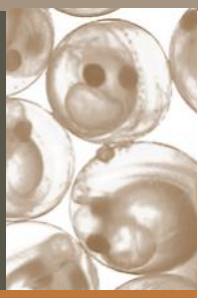
Volume 39, Issue 1 *January 29, 2021*

In this issue

Iowa Chapter of the American Fisheries Society

Lateral Lines



Current topics

Call For Papers!
Iowa Chapter AFS meeting
February 22-25, see page 4

Cyclone Corner

Visit Iowa AFS on the web:

http://iowa.fisheries.org

Visit the North Central Division AFS on the web:

http://ncd.fisheries.org

Check out Benefits of Parent Society Membership

https://fisheries.org

OFFICERS

PRESIDENT

Chris Larson
DNR Fisheries Regional Supervisor
Cold Springs
57744 Lewis Rd.
Lewis, IA 51544
(712) 769-2587
Chris.Larson@dnr.iowa.gov

PRESIDENT-ELECT

Tyler Stubbs
DNR Urban Fisheries Biologist
502 E 9th St
Des Moines IA 50319
(515) 725-8444
Tyler.Stubbs@dnr.iowa.gov

SECRETARY/TREASURER

Kyle Bales
Mississippi LTRM,
206 Rose Street
Bellevue, IA 52031
(563) 872-5495
Kyle.Bales@dnr.iowa.gov

MEMBERSHIP CHAIR

Greg Gelwicks
DNR Fish Research—Interior Rivers
Manchester Fish Hatchery
22693 205th Avenue
Manchester, IA 52057
(563) 927-3276
Greg.Gelwicks@dnr.iowa.gov

Our Mission:

To improve the conservation and sustainability of fishery resources and aquatic ecosystems by advancing fisheries and aquatic science and promoting the development of fisheries professionals.

COMMITTEE CHAIRS

Audit

Ben Dodd
Ben.Dodd@dnr.iowa.gov

Resolutions

Jeff Kopaska
Jeff.Kopaska@dnr.iowa.gov

Continuing Education

Clay Pierce
cpierce@iastate.edu

Student Affairs

Mike Weber
mjw@iastate.edu

Nominations

Greg Gelwicks
Greg.Gelwicks@dnr.iowa.gov

Best Paper

Chad Dolan
Chad.Dolan@dnr.iowa.gov

Newsletter Editor

Darcy Cashatt
Darcy.Cashatt@dnr.iowa.gov

President's Corner

Chris Larson

As sit to write my first president's blog I can't help but reflect on my DNR career and my affiliation with the Iowa Chapter AFS. I was hired as a permanent part-time worker creel clerk in 1986 (yes, I am that old!) by Jim Wahl at Clear Lake and I attended my very first Iowa AFS chapter meeting in 1989 which was a joint meeting with the NE & KS chapters at the Ak-Sar-Ben Aquarium. I remember how much fun it was to meet fisheries professionals from bordering states and learn about the issues they were dealing with. One of my fondest memories of this and all the other 31 chapter meetings that I have attended is the time spent socializing with peers after the meetings and the comradery shared by all chapter members. Like many of you that attend these meetings I probably learned as much or more about fishery management/research at these social events than I did listening to presentations. I have always been an active member, as an officer or committee member, of the Iowa Chapter AFS and I encourage all of you do the same. There is much value in it. The experiences you have and the skills you learn as an active member will make you better at your current job and a more rounded fisheries professional. I also encourage you to look beyond Iowa AFS chapter membership and consider joining the parent's society as well. Jim Wahl convinced me of that in 1992 and I am grateful for my affiliation over the past 29 years. For as little as $8/month you can become a member of the parent society and become part of a bigger coalition of professionals managing fisheries resources beyond our borders. A big part of what shaped my career, were early mentors that influenced me and helped me advance from undergraduate to graduate student to full-time fisheries professional. A common message from these mentors was join and get involved in the American Fisheries Society.

What a year I decided to throw my hat into the ring to run for Iowa's Chapter AFS president, ugh. Like me I am sure all of you are ready for this pandemic to be over with already! Months have past since the pandemic began and we will have to endure a few

more months before it is considered over and get back to normal, but at least there is light at the end of the tunnel. One positive take away from all of this is the amazing technological avalanche of new communication tools that have been developed to help us continue to do our business. I have lost count of the number of virtual meetings I have attended. Who knew; Google meets, Zoom, GoTo meeting, Microsoft teams, etc. would become common virtual platforms we are all communicating through. Although most of us more than ready to go back to in-person meetings these platforms will not be going away as a communication tool, especially when there are long distances between participants or time constraints. No doubt about it, going through this pandemic will change the way many of us conduct business. Like many of you, I prefer in-person meetings and can't wait for that to be a reality. The ability to interact face to face and have discussions following a presentation, during breaks, over lunch or at a social are by far the most informative methods to communicate with your peers.

Fortunately, for now, someone hasn't figured out effective methods to conduct all field data collection

President's Corner

Con't

activities remotely. Can you imagine how utterly boring it would be if you had to conduct fish population assessments from your computer with no field sampling trips to the beautiful lakes, rivers and streams of Iowa?

