

Aquatic Plant News

The Newsletter of the Aquatic Plant Management Society, Inc. May, 2021 – Issue 126



CONTENTS:

- APMS President's Update
- APMS 61th Annual Meeting
- 2021 APMS Annual Business Meeting and Voter Eligibility
- Officer and Director Nominee Bios
- News and Updates from Regional Chapters
- 2021-2022 Calendar of Events
- In Memoriam: Dr. David Hall
- Partnership In Action
- Washington Update
- General Membership Info & Sustaining Members

APMS President's Update

Fellow APMS Members,

As I type this message finals week is upon me and the academic year is coming to end, and like many of you I am looking forward to the research season. Research results in data (hopefully), data results in presentations, and presentations should be given at the upcoming 61st Annual APMS meeting in New Orleans, Louisiana. I realize that there is still uncertainty and hesitation with some in regards to travel and meetings, but it will be good to have an in-person meeting this summer and I look forward to catching up with colleagues and friends (believe it or not the 2018 meeting was the last meeting I attended). Please give thoughtful consideration in submitting an abstract for the in-person or the virtual meeting platform. Abstract submissions will be accepted until May 15, check the website for all meeting related information http://www.apms.org/ annual-meeting/2021-annual-meeting/.

The Aquatic Plant Management Society has been a co-signatory on a number of letters to congress, some which are outlined below.

- Letter to House Rule Committee
 Chairs opposing Representative
 Brian Mast's Amendment 43, which
 suggested prohibiting USACE from
 using approved aquatic herbicides
 to protect ecosystems, public safety,
 and infrastructure 7/28/2020
- Letter of support for Department of Interior's Invasive Species Strategic Plan, collaboration with other Weed Science Societies - 10/9/2020
- Letter urging APMS members to oppose legislation that would amend FIFRA (CropLife America and other Weed Science Society Chapters supporting as well) -10/12/2020

- Letter from NALMS encouraging joint collaboration between NALMS and APMS - 11/6/2020
- Urging completion of FY2021 appropriations bills without delay (to Senate and House of Representatives leadership, jointly with LOTS of other scientific organizations) - 12/8/2020

Lee Van Wychen (WSSA Science Policy Director) organized, and led, several virtual meetings with congressional staffers this past November. I along with Past Presidents Heilman, Richardson, and Layne joined the meetings to discuss upcoming legislation that would impact APM activities. Primary topics included support for USACOE APCRP funding at the Senate level, supporting the Senate's version of the 2020 Water Resources Development Act (WRDA), and opposing H.R. 7940 and S. 4406, the Protect America's Children from Toxic Pesticides Act.

The list of staffers included:

- Turner Bridgforth (Rep. Jim Hagedorn-R-MN)
- Dr. Pete Wyckoff (Sen. Tina Smith-D-MN)
- Brian Werner (Sen. Amy Klobuchar-D-MN)
- Payne Griffin (Sen. Mike Braun-R-IN)
- Nancy Martinez (Sen. Todd Young-R-IN)
- Cory Harris (Rep. Jim Baird-R-IN)
- Leigh Whittaker (Rep. David Price-D-NC)
- Josh Bowlen (Sen. Richard Burr-R-NC)
- Corey Weber (Sen. Thom Tillis-R-NC)

We hope to continue these staffer visits in the future in several other states. If Lee reaches out to you please consider volunteering.

In an effort to increase awareness of APMS and our activities Mark Heilman has been working very hard behind the scenes to strengthen partnerships with NALMS, USACOE, and AWWA. He has been instrumental in bringing key people together in order to plan, organize, and deliver seminars on topics that have broad appeal to many water management professionals. Be sure to read his update in this issue of the newsletter. Pursuant to



increased awareness of APM and the Society, the Society joined the North American Invasive Species Management Association at the Leader level. This new partnership will get APMS in front of more researchers, local government, and management personnel nationwide. APMS is also sponsoring a seminar during the upcoming National Invasive Weed Awareness Week (https://naisma.org/2021/04/27/nisaw-continues-with-part-ii-in-may/) where APMS and our members will be highlighted.

Finally, I would like to thank Erika Haug, John Madsen, and anyone else that gave an APMS update presentation on my behalf; your contributions are greatly appreciated. I would also like to give a huge thanks to Amy Giannotti for keeping things organized and functioning, and also for putting up with me this past year.

Sincerely,

Ryan M. Wersal, Ph.D. President – APMS

of m. Wesel

2021 APMS Annual Meeting

The arrangements are well underway for the 61st Annual Meeting of the Aquatic Plant Management Society to be held at the Riverside Hilton in New Orleans, Louisiana, from July 12-14, 2021 with a virtual component to be held July 27-29, 2021. This year's meeting is in the region of the MidSouth Aquatic Plant Management Society, so regional presenters are strongly encouraged to submit an abstract. Please check the APMS website regularly for information and updates regarding the 61st Annual Meeting.



