Lota-Fisk





OFFICIAL BIANNUAL NEWSLETTER FOR THE MINNESOTA CHAPTER OF THE AMERICAN FISHERIES SOCIETY

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Lake sturgeon release. Photo taken by Sharon Rayford, USFWS, CC BY 2.0

"Many men go fishing all of their lives without knowing that it is not fish they are after." – Henry David Thoreau

COMMITTEE OPPORTUNITIES GALORE

President's Message

by Edie EVarts, President, MNAFS

Greetings everyone,

Many of you were able to attend our joint annual meeting with the Dakota Chapter in Fargo last February. I hope you enjoyed our keynote speakers, Luther Aadland from MN DNR and William Rice from USFWS. Coming from the land of 10,000+ lakes, it is nice to hear a bit about rivers for a change of pace. Of the 292 attendees, 200 were from the Minnesota Chapter. We also had a great student presence with 31 of the 69 student attendees coming from Minnesota sub-units and universities. The meeting went off well thanks to all of the great coordination we had with Dakota Chapter members and our very own meeting committee. Thank you to the numerous people that helped pull off the meeting.

For my term, I am looking forward to building on our current committees and filling some vacancies. I have been busy confirming chairs to our standing committees and special appointments. Many of you have agreed to continue on, as in past years, and I have found a few new appointees, so thank you! Please contact me if you are interested in greater participation in the Chapter. Not only do these positions offer an opportunity to make a tangible contribution to our Chapter, but they provide a great opportunity for professional development, a connection to fisheries professionals across agencies, and the ability to facilitate greater input into Chapter decisions. To help with this, I will be inviting committee members to Executive Committee meetings throughout the year. Although not voting members, appointees certainly have input and we have historically included them. And lastly, being a committee member can be a path to running for AFS office and I will be contacting some of you in the near future. Please take a look at the committee list posted at the end of this issue for vacancies.



President Edie Evarts (MN-DNR) and MNAFS totem "Esox" during the 2019 Annual Business Meeting. Photo by Kristan Maccaroni (MN-DNR).

The two priority positions that need to be filled are the Arrangements and the Continuing Education Committee Chairs. One of my President's goals is to have a continuing education class. Quite a few years back I was chair of this committee so I would be happy to give some guidance. Heidi Rantala has volunteered to be Chair, but this committee lends itself well to co-chairs, so more than one volunteer would be appreciated. One of the first duties I would suggest to this committee would be to create a member questionnaire (shows my generation- maybe I should say 'post an online survey') and get a better understanding of what our members are interested in (we still have the old survey on file so that should help). If you are interested, I would be happy to discuss what would be expected and provide some advice on potential instructors.

We also need a new Arrangements Chair. This committee also works well with a co-chair (or a chair and chair-elect). This chair is responsible for setting up meeting locations and logistics as well as general oversight of the Annual Meeting itself. Craig Kelling, President-Elect, is currently working on setting up the 2020 meeting and would be very happy to have this position filled. Typically, we would be looking at preliminary plans for 2021 already as well.

I would also like to take the opportunity to thank some of our longstanding committee members who stepped down from their positions after many years of service: Mandy Erickson as Arrangements Chair, Keith Reeves as Awards Chair, Brian Nerbonne and Mark Hove as Science Fair Chairs, and John Hiebert as representative to the Fish and Wildlife Legislative Alliance. Their participation has been a great asset to our Chapter and, while I expect they will continue to be involved, they are ready to pass the torch.

I hope to hear from many of you wishing to become more involved in the Chapter. Please contact me if you are interested in a committee appointment or have ideas to contribute to Chapter business.

Have a great summer and get out fishing!

MEETINGS: THE PRACTICAL ALTERNATIVE TO WORK

2019 Business Meeting Minutes

by Calub Shaylik, Secretary-Treasurer, MNAFS



Attendees of the 2019 annual business meeting. Photo by Kristan Maccaroni (MN-DNR).

Minutes pending EXCOM approval and subject to change

Meeting called to order by President Paul Glander @ 4:07PM

Members present – Edie Evarts, Craig Kelling, Heidi Rantala, Patrick Schmalz, Jonathan Gustafson, Chris Kavanaugh, Bethany Bethke, Bradley Dawson, Henry Drewes, Lecia Babei, Doug Kingsley, Jay Hatch, Loren Miller, Joel Hoffman, Keith Reeves, Ann Schneider, Kristan Maccaroni, Dale Logsdon, Owen Baird, Tony Sindt, Scott Mackenthun, Jon Hansen, Tom Jones, Brian Nerbonne, Casey Schoenebeck, Andy Hafs, Jason Harris, Matt Petersen, Mandy Erickson, John Frank, Calub Shavlik

Minutes of 2018 Annual Business Meeting in St Cloud

 Printed in the May edition of the newsletter, and sent out via email prior to the meeting – Motion to accept -Schneider, Second - Kelling, passed

Past President Recognition

Patrick Schmalz, Loren Miller, Joel Hoffman, Dale Logsdon, Owen Baird, and Brian Nerbonne

North Central Division

Jeff Kopaska will speak at the banquet

Parent Society

• Contacted both the President and Executive Director regarding attendance/speaking, both were – busy traveling.

