Mid-South Aquatic Plant Management Society

Vol. 38
Issue: 1

Message from the President

Dear Fellow MSAPMS Members,

Let me start off by wishing you and yours a very happy and prosperous 2020! As I write this message, I can't help but reflect on the previous year and think toward the future.

I hope you all enjoyed our 38th annual conference, held this past November in historic Baton Rouge, Louisiana. We had one of the best turnouts in years with 92 members in attendance!

Our program kicked off on the morning of November 5th, with an aquatic plant management workshop which featured everything from control strategies to boating safety. The afternoon featured a special session geared toward public relations in aquatic plant management with emphasis on better communication, both in person and in an evolving and often chaotic social media space. A big thank you to our speakers from the front lines of conflict who gave us such valuable insight into what is quickly becoming a pivotal part of our industry.

Over the next two days, the program would feature speakers from across the mid-south region, sharing success stories and lessons learned in managing species like giant salvinia, Cuban bulrush, and other familiar characters to the mid-south region. One of the high notes of our conference were the six student presentations and one poster presentation highlighting ongoing research from universities across the mid-south region.

As a change in format, the conference also featured its first awards luncheon before wrapping up on the evening of November 6th. Congratulations to William Prevost of Louisiana State University, who took home the MSAPMS Student Scholarship. The MSAPMS also welcomed Carl Della Torre of Orion Solutions LLC. and Daniel Hill of Louisiana Department of Wildlife & Fisheries to the Board of Directors.

Finally, a ***BIG*** thank you to our 18 sponsors who helped raise nearly $30K for the Society this year! We simply could not do what we do without your continued support of MSAPMS.

With 2019 in the rear-view mirror, it's time to start focusing on the impact we will have as a Society in 2020. Our science and industry continue to be shaped and molded by public opinion, which is often shrouded in misinformation and misguided emotion. The lack of desire to communicate most any science to the public has created major problems for the science community, and aquatic plant management is no exception.

Continued on next page.

Message from the President

As many are aware, it is difficult to generate support from the public and government if our audience does not understand the relevance of what we do. We must not let this go overlooked or allow ourselves to dismiss questions and concerns, but rather be a guiding force to bridge the gap between the importance of our work and public understanding.

I challenge you in 2020, as individuals, companies, and as members of the Mid-south Aquatic Plant Management Society to take the time to focus on the public. I hope you have already begun using the many public relations tools provided by our wonderful speakers at our 2019 meeting. For those looking for tools, don't be afraid to reach out to members who have or are currently struggling with similar issues. I ask you to meet public concern with a smile, engage them proactively and frequently, and be a resource and advocate for sound science and information. We must continue to establish ourselves as a trusted source of information - our science and the vital resources that we protect certainly depend on it.

We as an organization of scientists, educators, students, resource managers, and industry are here to serve as an accredited resource to the public and to each other. If there is any way that we can help our members, including in the public relations space, please don't hesitate to reach out.

Keep your eyes peeled for an upcoming announcement regarding or 2020 meeting, that will be held in beautiful Mobile, Alabama at the Battle House Hotel & Spa October 26th-29th. Please visit the Annual Conference section of our website for more information.

I look forward to serving the MSAPMS as your president in 2020.

All the very best,

Brett Hartis



Scott Jackson provided Certificates of Appreciation for serving on the MSAPMS Board of Directors Wes Anderson (left), Adam Charlton (middle), and Jeremy Slade (right).

Dr. Brett Hartis (right) received the 2019 MSAPMS Presidents Award.

Thanks to all of the 2019 Conference Student Presenters!

The 38th Annual Mid-South Aquatic Plant Management Conference

Baton Rouge, LA

November 2019

2019 Awards and Recognitions

Scott Jackson (left) recognized for his service as President of MSAPMS and incoming President Dr. Brett Hartis (right).

Will Prevost (right) received the 2019 MSAPMS Student Scholarship Award.

Thank You to our Sponsors and Exhibitors for Supporting the Mid-South Aquatic Plant Management Society!