Meeting Formats:	 Participants and attendees for this year's conference can attend in-person or virtually. APMS will hold an in-person conference at the Riverside Hilton in New Orleans, Louisiana, from July 12-14, 2021. In addition, APMS will hold a virtual conference July 27-29, 2021. All in-person talks will be recorded and either played during the subsequent virtual conference or made available on demand. All presentations for the virtual conference will be pre-recorded, and additional instructions for those will be forthcoming. All talks at the in-person conference will be live; pre-recorded presentations will not be available at the in-person conference.
Meeting Registration:	This year's meeting begins on a Monday, and presentations will begin on Tuesday morning. Early registration (\$395 per person) is available until June 14. Thereafter, registration will be \$470 per delegate. The registration portal is available on the website at https://www.apms.org/annual-meeting/2021-annual-meeting/ .
Hotel Reservations:	Rooms at the Riverside Hilton can be reserved online by visiting https://book.passkey.com/go/AquaticPlantManagement2021 , or by calling 504-561-0500 / 1-800-hiltons. Please reference the Aquatic Plant Management Society Annual Conference to receive the group rate. Room rates start at \$169 per night until June 11 and/or while rooms last. Afterwards, the rate goes up to the standard rate of \$214 per night (subject to change).
Call for Abstracts:	The Call for Abstracts was open through May 15. Acceptance of contributed papers will occur after the deadline and will be confirmed by a separate e-mail. Additional presentation format details will be provided then.
Poster Presentations:	The in-person conference will not have our traditional poster reception. However, we will offer a poster presentation format virtually. Details about virtual poster formatting will be forthcoming and will be posted on the APMS website. Acceptance of posters will occur after the abstract deadline and will be confirmed by a separate e-mail.
Student Attendance & Participation:	The society will provide complimentary registration to presenting students (in person or virtual). We plan to hold a graduate student session for the virtual conference, and any graduate student presentations given in-person will be recorded and included in the virtual session. Students that choose to attend in-person will be responsible for covering travel and hotel accommodations. Students may contact the Program Chair (Dr. Ryan Thum; ryan. thum@montana.edu) or the Student Affairs Committee Chair (Samantha Sardes; sam.sardes@solitudelake.com) with questions.
Sponsorship & Exhibitor Information:	The Annual Meeting provides an excellent forum to exhibit products and services and interact with key people involved in aquatic plant management throughout the country. The Exhibit Hall is also the site of daily continental breakfasts and refreshment breaks to increase interactions and discussion among exhibitors and meeting attendees. There are a variety of sponsorship options for those individuals, agencies, or companies interested in sponsoring the meeting, and their support is recognized across several platforms during the meeting and throughout the year. For additional details about how to become a sponsor, please visit http://www.apms.org/annual-meeting/2021-annual-meeting/2021-sponsor-and-exhibitor-information/ . For general questions, please contact Dean Jones (863-209-4015, dean.jones@upl-ltd.com). For assistance processing a payment or if you need an invoice, please contact Justin Nawrocki (919-429-2185, APMS14@Hotmail.com).

2021 APMS Annual Business Meeting and Voter Eligibility

ARTICLE IX. MEETINGS of the APMS Bylaws requires that there shall be an annual meeting of the Society during which time the membership will elect officers and directors for the ensuing year as well as conduct other business as deemed necessary. APMS has traditionally fulfilled these requirements during the July Annual Meeting. Other business has historically included membership votes on proposed changes to the Bylaws and approval of officer and committee reports presented to the general membership in attendance during the Annual Business Meeting.

The 2021 Annual Meeting scheduled for July is incorporating both an in-person and a virtual meeting platform; therefore, to satisfy Bylaws requisites, the Board intends to provide officer and committee reports, as well as a slate of officers and directors and Bylaws amendments proposed by the Board for approval by members in good standing with the Society. Members in good standing are described in ARTICLE XII. MEMBERSHIP of the APMS Bylaws as all Individual, Student, Honorary and one representative from a Sustaining Membership with current, paid-up dues.

Historically, members have been able to check and renew their membership status on the APMS website under the Members Only tab. This year marks the first year that membership renewals will be done in conjunction with meeting registration. If you have already renewed online, no problem. If you plan to renew when registering for the Annual Meeting, your information will be incorporated and updated as well. Please check to see that your contact information is also up to date on the website as well.

The APMS Board is developing an online platform to cast votes for the slate of officers and directors and any proposed amendments prior to the Annual Business Meeting to be held virtually July 27-29, 2021 (exact date and time TBD). Officer and committee reports will be posted for review on the APMS website in early July. Members will be notified by email and on the website as to the details for when and how to cast their votes.

2021-2022 APMS Officer and Director Nominees

The following candidates have been selected by the Nominating Committee for consideration to serve on the APMS Board of Directors. The Nominating Committee suggests a slate of candidates for positions that are about to come open on the Board. Each candidate must meet specific criteria set forth in the APMS Bylaws. The Board of Directors has approved the slate and active members will vote to approve or amend the slate of proposed officers and directors. Members will be notified in the coming weeks as to how to cast votes prior to the Annual Business Meeting – which will have both an in-person component and a virtual component – in July 2021.

Office	Name	Affiliation	Location
Vice-President	Dr. Jason Ferrell	UF/IFAS Center for Aquatic & Invasive Plants	Gainesville, FL
Director	Dr. Toni Pennington	Environmental Science Associates	Bend, OR
Director	Mr. Matthew Johnson	Aquatic Control	Seymour, IN
Editor	Dr. Ramon Leon	NC State University	Raleigh, NC

APMS Needs You!