EXCOM

• Introduced the four new members – Neal Mundahl, Jay Hatch, Craig Kelling, and Kristan Maccaroni

Committee Reports

- Membership
 - Current membership for 2018 was 211 76 are professional level at the parent society, and 44 are student level at the parent society. 46 chapter level members only
- Nominations
 - o President Elect Craig Kelling,
 - o Secretary/Treasurer Calub Shavlik,
 - o Federal Representative Hanna Kruckman,
 - Academic Representative Neal Mundahl
- Awards
 - Student award winner for the Joan Duffy Bradley Dawson
- Communications Hanna Kruckman (update provided by Craig Kelling)
 - o Facebook presence has increased (1-2 posts per week);
 - o Parent Society hosted website is up and running
 - Newsletter 2 issues The summer issue will continue to focus on the annual meeting and the winter issue will focus on a different topic chosen by the editor and/or president (several standing articles will be present in each issue)
- Ad Hoc
 - o Arrangements Mandy Erickson
 - Acknowledged Josh Wert for a lot the initial groundwork joint meetings take time, so start early
 - o FWLA -Loren Miller
 - Two-line issue included endorsement of \$5 being used towards walleye stocking (special regulation lakes would be exempt)
 - Exploring a method of voluntary non-consumptive user fee trying to get support;

 Hatchery committee - need to read the other consultant reports so they avoid language that this committee directs stocking.

- o Scholarship Jay Hatch
 - Main issue for last two years low participation
 - 3 applicants Excellent applicants
- o Fundraising Jon Hansen
 - Working with U of M (Alex Franzen)
 - Buy tickets, auger/card, joint meeting raffle with tickets, split profit based on tickets received for items (weight of tickets)
- Science Fair Brian Nerbonne
 - (not very active) some got done (Bemidji, Duluth, Twin Cities, and State)
- Lota Fisk Gazette Craig Kelling
 - Deadline for next issue June 1st
- Vacant committees
 - President Edie Evarts goal is to fill the important ones with new members

NCD Technical Committee

- Walleye Dale Logsdon
 - o Next meeting July 15 17 Webster SD
 - Yellow Perch theme
 - Support Walleye symposium at upcoming NCD meeting – possible publication;
 - Student attendance Walleye tech support

Unfinished Business

- Communication Plan
 - Submitted to EXCOM, accepted, and will move forward
- Student Development
 - Work with incoming president to set up committee

Installation of President

- Edie Evarts escorted by Patrick Schmalz and Dale Logsdon
- ESOX handed over by out-going President Glander

Awards

• Out-going president award went to Paul Glander

New Business

- Election results
 - o President-Elect Craig Kelling,
 - o Secretary/Treasurer- Calub Shavlik,
 - o Federal Representative Hanna Kruckman,
 - o Academic Representative Neal Mundahl
- 2021 Annual Meeting
 - Will be held in conjunction with 2021 Midwest, which will be held in Minnesota
- 2020 Chapter meeting –



President Edie Evarts (MN-DNR) escorted by Dale Logsdon (MN – DNR) and Patrick Schmalz (MN-DNR). Photo by Kristan Maccaroni (MN-DNR).

o President-Elect Craig Kelling is looking for suggestions

Adjourn

BUDGETS: A MATHEMATICAL CONFIRMATION OF YOUR SUSPICIONS

2019 Proposed Chapter Budget

by Calub Shaylik, Secretary-Treasurer, MNAFS

Description	2018 Budget
Income	
Interest On Investments	\$300.00
Continuing Education Workshops	\$1,000.00
·	
2019 Annual Meeting	
Registration	\$26,250.00
Raffle	\$2,000.00
Sea Grant Award	\$0.00
New Ulm Scholarship Award	\$500.00
Total Anticipated Meeting Income	\$28,750.00
Chapter Dues	\$2,000.00
T-Shirt Sales	\$300.00
Scholarship Fund (Interest Only)	\$100.00
<u>Total Income</u>	<u>\$32,450.00</u>
Expenses	
Business Functions	
Printing/Postage/Website	\$300.00
President's Travel	\$1,500.00
Fish and Wildlife Legislative Alliance Membership	\$1,750.00
Chapter Awards	\$100.00
Total Business Costs	\$3,650.00
2018 Annual Meeting	
Facilities and Food	\$22,500.00
Miscellaneous	\$1,500.00
Fundraiser-Raffle Prizes	\$250.00
Best Student Paper Award	\$500.00
Student Support (Winners)	\$100.00
Total Meeting Costs	\$24,850.00
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	\$100.00
Meeting	
State Science Fair Awards	\$750.00
	•

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Hutton Junior Fisheries Biologist Program	\$300.00
Total Scholarships	\$2,650.00
Projects and Activities	
President and EXCOM Initiatives	\$500.00
Continuing Education Workshop Insurance	\$500.00
Insurance	\$150.00
Lake Friendly Award	\$150.00
Total Projects	\$1,300.00
<u>Total Expenditures</u>	<u>\$32,450.00</u>



Calub Shavlik (MN-DNR) taking minutes at the 2019 Annual MNAFS Business Meeting. Photo by Kristan Maccaroni (MN-DNR).

