

Lota - Fisk



Gazette

OFFICIAL BIENNIAL NEWSLETTER OF THE MINNESOTA CHAPTER OF THE AMERICAN FISHERIES SOCIETY

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Summer fieldwork. Photo taken by Kristan Maccaroni.

"All ethics so far evolved rest upon a single premise: that the individual is a member of a community of interdependent parts. The land ethic simply enlarges the boundaries of the community to include soils, waters, plants and animals, or collectively the land."— Aldo Leopold

President's Message

by *Craig Kelling*, President, MNAFS
Greetings everyone,

I hope this latest issue of the Lota-Fisk Gazette finds all of you safe and healthy during these extraordinary times. Little did I know that when we parted ways at the Annual Meeting in February, COVID-19 would reach our state and force us into a nearly two month long quarantine. All while fundamentally changing what each of us deem to be "normal life." We are undoubtedly in uncharted waters whether its working from home, providing child care/education, or unsuccessfully making bread. All kidding aside, I continue to be inspired by the resilience, creativity, and passion of our membership during these stressful times. I have the privilege of working with hundreds of students and professionals across Minnesota and several Midwest state fish and wildlife agencies, universities, and NGOs. Each have had their hardships during this pandemic. However, the character of the individuals in this profession continues to shine through with the resounding desire to get back to what we do best, taking care of our natural resources.

I would be remiss if I did not take this opportunity to acknowledge the social unrest throughout the nation sparked by the inexcusable death of George Floyd in Minneapolis. This Chapter recognizes the pain and anger that people feel. To stay silent on this is to be complicit. We stand in solidarity with the Black community against racial biases and injustices, and we support our colleagues, students, and friends that are impacted by these actions. I want to assure all of you that this Chapter and AFS strive for the advancement of equity and inclusion in the fisheries profession and beyond. Progress requires diverse people, ideas, and perspectives all moving together in unity. As such, I will be working over the next few months with our Executive Committee and membership to bring this topic to the forefront of our discussions and begin making meaningful strides toward a more diverse, equitable, and inclusive Chapter.

On a lighter note, I am glad many of you were able to attend our annual meeting in Willmar this past February. I hope you enjoyed the few small changes we made to our traditional meeting format as well as our plenary speakers, Dr. Gretchen Hansen, Paul Radomski, and Jeff Ledermann. As if a pandemic wasn't enough, fisheries professionals will face some daunting challenges in the next few decades and the presentations provided by these individuals certainly helped generate discussion around a few of those. We had close to 120 student and professional attendees, 26 oral presentations, and 18 poster presentations making for a fantastic event. Like I said at the meeting, planning this event is a tremendous undertaking and it could not have been done without the efforts of our meeting planning committee and the army of volunteers. Thank you all!

For my term, I am looking forward to building on the efforts of our past presidents and filling the remaining vacancies in our various committees. To continue to grow as a Chapter our members need to see the benefits of membership, most of which are facilitated by the efforts of these committees. My main goal is to revitalize our committees with fresh thoughts and perspectives to ensure that this Chapter is providing our fisheries students and professionals with everything they need to excel in their careers. As such, I will be asking our committees and members to push



President Kelling fishing with his family on Leech Lake. Photo provided by Craig Kelling.

the boundaries of what we have done historically and work toward developing activities, communications, programs, and training that increase the value of membership to this Chapter.

I hope to hear from many of you wishing to become more involved. This is a dedicated group of volunteers. Where this Chapter goes, what it does, and what it can be is ultimately up to you.

Have a safe summer!

MEETINGS: THE PRACTICAL ALTERNATIVE TO WORK

2020 Business Meeting Minutes

by *Calub Shavlik*, Secretary-Treasurer, MNAFS



Attendees of the 2020 annual business meeting. Photo by Brian Borkholder.

Minutes pending EXCOM approval and subject to change. Items in italics are important updates provided after the business meeting.

Meeting called to order by President Edie Evarts @ 11:10PM

- Members present – Calub Shavlik, Brian Nerbonne, Tom Jones, Craig Kelling, Kristan Maccaroni, Paul Radomski, Brian Borkholder, Doug Kingsley, Paul Glander, Loren Miller, Matt Skoog, Daniel VanderWeg, Neal Mundahl, Ryan Maki, Tom Hrabik, Jessie Koehle, Hanna Kruckman, Ann Schneider, David Schumann, John Hiebert, Tanner Stevens, Jon Hansen, Eric Altena, Olivia Graziano, Will Verela, Patrick Schmalz, Will French, Mark Finsel, Casey Schoenebeck, Kamden Glade, Scott Mackenthum, Jack Lauer, Tony Sindt, Nick Peterson, Charles Anderson, Heather Baird, Mogann Gordon, Ryan Lepak, Lecia Babeu, Ann Kuitunen, Mike Wolf, Andy Hafs, John Kempe, Kristian Rands, Joel Hoffman, Keith Reeves, and Edie Evarts
- Quorum was met - at least 15 Parent Society members

Minutes of 2019 Annual Business Meeting in Fargo

- Motion to accept - Hiebert, Baird, Passed.