There are currently 16 committees active in APMS, and each plays an integral role in moving the Society forward, making sure the annual meeting is a success, and working to grow our organization. Each committee is led by a Chair who organizes the meetings throughout the year and provides direction for the committee members. New ideas, suggestions for change, and feedback for the Society are important functions of these committees. Members of APMS are encouraged to volunteer to serve on a committee and we would love to have you!

Officer and Director Nominee Bios



Dr. Jason Ferrell earned a B.S. and M.S. in Plant and Soil Science from the University of Kentucky in 1998 and 2000, and a Ph.D. in Weed Science from the University of Georgia in 2003. He joined the University of Florida as an Assistant Professor in 2004 with responsibilities in weed management and herbicide stewardship. In the time since, he has attained the rank of Associate Professor (2009) and Professor (2014). Dr. Ferrell became the Director of the UF's Center for Aquatic and Invasive Plants in 2017 where he helps coordinate and promote invasive plant research and extension activities throughout the UF Institute of Food and Agricultural Sciences (IFAS). In 2019 he took leadership of the IFAS Pesticide Information Office which directs pesticide licensing/testing and extension outreach activities for pesticide safety and compliance. Dr. Ferrell has chaired or co-chaired 22 graduate students and published over 110 refereed journal articles in his career. He currently serves as Editor of the Journal of Aquatic Plant Management and sits on the Board of Directors of the Aquatic Plant Management Society.



Dr. Toni Pennington is an aquatic biologist with more than 20 years of experience in the research and management of nuisance aquatic plants across the western U.S.; developing and implementing sampling and analysis plans for freshwater systems; developing AIS management plans across multiple local, state, and federal agencies; conducting wetland delineations according to regional USACE guidance; supporting water quality and aquatic plant studies for FERC licensing projects; and conducting vegetation surveys. Her research on aquatic plants has included physiological studies to improve management of nonnative species, ecological studies on nutrient requirements, and herbicide efficacy studies to determine lowest dose requirements for management. She has led numerous multi-year projects in reservoirs and rivers developing integrated aquatic vegetation management plans, providing treatment recommendations, and supporting clients in developing bid specifications for a variety of controls including diver-assisted handpulling, installation of benthic barriers, and the application of EPA- and state-approved aquatic herbicides. Toni volunteers in a number of organizations related to the prevention and control and AIS, including the Western Aquatic Plant Management Society where she has served in all board positions, Oregon Lakes Association (current Director), Washington Lake Protection Association, North American Lake Management Society, Columbia Basin Cooperative Weed Management Area, and Western Regional Panel on Aquatic Nuisance Species. Toni received her PhD from Portland State University, MS from Texas State University, and BS from Fort Lewis College, and she has also co-authored peer reviewed articles and book chapters on AIS.



Mr. Matthew Johnson serves as President of Aquatic Control, where he has been employed since 1993. His career has spanned all facets of company operations, including work in shipping, aquatic vegetation management, fish population surveys, fountain/aeration systems installation, fisheries management and stocking, and revegetation projects. He has extensive experience in managing Eurasian watermilfoil, as well as marketing and business operations related to aquatic plant management. He holds a B.S. degree in business administration with an emphasis in marketing from the University of Southern Indiana. Mr. Johnson's professional affiliations include the Indiana Lake Management Society, Illinois Lake Management Association, Ohio Lake Management Society, The Aquatic Plant Management Society, The Midwest Aquatic Plant Management Society, The Mid-South Aquatic Plant Management Society, Aquatic Ecosystem Restoration Foundation, Responsible Industry for a Sound Environment, Indiana Professional Lawn and Landscapers Association, Indiana Golf Course Superintendents Association, and the Midwest Regional Turf Foundation. He is a PADI Certified SCUBA Diver. In his spare time, Mr. Johnson enjoys hiking, golfing, or other adventures with his wife and two sons.



Dr. Ramon Leon is an associate professor of Weed Biology and Ecology in the Department of Crop and Soil Sciences, North Carolina State University, USA. Previously, he was an associate professor of Weed Science at the University of Florida, USA, professor of Weed Science at EARTH University in Costa Rica, and assistant professor at California Polytechnic State University, San Luis Obispo, USA. Dr. Leon obtained a Ph.D. (2005) and M.S. in Crop Production and Physiology (2003) with emphases on Weed Science and Seed Science, and a Ph.D. in Genetics (2005) from Iowa State University, and a B.S. in Agronomy (2000) from the University of Costa Rica. His research has focused on understanding changes in weed dynamics in response to management and environmental factors. He has published over 112 peer-reviewed scientific articles, 2 book chapters, and 202 abstracts. He is an associate editor for Weed Science, Weed Research, Peanut Science, and previously for the journals Weed Technology and Agronomy.

News and Updates from Regional Chapters

From FAPMS

The Florida APMS Board of Directors met April 22, 2021, for their second quarter Board meeting. The Board made two significant decisions relative to APMS that were announced: First, plans are being made to proceed with hosting an in-person meeting of the 45th Annual Florida Aquatic Plant Management Society Training Conference from October 11-14, 2021, at the Hilton St. Petersburg Bayfront in St. Petersburg, FL.