The EXCOM officers have been busy planning the 2021 annual chapter business meeting. Because of the pandemic the committee reluctantly decided to hold the meeting virtually for safety reasons. The meeting will be during the week of Feb. 22-25. The structure will most likely be pre-recorded presentations uploaded to YouTube so members will be able to view them at your leisure during that week. There will be a chat box for each presentation for dialog between viewers and presenter. This will be a great opportunity for those of you that are skittish about standing up in front of crowd to give a presentation about your work to your computer screen! Please consider giving a presentation about your work at our upcoming Iowa Chapter AFS virtual meeting in February. As a young professional it's a opportunity to "show your skills" and gain confidence in developing a presentation for your peers. We are also working out the details on conducting our annual business meeting on one of the aforementioned virtual platforms. It is tentatively planned for February 25th from 3-4pm.

In closing, I want to thank you for all your support and wish you a safe and productive winter season!

Iowa Chapter AFS Annual Meeting

CALL FOR PAPERS!

Virtual meeting agenda

Feb 22 - 25 Virtual presentations

Feb 22 - 25 Virtual silent auction closes at 11am on the 25th

Feb 25 from 3pm-4pm virtual annual business meeting (Hosted by AFS GoTo meeting platform)

Please consider giving a presentation about your important work.

Abstracts should be emailed to Tyler Stubbs by 5pm Feb. 15th - tyler.stubbs@dnr.iowa.gov
Presentations should be emailed to Kyle Bales by 5pm Feb. 18th - iowachapterafs@gmail.com
-More information regarding your presentation recording and submittal will be sent out soon.

Presentations will be pre-recorded and uploaded to YouTube, and can be listened to anytime during the scheduled four days.

Silent auction item donations (picture & description) should be emailed to Jeff Kopaska by 3pm Feb. 19 - jeff.kopaska@dnr.iowa.gov

All other questions can be sent to Chris Larson - chris.larson@dnr.iowa.gov

Registration Fee: $0 (That's right, ZERO $)

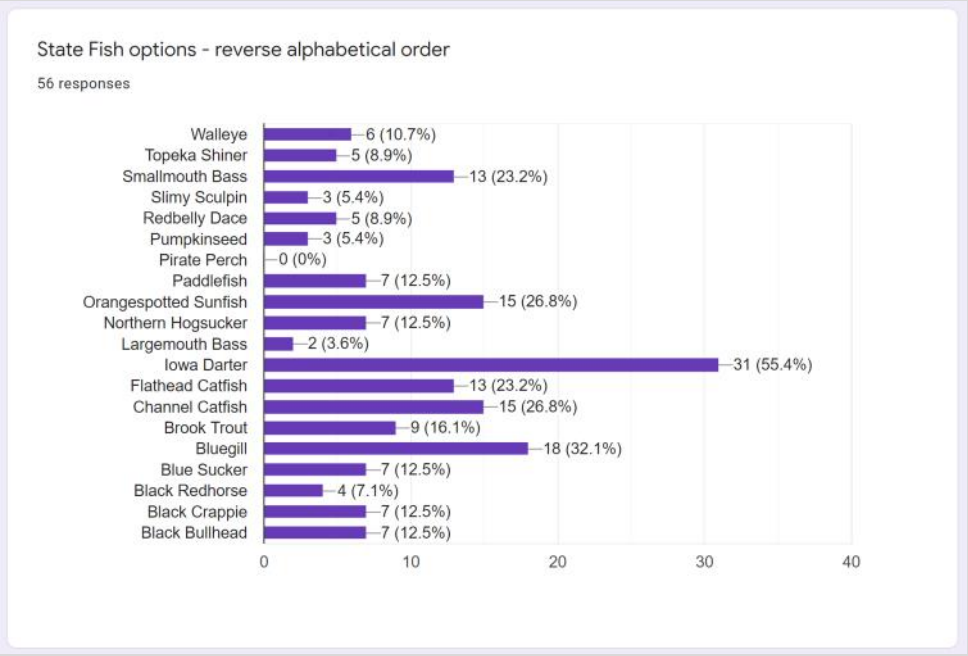
IA AFS Membership (required): $15

To become a member of the Iowa Chapter of the American Fisheries Society, just fill out the application form, email it to Kyle Bales at: iowachapter-afs@gmail.com. Then send your payment with a copy of the application to Kyle Bales at the address listed on the application.

Iowa State Fish Contest Update

Jeff Kopaska, Fisheries Biometrician, IA DNR

The votes are in, and people certainly seem to love the Iowa Darter! If you recall, this was a weeding out, or ranking, exercise. Individuals were allowed to vote for up to five of their favorite Iowa fish species, and you can see that we got 56 responses in this stage. Moving forward, we will proceed with a Final Four, all of which were voted for by at least 25% of the individuals casting votes. The Final Four fish are all introduced below. At our Iowa AFS meeting (hopefully) there will be a brief presentation about each of these fish. After those presentations, we can discuss which one is our favorite, and determine if we want to move forward with a species that we would like to put forward as the Iowa state fish. With the candidates that we have, we could also potentially suggest one game fish and one nongame fish for this honor. I look forward to talking with you all about this at the upcoming meeting!



Candidate #1 – Iowa Darter (*Etheostoma exile*)

Most abundant in the natural lakes in Iowa, but can be found in rivers and streams in northern Iowa, as well as the Missouri and Mississippi Rivers. The Iowa Darter lives in clear, sluggish, vegetated streams and weedy areas of glacial lakes, marshes and ponds. Forest clearing and drainage practices have reduced its habitat and warmed the remaining waters enough to eliminate this species in the southern part of its range. In the United States, it is now common only in non-agricultural areas.