Past President Recognition

- Borkholder, Evarts, Glander, Hiebert, Hoffman, Hrabik, Miller, Nerbonne, Radomski, and Schmalz

North Central Division Update – Mark Fincel – biologist – SD,

- 150th AFS meeting in Columbus
- Midwest – symposium (*now closed*),
- Climate – science policy need to be active in advocacy,
- NCD – urban tech committee - newly formed
- Ambassador program
- Midwest – River Centre 2021, Jan/Feb
- Still working on the new format of payment of hosting Midwest - how the states are involved - up by state chapter, payback, raffle – money maker for chapter

Parent Society

- AFS meeting in Columbus, OH in August (*now virtual. For more information see page 23*)

Committee Reports

- Arrangements
 - Looking for someone
- Communications
 - Still updating the website. Encourage all of membership to use it and provide feedback.
- Membership
 - Plan to reinvigorate
 - Get young professional and student to become long term members, work on ideas
 - Website – list serve – members only
 - Total membership - 202 (113 are Parent Society and 89 are Associate), (14 - ACA, 82 - DNR, 7 - FED, 5 - OTO, 6 - PCA, 8 - PRIVATE, 9 - RETIRED, 78 - STU, and 1 - UNK)Nominations
- Students
 - 16 at meeting. Combination of poster and paper presentations

Special Committee Reports

- Continuing Ed
 - Fundraising source, looking for ideas, held one prior to this meeting
- Fundraising
 - Looking for new volunteers to take over
- History
 - Photo and document – scan into cloud – still have holes, looking for old things
- Science Fair
 - Will be stepping down – Ben Larson will be the new contact
- Fishing Roundtable
 - Good participation, hard work
- FWLA
 - Two potential topics - two lines and lead tackle, meeting next week to see what potential bills might come up.

Unfinished Business

- 2021 Midwest – Nerbonne
 - Venue – River Centre, dates are set, Jan31/Feb3, 2021.
 - DNR – call volunteers,

- Using a planning company, DNR work on program, work committee,
- Kickoff meeting coming soon - on track for a normal meeting, plenty of opportunity to help,
- New model for funding the Midwest - funds to be transferred (Wildlife had the same seed money)
- *(Meeting may go virtual if COVID continues to prevent large gatherings)*
- *(Anticipating a smaller event due to COVID and employer travel restrictions)*
- *(Meeting theme will focus on hearing more diverse perspectives in natural resource management)*
- *(Call for symposia is closed and the general call for papers will be announced by August 10th)*
- Installation of New Officer - Kelling, escorted by Radomski and Glander – handed over Esox

Awards

- Past President Award - Edie Evarts
- Dennis Schupp Award of Excellence - John Hiebert - at banquet
- Special Recognition - Eric Altena – *(post meeting)*
- Special Recognition - Bemidji State Subunit - at banquet
- Special Recognition - Keith Reeves - at banquet

New Business

- 2020 Elections
 - President–elect – Keith Reeves
 - DNR rep – Nick Peterson
 - Open rep – Jessie Koehle
- Lead in tackle issue
 - Message and material sent out initially by Friends of SNA
 - Parent society information
 - Lead toxicity, population effect (big picture), more research and education – challenging issue, “no full ban”, just partial based on size, a lot of educational materials out there, encourage elimination, being proactive on education
 - One idea
 - Small steps (support parent society), Hoffman – advocacy to science, agree to toxin, good science base solution
 - Motion to have EXCOM appoint a committee to look at the science and keep the group grounded into science, Passed, direction
 - Committee to dig deeper
 - Parent society position description, some states are doing more, what is role when you have state employees, one idea – extend a call to Doug Austen) - Radomski and Koehle to lead
- Walleye symposium
 - Plan to send in a contribution to help fund - from 2012 proceeds

Other Business

- 150th Anniversary
 - Glander, display at the meeting, EXCOM
 - *(Morgann Gordon assisting with the display)*
 - *(150th displays being pushed off to 2021)*
- NALMS
 - Meeting coming to Twin Cities November 16-20
 - *(Virtual symposium due to COVID)*

Adjourned – 12:41pm; Maccaroni, Evarts, Passed

BUDGETS: A MATHEMATICAL CONFIRMATION OF YOUR SUSPICIONS

2020 Proposed Chapter Budget

by *Calub Shavlik*, Secretary-Treasurer, MNAFS

Description	2020 Budget
Income	
Carry from 2019 for FWLA	\$1,750.00
Income – Fees from Parent Society Investment	\$700.00
Continuing Education Workshops	\$1,200.00
2020 Annual Meeting	
Registration	\$12,000.00
Raffle	\$1,500.00
Sea Grant Award	\$250.00
New Ulm Scholarship Award	\$500.00
Total Anticipated Meeting Income	\$14,250.00
Chapter Dues	\$1,700.00
T-Shirt Sales	\$400.00
Scholarship Fund (Interest Only)	\$150.00
Total Income	\$20,150.00
Expenses	
Business Functions	
Printing/Postage/Website	\$250.00
President's Travel	\$1,500.00
Fish and Wildlife Legislative Alliance Membership	\$3,500.00
Chapter Awards	\$200.00
Total Business Costs	\$3,650.00
2020 Annual Meeting	
Facilities and Food	\$9,500.00
Miscellaneous	\$750.00
Fundraiser-Raffle Prizes	\$250.00
Best Student Paper Award	\$500.00
Student Support (Winners)	\$500.00
Total Meeting Costs	\$11,500.00
Scholarships and Travel Grants	
Chapter Scholarships	\$1,300.00
Joan Duffy Student Travel Award to Midwest	\$200.00
Equal Opportunities Section Travel Award to Parent Meeting	\$100.00
State Science Fair Awards	\$650.00
Hutton Junior Fisheries Biologist Program	\$300.00
Total Scholarships	\$2,550.00