Dr. Brett Bultemeier is serving as Program Chair, and abstracts should be submitted to him at bwbult@ufl.edu. Scott Jackson is overseeing the Vendor Committee, and he is welcoming sponsorships and exhibitors. Interested sponsors, vendors, and exhibitors can contact him at scott.jackson@syngenta.com. It's not too early to think about nominations for the Aquatic Plant Manager of the Year or the Michael D. Netherland Exemplary Colleague Award. Information about these awards is available on the FAPMS website (fapms.org), and nominations can be submitted to FAPMS President Jeremy Slade at jeremy.slade@upl-ltd.com.

Second, it was decided that Aquatics magazine, the official publication of the Florida Aquatic Plant Management Society, will be made available via hardcopy to Florida members and via email to regional chapter leadership for distribution to regional chapter members. Persons interested in receiving a hardcopy via mail will need to be an active member of the Florida Aquatic Plant Management Society. In addition, issues will be uploaded to and archived on the website two issues after initial publication.

From MAPMS

The Midwest Aquatic Plant Management Society in keeping with the effort to limit the spread of Covid-19 made the difficult decision to cancel our annual conference. We were able to hold our annual business meeting using a virtual setting in February. Along with all normal society business, we awarded our Robert L. Johnson Memorial Student Research Grant to Amber White of the University of Wisconsin and Michael

Verhoeven of the University of Minnesota. Amber will be researching the Photodegradation and long-term persistence of fluridone in whole-lake treatments, a compliment endeavor to her research looking at degradation of other chemistries (i.e. 2, 4-D and florpyrauxifen-benzyl). Michael's project will investigate the Re-establishment of native species after invasive species control, a project based in better understanding one of the core invasive plant management principals. We congratulate both students, wish them well in their research activities, and look forward to seeing a research update presented at the 2022 annual conference.

As part of our continuing efforts to promote the science behind the aquatics industry the MAPMS will be supporting the Pennsylvania Department of Conservation and Natural Resources, along with support from nine other groups, to host its first Plant Camp in August 2021. The three-day program will give 15 teachers the opportunity to learn more about aquatic plant management. The teachers will receive classroom instruction, field training, and materials to take back to their own classrooms. The program will be based at Pymatuning State Park in Jamestown, PA. The program staff and participants will be lodged at the University of Pittsburgh's Pymatuning Laboratory of Ecology. The program will also visit Presque Isle State Park, Conneaut Lake, Erie National Wildlife Refuge, and MK Goddard State Park. The participants will see a variety of waterbodies and aquatic plant communities. The camp will cover aquatic plant identification, management methods, and survey techniques.

Finally, in gratitude of his many years of service to MAPMS and many other organizations involved in the aquatics industry. The Midwest Aquatic Plant Management Society has bestowed upon Mr. Joseph Bondra an honorary membership. Joe has dedicated his time to helping many businesses succeed in this industry, directing government policy and educating others on the importance of aquatics. We look forward to seeing all our members at our next conference. Feb 27th to March 3rd, 2022 in Lake Geneva, Wisconsin. Please visit MAPMS.org for more details.

More Exciting News!

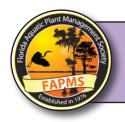
Dr. Susan Wilde, past member of the APMS Board of Directors, and colleagues continue to expand their research on and our knowledge of the causes of vacuolar myelinopathy in herbivores and higher order consumers associated with the toxin-producing species of novel cyanobacteria (*Aetokthonos hydrillicola*) on Hydrilla. Their recent publication in *Science* is available at: Study: Breinlinger S. et al. A cyanobacterial neurotoxin causes vacuolar myelinopathy. *Science* (2021). DOI: 10.1126/science.aax9050 https://science.sciencemag.org/lookup/doi/10.1126/science.aax9050

2021-2022 Calendar of Events for Regional Chapter Meetings & Related Events



SC APMS October 6-8, 2021

North Myrtle Beach, SC http://scapms.org/meetings.html



Florida APMS October 11-14, 2021 St. Petersburg, FL

https://fapms.org/conference/2021-conference/



Texas APMS November 15-17, 2021 Bryan, TX

https://www.tapms.org/2021-annualmeeting/



Midwest APMS February 27 - March 3, 2022 Lake Geneva, WI

https://www.mapms.org/ conferences/2022-conference/



Western APMS March 7-11, 2022

Tucson, AZ

https://wapms.org/events



It is with great sadness that we remember our friend and colleague, Dr. David Hall. David had a gift for communicating technical information in a way that we all could understand and with a presence that made us want to learn more. David's accomplishments in aquatic plant management are many. He was a renowned botanist whose contributions in the fields of plant identification, forensics, threatened and endangered species, and wetland delineation are unmatched. During his career, he published 15 books and over 150 articles that elevated our knowledge about everything from wildflowers to turf grasses to wetland plants and more.

