



Aquatic Plant News

The Newsletter of the Aquatic Plant Management Society, Inc.
7922 NW 71st Street, Gainesville, FL 32653
Jeffrey D. Schardt, Newsletter Editor

Issue 115

June 2017

Join us at the “World’s Most Famous Beach”

Daytona Beach, Florida

57th APMS Annual Meeting, July 16-19



The 2017 Annual Meeting of the Aquatic Plant Management Society will be held at the Hilton Daytona Beach Ocean Walk Resort July 16-19.

As you would imagine, the hotel block is almost full.

Please reserve your room as soon as possible.

Click [here](#) to go to the Hilton reservations site.

Reservations Toll Free: (866) 536-8477

Reservations Local Phone: (386) 254-8200

Please make your hotel reservations ASAP!

Last year, we filled our room block at the host hotel one full month before the meeting. When making your reservations by phone, be sure to mention that you are part of the Aquatic Plant Management Society. The cut-off date for reservations at the special group rate is June 24. We have a fantastic room rate of \$139.00 for single or double occupancy per night plus applicable tax. These group rates are available three days prior to the

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Join / Renew Membership

We're on the Web!
apms.org

Register Now for the 57th APMS Annual Meeting

conference and three days post-conference subject to availability. The Hilton Daytona Beach requires that all reservations be guaranteed with a major credit card or a deposit. Check in time is 4:00 pm and checkout time is 12:00 pm. If you choose to depart earlier than your reserved departure date, the hotel will charge one night room and tax.

Pre-Final Agenda

The Pre-Final Agenda is posted on the APMS web site under the [Annual Meetings](#) tab for planning purposes. Remember that the Annual Meeting is extended to 3:40 pm on Wednesday to accommodate General Sessions and Special Sessions on algae management and evolving technologies and strategies for managing aquatic plants in Florida waters. The Program and Meeting Planning Committees have assembled an excellent selection of more than 70 oral and poster presentations along with a number of interactive learning and social events for colleagues to share the latest research and operational strategies in managing aquatic plants and algae. A Final Agenda will be posted in early June.

Meeting Registration

Please register for the Annual Meeting as soon as possible to help our registration staff. Registration fees are \$300.00 for a delegate and \$130.00 for a guest (spouse, partner, child over 12) if received by June 16, 2017. After this date, registration fees will be \$375.00 for a delegate and \$155.00 for a guest. The meeting registration fee for students competing in the student presentation contest (oral or poster) is waived and the registration fee for a student not competing is \$75.00. Delegate and student registration includes all technical sessions, President's Reception, refreshment breaks, Poster Reception, and Awards Reception and Banquet. Guest registration includes President's Reception, refreshment breaks, Guest Tour, Poster Reception, and Awards Reception and Banquet. Non-registered guests may purchase individual tickets for these events. Registration is available on the [Annual Meetings](#) page of the APMS website.

Guest Tour

We have a fantastic tour of historic St. Augustine planned for the Guest Tour led by the crazy Ida Alice Shourd Flagler – the oil and hotel baron's second wife! Through the eyes of this colorful woman, you'll learn much about the area and its history. Once the bus tour is complete, guests will be guided to a delicious Spanish inspired restaurant, the famous Columbia, with wonderful offerings in a semi-private style. After lunch, the group will enjoy free time exploring St. Augustine for all it has to offer in shopping, unique boutiques, bars, restaurants, sweet treats, park sitting, and more! Round trip bus transportation from the Hilton Ocean Walk to St. Augustine will be provided with guests picked up at the bottom of the Hilton North Tower ramp along A1A at 9:00 am and return to the hotel by 4:00 pm. We only have 24 seats, so let the APMS Treasurer and/or the Registration Desk know as soon as possible if you will be attending.



Columbia Restaurant on Historic Saint George Street

Transportation

The Hilton is a 15-minute drive from the Daytona Beach International Airport and is accessible by taxi, limousine, rental car or Uber. A typical taxi fee is \$25 one way, an Uber about \$15. Complimentary self-parking is available to all attendees of the conference.

The venue is fabulous and the meeting will be great. Please plan to attend and bring your family. Please assist us in planning for the 57th Annual Meeting by registering by June 16, 2017.

2017 APMS Officer and Director Nominee Slate

The following nominees 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 for new Officers and Directors at the Annual Business Meeting scheduled for Monday, July 17, in Daytona Beach.