Projects and Activities	
President and EXCOM Initiatives	\$200.00
Continuing Education Workshop Insurance	\$150.00
Insurance	\$150.00
Lake Friendly Award	\$150.00
Total Projects	\$650.00
Total Expenditures	<u>\$20,150.00</u>



*Secretary/Treasurer Calub Shavlik presenting the Chapter budget to membership.
Photo by Brian Borkholder.*

2020 President's Action Plan

by *Craig Kelling*, President, MNAFS

GOAL	OBJECTIVE
<u>Membership Services</u>	
Work with President-Elect for 2021 meeting and explore possible meeting partners.	No annual Chapter meeting 2021. Plan business meeting in spring of 2021 Assist with any necessary planning and coordination for the 2021 Midwest F&W meeting
Promote fisheries certification.	Continues Send certification requirements to Chapter membership annually
Regular communication with membership.	Complete migrating all relevant information (newsletter, agenda, minutes, etc...) to the chapter website and keep up to date Update email distribution list based on recommendations from EXCOM and membership Increase email communication on relevant topics (job announcements, new research, etc...) In the absence of an annual Chapter meeting, hold business meeting in the spring of 2021
Sponsor at least one continuing education workshop.	Create and distribute questionnaire to membership to gauge interest in continuing education workshop topics Hold two continuing education workshops before spring of 2021
Provide judges and maintain funding for regional and state science fair awards.	Continues
Award Chapter scholarships	Continues Explore strategies to increase the number of applicants for Chapter scholarships
Maintain contact list with schools that have fisheries and related programs.	Update email distribution list
Encourage student involvement in the Chapter and Chapter meetings.	Explore options to reduce costs for students to attend Chapter, Regional, and National meetings

Recruit and retain young professionals into active roles in the Chapter.	Promote participation during the Chapter business meeting and regular updates through the Chapter newsletter Develop Chapter activities and programming targeted toward students and early career development
Enhance the diversity of Chapter members, especially in Chapter leadership positions.	Develop a new committee tasked with developing policy, communications, and programming with the goal of creating a more diverse, equitable, and inclusive Chapter
Retain post-professional contact information for retirees and increase role of retirees in chapter activities.	Update email distribution list based on recommendations from EXCOM and membership
Increase diversity of Chapter funding sources.	Explore sponsorship options for future Chapter meetings Follow-up with Parent Society on new structure for proceeds from 2021 F&W Midwest meeting
Review and update LRP.	Target date 2026
Network with other Minnesota professional societies, as well as AFS Chapters from neighboring states.	Improve collaboration with and appoint a representative to the Minnesota Chapter of The Wildlife Society
Host Midwest and National AFS when opportunity arises.	Assist with the planning and coordination for the 2021 Midwest F&W meeting.
Increase collaboration with non-governmental aquatic resource groups, between agencies, and with University researchers.	Continues
<u>Advocacy, Outreach, and Stewardship</u>	
Disseminate and promote Chapter positions on aquatic and related natural resource issues at the State legislature via Chapter letters, Chapter resolutions, and the Fish and Wildlife Legislative Alliance (FWLA) or similar lobbying groups.	Increase internal coordination to ensure the Chapter is proactive in developing/disseminating positions on aquatic and related natural resource issues Increase external collaboration with other groups where appropriate
Establish and encourage lines of communication, including but not limited to Facebook, Twitter, email, and/or web forums for exchange of information and opinion on current policy issues.	Follow Chapter Communications Plan to distribute information to members via email, social media, website, and newsletter
Increase general awareness of good aquatic stewardship by collaborating with citizen groups and local officials, and contributing to citizen stewardship programs such as the lake friendly shoreline awards.	Continue contribution to Lake Friendly Shoreline award Explore additional opportunities

Snapshot: 2020 Annual Meeting

by *Kristan Maccaroni*, Newsletter Co-Editor, MNAFS

Remember the Chapter meeting in February? It feels like it happened ages ago...

Tom Burri and Heidi Rantala organized a Continuing Education event on Monday before the welcome social. The topic was the communication of scientific information to the media. Personally, I dread talking with media people, so I was sure to sign up for this one. Workshop Instructors from the University of Minnesota and Minnesota Public Radio talked with us about distilling our message into a story with personal significance that speaks to the broader relevance of our actions. There was a mix of presentation and small group activities. The announcement for this workshop came a little late, so I believe attendance was lower than it could have been. Continuing education events are something we enjoy but don't always get to do, and that's because a lot of work is needed on the part of the organizers. Many thanks to Tom and Heidi for jumping into this, and may there be more continuing education events in the future! As you think of areas for your own professional development, please reach out to Tom or Heidi. New ideas are appreciated.

While the communications workshop was going on, the students had a chance to revamp their resumes with the assistance of fisheries professionals. Following these events was the Monday evening social, which was as fun and relaxing as these social reunions always are. Food and drink was enjoyed, music was played and stories were shared. It's good to spend an evening this way.



Dr. Gretchen Hansen provides a presentation to attendees of 2020 annual MNAFS meeting. Photo by Brian Borkholder.

Paul Radomski started the Tuesday morning plenary talks. His intelligence, wit and public speaking skills make for easy listening. Paul has a way of appealing to our deeper motives and helping us to ask the big questions. Gretchen Hansen kept the momentum with her presentation on fisheries management within the context of our dynamic experience on a broad scale. A changing climate combines with intensive land use practices which combine again with shifting species distributions and the result is natural resources that are doing things that we haven't seen before. A commitment to the scientific integrity of our work will help us learn from our actions and navigate the unknown.

