), which makes it very easy to get excited for another great year of field sampling across Indiana. At our spring meeting we heard about the upcoming projects that are going on with our members during the “State of Fisheries” introduction. This was a great way to kick off our meeting and also an opportunity for our members to see the work being done within IAFS. We also held our “Great State Fish Debate” where we decided to move forward with our plan to try and establish a state fish for Indiana. As the debate concluded it was clear we needed more than one fish to represent Indiana. Having a game/sport fish and a non-game fish gives us a chance to highlight a species sought after by anglers and chance to enlighten our state on the lesser known non-game species, in our case the Tippecanoe Darter. As mentioned during our business meeting here is a link to the game species poll ([Poll Link](#)). It is our goal to reach out to the teacher, Mrs. Samudio, who was the driving force behind Indiana getting a state insect and have her speak to our group at the upcoming fall meeting.

This upcoming year, 2020, the American Fisheries Society will be celebrating its 150th anniversary. To mark this historic event the parent society has reached out to each state chapter president to establish a display to be featured at the national meeting in Columbus, OH. Their goal is to have every state represented and to highlight the past, present and future of their chapter. We will also be celebrating a historic anniversary in 2020...50 years as the Indiana American Fisheries Society! This calls for a celebration! I would like to establish an ad hoc committee to plan something special for our 2020 spring meeting. If anyone would like to help with the AFS display or our 50th anniversary celebration, please feel free to contact me at ([dholloway@msdeng.com](mailto:dholloway@msdeng.com)).



(Continued page 2)



## President Message cont.

### Current Officers

**President:**

***Drew Holloway***

**President Elect:**

***Daniel Arndt***

**Vice President:**

***Rob Ackerson***

**Past President:**

***Ben Miller***

**Secretary/**

**Treasurer:**

***Ken Wetzel***

**Newsletter Editor:**

***Tom Bacula***

***Visit us at:***

***www.indianaafs.org***

***&***

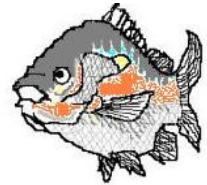
***Facebook***



While on the topic of celebrations and honoring our society I would also like to look into creating a new IAFS logo. I remember as a student (2008-2010) there was talk about updating our logo but don't remember what ever happened. I While on the topic of celebrations and honoring our society I would also like to look into creating a new IAFS logo. I remember as a student (2008-2010) there was talk about updating our logo but don't remember what ever happened. I think if we could create something that honors 50 years as a society and gives us a "fresh" design we could debut at the national meeting on our state chapter display. We could also use the new logo to create hats, shirts, decals, etc. to sell as a fundraiser for our chapter. Again please feel free to reach out with ideas or suggestion on a new logo.

After our well attended spring meeting, the potential for a state fish and celebrating our 50th anniversary, I can tell you that I have never been more excited for the years to come! I hope my enthusiasm is contagious and we can all put our best foot forward as we continue to promote fisheries science throughout Indiana.

*Thank you for sponsoring*



*Commonwealth  
Biomonitoring*

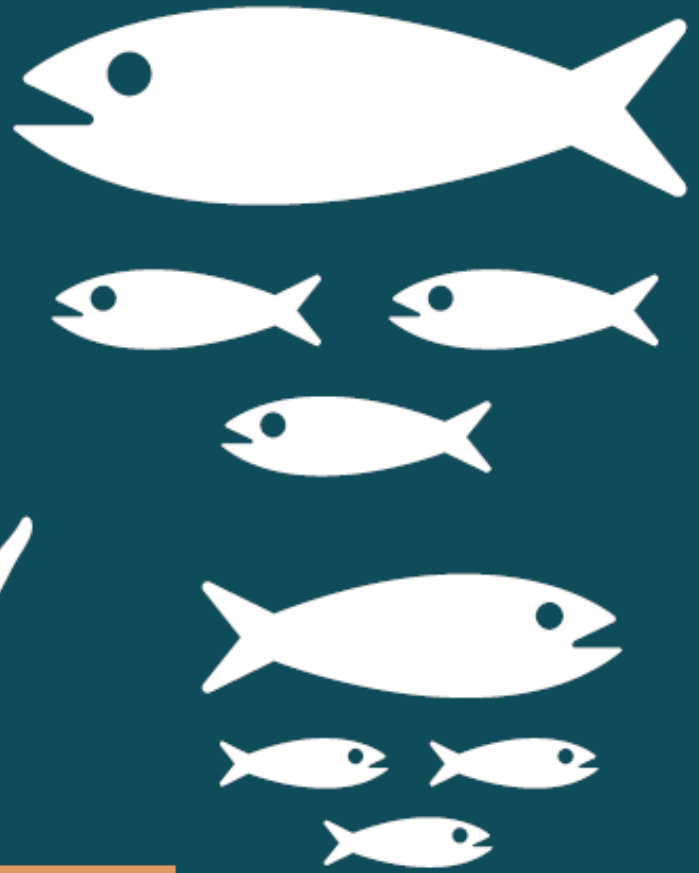


*Mark your Calendar*

**Fish with a Fishhead Day at  
Indiana State Fair**

**August 17, 2019**

# 5K Run



## STURGEON RUN 19'

Purdue American Fisheries Society

**Registration: \$20**

- Admission to the run
- Event Shirt
- Light Breakfast

**APRIL 20, 2019 @ 9 AM**

**Early Registration Ends April 5th**

*Day of Registration (no t-shirt)*

**100 TAPAWINGO DR,  
WEST LAFAYETTE, IN 47906C**

**Contact: Matt Byrnes ([byrnesm@purdue.edu](mailto:byrnesm@purdue.edu))**

# Secretary Report—Bri Ciara

2018 IAFS Fall Business Meeting Minutes  
Indianapolis Zoo  
Indianapolis, IN  
October 29, 2018

## Call To Order

The meeting was called to order at 10:15 am by Ben Miller.

## Establish Quorum

The Secretary confirmed that there was a quorum to conduct business. There were 51 paid members in attendance, 20 Parent Society members.

## Agenda Editions/Deletions

None.

## New Members/Guests

Jan Dean introduced himself. He is new to the Indiana Chapter from Louisiana and has previously worked in fisheries management, fish culture, and academia. He has also been an electrofishing instructor for U.S. Fish and Wildlife Service and offers his help, so please see Jan for electrofishing questions.

Jessica Thorton introduced herself from Illinois as a PhD student now at Ball State.

Paul Venturelli introduced himself as a professor at Ball State in Tom Lauer's old position.

Those interested in becoming one should contact Bri Ciara at [Bciara@dnr.in.gov](mailto:Bciara@dnr.in.gov).

## Secretary's Report – Bri Ciara

Bri Ciara stated that we currently have 83 chapter members, 63 of which are Parent Society members. There are several benefits to being a parent Society member and anyone interested should sign up on the website or see her. The Spring 2018 meeting minutes were approved.

## Treasurer's Report – Bri Ciara

The treasurer's report was passed out. See Attachment 1 for the report. Spring meeting with the Indiana Chapter of the Wildlife Society was a successful meeting with lots of amenities and discounted student registration costs to boost student attendance. EXCOM and the Sponsors were thanked for their contributions and creative planning to provide a good, cost effective meeting.

Bri Ciara and Ben Miller highlighted and explained the \$2,500 Conservation Enhancement Fund in the disbursements column of the financial report. Ben explained that the Conservation Enhancement Fund money was Midwest Fish and Wildlife Conference seed money distributed to Midwest Association of Fish and Wildlife Agencies (MAFWA), which is the organizing body for Fish and Wildlife Conferences. They will now handle all planning activities for Midwest Fish and Wildlife Conferences, lessening the burden on individual states. MAFWA has only request \$5,000 from each state which breaks down to just \$2,500 from each AFS and The Wildlife Society (TWS). The remaining \$5,000 seed money has been gifted to AFS from the Director of the Division of Fish and Wildlife. This was discussed in New Business.

Bri Ciara highlighted the investment reports, explained that the Parent Society is a slightly delayed on sending quarterly reports, and there were no questions. The Treasurer's Report was accepted as written.

## Committee Reports

### Standing Committees

#### Awards - Rob Ackerson

Rob was not able to attend so Ben Miller led the awards discussion.

Dave Kittaka announced a nomination for Steve Andrews to be awarded the Excellence in Fisheries Science Award and proceeded to read his nomination letter. Steve has contributed 37+ years of service to fish and wildlife science here in Indiana and is an incredibly valued member of IN AFS. He was presented this award and then presented a short narrative with advice and thanks. His wife, Mary Andrews was there to help Steve accept his award.