Beginning in the early 1980s while working as the Director of the Plant Identification and Information Services at the University of Florida, David formed a partnership with the Florida Department of Natural Resources using his skills training staff in plant identification

and mentoring many biologists along the way. David didn't just share his knowledge with scientists though; he was a gifted teacher to teachers, too. For 14 years, David served as an instructor at Plant Camp, sponsored by the University of Florida's Center for Aquatic and Invasive Plants and the Florida Fish and Wildlife Conservation Commission, inspiring educators to incorporate hands-on lessons in aquatic plant and invasive species management into their elementary, middle, and high school curricula.

David received many accolades over the years, and it is obvious that his leadership was equally matched by his generosity, service, kindness, professionalism and intellect.

We encourage you to visit this memorial website to leave remembrances for his family and friends: https://www.david-w-hall.net

Partnership in Action

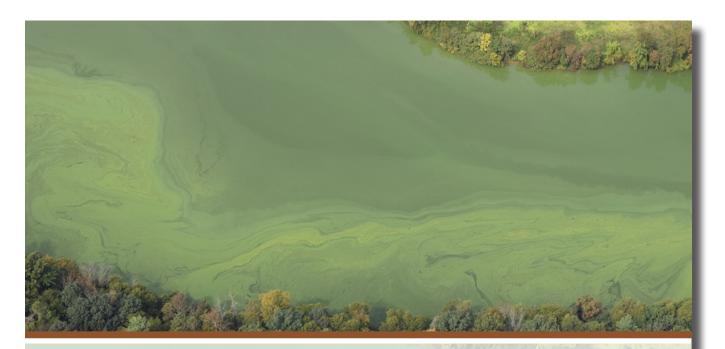
Update from Mark Heilman, APMS Immediate Past President

APMS has a history of collaborating with a variety of organizations focused on aquatic resource management. In the last 12 months, partnership examples include:

- collaboration with the North American Invasive Species Management Association (NAISMA) and other
 parties to offer presentations on aquatic plant management topics as part of National Invasive Species
 Awareness Week (NISAW 2020 presentation by Dr. Rob Richardson: https://youtu.be/846QLOV98ko);
- 2. work with the **Weed Science Society of America (WSSA)** and the **National Coalition of Food and Agricultural Research (NC-FAR)** to offer an overview of Harmful Algae Management by Dr. Ken Wagner (https://www.ncfar.org/HSS 20200608 Presentation.pdf)
- teaming with the Invasive Species Leadership Team (ISLT) of the US Army Corps of Engineers Research
 and Development Center on a fall 2020 webinar series (https://corpslakes.erdc.dren.mil/employees/learning.cfm) highlighting latest research and management strategies for control of invasive aquatic plants and harmful algae.
- 4. worked with the **North American Lake Management Society (NALMS)** to offer a special session on harmful algae management at the November 2020 NALMS virtual conference. (https://www.nalms.org/nalms2020/). Similar joint content is also planned for both future APMS and NALMS conferences along with other partnership efforts between the two Societies.

These collaborative efforts have allowed interaction between members and interested parties across aquatic disciplines to promote common vision and future cooperation in aquatic research, management, and outreach. The enhanced use of online platforms because of pandemic limits on conferences and other physical events has allowed contact with broader audiences with useful, cross-disciplinary information. While thankfully we begin to see a gradual resumption of in-person events, online communications will remain enhanced. APMS will continue to partner with many groups and take advantage of online platforms to fulfill its mission and enhance science and management of aquatic plants and algae. All APMS members are invited to participate and circulate information to other prospective attendees about the following upcoming events:

- NISAW 2021 Webinar Aquatic Plant Management Priorities by APMS President Ryan Wersal and Jeremy
 Crossland and Mike Greer with Corps of Engineers as part of NISAW 2021 Thursday May 20th 2 pm Eastern,
 1 pm Central. https://us02web.zoom.us/webinar/register/WN_flJS5cvBSzKJyRdY0MXrxA
- Comprehensive Strategies to Protect Drinking Water from Harmful Algal Blooms A five-week seminar series developed collaboratively by the American Water Works Association (AWWA), NALMS, Corps ERDC-ISLT, and APMS. Wednesdays @ 1 pm Eastern, June 23 July 21. See the preliminary announcement here in the newsletter. The technical contributors and abstracts for this interdisciplinary series will be announced shortly and will include presentations from multiple federal and state agencies as well as other public and private partners engaged at all phases of drinking water's journey from watershed to the tap. Seminar series information and content will be available through the Corps Learning Exchange website. https://corpslakes.erdc.dren.mil/employees/learning/index.cfm



SUMMER SERIES 2021

COMPREHENSIVE STRATEGIES TO PROECT DRINKING WATER FROM HARMFUL ALGAL BLOOMS

June 23 | HAB Impacts to Drinking Water and Current Management Outlook

Source Water Protection in the

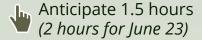
Watershed

July 7 Mitigation of Internal Nutrient Loads in Drinking Water Sources

July 14 Harmful Algae Management

July 21 From Intake to the Tap

Webinars begin at 12:00PM CST



Log-In information will be provided weekly and posted to the link below

<u>https://corpslakes.erdc.dren.mil/employees/invasive/exchange.cfm?</u> <u>option=CurrentSchedule</u>

The USACE Invasive Species Leadership Team in collaboration with the Aquatic Plant Management Society, North American Lake Management Society, and the American Water Works Association will summarize the latest research and technical information on management strategies to encourage better integration and facilitation in the protection of drinking water.