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39th Annual Mid-South Aquatic Plant Management Conference

Mobile, AL
The Battle House Renaissance Mobile Hotel & Spa
October 26-28th, 2020

For more information please visit the conference webpage

http://www.msapms.org/conferences/2020

Metsulfuron-methyl: A New 24(c) Label for Giant Salvinia Management in Louisiana and Texas

By Dr. Christopher Mudge

Giant salvinia (*Salvinia molesta*) has hindered waterbodies throughout Louisiana, eastern Texas, and neighboring states to the east for over two decades. Scientists at the U.S. Army Engineer Research & Development Center (ERDC) and former LSU graduate students have identified a new herbicide to manage the highly invasive aquatic fern. ERDC researchers Mr. William Prevost and Dr. Bradley Sartain generated three years' worth of replicated data in graduate school that demonstrated how highly efficacious the slow-acting, systemic acetolactate synthase (ALS) inhibiting herbicide metsulfuron-methyl was against giant salvinia in a mesocosm setting. During the past year, with support from various government agencies, metsulfuron was granted a Section 24(c) registration [Special Local Need (SLN) label] in Texas and Louisiana to control giant salvinia in public waterbodies by the Texas Department of Agriculture (2019) and the Louisiana Department of Agriculture and Forestry (2020), respectively, and subsequently approved by the U.S. Environmental Protection Agency. Natural resource agencies (i.e., local, state, and federal government only) will soon be able to apply Alligare's PRO MSM 60 in Louisiana and Texas and Bayer's Cimarron Max Part A in Louisiana to public managed and/or regulated waterways. The dry flowable can be applied at 0.5 to 1.0 oz. product/A and can only be applied to the foliage of giant salvinia (i.e., no in-water injection) growing in freshwater systems. In addition, the following restrictions are described on the label: do not apply more than 1.0 oz per acre per year, do not apply within 1/4th mile of functioning potable water intake and treated water cannot be used for irrigation. Other specific use patterns and restrictions can be found on the SLN labels. The new SLN will offer a rotational herbicide for managers to institute stewardship that will hopefully reduce selection pressure (herbicide resistance).

Student Scholarships

2020 Mid-South Aquatic Plant Management Society Scholarship

The MSAPMS is seeking applications for the 2020 graduate student scholarship to be awarded at the 2020 annual meeting. We request that the successful applicant attend the meeting and give a presentation of research progress and results as they are available. One scholarship of $2,500 will be awarded to a qualified student applicant enrolled and studying aquatic plant science or other relevant research.

To apply, The Scholarship Committee should receive the following information by September 1st, 2020:

1. A cover letter which includes the applicant's previous, current, and future relationship to the aquatic plant management industry, and a comment on the importance of the proposed research to aquatic plant management.

2. Copies of unofficial or official transcripts of undergraduate and any graduate work completed to date (these transcripts may be those issued directly to the student by the institution);

3. A letter from the student's major professor recommending the student for the scholarship, indicating that the student is currently enrolled and in good standing and has had their research proposal approved by their graduate advisory committee;

4. A copy of the approved graduate research proposal; and

5. One letter of recommendation, other than the major professor.

All Submissions may be made with either hardcopy, addressed as below or electronically via e-mail.

To enter an application or request more information, contact:

Brett M. Hartis, PhD | Manager - Aquatic Plant Management Program
Duke Energy | Water Strategy, Hydro Licensing, and Lake Services
13339 Hagers Ferry Road | Huntersville, NC 28078 |
brett.hartis@duke-energy.com
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Mid-South APMS Student Spotlight

This is edition of the Mid-South APMS Student Spotlight. The objective of the student spotlight is to get MSAPMS members more familiar with student members. I am hopeful this will evolve to not just involve students but other members of the society as well. If you know a student that would like to be featured or are a professor that has a student you would like to have featured, please contact the MSAPMS Editor Bradley Sartain.