## Secretary Report—Bri Ciara

Best Student Paper was awarded to Morgan Sparks.  
Best Student Poster was presented to Jeff Robins.  
Best Professional Paper was presented to Mark Pyron.

### Programs – Ben Miller

Ben Miller stated there was no report.

### Membership – Ben Miller and Bri Ciara

Bri Ciara and Ben Miller stated a current membership of 83 members, 63 Parent Society members. Bri requested that student sub-unit presidents submit their rosters. Those wishing to become new members or pay dues should see Bri Ciara.

### Nominations – Mark Pyron

Mark Pyron stated there were no nominations. Anyone with nomination should send them to Mark at [mpyron@bsu.edu](mailto:mpyron@bsu.edu).

### Resolutions – Dan Carnahan

Dan Carnahan was not able to attend. Ben Miller updated the group on the Recovering America's Wildlife Act in Dan's absence. Ben has communicated with Drew Winters from the Parent Society for guidance on how to support this measure as a Chapter, since we voted on doing so at the last meeting. She set template support letters that Ben then drafted from IN AFS; however, he needs a non-state employee to sign and send them. He passed out the draft letters. A decision was made to wait until the next President steps in to take further action on the letters. It was suggested that Cisco be highlighted as a Species of Greatest Conservation Need.

### Communications

#### Newsletter – Tom Bacula

Tom thanked all those that submitted content. Contact Tom with any suggestions, comments, or ideas at [TBacula@dnr.IN.gov](mailto:TBacula@dnr.IN.gov).

#### Website – Nick Haunert

Nick Haunert explained that the website software is 11 years old and no longer supported. He and Drew have been making little fixes but are actively seeking new solutions of where and how to house our website. There were 3 main solutions suggested: 1) We can create an entire new website for roughly \$1,000/ year, 2) update software on current software for \$300- \$400 year, 3) Join NCD website for free. Drew explained that the would discuss it more and have a full report prepared for the Spring meeting.

#### Social Media – Andy Bueltmann

Drew Holloway reported for Andy since he could not make it and reported that both IN AFS and NCD AFS were doing well; keep posting.

### Ad hoc Committees

#### Continuing Education – Steve Andrews

Steve Andrews announced that he has retired but will remain on the committee. Another individual has agreed to help. Contact him for more info or if you would like to help him.

Ideas suggested in the past include: 1) A fisheries statistics course taught by a professor from Florida, 2) Shrimp farm tour, 3) Field repair and maintenance of outboard motors. Please send all ideas to Steve at [SJanmea@gmail.com](mailto:SJanmea@gmail.com) or EXCOM.

#### Certification – Megan Gunn

Megan Gunn reported that Purdue just underwent a restructure of their fisheries courses and Megan has ensured that they still align with requirements for certification. She has requested input from the membership about how useful certification is in their jobs and hiring processes. Please send your comments to her at [MLGunn@purdue.edu](mailto:MLGunn@purdue.edu).

#### Legislative Communications – Bob Robertson

Ben Miller explained that his position has been vacant for several years but is important to our chapter.

Clint Kowalik elaborated that much of the Chapter is comprised of State employees who cannot actively perform this on work time due to conflicts of interest so it was decided previously that this person should be either retired or not a State employee. Those interested should contact Ben Miller at [BMiller2@dnr.in.gov](mailto:BMiller2@dnr.in.gov)

## Secretary Report—Bri Ciara

### History and Archives – Mark Pyron

Mark Pyron stated there was no report. Everything is available online.

### Outreach – Clint Kowalik

Clint Kowalik introduced himself and the IDNR GoFishIN Program which he manages. Clint stated that part of this GoFishIn Program is hosting Crew Captain Workshops where he trains leaders to teach fishing as well as provide equipment for events. He promoted this idea as an option for continuing education as well as for college students to enhance their skills. He suggested a few event ideas that a trained student sub-unit crew from the Crew Captain Workshop could host at universities including casting events and free fishing days. He stated that 20 members participated in the 10<sup>th</sup> year of Fish with a Fishhead Day and promoted it for 2019. He encouraged others to continue to promote fisheries and who we are when possible. Master Naturalists provide a good stage for communicating our message. Those interested in taking part of these events should contact Clint at [CKowalik@dnr.in.gov](mailto:CKowalik@dnr.in.gov).

### Technical Committees

This portion of the business meeting was skipped due to time constraints.

### Rivers and Streams - Kayla Werbianskyj

Centrarchid – Kevin Gaston

Esocid – Nick Haurert

Walleye – Corey DeBoom

Ictalurid – Craig Jansen

Reservoirs – Sandy Clark-Kolaks

### Student Subunit Reports

#### Ball State

Torrey Blevins, Ball State Student Sub-unit President, stated that BSU-AFS is focusing on reaching out to those who are not familiar with what fisheries management is, learning sampling techniques, and hosted several speakers from various professions.

#### Purdue

Lindsey Dice, Purdue Student Sub-unit President, proudly stated that the Purdue Chapter has a little over 20 active members, up from 3 in 2016. They have been fundraising by conducting sampling efforts for private land owners. They will use these funds to fund conference attendance and Sub-unit activities. She also stated that there are now several graduate students involved in the sub-unit.

#### Manchester

No report.

#### Indiana University

No report. IU Student Sub-Unit is still in the forming stages and was not able to attend the meeting. Bri Ciara stated that Sandy Clark-Kolaks has agreed to be their new faculty advisor.

### Unfinished Business

#### Procedures Manual – Benjamin Miller

Still ongoing edits.

#### AFS Directory – Benjamin Miller

Send in your information to Ben Miller at [BMiller2@dnr.in.gov](mailto:BMiller2@dnr.in.gov).

### New Business

#### NCD Update – Drew Holloway

Drew Holloway stated that things are going well. He recommend people attend the annual conference in Cleveland if able to.

#### Recovering America's Wildlife Act – Update – Benjamin Miller

Ben Miller stated that this was already discussed. He will send out draft letters and addresses to the membership.

## Secretary Report—Bri Ciara

### **State Fish – Drew Holloway**

Drew Holloway stated that people should start thinking about their nominations and arguments for State Fish for the Spring Meeting.

### **Change in Newsletter Frequency – Tom Bacula**

Tom Bacula stated that he would like to adjust the frequency to just twice a year for a spring and fall newsletter. The spring newsletter would have a deadline of end of March and come out in April while the fall newsletter would have a deadline of end of October and come out in November. This would hopefully solicit more submissions as well as include minutes from both Spring and Fall meetings. Any other ideas should be sent to Tom at [TBacula@dnr.in.gov](mailto:TBacula@dnr.in.gov). Ben Miller stated he supported this change.

### **Student Membership Discussion – Bri Ciara**

Bri Ciara stated that currently student membership is free for students from designated sub-units; however, there is a growing number of students seeking membership from schools without sub-units. She suggested that IN AFS not charge for any student, regardless of membership to a student sub-unit. Ben Miller restated this proposal to the membership. Clint Kowalik asked if they should have some sort of sponsor. Lindsey Dice responded that at the student sub-unit symposium, many students in western chapters supported each other along with one or several faculty advisors, regardless of affiliation to help guide the students and their activities. Ben Miller proposed the idea of a student liaison to act as a contact point for students in the Indiana Chapter. He proposed this be tabled until the Spring meeting. Tom Sobat volunteered to act as the student liaison.

### **Instillation of New Officers – Ben Miller**

Ben Miller stated that Rob Ackerson will be the new Vice President, Daniel Arndt is President-Elect, Drew Holloway is the President, and he is now the Past-President. The membership thanked Ben for his service and Drew presented him with the Past President award.

### **Other**

### **Announcements**

#### **Spring Meeting Tentative Information – Daniel Arndt**

Daniel Arndt explained that we will be doing an IN AFS Chapter only meeting the last week of February near central Indiana. This will likely consist of a 2 day meeting including topics of state fish, round table discussions, and updates from different fisheries professionals within the membership, poster session, social, and a ½ day communications workshop run by professors from Indiana University. He will plan to send out the Save the Date before the end of the year.

### **Other**

Clint Kowalik announced a 10-day boat, sport, and travel show in Indianapolis

### **Adjourn**

No more new business and a motion to adjourn was made and seconded at 11:21 am.