CHANGE THE PLAN BUT NEVER THE GOAL

2019 President's Action Plan

by Edie Evarts, President, MNAFS

GOAL	OBJECTIVE
Membership Services	
Work with President-Elect for 2020 meeting and explore possible meeting partners.	Help with site selection and meeting arrangements for Annual meeting. Help coordinate with TWS for possible joint meeting. Early coordination for F&W 2021 meeting.
Promote fisheries certification.	Continues
Regular communication with membership.	Follow Chapter Communications Plan to distribute information to members via emails, social media, Chapter website, and newsletters. Have Chapter documents (procedures manual, agenda, minutes, etc) accessible to membership.
Sponsor at least one continuing education workshop.	Assign special committee chair and support workshop arrangements. Have questionnaire created for membership interest in workshop topics.
Provide judges and maintain funding for regional and state science fair awards.	Assign committee chair and maintain funding for awards.
Award Chapter scholarships	Enlist committee chair.
Maintain contact list with schools that have fisheries and related programs.	Revise contact list of professors and follow-up with student sub-unit presidents.
Encourage student involvement in the Chapter and Chapter meetings.	Recruit special committee chair to look at alternate funding for student and young professional attendance to meetings.
Recruit and retain young professionals into active roles in the Chapter.	Offer standing and special committee chair positions and special appointments to young professionals.
Enhance the diversity of Chapter members, especially in Chapter leadership positions.	Offer standing and special committee chair positions and special appointments.
Retain post-professional contact information for retirees and increase role of retirees in chapter activities.	Continues
Increase diversity of Chapter funding sources.	Follow-up with Parent Society on new structure for proceeds from 2021 F&W Midwest meeting.
Review and update LRP.	Target date 2026

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Network with other Minnesota professional societies, as well as AFS Chapters from neighboring states.	Invite other professionals and organizations with fisheries connections to participate and attend Chapter meetings.
Host Midwest and National AFS when opportunity arises.	Midwest 2021 preliminary planning.
Increase collaboration with non-governmental aquatic resource groups, between agencies, and with University researchers.	Fill Chapter special appointments for NCD Technical Committees.
<u>General</u>	
Hold Ex-Com meetings.	Have at least 3 meetings with one onsite. Include Standing and Special committee chairs and special

appointees.

FISHERIES IN A CONNECTED WORLD

Snapshot: 2019 Annual Meeting

by Craig Kelling, President-Elect/Newsletter Editor, MNAFS

On February 25-27, 2019, approximately 300 students and professionals attended the Minnesota Chapter of the American Fisheries Society 52nd annual meeting at the Holiday Inn in Fargo, ND. This was a joint meeting with the Dakota Chapter of the American Fisheries Society and represents the first time, since 2001, the two chapters have held a meeting together. The fitting theme for this year's meeting was "Fisheries in a Connected World."

Day 1 started with a continuing education event titled "Become a PowerPoint Super Hero" provided by South Dakota's Mike Barnes. The event was well-received and provided members with new techniques to maximize the effectiveness of their oral presentations. This was followed by a student social and welcome reception. The promise of free food and beer make these highly popular events.

Day 2 began with a welcome address from Minnesota Chapter AFS President Paul Glander and Dakota Chapter AFS President Joshua Wert. This was followed by a presentation by Joel Hoffman describing the benefits of chapter and parent society level AFS membership. Joel provided a lot of great information for members to get to know their chapter/society and get involved.



Jeff Kopaska (North Central Division AFS and IA - DNR), discusses parent society AFS initiatives with Minnesota and Dakota Chapter AFS membership. Photo by Kristan Maccaroni (MN-DNR).

This year's plenary speakers were William Rice (USFWS Fish Passage Engineer) and Luther Aadland (MNDNR River Scientist). William gave a presentation titled "Establishing Fish Passage Connectivity for the Next 100 Years", which focused on what fish passage is and is not, the scale of the issue and what types of fish-ways have had success in facilitating passage. Additionally, he discussed current fish passage principles, design criteria, area case studies, data gaps, and opportunities for international collaboration. This was followed by Luther's presentation titled "Reconnecting and Restoring River Ecosystems", which focused on local and national case examples of dam removal and nature-like fish passage facilitating the re-establishment of extirpated fish communities.

Over the following day, more than 90 oral and poster presentations were given highlighting the tremendous fisheries conservation work throughout Minnesota and the Dakotas.

The oral and poster sessions were followed by the annual Chapter Business Meeting. Attendance to this all-member-event was seemingly at an all-time low. Nevertheless, the few forged on. During the meeting, it was announced that Craig Kelling (USFWS, Bloomington) was elected to be the Chapter's President-Elect. Hanna Kruckman (USFWS, Bloomington) was elected to the Executive Committee position for federal employees, Calub Shavlik was reelected to the Secretary/Treasurer position, and Neal Mundahl was reelected to the academic Executive Committee position. Edie Evarts was installed as President and with her first action, awarded Past-President Paul Glander, for his services to the chapter.

The meeting culminated with an awards banquet honoring member achievements. This year's guest speaker was current North Central Division AFS President Jeff Kopaska. Jeff provided a presentation highlighting recent parent society AFS initiatives, all of which culminated in a call to action for AFS chapters and leadership to ensure that the society is adequately serving <u>all</u> members from those working in the field to members in academia and administration. As always, there were a plethora of raffle items up for grabs this year due, in large part, to the generous donations of many members. Congratulations to all those lucky enough to claim one.

Special thanks to the Dakota Chapter members as well as the following Minnesota Chapter members who worked hard to make this meeting a success – Paul Glander, Edie Evarts, Calub Shavlik, Patrick Schmalz, Kristan Maccaroni, Jay Hatch, Craig Kelling, Neal Mundahl, Heidi Rantala, Mandy Erickson, Michelle Krecklau, Hanna Kruckman, Joel Hoffman, Keith Reeves, Jon Hansen, Owen Baird, Doug Kingsley, Dale Logsdon, Carl Pederson, Matt Skoog, Dave Staples, Tanner Stevens, and the University of Minnesota AFS Student Sub-Unit.