As a nice change of pace, the chapter business meeting immediately followed the plenary talks in the same room. The timing and larger venue made attendance easier and more relaxed for members. It's our goal that everyone who attends the Chapter meeting feels included in the actions and decision making of MN AFS. Participation should be easy and enjoyable. This year, the topic of lead tackle was discussed. Conservation groups are lobbying for the regulation of lead in tackle, and one such group has approached Minnesota AFS about our taking a position on the matter and perhaps writing some sort of statement. Jessie Koehle wrote about this in our last newsletter, and she initiated a great conversation at the business meeting.

Everyone has their opinions, and I was proud that we can openly and honestly discuss our thoughts on controversial topics while maintaining professionalism and respect for one another. These conversations are a key benefit of membership in an organization such as ours. I now forget the decision about drafting a document, but Calub Shavlik is a reliable source of meeting minutes.

Concurrent sessions of presentations followed lunch, and we had a great turn-out from the students. I find their presentations to be a breath of fresh air. For the first time since 2006, I gave an oral presentation, and that gave me a good case of the jitters. Delivering technical presentations is a skill that I'd like to improve. Contributing content to our chapter meetings is just as valuable as volunteering for committees and planning tasks. I'd like to encourage

everyone to offer oral presentations. The goal of giving a presentation to the chapter keeps your mind fresh and engaged on the job, improves your public speaking skills, and shares the basic state of the profession in Minnesota. We have top notch researchers in the state, and they are a tough act to follow, but field biologists make Minnesota DNR run.

The poster session was as good as ever; Tony Sindt had a good one on Channel Catfish population dynamics in the Minnesota River, and Jeff Reed had a throw-back retro style poster on nesting Largemouth Bass and angling vulnerability. Interestingly, he found that the closed season did little to protect the



Loren Miller addresses MNAFS members at the 2020 Annual Business Meeting. Photo by Brian Borkholder.



Poster session discussion. Photo by Brian Borkholder.

nesting fish from angling. Given that pressure is concentrated around fishing opener, and the bass are still on the nests, the closed season may actually be accomplishing the opposite of its intention! Christopher Rounds (Spoiler alert: who won an award later in the evening) presented a poster on digitizing lake maps using an open source software.

At the banquet Eric Altena received an award for his support of the chapter over the years. He's been a rock for MN AFS, maintaining the website and doing technical support for the meetings. These days he supports the chapter by playing the guitar for us at the social and donating fishing trips to the raffle. Students won scholarships and awards for being awesome, and we finally made it official and gave Bemidji State the recognition they deserve. What an outstanding group of students! I don't think we could applaud them enough, they have simply been a wonderful group to work with. Andy Hafs brings a posse of enthusiastic, engaged, hard-working and intelligent young people to this chapter. Jeff Ledermann polished things off with a presentation on angler recruitment, retention and reactivation.

Wednesday proceeded with more presentations and we all went home feeling smarter, reinvigorated in our work, and like we just had a good visit with old friends and new.





Snap shots of the 2020 MNAFS Annual Meeting. Photos by Brian Borkholder.

HONORING OUR MEMBERS

2020 Award Winners

by *Jessie Koehle*, Awards Committee Chair, MNAFS

Special Recognition Award for Services to the Chapter

Recognizes any individual who has made a remarkable contribution to MN AFS, shown exceptional dedication and skill in the advancement of fisheries science, and/or outstanding development of fisheries professionals through MN AFS.



Edie Evarts

Edie Evarts was awarded for her services to the Chapter as 2019 Chapter President. Edie did a fantastic job addressing vacancies in many of our committees. Due to her efforts, we now have committee chairs for all standing, special, and technical committees. Additionally, Edie advocated for and initiated the development of a committee to assist in the development of a lead tackle position statement for the Chapter. The position of Chapter President is not easy and Edie did a remarkable job.



Bemidji State University – Student Sub-Unit

Since we started to highlight AFS subunits from different Minnesota universities with our raffle, Bemidji State has exceeded expectations. They are continually one of our most active sub-units and are always looking for ways to assist. Whether it is chairing a Chapter committee, getting raffle donations, or volunteering their efforts at the annual meeting, Bemidji State continues to raise the bar in terms of what it means to be a Chapter Sub-Unit.



Keith Reeves

Keith spent many years coordinating Chapter awards and judging of student presentations/papers. Keith has been instrumental at organizing these efforts whether it is making sure judges got their paperwork, attended the appropriate talks, or returning their critiques. Keith did an excellent job in running the Awards Committee and has ensured a seamless transition for the next representative.



Eric Altena

Eric served many years as our communications committee chair/webmaster, which included building and operating our old website so that the Chapter could efficiently address scholarship submission, abstract submission, registration, and countless other needs required by committee members. This also included developing a makeshift registration process for a previous years' annual meeting due to the website being hacked. *Eric was mailed his award after the meeting as he was unable to attend the awards ceremony.*

Dennis H. Schupp Award of Excellence

The Dennis H. Schupp Award of Excellence: Given as special recognition to any individual who exemplifies the consummate natural resource/fisheries professional through exceptional dedication and skill throughout their career.