# Secretary Report—Bri Ciara

Attachment 1: IAFS Treasurer's Report

<b>INCOME</b>		<b>DISBURSEMENTS</b>	
<b>Indiana Chapter of the American Fisheries Society</b>		<b>Indiana Chapter of the American Fisheries Society</b>	
<b>Financial Report</b>		<b>Financial Report</b>	
<b>For the Period 2/12/2018 - 10/29/2018</b>		<b>For the Period 2/12/2018 - 10/29/2018</b>	
<b>Dues, registration fees, grants, and miscellaneous</b>		<b>Operating expenses, contributions, gifts, donations, and miscellaneous</b>	
Spring meeting reimbursement from IN TWS	\$ 6,414.75	Conservation Enhancement Fund for Midwest	\$ 2,500.00
Spring meeting registration fees	\$ 675.76	Catering for Spring Meeting	\$ 2,094.53
Parent Society rebate for membership	\$ 481.55	Reimbursement for Spring meeting food and bar costs	\$ 1,967.29
Membership dues	\$ 9.41	Reimbursement for Midwest attendance, D. Holloway	\$ 740.44
		Plaques & certificates	\$ 281.62
		Chapter Insurance	\$ 150.00
		Virtual Terminal PayPal Fee	\$ 30.00
<b>TOTAL Income</b>	<b>\$ 7,590.88</b>	<b>TOTAL Disbursements</b>	<b>\$ 7,763.88</b>
<b>Assets as of: 2/12/2018</b>		<b>Assets as of: 10/29/2018</b>	
Checking 1084	\$ 6,045.74	Checking 1084	\$ 5,883.92
PayPal	\$ 165.11	PayPal	\$ 144.52
Investment	\$ 10,000.00	Investment	\$ 11,548.00
Prepared by Brianna Ciara IAFS Treasurer 10/26/2018			

# Secretary Report—Bri Ciara

2019 IAFS Spring Business Meeting Minutes  
 Fort Harrison State Park  
 Indianapolis, IN  
 February 27, 2019

## Call to Order

Drew Holloway called the meeting to order at 2:02pm.

## Establish Quorum

Quorum was established.

## Agenda additions/Deletions

Drew stated that we were still seeking elections for new officers, so if anyone is interested to be prepared to nominate, speak, and vote.

## New Members

Ali Meils introduced herself as a graduate from Purdue University and current employee of the Indiana Department of Environmental Management (IDEM) where she leads the contaminants monitoring work.

## Secretary Report – Bri Ciara

Fall 2018 meeting minutes were handed out to be reviewed. Bri Ciara explained the website has been down so they have not been posted online. A motion to approve meeting minutes was delayed to allow the Membership time to review them. Minutes were approved at the end of the meeting with two minor edits.

## Treasurer Report – Bri Ciara

The financial and investment reports were handed out. It was stated that the checking account has \$5,061.62, \$2,248 in the PayPal account and \$12,068 in investments. IN DNR and IDEM registration fees were not included in the report due to time delays in processing payments. Paul Venturelli asked if our funds showed any trends over time of increases, decreases, or remained fairly stable. Bri explained that the accounts remain fairly stable and the only big change occurred in 2017 when the Membership decided to invest \$10,000 into the Parent Society investment fund and the check was submitted. She pointed out the investment financial reports on the back of the page. She also explained that the Parent Society is delayed on sending information but does send several reporting documents when they do. Bri announced that this was going to be her last meeting as Secretary/Treasurer due to time constraints of a her new employment with the Lake Michigan Coastal Program. She thanked EXCOM and the membership for the opportunity to serve and highly recommended it as a great way to serve the Chapter. EXCOM is seeking nominations for the Secretary/Treasurer position. Those interested should contact Dan Arndt at [Daniel.Arndt@duke-energy.com](mailto:Daniel.Arndt@duke-energy.com) or Bri for details at [Bciara@dnr.in.gov](mailto:Bciara@dnr.in.gov).

## Committee Reports

### Awards – Rob Ackerson

Rob Ackerson stated that he was still seeking a few volunteer judges for the presentations at the current meeting.

### Program Chair – Ben Miller

No report.

### Membership Report – Bri Ciara

Bri Ciara stated that IN AFS is currently comprised of 112 members, 29 of which are Parent Society members. She encouraged student sub-units to submit their rosters to ensure information is up-to-date. She also encourage Parent Society membership.

### Nominations – Mark Pyron

None.

### Resolutions – Dan Carnahan

No report from Dan Carnahan. Ben Miller stated that he would be sending Drew Holloway the draft Recovering America's Wildlife Act letters to be signed and distributed to the rest of the membership.

## Communications

### Newsletter – Tom Bacula

Tom Bacula stated that the Fall 2018 meeting minutes will be included in the upcoming Spring newsletter as well as updates about the upcoming field season so if anyone has content please send it to Tom at [TBacula@dnr.in.gov](mailto:TBacula@dnr.in.gov). He also reminded the membership that it was a good idea to continuously jot down submission ideas throughout the year so that when the request comes it is not time consuming to write. Drew Holloway said that a call for content will go out mid-April.



## Secretary Report—Bri Ciara

### Website – Nick Haurert

Nick Haurert stated that there has been no improvements to the website and it is still unreliable for the time being. It had not shut down for two weeks; however, he was not hopeful that it would remain functional. Drew Holloway stated that he and Nick discussed it and decided to switch the website host to the AFS Parent Society website template. This new website should be user friendly and all currently available information will be transferred over. Once main details of the new website are determined Drew will present the information to EXCOM regarding logistics and pricing. The goal is to have this completed before the main, summer field season begins in the next few months.

### Social Media – Andy Beultmann

Andy Beultmann stated things are going well and encouraged membership to keep posting, especially field photos.

### Ad Hoc Committees

#### Continuing Education – Steve Andrews

Steve Andrews that the Chapter continues to support continuing education very strongly. The Fall 2018 meeting included a behind the scenes tour at the Indianapolis Zoo that was well-received. He also explained that Bri Ciara and he worked together to organize a communications workshop for Day Two of the conference. Bri Ciara explained that the workshop will be led by Krista Hoffmann-Longtin and Jason Organ of Indiana University. They were trained Alan Alda Stonybrook Center for Communications and specialize in scientific communication to the public and decision makers. The workshop revolves around effective message distillation and storytelling to communicate fisheries science. The workshop is planned for 9am – 12pm Day Two. Steve thanked EXCOM and membership for this opportunity, support for this role, and help with planning continuing education workshops. He then explained that he will be stepping down from this position. Those interested should tell Steve or Dan Arndt.

#### Certification – Megan Gunn

No report. See Megan Gunn for information on certification.

#### Legislative – Vacant

Drew Holloway explained that this position is still vacant. Those interested should see EXCOM.

#### History and Archives – Mark Pyron

No report. Ben Miller stated that he was gifted a box of 25th anniversary IN AFS pins and will hand them out.

#### Outreach – Clint Kowalik

Clint identified an edit to Fall 2018 meeting notes. He stated that the AFS members helped get 200 kids fishing during the 2018 State Fair Fish with a Fishhead Day. Clint reminded the membership that fishing license sales funds much of the work that the Division of Fish and Wildlife does and that events like these are important to continue fisheries work here in the state. The 2019 Fish with a Fishhead Day at the State Fair will be Saturday August 17, 2019. Participants receive free parking, free admission to the fair, a free T-shirt, and an opportunity to connect with the public. The 1<sup>st</sup> free fishing day of four in 2019 is April 20<sup>th</sup>. He suggested that this be an opportunity for student sub-units to host an event and spread their message. Ball State has participated in an event at Eagle Creek Reservoir for the last several years. Clint suggested perhaps moving the event to West Side Park in Muncie and also suggested that Purdue host an event at Armstrong Park in West Lafayette. Clint promoted partnering with Indiana Master Naturalists to present to and help with events.

### Technical Committees

#### Rivers and Streams – Kayla Werbianskyj

Kayla Werbianskyj stated that she attended the Spring meeting in Illinois and that there is a lot of interesting work happening on the Mississippi River. She will be attending the next meeting in April and will report back to the Chapter in the fall. She asked that the membership, especially universities, send her updates for the report. She also asked that anyone interested in receiving the report or providing content update their contact information with her.

#### Centrarchid – Kevin Gaston

Kevin Gaston updated his contact information with the Parent Society to clear up communication errors. He stated that he attended the committee meeting in Cleveland where he was one of two people in the meeting. He discussed items that the membership sent in. Anyone with updates should send them to Kevin.

#### Esocid – Nick Haurert

Nick Haurert stated that he also attended the committee meeting in Cleveland. He reported that Ohio is conducting research on Muskie escapement in reservoirs and are finding that high April waters are flushing them out of reservoirs. If anyone has research or work they are doing on esocids, please send an update to Nick.