Scenes from the 2019 annual meeting. Photos by Kristan Maccaroni (MN-DNR).

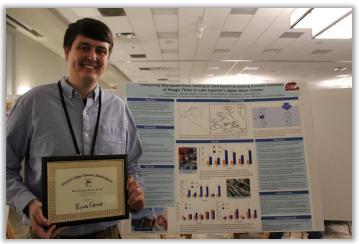
HONORING OUR MEMBERS

2019 Award Winners

by Keith Reeves, Awards Committee Chair, MNAFS



President, Edie Evarts (MN-DNR), awarding Paul Glander (retired FWS), for services to the Chapter as President. Photo by Kristan Maccaroni (MN-DNR).



Ryan Grow (University of Minnesota – Duluth), recipient of the Best Student Poster Award. Photo by Kristan Maccaroni (MN-DNR).



Keith Reeves (MN-DNR) awarding Henry Hansen (University of Nebraska – Lincoln), for Best Student Presentation. Photo by Kristan Maccaroni (MN-DNR).



Edie Evarts (MN-DNR) awarding Bradley Dawson (University of Minnesota – Duluth), the Joan Duffy Student Travel Award. Photo by Kristan Maccaroni (MN-DNR).

REWARDING OUR FUTURE PROFESSIONALS

2019 Scholarship Recipients

by Jay Hatch, Open Representative/Scholarship Committee Chair, MNAFS

2019 MNAFS E. E. Mecklenburg NUASF Scholarship Recipient



Alicia Skolte received the \$900 MNAFS E. E. Mecklenburg New Ulm Area Sport Fishermen (\$500 from Ruth Mecklenburg and \$400 from

the Chapter). The Chapter waived the Annual Meeting registration fee for Alicia and arranged to cover her lodging costs for two nights. Unfortunately, a last-minute winter storm prevented the entire Winona State University contingent from attending the Annual Meeting.

Alicia is a Senior at Winona State University (WSU) majoring in Biology, Environmental Science track and Ecology track. She is advised by Dr. Michael Delong and has conducted fish and

macroinvertebrate sampling with Dr. Neal Mundahl. Alicia has maintained a perfect 4.0 cumulative grade point average and will graduate this May after just three years in college. She is a Pathways Intern with the US Fish and Wildlife Service, where she has been involved in field studies of larval fishes, lake sturgeon, Asian carps, and fish health surveys since summer 2017. The



University) holding a flathead catfish during her Pathways Internship Program experience with the USFWS. Photo provided by Jay Hatch (University of Minnesota –Twin Cities).

Pathways Intern Program is highly competitive, and many of its former interns are now in professional federal government positions. Alicia's senior research project assesses the effectiveness of "skyhooks" and "LUNKERS" compared to cover rocks in providing habitat for Brown Trout *Salmo trutta*. She is looking not only at variation in size and condition of trout but also at differences in physical conditions among the cover structures. She presented portions of her work at a regional US Fish and Wildlife conference.

For the past three years, Alicia also has been the principal care-taker of a variety of fish, reptiles, amphibians and invertebrates used for educational purposes by the Biology Department at WSU. She regularly helps WSU students learn about the behavior, lifestyles, and care of these animals. Alicia is an active leader within the College of Science and Engineering at WSU and serves on the Dean's Advisory Council. As part of her duties, she liaisons between the Dean's Office and students to institute change in daily student life and provides feedback to the Dean on ways to improve the University's image. As an active member of the National Society of Collegiate Scholars, Alicia regularly volunteers for a variety of activities at WSU, especially projects that involve aquatic sampling. Alicia plans to pursue a Master's degree in fisheries science, focusing "on fish populations, fishery management, and natural resources involving water quality and GIS application of fisheries." She identifies a job in fisheries with US Fish and Wildlife Service or the Minnesota Department of Natural Resources as her career goal.

2019 Minnesota Chapter AFS Scholarship Recipient



Alex Franzen received the \$400 MNAFS Chapter Scholarship at the 2019 Annual Meeting awards ceremony. The Chapter waived the Annual Meeting registration fee for Alex and provided a room for both nights of the meeting.

Alex is a Senior at the University of Minnesota–Twin Cities, majoring in Fisheries, Wildlife and Conservation Biology. He is advised by Dr. Andrew Simons. Over the past two years, Alex has assisted Mark Hove researching the life histories and conservation of native freshwater mussels. He contributed to a variety of field and laboratory investigations, and co-authored four research notes published in Ellipsaria, the quarterly research newsletter of the Freshwater Mollusk Conservation

Society. A fifth has been submitted. The field component of this research has helped him hone his

seining, electrofishing, and SCUBA skills and has solidified his commitment to the study and conservation of these "fascinating animals with complex life cycles." It also led to his senior research project, which elucidates the glochidial fish hosts of the critically endangered Spectaclecase mussel *Margaritifera monodonta*. These previously unknown hosts are the Mooneye *Hiodon tergisus* and Goldeye *H. alosoides*. These two species appear to be in decline, at least in the major rivers of southern Minnesota, and Alex is now assisting in the assessment of Hiodon population trends.