Candidate #2 – Bluegill (*Lepomis macrochirus*)

Bluegill is the most abundant and widespread member of the sunfish family in Iowa. It is found in nearly all Iowa waters, but is more abundant in lakes and ponds than in streams and rivers. This fish is not commonly found in western Iowa streams, but is occasionally found in most eastern Iowa interior rivers. It is very abundant in the backwaters and sloughs of the Mississippi River.

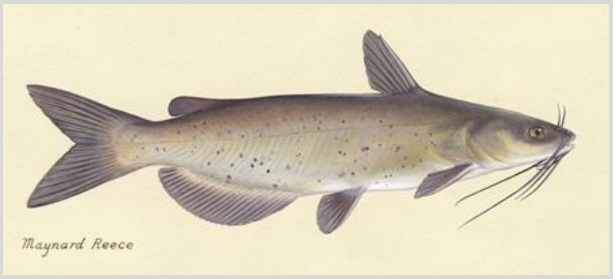
Aside from farm ponds and impoundments, the largest populations of Bluegill are in warm pools and backwaters of low-gradient streams, and particularly in overflow pools along floodplains with some aquatic vegetation or other cover. Researchers note that stream populations may be sustained by fish continuously escaping from impoundments. The Bluegill is intolerant of continuous high-turbidity, siltation and flowing waters, although in Wisconsin, Bluegill were often found in moderately swift waters of streams..

Bluegill are the most commonly caught, and one of the most highly sought after, species in Iowa. These fish are extremely important to anglers.

(Continued on next page)

Iowa State Fish Contest Update (continued)

Candidate #3 – Channel Catfish (*Ictalurus punctatis*)



Most abundant and widely distributed Iowa catfish; common to abundant throughout Iowa's rivers and moderate sized streams. The Channel Catfish occurs naturally, but is also stocked in artificial impoundments, natural lakes, and farm ponds throughout the state.

Channel Catfish are found in many types of habitats from ponds, lakes and reservoirs to rivers, oxbows and bayous. It is highly abundant in the deeper waters of impoundments and large streams with moderately clear bottoms of sand, gravel or boulders and sometimes silt, if the rate of deposition is low. It is extremely adaptable; it does not need flowing water at any point in its life cycle or live food. Although common in the Mississippi River and its larger tributaries, it has been known to be in the smallest creeks during spring flooding. Adults seek cover around submerged logs, steep cutbanks or drift piles during the day, and feed in riffles and shallow pools at night. It avoids clear, cool streams, streams with high gradient, and dense beds of aquatic vegetation. Yearlings can tolerate considerable current and are often found in riffles or shallow pools.

Channel Catfish are harvested by commercial fishermen extensively from the Mississippi River. About 400,000 pounds of Channel Catfish valued at nearly $250,000 are harvested from the Mississippi each year.

Candidate #4 – Orangespotted Sunfish (*Lepomis humilis*)

Widely distributed throughout Iowa; most common in the man-made lakes, natural lakes and interior streams. Occasionally seen in the Mississippi River and rare in the Missouri River.

The Orangespotted Sunfish spawns by nesting in colonies with the male fish building a nest by digging a small depression in the sand or gravel. Since this is the smallest sunfish, it also builds the smallest nests. Spawning lasts from May through August, at which time the males are so brightly colored they look like painted artificials.

Orangespotted Sunfish reach about an inch long by the end of their first year of life and grow to about 2-inches in the second year. Growth continues at about one inch each year for the first four years. Adults mature at about 2-inches long and fish longer than 4-inches are very rare in Iowa.

Upcoming Professional Meetings

- 81st Annual Midwest Fish and Wildlife Conference. February 1 - February 3, 2021. Virtual meeting theme is, Fostering Diversity.
- Iowa Chapter AFS Virtual Annual Meeting—February 21 - 25, 2021
- 86th North American Wildlife and Natural Resources Conference — March 8 - 12
- UMRCC - Iowa is hosting this year (virtual) — March 15-19
- AFS NCD Rivers and Streams Technical Committee (virtual) — March 30 - 31
- Southern Division Virtual Annual Meeting — April 6 - 9, 2021.
- Aquaculture America, World Aquaculture Society — August 11 - 14, 2021
- American Fisheries Society 151st Annual Meeting (Virtual) — November 6 - 10, 2021

From Days Gone By — Backbone Trout Hatchery

Vance Polton, Lake Darling Fisheries Management, IA DNR

The Iowa DNR Parks Bureau celebrated their 100th Anniversary during 2020 and they highlighted Backbone State Park as the first Iowa State Park, so I thought I would show this postcard of the Backbone Trout Hatchery as it was between 1928 (first year in production) and about 1938 (when the CCC started their rebuild of the hatchery grounds).

Backbone wasn't our first State fish hatchery, it wasn't even our first Iowa trout hatchery being proceeded by trout hatcheries at Lansing and Anamosa. Anamosa was our first State Fish Hatchery and was built and put into operation in 1874. 1874 was also the year that the Iowa Fish Commission was established. Do a little math and in 2024 the fisheries bureau of the Iowa DNR will be 150 years old.