John Hiebert

John started out in the MN DNR working on streams and learning Rosgen assessments. Little did he know he would eventually be overseeing shoreline habitat projects on lakes and streams and managing many thousands of acres of Fisheries aquatic management areas. John has had a solid career of educating the public about the importance of riparian habitat in the interest of healthy fisheries and has done his best to protect these same habitats. John has also been an advocate of funding for habitat over the years. In addition to his strong support for habitat preservation and restoration, John has been an enthusiastic supporter of our Chapter, so we would also like to recognize those many years of service. He served as the "Public Education" representative back in the late 90s and was active on the Rivers and Streams NCD tech committee as early as 2001. John's tenure as president was in 2003-2004 but his service continued. John served as a representative on the Awards Committee, assisted with nominations, sat in as the MN AFS representative for the Fish and Wildlife Legislative Alliance and has often helped with our budget audits, and of course served as a moderator for many meetings. Thank you John for your excellence in fisheries and you dedication to the Chapter!

Best Student Poster Award

This award is given to the student with the overall best student poster presentation.

Mitchel Johansen

“Determining Perch Age by using Otolith Weight and Size”



Best Student Presentation Award

This award is given to the student with the overall best student paper presentation.

Meg McEachran

“Patterns of Baitfish Use and Release by Minnesota Anglers”



2020 Scholarship Recipients

by *Jay Hatch*, Scholarship Committee Chair, MNAFS

2019 MNAFS E. E. Mecklenburg NUASF Scholarship Recipient: Kristina Rands



Kristina Rands is a senior Ronald E. McNair Scholar at Bemidji State University majoring in Aquatic Biology (emphasis on Aquatic Systems and Fisheries) with a minor in Wetland Ecology. Her advisor is Dr. Andrew Hafs. Kristina has achieved impressive accomplishments as a student researcher, as a teacher, and as a leader. For two years, she has worked in the long-term limnological study of Bad Medicine Lake, including her projects such as, “The effects of zooplankton and phosphate concentrations on chlorophyll-a,” “Morphological lake characteristics in comparison to age-0 Yellow Perch hatch rates,” and her senior capstone, “Age-0 Yellow Perch growth rates correlated with water temperature.” She has made or will make presentations of her work at BSU, here at our meeting, at the AFS Wisconsin Chapter meeting, and at a McNair Scholars Research Conference in New Hampshire. Kristina is the very dynamic President of the very dynamic BSU Student Subunit and is always striving to get more students involved in the subunit in more ways. She also is deeply committed to the TRIO Program at BSU, teaching a field-based summer aquatic biology course to Upward Bound high school students

and mentoring TRIO STEM students at BSU. This is very important work, given its potential to recruit under-represented students into our profession. Kristina is applying to graduate programs in aquatic biology and hopes to eventually become a professor.

2019 MNAFS Scholarship Recipient: Christopher Rounds



Christopher Rounds is a junior at University of Minnesota–Twin Cities majoring in Fisheries, Wildlife and Conservation Biology (emphasis on Fisheries and Aquatic Sciences). His adviser is Dr. Ray Newman. Christopher’s research record and leadership experiences already are impressive, and he still has another undergraduate year to go. He has worked extensively on freshwater mussels with Mark Hove, collecting live mussels and potential host fishes to study brooding behavior and conduct suitability trials for five mussel species and 25 potential host species. He presented a portion of this research earlier today and has authored or co-authored four articles in the national newsletter *Ellipsaria*. Currently, he is building and programming a robot to record *in situ* behavior of mussels. Christopher also works with Gretchen Hansen’s Minnesota Lakes group. His work analyzing temporal trends of ice cover, and in developing digital area-at-depth data efficiently from lake bathymetric maps was included in two presentations earlier today. He also works with one of Gretchen’s grad students who is studying food web dynamics using stable isotope analyses. Christopher is Vice President of the Fisheries, Wildlife and Conservation Club and a leader

within Men’s Club Soccer at U of M–Twin Cities. Not surprisingly, his future plans involve graduate school and a career in aquatic ecological research.

2019 MNAFS Scholarship Recipient: Alaina Taylor

Alaina Taylor is a junior at Bemidji State University majoring in Aquatic Biology. Her mentor is Dr. Richard Koch. Alaina has maintained a perfect 4.0 GPA and has been involved with aquatic field work as a volunteer and an intern since she entered college. Volunteer work with the Bemidji and Brainerd DNR offices, the MPCA, Camp Ripley, MNDHA, Crow Wing County, and Muskies Inc., supplements her two summer internships with the Brainerd Fisheries Office in 2018 and the Walker Fisheries Office in 2019. These two internships provided her with a wealth of aquatic experiences, including work on standard, target, and IBI lake surveys; emergent vegetation and score the shore (STS) surveys; creel surveys, lake-shore owner interviews, and Rainbow Trout stocking. She learned all of the standard fish sampling techniques, as well as how to remove otoliths and cleithra for age analysis. She became facile with ArcCollector and ArcMap. In her spare time, she learned to mend nets and helped fix and maintain the other equipment used in lake surveys. As leader of Score the Shore surveys this past summer, Alaina trained a second intern and finished the surveys one month ahead of schedule,

while simultaneously carrying out her IBI surveys and other field sampling duties. Other recognition of her leadership and commitment to aquatic resource management includes selection to the 2019 MN DNR Roundtable and several awards of excellence in academic achievement in natural resource studies. Alaina intends to continue her education and become an AFS certified Fisheries Biologist.

Grain of Salt

by *Scott Mackenthun*, Area Supervisor, Hutchinson Area Fisheries, MN DNR

Water level manipulation is a technique long used by resource managers for biological manipulation in various roles across the world. It is used on dams and reservoirs when managing flood waters while trying to avoid fish entrainment and maximizing important seasonal habitat access. It is used in aquaculture to stimulate spawning conditions. It is used to create tailwater fisheries on impoundments.