***Name:* Rachel Watson**

***School:* Louisiana State University**

***Degree:* Master's Degree**

Editor: **Where are you from?**

RW: *I'm from Winter Haven, Florida – the birthplace of Publix supermarket and Cypress Gardens (now Legoland). The area's called the Chain of Lakes because there are two different groups of lakes connected by a canal system, the Northern Chain and Southern Chain. It's a small suburban area, but my family made sure to do plenty of fishing throughout the state and hunting for Osceola turkeys too.*

Editor: **So what is the biggest difference you've noticed between FL and LA?**

RW: *There are a lot of differences between Florida and Louisiana, but I think the most obvious advantage to living in Louisiana is the food. I'm honestly surprised I haven't gained 20 pounds since I've moved here because this stuff is addicting! I also like that Louisiana is comprised mostly of native Louisianans. In Florida, less than 40% of the population are actual native Floridians, so I'd sometimes feel less connected in the community than I do here in Louisiana.*

Editor: **Where did you complete your undergraduate degree prior to starting at LSU and what was your major?**

RW: *I bleed orange and blue! I went to the University of Florida majoring in entomology with a specialization in biosecurity. I started working with biological control my freshman year and found my passions in invasive species and ways to manage them.*

Continued..

Editor: **Did you take time off from school after your undergrad? If so, what did you do?**

RW: *I graduated from UF in May 2018 and moved to Baton Rouge to work for Dr. Rodrigo Diaz. I worked for a year and a half in his lab on the biological control of giant salvinia. That experience helped me acclimate to Louisiana's ecosystem and learn more about aquatic plant management, but I felt I needed to earn a master's in aquatic weed science to have a better understanding of plants and chemical control.*

Editor: **What are you studying for your Master's?**

RW: *My research will focus on Cuban bulrush (Oxycaryum cubsense) and its two different biotypes as it becomes an increasing problem in the Southeast U.S. Specifically in Louisiana, Cuban bulrush grows in conjunction with giant salvinia, which may impact current giant salvinia management practices. For my research, I'd like to investigate the biological differences between the two Cuban bulrush biotypes, examine the competition of growth between Cuban bulrush and giant salvinia, and conduct various herbicide screenings on Cuban bulrush alone and a mixed population of Cuban bulrush and giant salvinia.*

Editor: **Were aquatic plants pretty foreign to you once you began your research, or was it a situation where you saw them a lot but never really paid them much attention** ?

RW: *I noticed aquatic plants when I was growing up, but I never really paid much attention to them until I learned about invasive plants. I had experience with hydrilla at UF, but it was limited to the entomology/ biosecurity side of aquatic plant management. Working as an independent researcher for the first time in Dr. Diaz's lab showed me that there were major gaps in my knowledge when it came to aquatic plants and chemical control.*

Editor: **What do you tell people when they ask what you are studying at LSU, and how often after you tell them do they seem confused and ask more questions like "So what will you do with that?" (I got this question so many times as a student and I finally decided to just say "agriculture"…)**

RW: *I start off by telling people that I study invasive species and ways to control them. If they look confused, I'll list out different invasive plants they may have encountered, explain what an invasive species is, and continue with different ways to control them. My mom is a biology teacher, so I've always had that inspiration to continue teaching others and help them understand something they might not know. I also think starting my career in biological control of invasive weeds helped me learn how to explain my field better because the majority of people don't know what that is (I'd get a lot of questions like, "Well, isn't that bug going to become invasive too?").*

Editor: **What do you do in your spare time besides study?**

RW: *I'll admit, I'm more a homebody than anything. My boyfriend and I have two dogs, so when we're not studying we typically spend time with them. I bounce around with different hobbies I have depending on the weather: if it's rainy or gloomy I'll crochet, read, or watch documentaries or true crime shows; if it's sunny we'll take the dogs somewhere to explore, ride our bikes, or play soccer or basketball.*

Editor: ***What was the last thing you listened to in your car or truck? (podcast, song, radio station)***

RW: *I was listening to a rerun of Casey Kasem's American Top 40 that was on the radio, and he played The Second Time Around by Shalamar. That song is so catchy and fun that it's been in my head ever since.*

Editor: ***I'm not familiar with Shalamar or I may have heard the song and just didn't know it was Shalamar. I'm usually listening to blues, 90's alternative rock, or 90's country. If you could learn something new what would it be?***

RW: *I would want to learn something hands-on, like carpentry or welding*

Editor: ***Welding is actually one thing I would like to learn too and I have access to a welder, but my brother has the "can fix anything gene" in my family... So do you have any pets?***