Alex also put his SCUBA skills to good use on a project investigating hybridization between invasive Eurasian Watermilfoil *Myriophyllum spicatum* and native Northern Watermilfoil *M. sibiricum*. Under the supervision of Dr. Ray Newman, Alex learned aquatic plant survey techniques, improved his skills in trailering and operating watercraft, and "how critical healthy and diverse aquatic macrophyte communities are to



Cities) with a collection of mussels and doffed SCUBA gear. Photo provided by Jay Hatch (University of Minnesota –Twin Cities).

aquatic ecosystems." Currently, he is a curatorial assistant in the Mollusk & Crustacean Collection at the James Ford Bell Museum of Natural History, where he helps curate freshwater mussels and gastropods. He also assists with identifying and vouchering fish specimens collected by MNDNR and MPCA.

Alex is a past-president of the Undergraduate Student Board in his college, and an active leader in numerous other student organizations and clubs. He regularly volunteers with many conservation and environmental monitoring organizations in the state. He is committed to helping create an all-inclusive societal environment. He writes, "I also believe that at the core of any society are strong educational programs not just about academics but also about the diversity of people." Alex hopes to eventually pursue a Ph.D. in aquatic ecology and develop a career in the conservation and management of aquatic resources.

KNOWING YOUR EQUIPMENT

Grain of Salt

by Dick Stern, Fisheries Technician, Minnesota Department of Natural Resources

Welcome to the Lota-Fisk Gazette's first installment of Grain of Salt. This article series provides all Minnesota Chapter AFS members the opportunity to regale us with outlandish stories in the field, lessons learned, internship woes, or interesting interactions with the public. There is certainly no shortage of these stories and of course, if taken with a grain of salt, much wisdom to be gained.

To help kick off this new series, we could think of no one better than the "old salt" himself, Dick Stern, Fisheries Technician, Finland Area.

All fishery field workers need to be very familiar with the equipment they use. Over a long and illustrious career, I have taken great pride in keeping all of the gear I use regularly in tiptop condition. Every so often though, for whatever reason, equipment must be borrowed from a



Nothing like a cold Steel Reserve after a long day in the field. Photo submitted by Dick Stern (MN-DNR).

different field station. These conditions have consistently proved to be the most exasperating experiences in my career.

In the early 90s, we used to have a regionally shared large stocking truck. This was always an accident waiting to happen because no one was really in charge of maintaining the unit. I remember having various mechanical problems, downshifting was nearly impossible, and you never knew if the oxygen and aerators were going to work for you.

In my first week working for Fisheries, we had to stock Rainbow Trout. Metro had just been split into East and West and one of my mentors was unfamiliar with the truck and tank we were using that day. I was driving on Warner Road and we were coming to a stop light. The light turned yellow so I had to hit the brakes pretty hard. All of a sudden, water and fish were pelting the back of the cab window because the tank did not have screens on the air vent tubes. Trout all over the road and in the back of the truck, we jumped out and picked up as many as possible, put them back in the tank, and got the heck out of there as the light turned green.

Another time, we had to do an ice out Musky assessment, and with the new safety policy we had to use at least a 17' boat, which we did not have. We were forced to borrow a boat from a nearby station. This particular time, I will take

a percentage of the blame, because we knew that the guys at this station had historically done zero maintenance on their equipment. We were a long way from the access when the motor decided to quit shifting and we were stuck in neutral. Luckily, the fish Gods were smiling on us that day because the wind was in our favor and we were able to paddle back to the access, drive back to our office and get a different (but considerably smaller) motor. When I told the assistant manager of said station what had happened and that we would have to get their boat fixed, he said, "Oh yeah, I remember it was acting up the last time we used it". That is when my anger really surfaced.

The all-time classic was way back in 1995. The DNR was, as usual, in budgetary dire straits. I and the other seasonal guy were going to have our 1996 season paid by a shifting of funds from a UMD research project back to the DNR. Our mission was to collect contaminant monitoring fish mainly in the Ely and Grand Marais areas with quite a lot of BWCA work. In fall of 95, as kind of a pilot project, we were flown into the BWCA and stayed at an old mouse infested warden cabin on Little Saganaga Lake. We were to collect various size groups of Northerns from Little Sag and Gabimichigami. My coworker Paul and I wanted to organize all of our own gear, but our manager Pete said, "Oh no, Grand Marais will set everything up for you". "Set up" was the key word here. On Thursday, the next to last day, we had finished Little Sag and had to make a 40 rod portage into Rattle Lake, then another 40 rod portage into Gabi. As we got to the far shore of Rattle a lone guy in a small canoe was just coming onto the water. Over the sound of the motor, all we could see was the guy flailing his fists and his mouth opening and closing. We killed the motor and could hear now, "YOU CAN'T HAVE THAT MOTOR IN HERE, DON'T YOU KNOW THIS IS THE WILDERNESS", he shouted. Paul just showed him the DNR patch on his shoulder and said, "Do you see that"? "Well they're going to hear about this in Duluth" he said. Paul responds with, "Go right ahead, they already know. They're the ones that gave us permission to be here". We chuckled about the experience as we went about our work, but little did we know at the time that he had changed our mojo. After setting a gill net as far from the portage as possible, we headed back and ran out of gas near the portage. At the portage, I went to fill the tank on the motor with our last gas can and as soon as I opened it I said to Paul, "Pauly, I don't know if this is even gas, it smells like turpentine". With the motor hot, I limped it back the 3 miles to our cabin having to feather the choke the whole way. The next day, once the motor was cold, there was no way that crappy old, and formerly mixed gas would ignite. We had to paddle that 18 foot cargo canoe 5 miles one way to our gill nets and 5 miles back, complaining the whole time about our area manager not allowing us to organize our own equipment. When we finally got flown out that day and got back to the office, our area manager had picked a good day to go get a haircut. Had he been in the office when we got there, it likely could have ended both of our careers.