June 30









April 30, 2021 By, Lee Van Wychen

National Invasive Species Awareness Week (NISAW)- Part II

NISAW Part II - Outreach and Education – is May 15-22, 2021 and will focus on local invasive species prevention, removal, and educational events. If you are coordinating or aware of invasive weed removal or educational events, please add it here. The North American Invasive Species Forum is also being held virtually during NISAW Part II. The Forum is an international event encompassing the interests of professionals involved in invasive species management, research, and regulation across North America. To learn more and register for the North American Invasive Species Forum, click here.

The five webinars offered during NISAW II will focus on invasive species prevention and control:

- May 17: The Climate Crisis and Invasive Species
- May 18: The Model Legislative Framework for State Aquatic Nuisance Species Programs
- May 19: The Regulatory Process for Classical Weed Biological Control
- May 20: Aquatic Plant Management Priorities
- May 21: A Comparison of State Noxious Weed Lists and The Western Weed Action Plan

The May 20th webinar on Aquatic Plant Management Priorities is sponsored by APMS and will feature the following three presentations:

- **Presentation 1** An Overview of the Aquatic Plant Management Society (APMS) presented by **Dr. Ryan Wersal**, President of APMS and Assistant Professor of Aquatic Plant Ecology in the Department of Biological Sciences at Minnesota State University Mankato
- **Presentation 2** Hydrilla in the Connecticut River presented by **Dr. Greg Bugbee** with the Connecticut Agricultural Experiment Station
- **Presentation 3** Challenges and Successes with Long-Term Control of Invasive Weeds presented by **Jeremy Crossland** and **Mike Greer** with the U.S. Army Corps of Engineers

The May 21st webinar will feature a presentation by **Dr. Jacob Barney** from Virginia Tech, Chair of WSSA's Noxious and Invasive Weed and Biocontrol Committee. His presentation will focus on variations in how states regulate noxious weeds and how state noxious weed lists are reactive, not coordinated, and incongruous with biology.

National Invasive Species Awareness Week (NISAW): Part I

NISAW Part I was February 22-26, 2021 and included a policy focused webinar series during the week in which over 1,900 people registered. The U.S. federal agencies responsible for invasive species management in aquatic and terrestrial ecosystems, in general, have sufficient legislative authority from Congress to manage invasive species. However, federal invasive species programs remain extremely underfunded. In FY 2020, the Department of the Interior estimated it spent \$143 million to manage invasive species for 400+ million acres of public lands. That's roughly 35 cents per acre for all invasive species research, prevention, EDRR, management and restoration. As invasive species stakeholders, we need to seek full appropriations as authorized for these programs. That was the central theme of the NISAW webinar I presented titled "Show Me the Money". The recorded presentations are available at: www.nisaw.org/nisaw-2021/.

Pinkham Serving as Acting Assistant Secretary of the Army for Civil Works



Mr. Jaime A. Pinkham was appointed Principal Deputy Assistant Secretary of the Army for Civil Works on April 19, 2021, and is also serving as the Acting Assistant Secretary of the Army for Civil Works.

Prior to his appointment, Mr. Pinkham served as the executive director of the Columbia River Inter-Tribal Fish Commission in Portland, OR since 2017. Prior to that position, he was the vice president of the Bush Foundation in St. Paul, MN. He led the Foundation's Native nations program and worked with tribes across ND, SD and MN as they redesigned their governing systems. He spent the previous two decades in the Pacific Northwest advocating for tribal sovereignty, self- determination and treaty rights.

AQUATIC PLANT NEWS / 11



[Continued]

2020 WRDA Authorizes Over \$100 Million for Invasive Species Management

The 2020 Water Resources Development Act (WRDA) was included as part of the massive 5000+ page Consolidated Appropriations Act of 2021. WRDA bills are authorization bills enacted by Congress to deal with various aspects of water resources such as environmental, navigational, and flood protection issues that are mostly administered by the U.S. Army Corps of Engineers (ACOE). This is the 14th WRDA bill enacted since 1974 and the fourth since 2014.

New invasive species provisions included in 2020 WRDA:

- Authorizes \$25 million for a Harmful Algal Bloom (HAB) demonstration program to "determine the causes of, and implement
 measures to effectively detect, prevent, treat, and eliminate, harmful algal blooms associated with water resources development
 projects." The HAB demonstration program will be carried out by ACOE with focus areas in the Great Lakes, the tidal and inland
 waters of New Jersey, the coastal and tidal waters of Louisiana, the waterways of the counties that comprise the Sacramento-San
 Joaquin Delta, California, the Allegheny Reservoir Watershed in New York, and Lake Okeechobee, Florida.
- Requires the Army Corps to add "prevention" to its aquatic invasives species research (33 U.S. Code § 2263a). Specifically: "As
 part of the ongoing activities of the Engineer Research and Development Center to address the spread and impacts of aquatic
 invasive species, the Secretary (of the Army) shall undertake research on the PREVENTION, management and eradication of aquatic
 invasive species, including Asian carp, ELODEA, QUAQQA MUSSELS, and zebra mussels."
- Directs the Army Corps to conduct a **terrestrial noxious weed control** pilot program in consultation with the Federal Interagency Committee for the Management of Noxious and Exotic Weeds (FICMNEW) "to identify and develop new and improved strategies for terrestrial noxious weed control on federal land under the jurisdiction of the Secretary (of the Army)".
- Authorizes \$50 million per year for FY 2021 2024 for ACOE to "enter into partnerships with applicable States and other Federal
 agencies to carry out actions to prevent the introduction of, control, or eradicate invasive species that adversely affect water
 quantity or water quality" in the Platte River Basin, the Upper Colorado River Basin, the Upper Snake River Basin, and the Upper
 Missouri River Basin. ACOE shall give priority to projects that are intended to control or eradicate Russian olive (Elaeagnus
 angustifolia) or saltcedar (of the genus Tamarix).
- Authorizes \$10 million for the Secretary of the Interior, acting through the Director of the U.S. FWS, to establish a pilot program "to remove invasive plant species in riparian areas that contribute to drought conditions" in the Lower Colorado River Basin; the Rio Grande River Basin; the Texas Gulf Coast Basin; and the Arkansas-White-Red Basin; and where appropriate, to replace the invasive plant species with ecologically suitable native species and to maintain and monitor those riparian areas.
- Authorizes \$25 million for the Secretary of the Interior, acting through the Director of the U.S. FWS, to establish a pilot program "to develop and carry out effective measures necessary to prevent, control, or eradicate aquatic invasive species in alpine lakes that are not located within a unit of the National Park System."

Regan Confirmed as EPA Administrator



Michael S. Regan (pronounced REE-gan) was confirmed by the Senate on March 10 by 66-34 vote to serve as the 15th Administrator of the U.S. EPA.

Regan is a native of Goldsboro, NC and received a B.S. in earth and environmental science at North Carolina A&T State University. He received a Master of Public Administration from George Washington University and worked at EPA from 1998 to 2008 working on air pollution issues. He then joined the Environmental Defense Fund (EDF) for eight years before being selected by NC Governor Roy Cooper in 2017 to serve as the secretary of the NC Department of Environmental Quality.

12 / AQUATIC PLANT NEWS



[Continued]

WSSA Comments on Endangered Species Act Assessments for Triazines and Glyphosate

Last fall, EPA released its draft biological evaluations (BEs) for the triazines and glyphosate for review and comment. Biological evaluations (BEs) are the beginning of EPA's Endangered Species Act (ESA) consultation review process for pesticides where they determine if an endangered or threatened species or critical habitat could be affected by the use of that pesticide.

The WSSA submitted separate comments for the <u>triazines</u> and <u>glyphosate</u>. In general, EPA's biological evaluations (BEs) lack a workable and consistent approach to endangered species assessments. An assessment process which essentially equates any exposure to a pesticide as a possible concern to any species does little to advance appropriate options which could be tailored to improve species protection. The implications of unrealistic analyses will result in unjustified restrictions on the use of both triazine and glyphosate products which remain critical weed management tools across the U.S.

The WSSA would like to thank the many weed scientists who submitted comments documenting actual use rates and patterns for these herbicides.

Vilsack Confirmed as USDA Secretary Again



On Feb. 23, 2021, the Senate confirmed Tom Vilsack by a 92-7 vote to lead USDA as the 32nd U.S. Secretary of Agriculture. Vilsack was serving as the CEO of the U.S. Dairy Export Council following the eight years he served in the Obama Administration as the 30th Secretary of Agriculture from 2009 to 2017. Prior to that, he served as governor of Iowa from 1999 to 2007. Vilsack is the first USDA Secretary to serve in two different administrations nonconsecutively. Vilsack earned his bachelor's degree at Hamilton College in Clinton, NY and his J.D. from Albany Law School. Vilsack and his wife Christie moved to Mount Pleasant, IA in 1975, where he joined his father-in-law's law practice. He became mayor of Mount Pleasant in 1987 and then was elected to the Iowa Senate in 1992 before becoming governor of Iowa in 1999.

Legislation to Boost USDA Research Funding Reintroduced

Senators Dick Durbin (D-IL) and Jerry Moran (R-KS) reintroduced the America Grows Act, S. 1371, that would require a five percent annual funding increase each year for the next 10 years for research activities at USDA's ARS, NIFA, NASS, and ERS. The U.S. share of total agriculture research investments among high-income countries as a group has declined from 35 percent in 1960 to less than 25 percent by 2013. By comparison, in the past 30 years, Chinese investments in agriculture research have risen eight-fold. The six National and Regional Weed Science Societies joined over 120 other organizations in a letter to Senate Agriculture and Appropriations Committee members supporting the America Grows Act of 2021.

Weed Science Societies Support Federal Investment in Ag Research Infrastructure

In 2021, Gordian assessed the state of facilities at U.S. Land Grant colleges of agriculture (1862, 1890, 1994) and reported that 69% of these buildings are at the end of their useful life. The report stated that the cost of upgrading deferred maintenance now is \$11.5 billion, and the replacement cost for the dilapidated facilities is \$38.1 billion.