RW: *I have a corgi/Jack Russell mix named Mac and my boyfriend has a boxer/America bulldog mix named Otis.*

Editor: ***Are you a morning person or more of a night owl?***

RW: *I'm definitely a morning person – for some reason getting up before the sun and starting my day early just makes me happier! Breakfast is my favorite meal of the day too, so getting up early and cooking big breakfasts on the weekend is fun to me.*

Editor: ***Did you do anything cool for the LSU vs Clemson football national championship game? Or are you not much of a football fan?***

RW: *I'm not much of a football fan, but being around the LSU football culture is definitely intoxicating. We live right next to campus and tried to go to one of the restaurants to watch the game, but they were all packed out the door! I personally like other sports more than football, so I'm really excited that I get to go to sports events free as a student.*

Editor: ***If you could pick one to watch/read would it be Star Wars, Harry Potter, or Lord of the Rings? Or none?***

RW: *Lord of the Rings. I grew up watching the movie all the time with my dad. When I got into high school, I read the books, and my junior year of high school I got the Ring of Power instead of my high school class ring. I would take my dad's extended edition trilogy set and bring it over to my friends' houses to have movie marathons.*

Editor: ***If you were stranded on a deserted island, what 3 things would you take with you?***

RW: *A water purifier, a tarp, and a machete.*

Editor: ***Last question, What would you like to do after finishing school, career wise?***

RW: *I want to either work for a university or a federal agency. I love this field and what I do, so I hope that I can use whatever job I have to encourage a younger generation of students to pursue a career in aquatic weed science or in the study of invasive species.*

A Note From The Editor

Hopefully everyone had a great holiday season. I am always looking for good material to include in the MSAPMS newsletter. If anyone has any news regarding aquatic plant management or a unique experience that they would like to share in the newsletter, please contact me at one of the email address listed below.

Thank you

-B. Sartain

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Bradley.T.Sartain@usace.army.mil

Michael D. Netherland

Graduate Student Research Grant

Student initiatives are among the most important core values of the Aquatic Plant Management Society. At the top of the list of student support programs is the Michael D. Netherland Graduate Student Research Grant (GSRG) offered by APMS in the area of aquatic plant and algae management and ecology. This academic grant is co-sponsored by APMS and the seven regional APMS chapters: Florida, Mid-South, Midwest, Northeast, South Carolina, Texas, and Western.

The APMS GSRG was renamed in 2019 to honor the technical accomplishments and unique character of our friend and colleague, Dr. Michael D. Netherland. Mike had unrivaled passion for the science and practice of aquatic plant management. He trained under some of the discipline's most productive scientists. He worked in government research, academia, and private industry; providing him a great perspective on partnership and joint success. He studied all aspects of aquatic plant management including diverse collaborations examining basic biology, ecology, and genetics.

Mike published high-impact applied studies including numerous papers in the *Journal of Aquatic Plant Management*. He was a phenomenal technical resource to public agencies and private management firms around the U.S. and the world. His support and related research led to adoption of many new herbicide use patterns that fundamentally improved control practices in all types of aquatic systems. He directly advised graduate students at the University of Florida, participated on numerous other student advisory committees around the country, and was a mentor for countless young scientists. He served as President of APMS (2014) and Florida APMS (2009). Beyond and above all of that, he was son, husband, father, and great friend.

Michael D. Netherland Graduate Student Research Grant

Objective

The $40,000 Michael D. Netherland Graduate Student Research Grant is awarded biannually by the Aquatic Plant Management Society (APMS) for the most qualified proposal submitted. The objective is to provide a grant for a full-time graduate student to conduct research in an area involving aquatic plant management techniques (used alone or integrated with other management approaches) or in aquatic ecology related to the biology or management of regionally or nationally recognized nuisance aquatic vegetation (macrophytes, algae or cyanobacteria).

Solicitation for proposals is open to any full-time faculty member and/or graduate student of an accredited U.S. academic institution. A faculty sponsor must be identified if the application is submitted by a graduate student. Proposals are scored by an eight-member panel consisting of academic judges from APMS and each of the regional chapters. Grants are awarded at the July APMS Annual Meeting.