But back to Backbone, in the postcard you can see that the hatchery had some interesting design features: notice the curved raceways just below the two cedar trees, or the raceway that does a zigzag between the two irregular shaped ponds, or that the water overflowing from the first pond goes across the ground and into the second pond. At first, I thought that overflow was just a case of bad timing on the photographer's part but nearly all of the pictures I have found from this time period shows the same thing. Were they trying to add more oxygen to the spring water since the area does certainly have a "riffle" effect on the water? The little brick building just above the upper pond was the "meat house" where the cooking of the fish's food was done. The little trout (up to four inches) were fed a daily ration of ground-up cooked liver, the four and six inchers were fed a diet of cooked small grains and cotton seed, and the bigger trout were fed a diet of cooked ground carp. The main hatchery building can just be seen through the trees along the left edge of the picture.

An excerpt from an email from Ken Lubinski forwarded by Jon Christensen

"Back around 1980 I received one of the best Christmas presents ever - a 17 volume collection of encyclopedia-like books called "The Nature Library", published by Doubleday in 1905. The books cover general topics like birds, insects, reptiles, mushrooms, trees, wildflowers, butterflies, moths, etc. Volume 5 is titled "Fishes" on its spine, and "American Food and Game Fishes" on its title page. The authors were David Starr Jordan (Leland Stanford Junior University) and Barton Warren Evermann, an ichthyologist of the U. S. Fish Commission. I remembered these names from my early zoology classes at Western Illinois University. Each of the volumes provided some of the most detailed scientific observations available back then, details that are frequently omitted in more modern treatments of the subjects. Lots of excellent color plates. The books are as handsome as they are chock full of valuable information." *For those interested, these volumes can be found at —*

http://catalog.hathitrust.org/Record/100941846

A poem from the start of volume 5 (Food and Game Fishes)

"Of Recreation there is none
So free as Fishing is alone:
All other Pastimes do no less
Than Mind and Body both possess;
My Hand alone my Work can do,
So I can fish and study too."

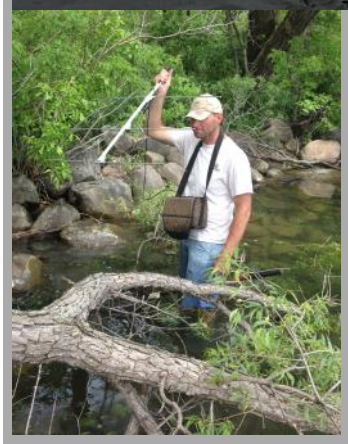
For a longer poem on Blue Catfish, see pages 19 - 20 in this same volume.

Muskellunge Research in Iowa's Natural Lakes—Part 2

Jonathan Meerbeek, Fisheries Research, Iowa DNR

In the first part of this documentary, we touched on Muskellunge emigration, one of two important bottlenecks that limit the potential for our Muskellunge fisheries. The other is Muskellunge recruitment and survival to adulthood. Scores of researchers have focused on this single topic spanning a wide range of fish species, all attempting to maximize fish post-stocking survival and contribution to the fishery. The truth is, there is no "silver bullet" that can guarantee fish survival once fish leave the confines of intensive husbandry. Sure, trends and patterns have been acknowledged for certain species stocked in particular systems, but high post-stocking survival tends to be the exception rather than the rule.

A good example of this is Iowa's Muskellunge program. Muskellunge populations were first maintained via fall stocked, pond-reared fingerlings. Muskellunge populations initially thrived, but inconsistencies in the hatchery product made this technique unreliable. A novel method of rearing Muskellunge on a pellet diet was introduced in the 1980s, but shortly after implementing, a large decrease in the adult population was observed, prompting more research. A single observation of high (50%) post-stocking survival of spring-stocked Muskellunge swayed the entire state's production to the current pellet started, minnow finished, spring-stocked yearling product. Initially, it appeared that we had indeed found the "silver bullet" to maintaining healthy Muskellunge populations in Iowa. But, as more than a decade of studying pellet-minnow finished yearlings passed, it became evident that these products, too, were susceptible to periods of poor performance and adult populations in some systems eventually dwindled to unacceptable levels.



So, even after years of tedious research, the question still remained: what are the limiting factors contributing to the success or failure of stocked Muskellunge in Iowa? In 2016 we sought to start answering this question by implanting transmitters in yearling Muskellunge and following their movements and survival over 100+ days post-stocking. More specifically, we wanted to test if fish allowed a transporting stress recovery period survived better than fish that were stocked once they arrived to the lake, or if fish stocked offshore had a better chance of surviving. After two years and 100 fish fitted with transmitters, we were unable to detect differences in survival rates among the three treatments. However, it became quickly apparent that larger fish (>13.0 in) had much higher survival rates than their smaller sized counterparts. Could it be something as simple as a fish size factor that limits our Muskellunge stocking success in natural lakes? Interestingly enough, as recaptures of tagged yearling Muskellunge from previous years stocked started to pour in, a very similar trend was appearing with size-at-stocking being a significant factor in yearling survival to adulthood. Once again, we thought we had stumbled upon the answer to all of our problems. So, to prove that we were on track, we continued our yearling Muskellunge tracking studies with one goal in mind: produce bigger fish to improve survival. And, we did just that. Fish that were not >13.0 inches in May, were held in raceways for an additional 30 day grow-out period. In late-June, fish were stocked and a subsample of those were fitted with transmitters and tracked for 100+ days. In 2018 and 2019, what we observed was exactly what we predicted – 75-90% of the grow-out fish survived 100+ days. Boom, we finally unlocked the mystery to effectively managing Muskellunge populations in Iowa!