The moral is, when borrowing equipment, know that you aren't getting the cream of the crop. Be extra prepared, ask questions, bring extra gear and be ready for a possible nightmare day.

SUB-UNIT HAPPENINGS

Student Sub-Unit Updates

By LOGAN New, President, University of Minnesota-Twin Cities, AFS Student Sub-unit



University of Minnesota

The University of Minnesota-Twin Cities Fisheries, Wildlife and Conservation Biology Club traveled to the field multiple times last month to practice boom shocking, backpack electrofishing, and seining. Some of the collected fishes were used for a native mussel life history research project.



Electrofishing. Photo provided by Logan Neu and taken by Ray Newman (University of Minnesota – Twin Cities).

By Kristina Rands, President, Bemidji State University, AFS Student Sub-unit





The Bemidji State University American Fisheries Society Student Sub-unit has had an eventful year! At the beginning of the year, we made our way over to the north shores of Duluth to do some salmon fishing. Although the fishing wasn't the best, we still had a great time exploring new streams and getting a line in the water. This fall, we visited the Turtle River to do some backpack electrofishing to broaden our Ichthyology specimen collection. The Director of the Minnesota Aquatic Invasive Species Research Center (MAISRC) and BSU Alumni, Nick Phelps, came to speak at the University to answer questions about how BSU shaped his career. He also received The Young Alumni Award! Afterword's, we had the pleasure of hearing about the current projects he is working on related to his aquatic invasive species research. At this year's AFS Conference, we had some phenomenal research projects to present. Anna Estes, Mike Collins, Joseph Amundson, and Craig Tangren presented some amazing posters. We also had two of our graduate students, Sam Peterson and Steve Hauschildt who gave oral presentations on their research. Sam conducted his graduate research on Benthic Carbon Accumulation and Macroinvertebrate Colonization on Artificial Zebra Mussel Substrate. While Steve researched Spatial and Temporal Variability in Post-Larval Yellow Perch Density. Throughout the school year, we had been volunteering at the Stanford Center, working concessions, to raise money for the club. Our Beaver Freeze fishing tournament took place on Lake Bemidji. We had a great crowd of people and amazing prizes that were donated to us by Reeds, Northwoods and Destination



Helping Urbank Bait Company with the Sucker Run. Photo provided by Kristina Rands (Bemidji State University).

Sporting Goods. The Yellow Perch fishing tournament was also held, and the biggest Perch caught was 286 millimeters long! At our last meeting, we voted in new officers for the following year. We finished off the school year by helping out Urbank Bait Company, they were stripping suckers for their bait shop. Here at Bemidji State University, we have had an excellent year and cannot wait for what the 2019-2020 school year has in store for us!

LEARNING FROM THOSE WITH EXPERIENCE

Member Spotlight

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

This issue's member spotlight: Kristan Maccaroni, Fisheries Specialist, West Metro Area Fisheries, Minnesota Department of Natural Resources.

How did your professional involvement in fisheries begin?

Professionally, I became involved with fisheries when I went to college at the University of Minnesota and majored in Fisheries and Wildlife. I did several fish jobs on campus, but I primarily worked in the aquaculture lab, breeding and rearing experimental fish for grad students. Mostly, I worked with Tilapia and Japanese Medaka. Fish behavior absolutely intrigues me; I loved (and continue to love) breeding fish, and I also worked on a research project studying fish reproductive behavior. I exposed minnows to chemical pollutants and observed the way that it impacted their spawning behaviors... it's so enlightening that the waste from our industries can impact populations by impairing an animal's ability to reproduce. Fisheries Internships with MN DNR later got me hooked into fieldwork.

Personally, I've been involved with fisheries my whole life. It's a good long story, and hard to know how to write it... if you're interested, talk to me at the next chapter meeting!



Kristan enjoying some data collection duties. Photo provided by Kristan Maccaroni (MN-DNR).

What are some interesting projects you are currently working on?

Something we're currently doing started from a conversation over sex determination of Northern Pike. When I started as a Fisheries Specialist, we routinely determined Northern Pike sex during summer gill net surveys by cutting open the fish and examining the gonads. It's not an unambiguous thing to do, and in working with a new coworker, we spent a bit of time debating the sex of the fish. We realized that there is a lot of uncertainty in this technique. During ice-out surveys, sex determination is a different story. Eggs or sperm come out as the fish is handled, so the sex obvious. For the last two years, during ice-out trap netting, we'll give the fish a pelvic fin clip indicating sex... right for female, left for male... the female is always right;) ... then, when we come back and gill net during the summer, we catch a few of those ice-out fish, and photograph the gonads of known-sex fish. In this way, we'll make a training tool for sex determination of Northern Pike. ... Next comes the conversation of why we want to know the sex in the first place...

Additionally, a field project that I work on each year is the spawning of Muskie. We're continually trying to improve our catch rates of brood fish and the hatch rates of our eggs. There is a lot of variables at play during this operation, and it's always a work in progress.

How do you think fisheries management and conservation will change in the next 10 years?