In Minnesota, we are becoming increasingly familiar with water level manipulation in shallow lakes for biomanipulation, specifically. Drawdowns of shallow lakes are done by limnologists and aquatic resource managers to mimic natural drought cycles. By taking a number of acre feet of water away from a waterbody, a winter or summer kill can be induced, provided climactic conditions are favorable. Such kills eliminate or decrease the density of benthivorous fish. If said fish are driving water quality impairments by uprooting submerged plants and putting the substrate and bound nutrients into suspension, the resulting habitat shifts



favor increased transparency, encourage macrophyte growth, and provide a more biologically diverse shallow lake habitat. Rooted emergent and submerged plants anchor the substrate and exposed substrates during the drawdown phase are consolidated. With the return of the clear water state and a supported diversity of aquatic plants, fish and wildlife habitat value is boosted, providing recreational benefits for wildlife observers, hunters, and anglers and improved ecosystem services.

Often the return to the clear water state is ephemeral, as benthivores eventually return to a tipping point of affecting habitat. For this reason, a return to drawdown is necessary, just as the cycles of low and high water years bounced around historically but are now artificially suppressed. Communicating the necessity of repeating drawdowns in future years is important for managing expectations. Similarly, communicating and informing the general public about shallow lake ecology is imperative, especially ahead of any public hearing where a decision on drawdown hangs in the balance of whether said public supports it.

The means of legal drawdown in Minnesota are spelled out in Minnesota Statutes 103G, "Waters of the State." In particular, the 400 series, 103G.4XX are the establishment and control sections for water levels. State wildlife managers, in a separate statutory section (97A.101), can go through a formal designation process for wildlife lakes, thereby getting the public's consent for drawdowns. In the 103G.4XX sections, public entity applicants can either get 75% of surrounding landowner signatures or hold a public hearing to get the public's consent for drawdown. Certainly restrictions and requirements apply, the details of which can be found in the text and other supporting rules and statutes governing water levels.

Worth noting is that M.S. 103G.408 was changed in 2012 so that a public hearing could be held rather than needing to get landowner signatures to institute a drawdown. Conservation nonprofits lobbied for this change and it has helped create more water level manipulation management, one of the few tools in a shallow lake natural resource manager's toolbox. While primarily a wildlife management focused tool, it can be useful for fisheries managers looking for fish rearing or boom-and-bust fishery development and as a means to restoring water quality measurables to below impairment thresholds.

Member Spotlight

by *Kristan Maccaroni*, DNR Representative/Newsletter Co-Editor, MNAFS

This issue's member spotlight: Nick Rydell, Fisheries Specialist, Glenwood Area Fisheries, Minnesota Department of Natural Resources.

First off, welcome to DNR, Nick. You're a recently hired Specialist, and that's one reason I was interested in interviewing you for this piece. I heard that before you came to DNR, that you worked for a tribal agency in Wisconsin. What was your position there, and what did you do?

Before starting with the MN DNR, I was the Fisheries Biologist for the Menominee Tribe in northeast Wisconsin. I was in charge of managing the 187 streams and 53 lakes on the reservation. There was very limited data on these systems, so much of my job duty was conducting lake and stream surveys. I also raised Walleye fingerlings in two drainable ponds for stocking into area lakes. Since Lake Sturgeon are a culturally important species to the Menominee people, I did quite a bit of sturgeon work. Two dams downstream of the reservation on the Wolf River impeded Lake Sturgeon from reaching their historical spawning grounds on the reservation, and led to their eventual extirpation above the dams. Through a Memorandum of Agreement with the Wisconsin DNR, at least 100 Lake Sturgeon were moved above the two dams each year so they could spawn on the reservation. Long term solutions of dam removal or fish passage were also in the works. In addition, I also conducted a population estimate for a chain of lakes that were stocked with Lake Sturgeon as a rare put-grow and take sturgeon fishery. The Menominee reservation has some really unique resources with only three lakes having any shoreline development, most streams containing Brook Trout populations, and a lake that has naturally reproducing Kokanee Salmon.



Nick with a healthy Menominee Walleye. Photo provided by Nick Rydell.

How is it different to work for a tribal agency than for a state government agency?

I would say in most tribal agencies you need to be a generalist, not a specialist. In the DNR, we are fortunate to have a vast pool of staff, allowing people to become more specialized in the work that we do, even within offices. Generally, staff numbers in tribal agencies are limited, with likely only one fisheries biologist, so you need to be able to do a little bit of everything. This means getting creative or relying on staff from different fields to complete surveys, but being able to help with interesting projects, such as Black Bear or Pine Marten surveys in return.

I'm also aware that you studied at UW Stevens Point... are you from Wisconsin? If so, have you traveled far and wide in your pursuit of full-time work, or have you been able to stay closer to home?

I've been fortunate enough to be able to stay fairly close to home on my fisheries path. I'm originally from St. Peter in southern Minnesota, and went to MSU-Mankato for my Bachelor's. While I was at Mankato, I worked two summer internships at the Walker office and one fall at Baudette. That winter, I started my Master's at UW-Stevens Point on the effects of 2, 4-D herbicide treatments used to control Eurasian watermilfoil on fish and zooplankton in northern

Wisconsin lakes. I defended my thesis in spring 2018, and started my position with the Menominee Tribe shortly afterward. After a little under a year with the tribe, I saw an opening with the MN DNR at the Glenwood office and was lucky enough to receive the position in February 2019.