#### Walleye – Corey DeBoom

Corey DeBoom stated that he wasn't able to attend the committee meeting but reported that an entire symposium is being

## Secretary Report—Bri Ciara

planned for the next National Meeting. He suggested that anyone conducting work or research on Walleye be prepared to present it there. Meeting minutes from the last committee meeting have been posted on the NCD website. He stated that Illinois has recently changed their Walleye regulations on the Ohio River. Corey and Craig Jansen explained that Indiana and other Ohio River states will soon be following suit. Another interesting update gleaned from the minutes was that Iowa is looking at the stocking success of extensively reared fingerlings and also evaluating Walleye recruitment in reservoirs. The summer tech committee meeting is July 16 - 18, 2019 in South Dakota. This meeting will include a tagging and transport workshop. If anyone has updates for Corey, please send them to him.

### Ictalurid – Craig Jansen

Craig Jansen stated that he was able to attend the latest tech committee meeting where most of the discussion centered on the Catfish 2020 Symposium. The call for abstracts is open and he will send out the announcement if anyone is interested. If anyone is interested in presenting any work at the symposium, please submit your abstract before the end of September. The Catfish 2020 Symposium has its own website where you can submit your abstract. He explained that the last catfish symposium was in 2010 so this is a great opportunity to learn and present, especially if anyone has grey literature. This symposium will be published so a draft of any articles to be presented is requested. The symposium will be in Little Rock Arkansas just before the Southern Division meeting.

### Reservoirs – Sandy Clark-Kolaks

Sandy Clark-Kolaks stated that there is a reservoir symposium every year at the Midwest Fish and Wildlife Conference. Ta the past one, there was a workshop on standardized sampling which has been repeated the last two years. There appears to be a strong push to update the Standard Sampling Guidelines in the Fisheries Techniques book over the next few years. This is to include new techniques, new gear, eDNA techniques, and how to incorporate these things into standard methods. There were several talks about Ohio Crappie regulation evaluations, which is something also being done here in Indiana. There are multiple states focusing on reservoir habitat work. A university in Arkansas just hired the 1<sup>st</sup> ever-in-the-country professor who specializes in reservoir habitat. Their research will be something to watch.

### Student Subunit Reports

#### Ball State

No report.

#### Purdue

Lindsey Dice introduced herself as the Purdue University Student Subunit President. She announced that the Purdue subunit is partnering with the Purdue Wildlife Society subunit to go on an overnight trip to Cook County where they will be getting experience with radio telemetry, gill nets, fyke nets, hatchery work, and other sampling techniques. They are considering offering the opportunity to other Indiana students to join because they can take up to 20 students and currently don't have that many signed up to attend. If any student is interested they should contact Lindsey. They are also considering planning a trip to the Shedd Aquarium in early April. Eight of the Purdue Subunit members recently attended the Southern Division meeting in Texas. They were able to fund a majority of the costs for all eight members. Their annual Sturgeon Run is coming up April 20<sup>th</sup>. This is their largest fundraising event. More information will be coming soon. They have also been conducting some private pond sampling to raise funds for subunit activities. Purdue subunit just elected the Tippecanoe Darter as their "club fish".

#### Manchester

No report. Drew Holloway suggested we look into finding out their subunits status.

#### Indiana

Drew Holloway stated that the Indiana University student subunit was officially accepted on January 22, 2019. Congratulations and welcome to them. Anna Klingbeil introduced herself as the president of the newly created subunit. She explained that they have been meeting as a group for the past two years and are now proud to be registered. Sandy Clark-Kolaks is their faculty advisor. They currently have around 15 members and have been working hard to get their name out there. They have hosted several fisheries related talks, a fish filleting demonstration, a workshop on endangered mussels, and they are hoping to work with the IDNR to conduct some electrofishing and build fish habitat structures to be placed in the Monroe County/Bloomington area. They are looking forward to planning more events and to keep growing.

### Unfinished Business

#### Procedures Manual – Benjamin Miller

No report.

### New Business

#### NCD Update – Drew Holloway

Drew Holloway stated that he was able to attend the Midwest Fish and Wildlife Conference. He explained that the upcoming national AFS meeting in Reno is going to be the first joint meeting between AFS and the Wildlife Society making it a really large, fun meeting. He also stated that the 2020 meeting in Columbus, OH is going to be the 150<sup>th</sup> anniversary of AFS. Starting in June, the Parent Society is organizing a "The Year of AFS" which will include many special publications and events celebrating the 150 years

## Secretary Report—Bri Ciara

of AFS' existence. Gary Whelan has been tasked to organize a special exhibit of each State's chapter AFS at this meeting. Please start thinking about what our Indiana Chapter display should look like and send all ideas to Drew. Drew thinks this is a great way to promote our Chapter. Those interested in organizing this should see Drew. While researching some of IN AFs history, Drew realized that in 2020 IN AFs will be celebrating our 50<sup>th</sup> anniversary. He suggested that the membership consider do some sort of commemorative event to celebrate. He suggested we perhaps consider updating our logo. See Drew for ideas.

### **Catfish Symposium 2020 – Craig Jansen**

Craig Jansen explained that the Catfish 2020 Symposium planning committee is seeking sponsorships from State chapters. All of the current sponsors are listed on the website. He recommended that we also support this sponsorship. Drew asked if there was a deadline to make a donation and Craig responded that he did not think so, so long as it is by the end of the year to give enough to time to add our name to meeting materials.

### **Nominations for New Officers**

#### **Secretary/Treasurer**

Bri Ciara explained how fulfilling of an experience this role is, her gratitude to the membership for trusting her with this position, and encouraged the membership to consider stepping into this role. No nominations or volunteers were announced. Ken Wetzel later volunteered to become the new Secretary/Treasurer and was accepted by the rest of the EXCOM. Bri will transition Ken into this his new role over the coming months. Congratulations to Ken.

#### **Vice President**

Mark Pyron asked Drew to explain the role and EXCOM process to the membership. Drew explained the 4-yr process and then Ben Miller briefly explained the roles and stated they are in the procedures manual. Kevin Gaston ran for Vice President unopposed. Drew initiated a motion to accept Kevin as the new Vice President and the motion was approved. Congratulations to Kevin.

#### **Vacant Positions**

See Drew if anyone is interested.

### **IAFS Directory Update – Benjamin Miller**

Ben explained the purpose of the directory update to be posted online. About 15 members have submitted their bios. Please see Ben to submit your bio.

### **Other**

Mark Pyron promoted the National AFS Meeting in Reno stating that there are currently 36 symposia planned for the meeting and new ideas are requested. Please send any symposium ideas to the Parent Society, meeting planners, or Mark.

### **Adjourn**

Drew Holloway made a motion to adjourn and was seconded at 2:51pm.

## Secretary Report—Bri Ciara

### Indiana Chapter of the American Fisheries Society

#### Financial Report

For the Period 10/29/2018 - 2/26/2019

#### INCOME

##### Dues, registration fees, grants, and miscellaneous

Member cash dues and Fall meeting fees	\$ 345.00
Member dues PayPal	\$ 75.28
Spring Meeting Registration	\$ 2,072.82
Spring Meeting Sponsorships (Duke Energy and Aquatic Control)	\$ 1,468.70

TOTAL Income \$ 3,961.80

##### Assets as of: 10/29/2018

Checking 1084	\$ 5,883.92
PayPal	\$ 144.52
Investment	\$ 11,548.00
TOTAL	\$ 17,576.44

Prepared by  
Brianna Ciara  
IAFS Treasurer  
2/26/2019

#### DISBURSEMENTS

##### Operating expenses, contributions, gifts, donations, and miscellaneous

Stop Check Fee for Lost Insurance Check	\$ 25.00
Deposit for Spring Conference	\$ 856.00
Fall meeting Behind the Scenes Zoo Tour	\$ 400.00
Reimbursement to Drew Holloway for attendance to Midwest FWC	\$ 281.62
Annual Website Fee	\$ 218.40
Virtual Terminal PayPal Fee	\$ 30.00

TOTAL Disbursements \$ 1,811.02

##### Assets as of: 2/26/2019

Checking 1084	\$ 5,061.62
PayPal	\$ 2,448.40
Investment	\$ 12,068.00
TOTAL	\$ 19,578.02