(Continued on next page)

Muskellunge Research in Iowa's Natural Lakes—Part 2 (continued)

And then 2020 came along and poked out its' big ugly head. We had extended our telemetry research to one final year with really one objective: do large (16.5 in) yearling Muskellunge raised entirely in a recirculating aquaculture system survive as well as our "new and improved" traditional product? So, again we fitted transmitters on 75 fish and followed their movements and survival over the course of spring-summer 2020. What we found is that there is no practical size that you can rear Muskellunge that will avoid avian predation. Fish up to 16.6 in were recovered 9 mi from stocking location at a Great Blue Heron rookery and a single American White Pelican consumed 5 yearling Muskellunge of similar size during the study. Nearly 50% of the traditional pellet-minnow finished Muskellunge stocked in May (> 13.0 in at time of stocking) fell victim to Great Blue Heron predation within the first two weeks post-stocking. Only 35% of these fish survived 137 days. Even the grow-out fish performed poorly compared to the previous two year as only 50% were alive after 120 days. Great Blue Herons were not as detrimental to grow-out fish stocked in late-June (18% of known mortality), but fish predation was substantially higher than observed in previous years.

So now you are probably thinking that we are right back where we started, right? No, not really. In hindsight, 2020 was more of a blessing in disguise than a disgrace. Our findings from previous years led us to believe that "hands-down", size at time of stocking was the single most influential factor determining yearling Muskellunge survival. But in reality, like so many other experiments in our field of study, rarely does one variable determine the success or failure of an experiment consistently. Stocked fish survival in natural lakes is no exception. In a natural environment, many factors are constantly changing within a year, or among years that may influence stocked fish survival. However, what we have learned is, a component to improving survival is the size at stocking. Other variables, such as avian predator densities, adult piscivore densities, stocking location, transportation stress, etc. are all an intertwined component of fish survival and, in any given year, may be the most important factor leading to the demise of a stocked fish cohort. Our job, as fish culturists and managers is to: 1) produce a quality product, and 2) identify and resolve potential bottlenecks to recruitment success on a system-by-system basis. In our Muskellunge example, we have identified that size, although important, does not result in immediate success. We have found that there is a need to stock fish away from areas where piscivorous birds congregate. We have also observed that stocking fish later in the year when turbidity increases, lessens the chances of avian predation. Future stockings in many natural lakes will consist of larger, grow-out Muskellunge and stocked haphazardly offshore in attempt to maximize stocking survival. I challenge each of you to critically think about the systems you manage and identify practical methods you could use to improve stocked fish survival. Although we have gotten closer to finding the "silver bullet" to maintaining quality fisheries in Iowa, there are always opportunities that we can pursue to keep Iowa great.

Cyclone Corner

ISU Student Sub-Unit Updates

Marcus Prull , President

(Like us on Facebook, search @ISUAFS)

Unfortunately, COVID took a toll on our club members this summer. Many of our members had their internships cancelled this past summer. It was 100% the correct decision and unavoidable because of the pandemic, but it was still disappointing for many of our members to not get fisheries experience this past summer. Upon getting back to campus we have had meetings in both in-person and online formats. It has been hard to get members to show up on a consistent basis due to the COVID regulations. Many people don't want to sit in the classroom with a mask more than they have to but also don't want to sit at home for an online meeting. However, I believe that we will work through this, and this semester looks very promising. At the end of the fall semester our vice president (Brett Anderson) graduated from Iowa State. Devin Miller has stepped into the vice president role for the spring semester. We look forward to working more closely with him as we navigate the spring semester. Our club is currently working on a project repurposing trees that were knocked down by the derecho and turning them into brush piles to be placed in a pond on the horticulture research farm. Our officers are all really excited and we can't wait for a great semester. The current officers are:

-**President**: Marcus Prull
-**Vice President**: Devin Miller
-**Treasurer**: Justin Gard
-**Secretary**: Brayden Crew

THE T-SHIRTS HAVE ARRIVED! WE ARE CURRENTLY TRYING TO FIGURE OUT HOW TO COLLECT PAYMENT AND DELIVER ALL OF THESE WITHOUT AN IN-PERSON MEETING. Please communicate any ideas for individual or group logistics to: mprull@iastate.edu

Cyclone Corner

Oxbows of Dreams: If you build it... they will come

Return of the Topeka Shiner to the White Fox Creek basin of North Central Iowa

Dylan Osterhaus, ISU Masters Student

The Topeka Shiner (*Notropis topeka*) is an endangered cyprinid that is endemic to the Great Plains region of the central United States. In Iowa, the species is found within the Rock, North Raccoon, and Boone River watersheds where it inhabits small streams and oxbows. Historically, Topeka Shiner were present in all HUC10 watersheds within the Boone River basin. However, a recent assessment of Topeka Shiner in Iowa noted that the species is possibly extirpated from the White Fox Creek HUC10 within the Boone River basin (Pierce et al. 2019). The species was absent from collections made within the White Fox Creek HUC10 during the period analyzed by the study (1997-2017; Pierce et al. 2019).

Oxbow restorations have been ongoing throughout the last decade within the Rock, North Raccoon, and Boone River watersheds in areas known to be inhabited by Topeka Shiner to restore critically important habitat for the species. Additionally, several oxbows have been restored within areas that historically held Topeka Shiner, but have not recently supported a population of the species. In uninhabited areas, these oxbows have been restored in a sort of "If you build it, they will come" strategy. In recent years, the number of oxbow restorations within the state has increased as the multitude of potential ecological benefits of oxbow habitats are being realized. Within the Boone River watershed alone, 20 oxbows have been restored between 2015 and 2020.