So what turned out to be the effects of the herbicide on the fish and zooplankton?

My study was over three years (pre-treatment, treatment and post-treatment) with three reference and three treatment lakes. No significant effects were detected in the treatment year. However, different trends were observed for some zooplankton taxa (i.e., *Daphnia* spp., *Bosmina* spp., and cyclopoids) in the year after the treatment, but these trends were not consistent among treatment lakes. Larval Yellow Perch relative abundance appeared lower in treatment lakes in the year after treatment, a trend not observed in reference lakes, but this was not significant at the treatment level. Changes in the post-treatment year were likely a result of changes in the aquatic plant community, and not a direct effect of the chemical. There were no other meaningful changes in the other taxa or metrics I measured, (e.g., larval fish diets, daily growth rates, hatch dates, etc.) but it would be difficult to detect in lakes with so much variance. Recent laboratory studies have reported significant mortality in larval fishes.

Glenwood has the reputation of being a rock-solid Fisheries office these days... What do you work on the most at Glenwood, and what's your favorite part of your job there?

We have a great office and staff at Glenwood, so it makes working here really enjoyable. A majority of our time is spent on our lake survey program, conducting around 15 standard lake surveys and additional targeted surveys each year. Walleye production is also a big part of our work. In the spring, we all help out in the hatchery to produce around 50+ million Walleye fry for stocking into area lakes, as well as ponds for fingerling production. In a typical fall, we harvest and stock around 10,000 lbs of Walleye fingerlings. I'm also in charge of aquatic education and outreach, with events from a live fish display at the Douglas County Fair and hatchery tours, to publishing the Glenwood Area Fisheries Newsletter. My favorite job duty, though, is being the lead for Muskie survey, especially Muskie electrofishing. Last year we began a population estimate on Lake Miltona and had many fish over 50 inches, with the largest being 52.75 inches. It's fun being able to see and handle so many big fish.

What's something you enjoy doing when you are not hunting or fishing? Assuming you like to hunt and fish!

Haha ... Most of my free time is hunting and fishing, but if I'm not doing either of those I'm probably still outdoors. I enjoy hiking or spending time around a campfire with friends and family.

WHAT'S NEXT?

Upcoming Events

by *Craig Kelling*, *President, MNAFS*



AMERICAN FISHERIES SOCIETY VIRTUAL ANNUAL MEETING SEPTEMBER 14-25 2020

A VIRTUAL EXPERIENCE

Attend the 2020 Virtual Annual Meeting from anywhere! Learn the latest fisheries science from more than 800 on-demand papers and posters in 40 symposia and contributed paper sessions with convenient 24/7 access, while 10 days of exciting live programming keeps you engaged and interacting with your colleagues across North America and around the world.

The Virtual Annual Meeting also includes all of the special events you know and love: the Spawning Run, student mentoring, awards presentations, Section meetings, and great plenary speakers. All presentations will be recorded and accessible indefinitely for registered attendees.

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

VIRTUAL ANNUAL MEETING REGISTRATION FEES

AFS is charging a modest registration fee to attend the Virtual Annual Meeting. Organizing a meeting on a scale to deliver more than 600 papers, 4 plenaries, and 10 days of interactive sessions and special events requires AFS to license new presentation technology and expend substantial staff time coordinating planning activities leading up to and during the virtual event.

Typically, registration fees for the in-person Annual Meeting cover direct costs (audio-visual, internet, food-beverage, etc.) but only a portion of indirect costs (staff time, travel, etc.). The difference is usually underwritten through exhibitor and sponsorship fees. While we believe the virtual meeting will attract a wide audience, we are expecting fewer virtual exhibitors and limited sponsorship support.

Registration pricing was established taking into account lower non-registration revenue, and costs to plan and deliver a meeting that provides attendees with a robust meeting experience and content access after it ends. As such, the virtual meeting is budgeted to cover costs in the best case scenario.

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

150TH ANNIVERSARY

The American Fisheries Society turns 150 years old in 2020. Although we will have to wait one more year for our in-person celebration at [Baltimore 2021](#), you can learn more about our fascinating history and even shop for a little 150 swag right now!



After careful consideration and in consultation with our partners and planning team, NALMS has decided we will not be able to hold our 2020 annual symposium in Minneapolis as planned. Instead we will hold a virtual symposium during those dates in keeping with the best interest of the health and well-being of our attendees, sponsors, exhibitors, and staff.

With the uncertainty of the past several months, we understand that some prospective presenters were not able to submit an abstract for the 2020 conference but may now be interested in participating in a virtual meeting presentation format. [We are reopening abstract and special session submissions until July 31.](#)

If you have already submitted an abstract, there is no need to resubmit. We will be in contact with authors to confirm their interest in continued participation.

We are still in the planning stages of this new format, but we expect the program to include:

- Plenary sessions with live Q&A.
- Daily technical presentations with live Q&A.
- “On your own sessions,” view recorded presentations on your timetable and ask the authors questions.
- Poster Session with “lightning” presentations.
- Talks and posters will be available to attendees on demand during the conference week, no need to miss any talks of interest due to overlapping times.
- Daily meet & greet opportunities and a virtual hospitality room.
- Virtual exhibits from new and long time NALMS Corporate Members, Affiliates, and Nonprofits.
- Virtual Clean Lakes Classic 5K Run/Walk.

Stay tuned for more detailed information on the program, registration, awards, NALMS Membership Meeting, and more!