## Secretary Report—Bri Ciara

AFS Managed Unit Investment Program			AFS Managed Unit Investment Program		
<b>Fund or Unit Name:</b>	Indiana Chapter		<b>Fund or Unit Name:</b>	Indiana Chapter	
<b>For the period ending:</b>	3/31/2018		<b>For the period ending:</b>	6/30/2018	
<b>Contributions</b>	<b>Date</b>	<b>Amount</b>	<b>Contributions</b>	<b>Date</b>	<b>Amount</b>
Total Invested	10/17/2017	\$10,000	Total Invested	10/17/2017	\$10,000
	<b>Calendar Year</b>	<b>Year-to-Date</b>		<b>Calendar Year</b>	<b>Year-to-Date</b>
<b>Description</b>	<b>2017</b>	<b>2018</b>	<b>Description</b>	<b>2017</b>	<b>2018</b>
Beginning Balance	\$0	\$11,419	Beginning Balance	\$0	\$11,419
Contributions /			Contributions /		
Withdrawals	\$10,000	\$0	Withdrawals	\$10,000	\$0
Income	\$235	\$43	Income	\$235	\$117
Gains / Loss	\$1,236	-\$137	Gains / Loss	\$1,236	\$41
Fees	-\$52	-\$14	Fees	-\$52	-\$29
Ending Balance	\$11,419	\$11,311	Ending Balance	\$11,419	\$11,548
AFS Managed Unit Investment Program			AFS Managed Unit Investment Program		
<b>Fund or Unit Name:</b>	Indiana Chapter		<b>Fund or Unit Name:</b>	Indiana Chapter	
<b>For the period ending:</b>	9/30/2018		<b>For the period ending:</b>	12/31/2018	
<b>Contributions</b>	<b>Date</b>	<b>Amount</b>	<b>Contributions</b>	<b>Date</b>	<b>Amount</b>
Total Invested	10/17/2017	\$10,000	Total Invested	10/17/2017	\$10,000
	<b>Calendar Year</b>	<b>Year-to-Date</b>		<b>Calendar Year</b>	<b>Year-to-Date</b>
<b>Description</b>	<b>2017</b>	<b>2018</b>	<b>Description</b>	<b>2017</b>	<b>2018</b>
Beginning Balance	\$0	\$11,419	Beginning Balance	\$0	\$10,000
Contributions /			Contributions /		
Withdrawals	\$10,000	\$0	Withdrawals	\$10,000	\$0
Income	\$235	\$166	Income		
Gains / Loss	\$1,236	\$528	Gains / Loss		
Fees	-\$52	-\$45	Fees		
Ending Balance	\$11,419	\$12,068	Ending Balance	\$10,000	\$10,000



## Chapter News

### **Awards Committee—Rob Ackerson**

Hearty thanks go out to all who presented talks and posters at our recent meeting. I am sure that all those who attended our meeting feel as I do, that all of the contributions are appreciated.

I would like to point out that **all** Presentations and Posters were very close. If any of the presenters/poster participants would like to know any of the remarks/comments (if any) they can contact me (for future improvements).

### **Awards will be presented at the Fall AFS meeting**

Best Professional Paper:

**Paul Venturelli**—*Angler Apps as a Source of Fisheries Data: Revolution or Fool's Errand*

Best Student Paper:

**Patricia Nease**—*Nearshore Aquatic Vegetation and the Impacts on Fish Abundance and Size Structure in Indiana Glacial Lakes*

Best Student Poster:

**Jessica L Thornton**—*Evaluation of the Shovelnose Sturgeon Commercial Caviar Fishery in the Wabash River*

### **A big thank you goes to all our judges:**

Drew Holloway

Alexander Ingersoll

Rob Ackerson

Tom Bacula

Laura Bowley

Mitchel Zischke

Ken Wetzel

Rod Edgell

Bri Ciara

I apologize if I missed anyone who judged or misspelled their name

\*The Best Student paper and poster will be awarded at the fall meeting and will receive a certificate. Best Professional paper will be the same as in the past.

\*\* I would also like to note that I would like to see more students/professionals get involved in the judging. This can be a great way to be involved in the chapter and also provide some learning experience.

Rob Ackerson

IAFS Awards Chair

Phone: (219)369-9591

[rackerson@dnr.in.gov](mailto:rackerson@dnr.in.gov)



Steve Andrews with his Fisheries Award of Excellence, presented at the Fall 2018 IAFS meeting.

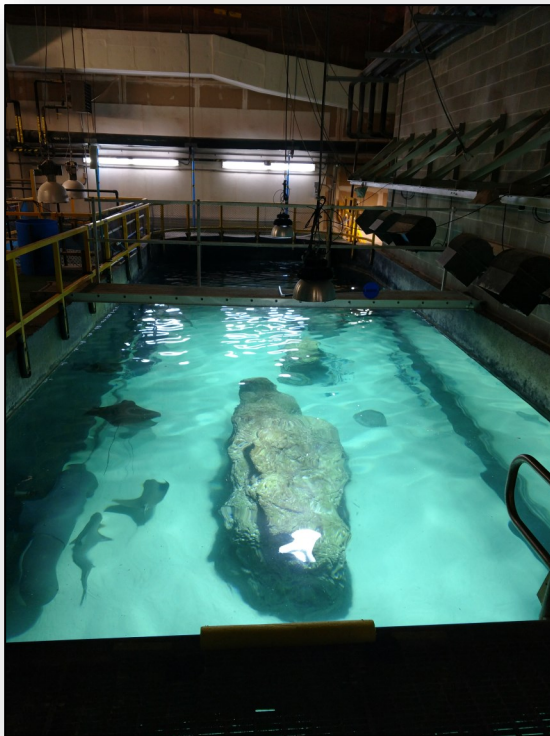
## Chapter News

### **Newsletter Editor—Tom Bacula**

Thank you to all who submitted information to the newsletter. Please send your field pictures into the Facebook group and save a few for the Fall Newsletter. Contact Tom if you have any comments or suggestions.

### **Continuing Education—Steve Andrews**

Indiana Chapter AFS continues to have a robust continuing education program. Thanks to the EXCOM, INAFS members enjoyed a behind the scenes tour of the aquatic displays and a dolphin show at the Indianapolis Zoo following the fall business meeting. At the spring technical meeting, chapter members attending on the second day participated in a Communication Workshop focusing on communicating science to the public effectively. This workshop was taught by Krista Hoffmann and Jason Organ from Indiana University and was organized by Bri Ciara. After serving as the chair of this committee since 2013 and becoming a bit of a lame duck the last couple of years, I would like to hand over the reins to a new chair. If you are interested in serving as the chair of the Continuing Education Committee, please let the EXCOM or myself know. I found this position to be both enjoyable and rewarding and feel it would be a great opportunity for a younger professional in the chapter.

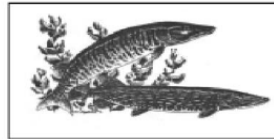
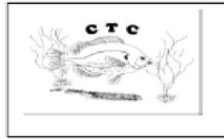


Couple of behind the scenes pictures shark and ray tank on left and coral reef tank on right from Indy Zoo.

### **Rivers and Streams—Kayla Werbianski**

The Indiana State Report was compiled and sent to the NCD division to be posted onto the website and Kayla will be attending the NCD Rivers and Streams Technical Committee annual meeting April 2-3 in Rock Island, IL.

NORTH CENTRAL DIVISION OF THE AMERICAN FISHERIES SOCIETY  
**JOINT MEETING**  
Centrarchid, Esocid and Walleye Technical Committees



**2019 Joint Meeting of the Centrarchid, Esocid, and Walleye Technical Committees – North Central Division of the American Fisheries Society**

## **ANNOUNCEMENT AND CALL FOR PAPERS**

**Dates: July 16-18, 2019**

**Location: The Galley Hotel, Bar and Grill, Webster, SD.**

**<http://thegalleyhotelbarandgrill.com/home/3693401>**

### **Meeting**

The Joint Meeting will include a welcome dinner social Tuesday evening, a full day of presentations on Wednesday, a dinner social Wednesday evening, and a half day of presentations/business meetings on Thursday. Registration cost is anticipated to be around \$65 and will include both socials, coffee breaks, breakfast on Wednesday and Thursday, and lunch on Wednesday. Students are half price.

### **Fish Production Symposium**

In response to recent discussions, a fish production symposium will be held on the afternoon preceding the Joint Meeting (July 16<sup>th</sup>). The symposium will begin with lunch, followed by an afternoon of presentations on subjects related to fish production, potentially including fish rearing, fish marking, brood stock management, spawning techniques, fish transport or other related topics. Cost is anticipated at \$20 per person.

### **Lodging**

The meeting will be held at The Galley Hotel, Bar and Grill and additional motel rooms will be available right next door at Boomers Outback Motel. Contact The Galley (605) 345-9989 or Boomers Outback Motel (605) 345-3323 for reservations and additional information. Cost for rooms should be \$70.

### **Registration and Presentation Submittal**

Contact [Nicholas.Kludt@sdstate.edu](mailto:Nicholas.Kludt@sdstate.edu) for registration and submission of paper abstracts. Payment will be accepted as cash or check at the door (sorry, we are unable to process credit cards or other forms of electronic payment). Deadline for registration is **June 21<sup>st</sup>**.