The National and Regional Weed Science Societies joined many other stakeholder groups in a letter to the House and Senate Ag Committees strongly urging them to include a federal agricultural research infrastructure investment of \$11.5 billion over a period of five years. Such an investment is necessary to advance the critical work being done at Land Grant Universities across the country to support American jobs, recruit and graduate 60,000 new U.S. graduates annually with ag and natural resource management expertise, and ensure ongoing U.S. leadership in food and agricultural innovation.



[Continued]

Final Appropriations for FY 2021 and Weed Science Society Requests for FY 2022

The Consolidated Appropriations Act of 2021 that was signed into law (P.L. 116-260) on Dec. 27, 2020 making appropriations for the fiscal year ending September 30, 2021. The bill combined a \$900 billion Covid relief bill with the \$1.4 trillion for the 12 annual spending bills making it one of the largest spending measures even enacted by Congress. Below are final FY 2021 appropriations for certain federal agency programs with a focus on weed research and management in agricultural and natural ecosystems as well as the weed science societies request for FY 2022 appropriations.

	FY19 Final	FY20 Final	FY21 Final	Weed Science FY22 Request
	Millions			
USDA-ARS	\$1,303	\$1,414	\$1,492	\$1,721
USDA-NIFA	\$1,471	\$1,527	\$1,570	
- AFRI Competitive Grants	\$415	\$425	\$435	\$600
- Hatch Act (Exp. stations)	\$259	\$259	\$259	
- Smith Lever (Extension)	\$315	\$315	\$315	\$335
- IR-4 Program	\$12	\$12	\$12	\$20
-Crop Protection and Pest Management	\$20	\$20	\$20	\$25
USDA-APHIS: Cogongrass eradication**			\$3	\$4
Army Corps- Aquatic Plant Control research	\$6	\$6	\$7	\$13
EPA - Great Lakes Restoration Initiative	\$300	\$320	\$330	\$375
DOI – Wildland Fire: Fuels Management	\$189	\$194	\$220	\$240
DOI – BLM: Rangeland Management	\$104	\$106	\$106	\$116
DOI - FWS: National Wildlife Refuge System: Wildlife and Habitat Management	\$234	\$239	\$240	\$250

^{**} The final FY 2021 appropriation directs APHIS to reallocate \$3 million from its Field Crop and Rangeland Ecosystems Pests account to create a pilot program for the **control and eradication** of cogongrass focused on the following states: **Alabama, Georgia, Mississippi and South Carolina**.

Haaland Confirmed as Secretary of the Interior



Rep. Deb Haaland (pronounced HAH-lend) was confirmed by the Senate on March 15 by a 51 – 40 vote to lead the Department of the Interior. She is the first Native American to run the Department of the Interior in its 171 year history, and the first Native American Cabinet secretary in U.S. history. Haaland was born in Winslow, Arizona and is an enrolled member of the Laguna Pueblo. At 28, she enrolled at the University of New Mexico, where she earned a Bachelor of Arts in English in 1994. She earned her J.D. in Indian law from the University of New Mexico School of Law in 2006, but is not a member of the New Mexico State Bar. Haaland served as the tribal administrator for the San Felipe Pueblo from 2013 to 2015 and was elected to a two-year term as chair of the Democratic Party of New Mexico before being elected to the U.S. House of Representatives in 2018 for New Mexico's 1st District. She was subsequently re-elected for a second term in the House in 2020 before being nominated for Interior Secretary.

Incorporated in 1961 as a forum to share water hyacinth control experiences, today APMS and its seven Regional Chapters promote research and outreach to manage all species of aquatic plants and algae.



General Info for Membership, Etc.

The Aquatic Plant Management Society, Inc. is an international organization of scientists, educators, students, commercial pesticide applicators, administrators, and concerned individuals interested in the management and study of aquatic plants and algae. The membership reflects a diversity of federal, state, and local agencies, universities and colleges around the world, corporations, and small businesses.

VISION

The Vision of the Aquatic Plant Management Society is to be the leading international organization for scientific information on aquatic plant and algae management.

MISSION

The Mission of the Aquatic Plant Management Society is to provide a forum for the discovery and dissemination of scientific information that advances aquatic plant and algae management policy and practice.

MEMBERSHIP

Individual	\$95.00	Entitles member to vote, hold office, serve on committees, and receive publications
Student	\$20.00	Full time students receive same privileges as Individual member
Sustaining		Membership privileges for one designated representative; subscription to the Journal of Aquatic Plant Management, APMS newsletters, and access to the APMS Blog and social media content; quarterly issues of Aquatics magazine; recognition as a Sustaining Member in newsletters, the Annual Meeting Program, and on the APMS website

To join, visit this link: http://www.apms.org/society/membership/

To renew a membership, login and visit this link: http://www.apms.org/member-login/

Follow us and Learn More:



.....And Join the APMS Group on LinkedIn....

Sustaining Members

APMS would like to thank the following Sustaining Members who have renewed thus far for their support in 2021-2022. Generous annual contributions from these organizations and individuals support APMS education and outreach initiatives. Sustaining Membership costs \$500 and membership privileges include: one designated representative member; subscription access to the Journal of Aquatic Plant Management; recognition in APMS Newsletters, the Annual Meeting Program, and on the APMS website.

Additional Sustaining Members that renew after the publication of this newsletter will be recognized in the next edition.