The 81st Annual Midwest Fish & Wildlife Conference will be on Sunday, January 31, 2021 - Wednesday, February 3, 2021 at the Intercontinental Saint Paul Riverfront Hotel and the Saint Paul RiverCentre.

The Call for Symposia is now closed. Thank you to everyone who submitted a proposal for consideration! Symposia will be announced and the general Call for Abstracts will open by August 10th.

Host Hotel: Intercontinental Saint Paul Riverfront Hotel

Overnight accommodations will be available at the InterContinental (11 Kellogg Boulevard East, Saint Paul, MN) to conference participants at a reduced rate of \$142/night + 13.875% tax. These rates will be available until the cut-off date of January 8, 2021 or until the block is full, whichever occurs first. Please contact the reservations department at (651) 292-1900 to make your reservation and be sure to mention the 2021 Midwest Fish & Wildlife Conference in order to receive the group rate.

The Intercontinental is centrally located, set high above the Mississippi River, and is 7.3 miles from the Minneapolis-Saint Paul International Airport (MSP). www.intercontinentalstp.com/our-hotel

Conference events and activities will be held at the Saint Paul RiverCentre.

(175 West Kellogg Boulevard | Saint Paul, MN 55102)

OPPORTUNITIES TO GET INVOLVED

Committee Member Update

by *Craig Kelling*, *President, MNAFS*

Minnesota Chapter Standing Committees	
Arrangements	VACANT
Awards	Jessie Koehle, City of Eagan Water Resources
Communications	Hanna Kruckman, U.S. Fish and Wildlife Service
Issues	Edie Evarts, MN DNR Fisheries
Long Range Planning	Jacquelyn Bacigalupi, MN DNR Fisheries
Membership	Joel Hoffman, U.S. Environmental Protection Agency
Nominations	Edie Evarts, MN DNR Fisheries
Resolutions	Brian Nerbonne, MN DNR Fisheries
Students	Kristina Rands, Bemidji State University
Minnesota Chapter Perennial Special Committees	
Continuing Education	Heidi Rantala, MN DNR Fisheries
Fund-Raising	Jon Hansen, MN DNR Central Office
History	Brian Borkholder, Fond du Lac Resource Management
Past-Presidents	VACANT
Procedure Manual	VACANT
Scholarships	Jay Hatch, University of Minnesota – Twin Cities Mark Hove, University of Minnesota – Twin Cities
Science Fair	Ben Larson, MN DNR Fisheries
Student Development	Jay Hatch, University of Minnesota – Twin Cities Andy Hafs, Bemidji State University
Parent Society 150 th	Paul Glander, Retired U.S. Fish and Wildlife Service Morgann Gordon, U.S. Environmental Protection Agency

Minnesota Chapter Special Appointments	
DNR Fishing Round Table Representative	Mark Hove, University of Minnesota
FWLA Delegates	Loren Miller, MN DNR, University of Minnesota – Twin Cities Jon Hansen, MN DNR Fisheries
MN Chapter TWS Representative	VACANT
North Central Division Technical Committees	
Centrarchid	Alisha Hallam, MN DNR Fisheries
Esocid	Mike Habrat, MN DNR Fisheries Nate Hodgins, MN DNR Fisheries
Ictalurid	Tony Sindt, MN DNR Fisheries
Rivers & Streams	Ann Kuitunen, MN DNR Fisheries
Salmonid	VACANT
Walleye	Dale Logsdon, MN DNR Fisheries
Student Sub-Unit Advisors	
Bemidji State University:	Andy Hafs, Bemidji State University
University of Minnesota Twin Cities:	Gretchen Hansen, University of Minnesota – Twin Cities
University of Minnesota Duluth:	Thomas Hrabik, University of Minnesota – Duluth
Student Sub-Unit Presidents	
Bemidji State University:	Alaina Taylor, Bemidji State University
University of Minnesota Twin Cities:	Nolan Kerr, University of Minnesota – Twin Cities
University of Minnesota Duluth:	Noland Michels, University of Minnesota – Duluth
Newsletter Editors	
Editor	Craig Kelling, U.S. Fish and Wildlife Service
Co-Editor	Kristan Maccaroni, MN DNR Fisheries

Minnesota Chapter Executive Committee	
President:	Craig Kelling, U.S. Fish and Wildlife Service
President - Elect:	Keith Reeves, MN DNR Fisheries
Past President:	Edie Evarts, MN DNR Fisheries
Secretary/Treasurer:	Calub Shavlik, MN DNR Fisheries
Federal Representative:	Hanna Kruckman, U.S. Fish and Wildlife Service
DNR Representative:	Nick Peterson, MN DNR Fisheries
Academic Representative	Neal Mundahl, Winona State University
Open Representative:	Jessie Koehle, City of Eagan Water Resources



Members of the 2020 MNAFS Executive Committee. Clockwise from bottom left Keith Reeves, Neal Mundahl, Paul Glander, Edie Evarts, Craig Kelling, Hanna Kruckman, Calub Shavlik, Patrick Schmalz, and Kristan Maccaroni. Photo by Brian Borkholder.



Overlooking the Mississippi River and Upper Mississippi River National Wildlife and Fish Refuge from Great River Bluffs State Park in Minnesota. Photo taken by Courtney Celley, USFWS, Public Domain

See you out there!

The information and opinions presented in this newsletter are those of the respective authors and do not necessarily represent the views of the U.S. Fish and Wildlife Service or any other federal, state, or local agency.

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