## All in a Days Work

### Aquatic Control: Wes Goldsmith

The Aquatic Control Fish Management Team is looking forward to this year's field season. We will be working with clients throughout the Midwest. One particularly exciting project we have this spring is a habitat and structure improvement project on a 9-acre Smallmouth Bass fishery. Currently, there is very little structure throughout lake and the forage base is extremely lacking. One of many management strategies we will implement is deploying artificial structure throughout the littoral zone of the lake. We will conduct annual surveys moving forward and work to provide our customer with a lake that family and friends can enjoy for years to come.



## All in a Days Work

### Indiana Department of Environmental Management/Office of Water Quality/Watershed Assessment and Planning Branch : Kayla Werbianskyj

Fish community collections for the year 2018 focused on the tributaries to the Great Lakes Basin as well as other targeted watersheds throughout the state (Blue-Sinking, Lower East Fork White, Middle Ohio-Laughery, Middle Wabash-Busseron, Patoka, and Whitewater). A total of 111 fish community samples were collected from 98 sites resulting in the capture of 20,312 individuals representing 111 different species.

### Monitoring Results from 2018

#### Probabilistic Monitoring

The Watershed Assessment and Planning Branch (WAPB) collected 44 samples at 38 sites on waterbodies in the Great Lakes Basin. A total of 69 different species were captured and 4,926 individual fish were identified. Results are currently under review to determine whether the stream segments these sites fall on are considered “supporting” for aquatic life use.

Table 1. Great Lakes interesting species captured

Common Name	Species	Waterbody	County
Brook Stickleback	<i>Culaea inconstans</i>	Pigeon Creek	Steuben
Longnose Dace	<i>Rhinichthys cataractae</i>	Elkhart River	Elkhart
Brown Trout	<i>Salmo trutta</i>	East Arm Little Calumet	Porter
Rainbow Trout	<i>Oncorhynchus mykiss</i>	East Arm Little Calumet	Porter
		Juday Creek	St. Joseph

#### Reference Site Monitoring

In 2015, IDEM started a 10 year project to sample 250 sites across Indiana with the intention of finding sites with the best water quality in the state. Currently in the 4<sup>th</sup> year of monitoring, the WAPB collected 33 samples at 29 sites on waterbodies in the Great Miami Basin, Ohio River Basin, and Patoka River Watershed (05120209). A total of 78 different species were captured and 9,409 individual fish were identified across 11 counties for this project.

#### *Great Miami Basin*

Nine sites were sampled for fish community in the Great Miami Basin; 11/33 samples in the counties of Wayne, Dearborn, Fayette, Franklin, and Union. A total of 59 species and 4,476 individuals were identified. IBI scores in the Great Miami Basin had a range of 46-58. The highest IBI score of 58 occurred at a site on White-water River near SR 1 in Franklin County. Additionally, seven out of nine sites scored 50 or above on the IBI. The lowest IBI score of 46 occurred on Little Salt Creek near Stipps Hill Rd in Franklin County.



## All in a Days Work

Table 2. Great Miami Basin interesting species captured

Common Name	Species	Waterbody	County(s)
Redside Dace <sup>1</sup>	<i>Clinostomus elongatus</i>	Elkhorn Creek	Wayne
Smallmouth Redhorse	<i>Moxostoma breviceps</i>	Whitewater River	Dearborn
Gravel Chub	<i>Erimystax x-punctatus</i>	Whitewater River	Franklin
Variagate Darter*	<i>Etheostoma variatum</i>	Whitewater River (3 sites)	Franklin, Dearborn
Stonecat*	<i>Noturus flavus</i>	Whitewater River (4 sites)	Franklin, Dearborn, Fayette
Banded Darter*	<i>Etheostoma zonale</i>	4 waterbodies (7sites)	Franklin, Dearborn, Fayette, Wayne, Union

<sup>1</sup>Identified for the first time in Elkhorn Creek; new distribution expansion

\*Species co-occurred at multiple sites

### Ohio River Basin

Seventeen sites were sampled in the Ohio River Basin; 18/33 samples in the counties of Dearborn, Ripley, Harrison, Crawford, Washington, and Perry. A total of 58 species and 4,568 individuals were identified. IBI scores had a range of 26-52. There were three sites that received an IBI score of 52:

- Blue River near E Daughtery Rd in Harrison County
- Blue River near SR 62 in Crawford County
- Little Blue River near Beechwood Rd in Crawford County.

Table 3. Ohio River Basin interesting species captured

Common Name	Species	Waterbody	County(s)
Bluebreast Darter	<i>Etheostoma camurum</i>	Blue River	Crawford
Spotted Darter	<i>Etheostoma maculatum</i>	Blue River (2 sites)	Crawford, Harrison
Channel Shiner	<i>Notropis wickliffi</i>	Little Blue River	Crawford
Stonecat	<i>Noturus flavus</i>	Blue River	Crawford
		Hayes Branch	Dearborn
Banded Sculpin	<i>Cottus carolinae</i>	5 waterbodies (7 sites)	Crawford, Harrison, Washington
Scarlet Shiner	<i>Lythrurus fasciolaris</i>	9 waterbodies (10 sites)	Crawford, Harrison, Washington, Ripley, Perry

Addi-  
26



tionally, there were five other sites that scored 50. The lowest IBI score of was at a site on Trigger Branch near Gerald Rd in Perry County.

Scarlet Shiner from Mosquito Creek, Harrison County

## All in a Days Work

### Patoka River Watershed

Three sites were sampled within the Patoka River Watershed; 4/33 samples in Orange County. A total of 22 species and 365 individuals were identified. Some interesting regional species included: Ribbon Shiner (Patoka River), Banded Sculpin (Patoka River, Youngs Creek), Warmouth (Patoka River), and Southern Redbelly Dace (Patoka River). The IBI scores ranged from 28-40. The highest IBI score of 40 was on the Patoka River near CR175 W/Fargo Rd in Orange County. Youngs Creek near CR 650 S in Orange County received the lowest IBI score of 28.

### Performance Measures Monitoring

The WAPB collected fish and macroinvertebrate communities at nine sites across five sub-watersheds (West Branch Fish Creek, Smith Ditch-Cedar Creek, Peckhart Ditch-John Diehl Ditch, King Lake-Little Cedar Creek, and Dosch Ditch-Cedar Creek) as part of performance measures' monitoring to determine if there are improvements in the biological integrity. Site locations and Index of Biotic Integrity scores are summarized below in Table 4.

Table 4. Performance Measures Monitoring waterbodies, HUCs, counties, fish and macroinvertebrate IBI scores

Project Site Number	Waterbody	HUC Code	County	fIBI <sup>1</sup>	mIBI <sup>2</sup>
18W001	West Branch Fish Creek	041000030401	Steuben	N/A	N/A
18W002	West Branch Fish Creek	041000030401	Steuben	44	40
18W003	West Smith Ditch	041000030604	Dekalb	16	30
18W004; 18W004.5*	Peckhart Ditch	041000030702	Dekalb	16;18*	30
18W005	Little Cedar Creek	041000030705	Dekalb	48	38
18W006; plus macro dup**	Little Cedar Creek	041000030705	Allen	50	40;40**
18W007	Cedar Creek	041000030707	Allen	48	32
18W008	Cedar Creek	041000030707	Allen	54	32
18W009	Cedar Creek	041000030707	Allen	52	34

<sup>1</sup> Index of Biotic Integrity Score for fish community

<sup>2</sup> Index of Biotic Integrity Score for macroinvertebrate community

\*Site revisit for fish community in same year as part of QA/QC procedures

\*\*Site duplicate for macroinvertebrate community as part of QA/QC procedures

A score of lower than 36 (out of 60) on the IBI or macroinvertebrate IBI indicates impairment for both communities. Site 18W001 on West Branch Fish Creek was identified as not a stream but a wetland, therefore it will not be assessed for improvement. 18W002, 18W005, and 18W006 displayed improvement in both biological communities. 18W003 and 18W004 (including fish revisit score) did not show improvement in either biotic community. Sites 18W007, 18W008, and 18W009 located on Cedar Creek displayed very good to excellent fish community scores, but poor macroinvertebrate community scores. There were, however, 7-9 Ephemeroptera, Plecoptera, and Trichoptera (EPT) taxa (pollutant sensitive macroinvertebrate taxa which include mayflies, stoneflies, and caddisflies) reported at each site on Cedar Creek.

Performance Measures Monitoring results are currently under review to determine whether the stream segments these sites fall on are considered "supporting" for aquatic life use and if any segment improvements can be reported as Success Stories.