Maybe over the next ten years, fisheries management will start to more closely resemble fisheries conservation. That is, maybe conservation is a growing priority. Ten years isn't a long time, either. I bet within ten years, at the state level, we'll start to more clearly see the importance and utility of the Index of Biotic Integrity (IBI) surveys. These are lake surveys that not only include the sampling of game fish populations, but also include sampling nongame species like minnows and darters. Emergent vegetation surveys and surveys of shoreland use are also conducted with IBI surveys. These comprehensive surveys give information on the entire fish community and the habitat of that species assemblage.

In the metro area, Lake Associations are interested in improving water quality. Water quality and the ecological condition of our lakes and rivers seems to be moving to the forefront of public priorities, and I think that management or conservation efforts will reflect that.

What is a favorite memory from your field work?

Lunch in the field. Taking a moment to relax and appreciate where we work.

What advice would you give to young fisheries professionals?

I'm more in the position of receiving advice than giving it! I suppose something that I've become more aware of lately is that we have some great fisheries people retiring these days, and as young professionals, we ought to learn from them as much as we can. We ought to not only learn from them about our local resource, or about their field techniques, but we should also take guidance on how to conduct ourselves and how to be good coworkers.

DEVELOPING FUTURE LEADERS OF THE SOCIETY

AFS Opportunity Board

by Craig Kelling, President-Elect/Newsletter Editor, MNAFS

HUTTON JUNIOR FISHERIES BIOLOGY PROGRAM

The Hutton Junior Fisheries Biology Program is a paid summer internship and mentoring program for high school juniors and seniors, sponsored by AFS. The mission of the Hutton Program is to stimulate career interest in fisheries science among young people from underrepresented groups. Each student selected to the program is matched with and mentored by a fisheries professional while getting hands-on experience in a marine or freshwater setting. Those who successfully complete the program receive a \$4,000 scholarship as well as valuable work experience in an exciting and rewarding field.

Because the principle goal of the Hutton Program is to diversify fisheries professions, minorities and females are strongly encouraged to apply. Since the program began in 2001, participants have included 362 minority scholars and 383 female scholars. In a 2011 survey, 89% of the Hutton Program alumni reported working in fisheries, biology, environmental or other sciences.

Established fisheries professionals can support the program financially or by acting as mentors. Annually, applications for Hutton Scholar spots are nearly ten times the number available. As the program has grown, so has the need for funding.

For more information, please visit http://Hutton.fisheries.org/

AFS EMERGING LEADER MENTORSHIP AWARD PROGRAM

The American Fisheries Society requests applications for the Emerging Leader Mentorship Award (ELMA) Program. The purpose of the ELMA Program is to develop future leaders of the Society, and the fisheries profession as a whole,

by providing selected candidates an opportunity to participate for one year in activities of the Society Governing Board. Participants in the Program are selected based on their level of involvement in AFS, as well as their potential for assuming leadership of Society units in the future.

A candidate must be a Society member in good standing and an application must be endorsed by an AFS member in good standing (preferably a member who has held or is holding a leadership position in AFS). The application package must include a: (a) personal statement prepared by the candidate that explains why s/he wants to participate in the Program (not to exceed one page); (2) a curriculum vita if the applicant is a student; (3) at least one letter of support from AFS member in good standing (preferably a member who has held or is holding a leadership position in AFS), and (4) a letter from a current Governing Board member willing to serve as a mentor.

Candidates selected must attend the Management Committee meeting, Governing Board meeting, and the Governing Board retreat, and the AFS leadership training session(s), all of which are scheduled during the 3 day period immediately preceding the annual meeting; attend as many other sessions as possible at the annual meeting associated with the Governing Board (e.g., Incoming Governing Board Breakfast) and other meetings (e.g., Journal Editors meeting, Fisheries Science Editor breakfast) with their assigned mentor when possible; participate in monthly Conference calls of the Management Committee, as time allows; and prepare a report to the Governing Board prior to the mid-year meeting that summarizes her/his experience in the ELMA Program during the past year and provide recommendations for improving the Program. For additional information about the Program and requirements, please see the AFS ELMA Program Procedures for Application and Selection of Candidates in the AFS Policy and Procedure Manual.

Due to limited funds to support this program (\$500 per awardee to cover costs of attending AFS governance meetings immediately preceding the annual meeting), applicants should be those that already intend to attend the annual AFS meeting. Applicants should inform their Division President with their intent to submit an application, submit their application directly to the ELMA Program Chair (Jim Bowker at jim3180bowker@gmail.com), and cc: their Division President. Division officers are encouraged to contact AFS Units in which the applicant is a member to seek matching funds to further support the applicant.

Applications must be received by April 1 of each year.

WHAT'S NEXT?

Upcoming Events

by Craig Kelling, President-Elect/Newsletter Editor, MNAFS

2019 SUMMER JOINT MEETING OF THE NORTH CENTRAL DIVISION CENTRARCHID, ESOCID, AND WALLEYE TECHNICAL COMMITTEES

July 16, 2019 - July 18, 2019 | Leave a comment

2019 Summer Joint Meeting of the Centrarchid, Esocid, and Walleye Technical Committees – Webster, South Dakota, July 16-18, 2019

Reservations can be made at:

The Galley Hotel, Bar, & Grill 605.345.9989

Boomers Outback Motel 605.345.3323

Both have SD State Rates of \$70/night

See: https://ncd.fisheries.org/walleye/



A Conference Not to be Missed!