A Topeka Shiner collected from a restored oxbow within the White Fox Creek HUC10 during summer 2020.

One HUC10 watershed in which the Topeka Shiner has been possibly extirpated is the White Fox Creek. Despite extensive survey efforts by Iowa State University graduate students and Iowa DNR biologists, the last collection of Topeka Shiner within the White Fox Creek HUC10 was made by Curt Meyer and Dan Wiedmeir in 1984. However, during the summer of 2020, fish community surveys were conducted within the White Fox

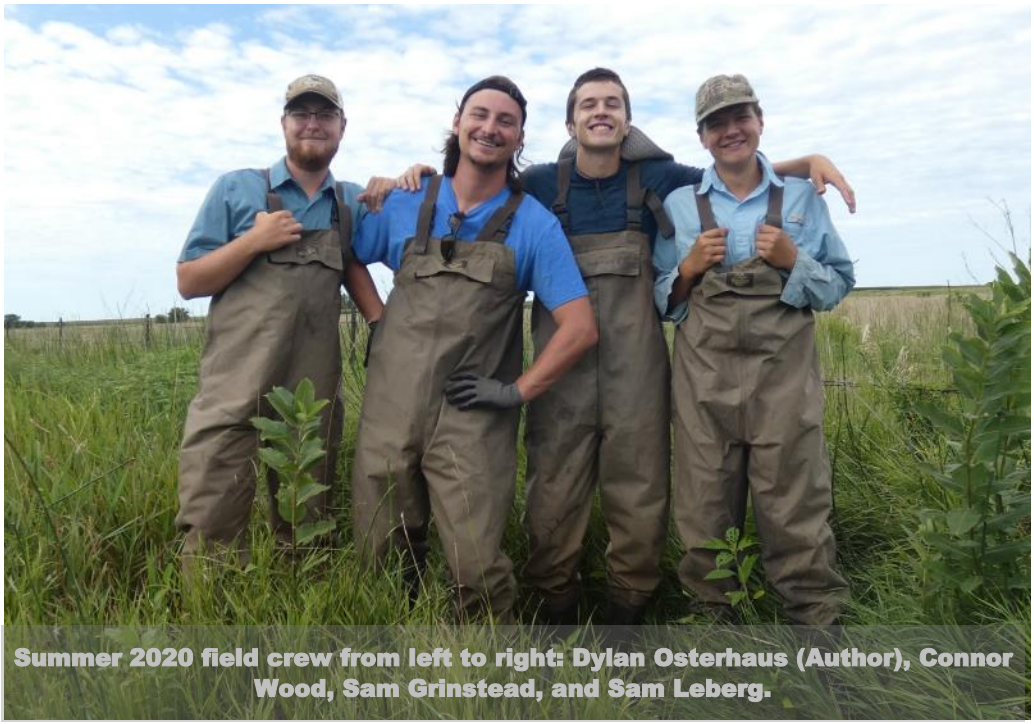
(Continued on next page)

Return of the Topeka Shiner to the White Fox Creek basin of North Central Iowa (*continued*)

A male Topeka Shiner in breeding coloration, collected from a restored oxbow within the White Fox Creek HUC10 during summer 2020.

Creek HUC10 by myself and Samuel Leberg (Iowa State University), resulting in the collection of one Topeka Shiner each from two different restored oxbows. These findings represent the first collection of Topeka Shiner within the White Fox Creek HUC10 since 1984, an absence of 36 years.

Our discovery is an example of successful oxbow restoration in terms of restoring critically important habitat for the endangered Topeka Shiner in Iowa. We are hopeful that as oxbow restorations continue, and more high-quality oxbow habitat becomes available, Topeka Shiner populations that have declined or disappeared will recover.



Summer 2020 field crew from left to right: Dylan Osterhaus (Author), Connor Wood, Sam Grinstead, and Sam Leberg.

Pierce, C. L., N. T. Simpson, A. P. Bybel, C. L. Zambory, M. J. Weber, and K. J. Roe. 2019. Status of the Topeka Shiner in Iowa. The American Midland Naturalist 182: 109-117.

Fishes & Dishes

Sharing the fun stuff!!

Oven-Baked Fish Fillets

Have you ever baked fish fillets and been disappointed with the results (fishy flavor, too dry)? Below are two off-the-cuff recipes that have given me pretty good results.

1) Soak fillets and bake in milk

- Soak fish fillets in milk for 1 to 24 hours
- Preheat oven to 325°F
- Remove fillets from milk and put into a shallow baking dish. Add fresh milk to a level where fillets are still sticking out above the liquid.
- Sprinkle with a little salt, dillweed and lemon pepper.
- Brush or spray with olive oil
- Bake for 30 minutes, or until fish flakes easily (time will vary depending on the size of the fillet, so check every 15 minutes. Catfish will take much longer than other species.

2) Coat fillets with a moisture-preserving and flavorful sauce

- Preheat oven to 325°F
- Mix the following in a small bowl:
  - 1/4 C Mayonaise
  - 1/4 C Plain Yougurt
  - Juice from 1/2 lemon
  - 1/4 tsp dillweed
- Spread the fillets out onto a shallow baking dish that has been sprayed or brushed with oil.
- Use a brush or spoon to spread a thin layer of the sauce over each fillet.
- Bake for 30 minutes or until fillets flake easily with a fork.