## All in a Days Work

For more information on IDEM's fish community monitoring program or to inquire about fish community data, contact IDEM Watershed Assessment and Planning Branch staff members Kevin Gaston, at [kgaston1@idem.IN.gov](mailto:kgaston1@idem.IN.gov) or (317) 308-3396 or Kayla Werbianskyj, at [kwerbianskyj@idem.IN.gov](mailto:kwerbianskyj@idem.IN.gov) or (317) 308-3373.

### Fish Tissue Contaminants Monitoring Program

Fish tissue contaminant samples from our 2018 sampling efforts (Upper Wabash Basin) were sent to the analytical laboratory in November. Data results are anticipated to be received by the end of April 2019, at which time results will be, incorporated into Indiana's Integrated Report, the 303(d) List of Impaired Waters, and the Indiana State Department of Health's Indiana Fish Consumption Advisory. Plans are underway for 2019 fish tissue sampling in the Lower Wabash and Kankakee River basins. The fish consumption advisory workgroup, comprised of members from DNR, ISDH and IDEM, has worked diligently to incorporate the data from this program in the Indiana Fish Consumption Advisory (<https://www.in.gov/isdh/23650.htm>) which has a new interactive map format. For more information on IDEM's contaminants monitoring program or to inquire about fish tissue contaminants data, contact IDEM Watershed Assessment and Planning Branch staff members Ali Meils, at [ameils@idem.IN.gov](mailto:ameils@idem.IN.gov) or (317) 308-3204 or James Stahl, at [jstahl@idem.IN.gov](mailto:jstahl@idem.IN.gov) or (317) 308-3187.

### 2019 Monitoring Projects

Site reconnaissance and evaluation was conducted from January-March for all 2019 field projects.

**Probabilistic Monitoring:** Sampling will be focused on waterbodies in the Ohio River Basin in Southern Indiana. The goal is to sample 38 sites in the basin. Data to be collected at these randomly generated sites include water chemistry, bacteriological, algal, macroinvertebrate communities, fish communities and habitat quality assessments.

**Reference Site Monitoring:** Sampling will occur at 15 sites in HUCs 05120202 and/or 05120208 (counties of: Owen, Monroe, Greene, and Lawrence); and 15 sites in HUCs 05120201, 05120204, and/or 05120205 (counties of: Henry, Madison, Shelby, Johnson, and Morgan). Sites are still in the process of becoming finalized.

**Watershed Characterization:** Sampling will occur at 24 targeted sites in the Laughery Creek Watershed (HUC 0509020305 in the Ohio River Basin) as part of the baseline monitoring and Total Maximum Daily Load project.

**Performance Measures' Monitoring:** The WAPB staff will revisit 14 sites across 12 sub-watersheds as part of performance measures' monitoring to determine if there are water quality improvements. The 2019 sites will be sampled due to a historical impairment for one or more of the following parameters: biological communities, dissolved oxygen, or nutrients. Counties where sampling will occur include: Carroll, Clinton, Dearborn, Ripley, Jefferson, Pike, and Dubois. The objective of monitoring these sites is to document water quality improvements following implementation of a watershed management plan.

### Other News

The WAPB would like to thank our 2018 interns: Cole Baird (Ball State University), Samira Armijos (University of Texas El Paso/IUSPEA), Julia Markovitz (Purdue University), Kathy Roeder (Purdue/IUSPEA), and Taylor Mikulyuk (Ivy Tech)!



## All in a Days Work



Pictured above (left to right): Samira Armijos, Cole Baird, Taylor Mikulyuk, Kayla Werbianskyj



Pictured above (from left to right): Interns Taylor Mikulyuk, Cole Baird, Kathy Roeder, Julia Markovitz, Samira Armijos at the Wabash River Enhancement Corp Rain Garden outreach event.



## All in a Days Work

### Duke Energy: Daniel Arndt

With spring finally here, on the calendar at least, Duke Energy Biologists prepare for another season of fisheries field work. Duke Energy has been monitoring aquatic communities at five facilities (Wabash River Station, Cayuga Station, Edwardsport Station, Noblesville Station, and Dresser Station) on the Wabash and White River at various intervals since 1982. These efforts were driven in large part from requirements in the National Pollutant Discharge Elimination System (NPDES) permits at each applicable station. Specifically, Duke Energy has studied the potential effects of thermal effluent on the aquatic communities present in the Wabash and White Rivers in order to demonstrate that a Balanced and Indigenous Community of fish and aquatic macroinvertebrates exist in the vicinity of these stations. Specific objectives of these studies include: document the current species composition and relative abundance of the fish and macroinvertebrate community of the Wabash River and White River in the vicinity of Wabash River Station (WRS), Cayuga Generating Station (CGS), Edwardsport Generating Station (EDW), Noblesville Generating Station (NOB), and Dresser Station (DRS), document the changes in the spatial and temporal distribution of the fish and macroinvertebrate community, compare the results of fisheries and macroinvertebrate data with previous years, and evaluate the potential impact of these station's discharge on the diversity and density of the downstream fish and macroinvertebrate assemblages.

Fisheries sampling occurred at CGS, EDW, NOB, and DRS in 2018. Fish and macroinvertebrates were sampled at CGS while fish were the only trophic level sampled at EDW, NOB, and DRS. Sampling at EDW and NOB in 2018 provided a unique opportunity to analyze a fish community that was once affected by a thermal discharge but no longer is due to changes in operations at each station. Data collected at these stations will be compared during years of thermal impact and years of non-thermal impact to determine if significant differences exist in the fish community. These results will help researchers, regulators, and utilities better understand the impacts of thermal discharges on fish communities or lack thereof. Sampling is planned for 2019 at these stations in a manner similar to that described above.

Another item keeping Duke Energy Biologists busy is supporting company efforts to develop the required submittals for the 316(b) rule. The final version of the rule was published back in 2014. The 316(b) regulation is EPA's effort to set standards and guidelines as to what the best technology available is that will minimize adverse environmental impact associated with impingement and entrainment of fish, fish larvae, and fish eggs. Depending on the amount of water a regulated facility withdrawals, up to 12 documents are required to be submitted to the Indiana Department of Environmental Management and U.S. Fish and Wildlife Service. These documents will be used by these agencies to make a determination of the method of compliance for each facility. Currently, Duke Energy has four facilities in their Midwest service territory that are developing their submittal packages. The determination made of the agencies will be incorporated into the Station's NPDES permit.

In summation, 2019 promises to be another busy year. Fisheries sampling will be starting soon and 316(b) compliance work will move forward.



Hybrid Stiped Bass at Cayuga Station



## All in a Days Work

### IDNR Fish Management District 1: Tom Bacula

A noticeable change to the brief is Bri Ciara has changed positions. She now works for the Lake Michigan Coastal Program based out of the Indiana Dunes State Park. She is a special projects coordinator with a major current project focusing on septic systems within the Lake Michigan watershed. She will be transitioning out of AFS duties, but still assisting the district with a few fisheries projects. I do not know when the position will open but I hopefully for this summer or fall so those interested should check the state jobs.

The fall and winter did much of the usual items of aging fish, writing reports, stocking requests and attending meetings. Additionally, with Bri's departure had to prioritize items to finish and direction for the reports. Also finished coordinating some purchases that will greatly benefit our safety. Also coordinating with other biologists on updating our shock boats to use the MLES infinity boxes.

On tap for this field season is coordinating lots of volunteers, but so far many people have been interested in getting a taste for the fisheries work. Planning a spring Walleye survey at Lake Maxinkuckee, Crappie netting at two lakes, various status and trends sampling efforts, the annual assessment of JC Murphey Lake and a survey on Clear Lake. This particular clear lake is outside of Westville on the Porter/LaPorte County line not the one in LaPorte, it gets very confusing when not so original names are used 20 miles apart. This lake has a new access site of last fall and has not been surveyed before with fall and winter anglers reporting big gills and perch. One of the crappie surveys is at Bruce Lake Northwest Indiana's premier muskie lake so I am hopeful to update a few muskie and crappie pictures that I regularly use from 2013.



A few pictures from various 2018 Bass Lake (Starke Co.) that anglers this past year affectionately called the "Dead Sea."

## All in a Days Work

### IDNR Fish Management District 6: Andy Bueltmann and Tyler Ham

While spring hasn't quite sprung yet in District 6 (though we're keeping our fingers and toes crossed!) we're still managing to keep ourselves busy. In true rhyming fashion, we dropped the ball last fall in 2018 so we'll begin there. Fall was a busy time on Patoka Lake with numerous surveys. First was a Walleye/Hybrid Striper age-0 electrofishing survey. We did really well on wipers with 30 collected and a bit slower on Walleye with seven YOY collected. Next up was an adult moronid survey which quickly turned into mainly a catfish survey. Despite quite a bit of effort, we ended up only collecting six adult wipers and one striper in the gill nets but were able to collect 79 Channel Catfish with nearly a quarter of those over 20 inches! We wrapped up the 2018 field season with helping Southern Fisheries Research sample crappie (and some massive Redear!) on Hardy Lake. Soon after, we commenced on prepping and ageing structures as well as maintenance and other housekeeping.