A total of $450,000 in Graduate Student Research Grants have been awarded since 1999. When sufficient funds are available, APMS may solicit proposals for additional grants funded exclusively through APMS, without regional chapter contribution (for example, the grant awarded in 2015 to North Carolina State University). APMS may also solicit proposals when entities approach APMS to cost share urgently needed aquatic plant or algae-related research within a specific region (for example: the Starry Stonewort Grant proposal solicitation that was awarded in 2017).

For additional information please visit https://www.apms.org/society/graduate-student-research-grant/

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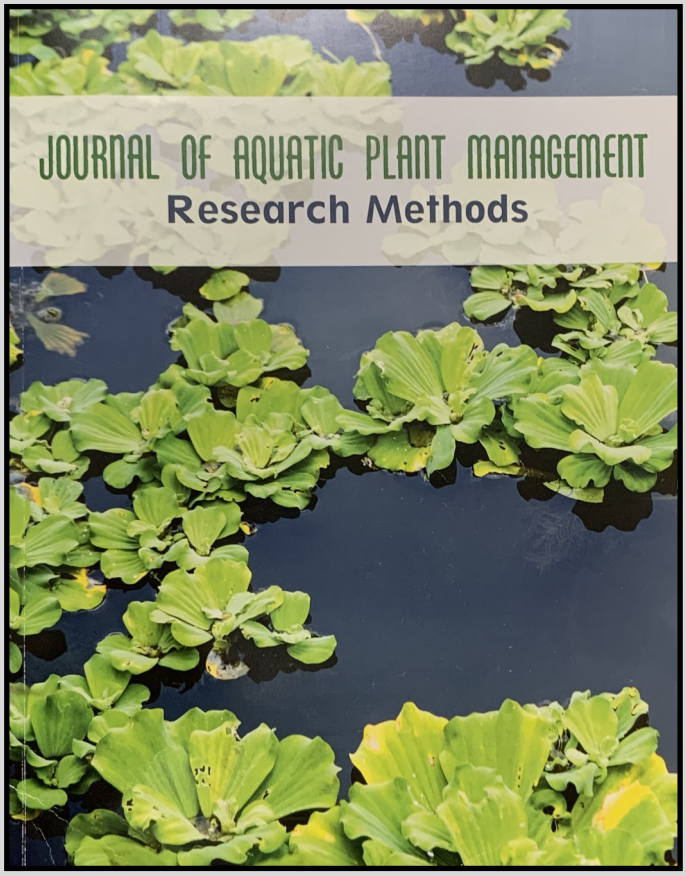
Journal of Aquatic Plant Management Research Methods




JOURNAL OF AQUATIC PLANT MANAGEMENT
Research Methods

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Journal of Aquatic Plant Management: Research Methods

The Aquatic Plant Management Society hopes this publication will set a standard for conducting high-quality research for the next several decades. As the pioneers of these techniques move into retirement, we hope this collection of articles will help prepare the next generation of aquatic plant managers to lead our discipline with innovation and passion.

-Jason Ferrell, Ph.D. Editor

Copies can be purchased from the Aquatic Plant Management Webpage www.apms.org

We graciously acknowledge the support of our partners in this project. Without them, this publication would not have been possible.

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Upcoming Annual Meetings/Events

July 19-22 Aquatic Plant Management Society San Antonio, TX

Joint Meeting APMS (60th Anniversary) & TAPMS

July 19-22 Texas Aquatic Plant Management Society San Antonio, TX

Aug 30 - Sep 3 American Fisheries Society (150th Anniversary) Columbus, OH

Sep 30 - Oct 2 South Carolina Aquatic Plant Management Society North Myrtle Beach, SC

October 5-8 Florida Aquatic Plant Management Society Daytona Beach, FL

October 26-28 MidSouth Aquatic Plant Management Society Mobile, AL

November 16-20 North American Lake Management Society Minneapolis, MN

2021

January 12-14 Northeast Aquatic Plant Management Society Hyannis, MA

February 22-25 Midwest Aquatic Plant Management Society Grand Rapids, MI