With both recipes feel free to add spices and make substitutions that you think will work well or match what you have available in your fridge. (E.g. Add a tsp of Sriracha sauce to the mayo/yogurt sauce; eliminate yogurt; add cilantro instead of dillweed; use vinegar instead of lemon juice; add finely chopped or blended cucumber or onion to the milk or sauce).

Submitted by Darcy Cashatt

Kayak Fishing, Crystal Lake, Spring 2020

Photo and anger Credit: Scott Grummer

Ice Sunset, Crystal Lake
Scott Grummer

Application form

Fisheries Project Grant

Iowa Chapter – American Fisheries Society

Project Name:_____

Project Description: _____.

_____

_____

_____

Attach map or supplementary information

Project Location:

Water Body:_____

Address:_____

_____County:_____

Start Date: _____ End Date:_____

Project Personnel:_____

_____

Fisheries Benefits:_____

_____

Iowa Chapter Representative: _____

Amount needed: $ _____.____ Total project cost: $_____.____

Money will be used for: _____

_____

_____

_____

Up to $1,000.00 per project.

Approved by Excom Committee Date:_____

(Continued on next page)

Fisheries Project Grant Application Form Instructions

The Iowa Chapter of the American Fisheries Society is offering to help finance worthwhile fisheries related projects. The completed application form needs to be transferred to the Iowa Chapter President by an Iowa Chapter Member.

Project Name – Give the project name.

Project Description – Give a brief review of the intended project. Include the work to be done, the methods and material that will be used in the project.

Attach a map and any supplementary information that you think will help the Excom Committee evaluate the project.

Project Location – Where will the work be done.

Start and End dates for the project. Month and calendar year will do.

Project Personnel – Include organizations and or individuals who will be directly involved in the work.

Fisheries Benefits – A very important part of the project should be direct benefits to Iowa's fishery. How does the project help and who is the beneficiary?

Iowa Chapter Representative – All projects need to have and Iowa Chapter member as a sponsor.

Amount needed – Tell us how much you need and the total project cost. There is a $1,000.00 limit for each project.

Money will be used for – Be as specific as you can. Will the money be used to hire people, buy, equipment, be seed money for a grant, etc.

The Excom Committee of the Iowa Chapter will review the application and approve or reject the request.

Iowa Chapter of the American Fisheries Society Annual Business Meeting

4:30 pm, March 3rd, 2020

Honey Creek Resort, Moravia, Iowa

CALL TO ORDER

The meeting was called to order by President Gregory Gelwicks. Gelwicks introduced EXCOM: Past President: Scott Grummer, President Elect: Chris Larson, Secretary/Treasurer: Kyle Bales. The NCD President Jeff Kopaska was present as a special guest. In attendance at the beginning of the meeting were 60 chapter members (Quorum).

The 2019 Annual meeting minutes were approved.

NCD/AFS Update

Jeff Kopaska gave an update highlighting AFS opportunities and events. The Society is celebrating their 150th year in Columbus, Ohio. Award nominations are being received right now. The Society is celebrating their 150th using the 1870 society (the year that they were founded). Benefits of being a Society member include: Online webinars, continuing education opportunities, access to journals, discount on registration to the annual meeting, discount on books, and travel grant opportunities. The Society is attempting to increase their footprint in Washington D.C. especially co-op units. There are thirty-four positions that are being filled with one of those positions being in Iowa. They are discussion creating more cooperative units. Kevin Pope said that there is discussion to add more a couple more units but they are not disclosing anymore information until it happens. The Society is advocating a policy statement to the Supreme Court for a water quality case in Hawaii. The Recovering Wildlife Act is another piece of legislation that AFS is working on. This act would provide state wildlife grant opportunities if it were to go through. Scott Bonar (AFS President) has been challenging members with climate change issues. Jeff talked about a fishing group (Ames Anglers) that he gave a presentation to and mentioned that their top priorities right now or what they want us to focus on are protecting water quality, conserving rivers and streams, and protecting and improving fishing habitat. Jeff mention a few climate change issues that may affect fisheries to the fishing group and the group was receptive to them. Jeff then gave feedback to Scott and he said that this type of presentation was a difficult one to give. A final remark by Jeff was that AFS is the oldest and largest fisheries society in the world and that he would love to see more Society level participation although he knows how difficult it can be.

COMMUNICATIONS REPORT

We have the only Water quality and fisheries voice through the Iowa Conservation Alliance. Lobbying for the Invest in Iowa act. In support for the lifetime trout stamp and against the no fishing license in farm ponds. Ryan Hupfeld asked how we decide what to support. The coordinator said that if it is controversial then we email them out to the non-work email list to receive input. However, for some other bills he waits to see how other conservation organizations might fall before making a decision for us. They usually stand behind us for fisheries bills so he thought that it would be the correct thing to do in this situation.

2019/20 TREASURER'S REPORT

The chapter started report period (2/1/2019) with a balance of $13,914.27 ($2,843.57 in the warm water account and $3,572.80 in Mike Mason Memorial Fund, resulting in $7,497.90 available for AFS). Disbursements since the last financial report equaled $23,187.51 and receipts equaled $23,784.25.

The annual meeting, donation, dues, raffle along with parent society returns brought in $8,210.25. The annual meeting had $4,088.96 in expenses and raffle and auction proceeds from the 2019 IA AFS meeting were split with the ISU Student Subunit for an amount of $837.66. Money brought in minus total expenses and ISU split resulted in a total profit of $3,283.63.