Patoka Lake Channel Catfish

The new year found us making a trip to the mythical land of Cleveland to attend the Midwest Fish and Wildlife Conference where Andy presented a gear comparison between Indiana standard and Lake Michigan trap nets and Tyler presented some of his Masters work on Upper Mississippi Black Crappie. A lot of good insights were gleaned, connections made, drinks consumed, and nobody lost any digits despite the -35 degree weather. February was a month of meetings, with D6 attending a pesticide applicators workshop in West Lafayette early in the month, the DFW Annual Conference in the middle of the month, and the crown jewel at the end: the IAFS Spring Meeting. Tyler presented a poster on a case study of the management issues at Hardy Lake and we enjoyed an excellent communications seminar on the second day.



Patoka Lake Walleye

As spring looms closer, we are working on wrapping up reports from 2018. Andy is elbow deep in the Patoka report with its many facets and Tyler has been digging into the tournaments database. For those unfamiliar, Indiana requires tournaments over 15 boats on certain properties to obtain permits and report results afterwards. Each year we compile the results from the previous year and we've been doing this since circa 2003 so there's quite a bit of info. We're hoping to re-vamp the aging system in the near future and continue to glean as much info as we can.



# All in a Days Work



A chilly, snowy day spent helping the Forest Service drop catfish nesting boxes in Springs Valley (aka Tucker) Lake on the Hoosier National Forest.

Now, we are planning our spring Crappie/Muskie surveys on Bluegrass and Loon Pits near Evansville as well as mentally preparing for the “Brookville Experience.” We are also looking to start the Patoka creel in the near future. We are excited to begin the planning process for the Patoka Habitat Project this summer (to be completed in 2020). Be on the lookout for volunteer opportunities, we’re looking to do both weekday and weekend volunteer work days to allow plenty of people to help out if interested! Visit <https://www.in.gov/dnr/fishwild/7665.htm> for more info on the habitat program. If anyone has any questions about D6, what we’ve done, or what we’re doing, please reach out at [ABueltmann@dnr.in.gov](mailto:ABueltmann@dnr.in.gov), [THam@dnr.in.gov](mailto:THam@dnr.in.gov), or (812) 789-2724!



Patoka Lake Wiper



Patoka Lake Striper

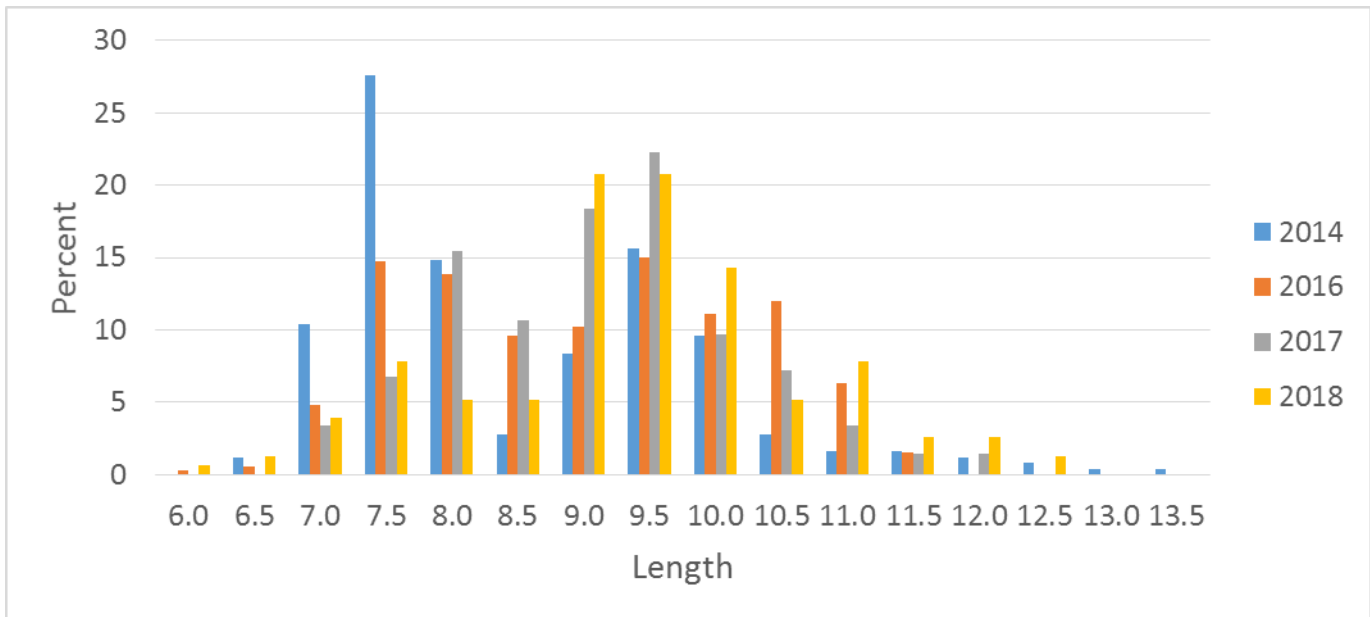
# All in a Days Work

## IDNR South Region Fisheries Research: Sandy Clark-Kolaks

Some may know that Andy Bueltmann, decided to fly south to become the District 6 fisheries biologist. I have interviewed and offered my assistant’s position and my new assistant will begin in May. Many of you may know him, Seth Bogue, he was a graduate of Ball State and is completing his master’s at Eastern Illinois.

Even though I am a one women show, I was able to get some field work done with the assistance of Andy and Tyler from District 6. Monitoring of the 9” minimum size limit continues at both Dogwood and Hardy lakes.

Size distribution of Black Crappie is increasing to larger fish at Dogwood, however, relative weights have dropped since the implementation of the regulation. As we all know minimum size limits only work if harvest is moderate to high. There is concern that with the renovation and rebound of the West Boggs fishery (within 30 minute drive of Dogwood) that anglers will move from crappie fishing at Dogwood to West Boggs.



Year	PSD	PSD-9	PSD-10	PSD-12	Wr-8	Wr-10	Wr-12
2014	60	43	19	3	101	101	97
2016	77	56	30	-	104	95	-
2017	90	64	23	1	88	88	82
2018	92	81	54	16	90	90	88

Hardy Lake is also seeing many changes and evaluating the 9” minimum size limit has been complicated. Since monitoring began in 2015 we have seen an increase in the number and year classes of White Crappie. We have now documented three year classes of White Crappie at Hardy Lake. Size structure has not increased at Hardy Lake and relative weights have decreased since 2015. Crappie stock piling is a concern. Confounding the situation is the dramatic increase in Yellow Bass harvest which may be impeding the crappie anglers from catching and harvest crappie. A tag return study was conducted in 2017 and 2018. Of 353 crappie tagged only 19 tags have been returned. A creel was conducted at the same time so we are confident in our tag return rate. The low harvest rate of crappie was not only confirmed in the creel but seven tagged crappie were recaptured during our fall survey. Tyler Ham did a poster at the Indiana AFS meeting highlighting the very diverse management strategies implemented at Hardy.



## All in a Days Work



We also continued a gear comparison study between our Indiana standard trap nets and the smaller Lake Michigan trap nets. Andy Buelmann gave a presentation on this at the Midwest Fish and Wildlife Conference.



I have also been busy purchasing new equipment including upgrading the Funtoon habitat boat motor from a barely running 1991 2-stroke 50 hp to a 75hp 4-stroke. The motor finally matches the beauty of the rest of the boat.



# Catch of the Day



"If I fished only to capture fish, my fishing trips would have ended long ago."

-Zane Grey



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Mary and Steve Andrews out enjoying retirement.





Catch of the Day



Bryan Kalb with a Yellowstone Cutthroat Trout (*Oncorhynchus clarkii bouvieri*) caught from Armstrong Spring Creek at the O'Hair Ranch in Livingston, Montana.



Tyler Ham's bass from West Twin Pit (Sugar Ridge FWA).

## Catch of the Day



AJ and Rod Edgell with a 38" pike from Pretty Lake in LaGrange County.



All smiles Fi, Tom, Allison and Valerie Bacula with a triple while tip-up fishing at JC Murphey Lake. While releasing the fish, Allison wanted to follow them and stepped into the hole, fortunately it wasn't too cold out.