Experience AFS and TWS Live in 2019...

In 2019, The Wildlife Society and American Fisheries Society will come together for the first-ever joint national conference of these two organizations. The event will likely be the largest gathering of fish and wildlife professionals ever, and will provide unprecedented opportunities for science-sharing and potential collaboration. Individually, these organizations' conferences ensure your staff stay knowledgeable and up to date on the latest science and management techniques, but combined this can't-miss event opens doors for the future of the natural resources professions. Join us in Reno for an unforgettable experience, and be a part of this historic event.



The next World Fisheries Congress is only two years away. Adelaide, Australia, will host the premier international fisheries conference in 2020 bringing together research, industry, management and the latest technological

advances in fisheries worldwide under the theme 'Sharing our oceans and rivers – a vision for the world's fisheries'. Aiming to foster cooperation and engagement in commercial, recreational and indigenous fisheries, the World Fisheries Congress 2020 (WFC2020) will provide insightful presentations and inspiring forums on key developments needed to ensure future sustainable development of the world's oceans, lakes, estuaries and rivers.

Organizers of this major event are now seeking expressions of interest to lead innovative sessions, symposia, and education and training workshops. Chair WFC2020 Gavin Begg, who is also the Research Director of Aquatic Sciences at the South Australian Research and Development Institute (SARDI), said excitement for the congress was building.

"We're thrilled to have so many world leaders in fisheries science, management and industry converge in Australia at the same time," he said. "We are currently seeking expressions of interest for key components of the program, so if you have a key topic or theme you'd like to lead, get in now and register it. The program is shaping up to be very comprehensive, with something for every delegate to take away and learn from."

Help set the future directions for the world's fisheries and lead in these critical discussions by emailing your ideas or suggestions to conference@aomevents.com by 31 January 2019 (extended deadline).

Sponsors and exhibitors won't want to miss out either. Showcase your business on the world fisheries stage by sponsoring or exhibiting at WFC2020. With more than 1500 attendees; multiple networking events; maximum opportunity to engage with major purchasers of scientific, fishing and aquaculture equipment; and dedicated media coverage this event is much anticipated across the globe.

OPPORTUNITIES TO GET INVOLVED

Committee Member Update

by Edie Evarts, 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: Paul Glander, Retired U.S. Fish and Wildlife Service

Long Range Planning: Jacquelyn Bacigalupi, MN DNR Fisheries

Membership: Joel Hoffman, U.S. Environmental Protection Agency

Nominations: Paul Glander, MN DNR Fisheries

Resolutions: Brian Nerbonne, MN DNR Fisheries

Students: VACANT

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: Brian Nerbonne, MN DNR Fisheries

Student Development: Jay Hatch, University of Minnesota – Twin Cities

Patrick Schmalz, MN DNR Fisheries

Minnesota Chapter Perennial Special Committees

Parent Society 150th: Paul Glander, Retired U.S. Fish and Wildlife Service

Brian Borkholder, Fond du Lac Resource Management

Minnesota Chapter Special Appointments

DNR Fishing Round Table Mark Hove, University of Minnesota

Representative:

FWLA Delegates: Loren Miller, MN DNR, University of Minnesota – Twin Cities

Jon Hansen, MN DNR Fisheries

MN Chapter TWS VACANT

Representative:

North Central Division Technical Committees

Centrarchid: VACANT

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: Don Schreiner, Retired MN DNR

Walleye: Dale Logsdon, MN DNR Fisheries

Student Sub-Unit Advisors

Bemidji State University: Andy Hafs, Bemidji State University

University of Minnesota – Gretchen Hansen, University of Minnesota – Twin Cities

Twin Cities:

University of Minnesota – Thomas Hrabik, University of Minnesota – Duluth

Duluth:

Newsletter Editors

Editor Craig Kelling, U.S. Fish and Wildlife Service

Co-Editor Kristan Maccaroni, MN DNR Fisheries

Minnesota Chapter Executive Committee

President: Edie Evarts, MN DNR Fisheries

President - Elect: Craig Kelling, U.S. Fish and Wildlife Service

Past President: Paul Glander, Retired U.S. Fish and Wildlife Service

Secretary/Treasurer: Calub Shavlik, MN DNR Fisheries

Federal Representative: Hanna Kruckman, U.S. Fish and Wildlife Service

DNR Representative: Kristan Maccaroni, MN DNR Fisheries

Academic Representative Neal Mundahl, Winona State University

Open Representative: Jay Hatch, University of Minnesota – Twin Cities



2018-2019 Executive Committee (left to right): Edie Evarts (President-Elect, MN-DNR), Calub Shavlik (Secretary/Treasurer, MN-DNR), Paul Glander (President, Retired-USFWS), Patrick Schmalz (Past-President, MN-DNR), Craig Kelling (Federal Representative, USFWS), Jay Hatch (Open Representative, UMN), not pictured Neal Mundahl (Academic Representative, WSU), Kristan Maccaroni (DNR Representative, MN-DNR)



Spring flood waters in Bagley Bottoms on Upper Mississippi National Wildlife Refuge's McGregor District, Photo taken by Brandon Jones USFWS, CC BY 2.0

See you out there!

Lota-Fisk Gazette is the official biannual newsletter of the Minnesota Chapter of the American Fisheries Society. Material in this newsletter may be reprinted from other AFS websites. Deadline for material for the next issue is December 1^{st} 2019.