The warm water/cool water conference planning was in full swing. As of February 1, 2019 there was $2,843.57 in the account. After the remaining disbursements and receipts cleared the bank; the account ended with a balance of $3,100.38.

Other noteworthy expenditures included a student scholarship ($500.00), membership in Iowa Environmental Council for 2020 ($100.00), 2019 membership for Iowa Conservation Alliance ($250.00), second and final payment for Catfish 2020 donation ($750.00), an IA AFS grant for fish habitat ($342.00).

All account activity resulted in a balance of $14,511.01 on 2/14/2020. The Warm Water Account has $3,100.38; Mike Mason Memorial Fund has $2,325.10, resulting in an AFS available balance of $9,085.53.

Proposed budget continues payments to the Iowa Environmental Council, the REAP Alliance, the Iowa Conservation Alliance, the student scholarship, IA Chapter insurance, and the remaining balance for each of the approved grants.

(Continued on next page)

Iowa Chapter AFS Annual Meeting *…(continued, 2nd page)*

Jay Rudacille gave a Mike Mason Memorial Fund update. He said that Ben Wallace acquired a go pro camera and some equipment to mount it in various locations and applications. Ben mentioned that the camera and accessories are there if anyone would like to use them to create videos of what we do. Jay also mentioned that Rathbun is going to make the theatre functional again using the remaining funds in the Mike Mason account. Mike's widow has approved the project. The current system is dated and no longer functioning. There is a company that is willing to donate labor for updating the theatre. The new one will be a touch screen with mp5 files in the background. Many choices for people to watch. There will be seating for 12. Something that we can change without the need of hiring a professional.

Committee Reports

Committee Reports were sent out for review before the meeting.

Walleye Technical Committee is looking to fund the Walleye proceedings book. It takes $150 per page of the proceedings. Andy makes a motion to donate $300 toward the printing of the proceedings. There was a second. Discussion – We gave Catfish 2020 $1500. Mike Steuck amended the motion where we would donate $500. Amendment passes. New motion is to support the WTC in the amount of $500. No further Discussion. All were in favor. Motion Passes.

Tyler Stubbs thanked IA AFS for supporting the Catfish 2020 and for allowing him to attend the meeting using our complimentary registration.

New Committee – Urban Fisheries: Tyler Stubbs is working to get one started because "he really doesn't fit in" as it pertains to technical committees.

Nothing further to report.

Awards:

Past President: Scott Grummer

Best Student Paper winner from AFS 2019: Andrea Sylvia, Iowa State University, "Use of a mark-recapture model to evaluate bass tournament mortality".

Best Student Poster: Andrea Sylvia, Iowa State University, "Effects of four culling systems on Largemouth Bass physiology and survival".

Best Professional Paper: Jeff Kopaska, Iowa Department of Natural Resources, "Investigating hunting and fishing license purchase patterns".

Acknowledged Scholarship winner: Estefany Argueta Herrera

Acknowledged Joan Duffy Travel Award winner: Brett Kelly

Acknowledged the an AFS member of over 60 years: Dr. Robert Summerfelt every year since 1959

Acknowledged Heros of Fisheries: Mike Siepker, Chad Dolan, Kim Hawkins, Darcy Cashatt, and Ben Wallace.

Jeff Kopaska presented Mike Siepker with an award from Missouri AFS Chapter acknowledging his work in Missouri.

Old Business:

Update on IA AFS grants

> Andy Fowler- Bought 5 fish farming units. Also, allowed them to run in water lines for the grant units. Trying to make the hatchery relevant (something for the public to see and to get mussels in the river).
>
> Rebecca Krogman- Post card survey on lakes across the state. Money used to offer incentives to the public to increase the return of postcards.

Committee positions

> Chad Dolan- Said he would keep doing the awards unless someone really wanted to step into the role.
>
> Ben Dodd- Said he would stay in the Auditing role.
>
> Mike Weber will stay in the Student Affairs role

(Continued on next page)

Iowa Chapter AFS Annual Meeting *…(continued, 3rd page)*

Continuing Education- haven't heard much from; Ryan Hupfeld has volunteered to take over that role.

Technical Section Committees – 5 Year appointments. All open committers are below. If you are interested, please

submit a letter of interest to the EXCOM by April 8th, 2020. If there is no interest and the current representative would like to continue in their role they may.

Escocid

Rivers and Streams

Reservoir

Centrarchid

Fish Culture

Chapter exhibit: 150 years of AFS

Rebecca was willing to put together the poster. But now there is going to be booth associated with each chapter that would incur expenses. So the EXCOM decided not to do anything with it since our benefit would be minimal/non-existent

New Business:

Midwest Fish and Wildlife Conference Update

George Scholten gave an update. He attended the Illinois Midwest to see what kind of problems that they may have encounted and to see what we are getting into in 2022. The real planning starts in about a year. We need to find a conference theme, logo, and chair the major committees. Think about Plenary Speakers. If there is any interest to be on the theme and logo committee let George know.

IA AFS meeting in 2021

Chris Larson gave an update about a joint meeting with Nebraska and Kansas. Joe talked to the director and she is receptive to us having an out-of-state joint meeting for IA AFS. The tri-state meeting would be Feb. 22, 2021. Chapter was in favor of proceeding.

Continuing Education

If anyone has any ideas/willing to help put something together, please contact Gregory Gelwicks or Ryan Hupfeld.

Gregory Gelwicks adjourned the meeting.