<i>Office</i>	<i>Name</i>	<i>Affiliation</i>	<i>City</i>	<i>State / Country</i>
Vice President	Mark Heilman	SePRO Corporation	Carmel	Indiana
Treasurer	Jeremy Slade	UPI	Gainesville	Florida
Director	Deborah Hofstra	National Institute for Water and Atmospheric Research	Hamilton	New Zealand
Director	Amy Kay	Clean Lakes Midwest, Inc.	Oakwood Hills	Illinois

Vice President—Dr. Mark Heilman

Dr. Mark Heilman has been a member of APMS since 2000 and previously served on the APMS Board as a Director and Secretary. He is also a past chairman of the Student Affairs Committee and currently chairs the APMS Membership and Strategic Planning Committees. Dr. Heilman is the current President of the Northeast APMS. As Senior Aquatic Technology Leader for SePRO Corporation, Dr. Heilman leads the company's research and development efforts to bring forward new technologies for managing water resources. He also directly assists many public and private natural resource managers in the U.S. and some international colleagues with challenging projects managing aquatic invasive species with an emphasis on aquatic plants.

Dr. Heilman received his Ph.D. in Aquatic Ecology from the University of Notre Dame in 1998 where he was a NASA Global Change Research Fellow for his work examining changes in methane cycling associated with submersed aquatic plants. He received the NEAPMS Aquatic Plant Science Award in 2011 and the APMS Outstanding Research and Technical Contributor Award in 2013. When not diving to look for submersed plants, throwing weed rakes, or pounding away on the computer, Mark enjoys hiking, golf, watching college football and basketball, and just generally chasing his kids around.

Treasurer— Mr. Jeremy Slade

Mr. Jeremy Slade graduated from The University of Mississippi with a Bachelor's of Science in Biology in 2002, and Mississippi State University (MSU) with a Master's of Science in Wildlife and Fisheries Science in 2005. After graduating from MSU, Jeremy worked as a research associate in the Department of Wildlife and Fisheries at MSU and research scientist contracted by the U.S. Army Engineer Research and Development Center, U.S. Army Corps of Engineers from 2005 to 2008. His duties in this position were to evaluate aquatic herbicide efficacy on nuisance aquatic weeds in laboratory and mesocosm studies. In 2008, Jeremy moved to Gainesville, Florida, where he worked at the Center for Aquatic and Invasive Plants, University of Florida evaluating large-scale herbicide applications for controlling hydrilla performed by the Florida Fish and Wildlife Conservation Commission until the end of 2010.

In January 2011, Jeremy joined United Phosphorus, Incorporated (UPI) as the Aquatics Accounts Manager for the southeast U.S. covering the Gulf States. Responsibilities include supporting and providing technical assistance on UPI's aquatic products to insure proper use resulting in responsible and effective aquatic plant management programs. Jeremy has been involved in aquatic plant management in all regions of the U.S.

2017 APMS Officer and Director Nominees

Director—Dr. Deborah Hofstra

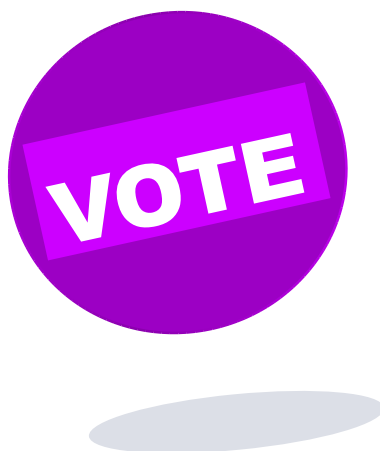
Dr. Hofstra is a scientist in the Freshwater and Estuaries Centre of NIWA (National Institute of Water and Atmospheric Research, New Zealand). Deborah leads government funded and commercial projects that focus on research solutions for aquatic weed issues, such as screening aquatic herbicides for use on target weeds and assessing the impacts of grass carp and the development of aquatic weed management plans for freshwaters. Dr. Hofstra contributes to the assessment of aquatic plant species in the aquarium trade to predict their potential threat to the environment, and inform legislation where appropriate. She has a special interest in the conservation of native flora and fauna which can be better protected through understanding the consequences of aquatic weed invasions and management.

Collaboration with international colleagues has included projects on aquatic weed control, macrophyte growth and physiology under different environmental conditions, and most recently led to a review of management for invasive aquatic plants. Current research projects focus on new use profiles for herbicides on submerged weeds and restoration initiatives in shallow degraded lakes.

Director—Ms. Amy Kay

Amy Kay is a 2005 graduate from The Ohio State University. Amy has been involved in the aquatic plant management industry for 10 years participating in research and control projects in California, Florida, Idaho, Illinois, Indiana, Michigan, Minnesota, Montana and Wisconsin. Her main focus has been in the Midwest primarily working on large scale aquatic invasive species control projects, recently conducting the largest aquatic herbicide treatment ever to be performed in the state of Wisconsin.

Amy Kay is the founder and president of Women of Aquatics, a nonprofit organization promoting all women of the aquatics industry by inspiring and supporting them to pursue their ambitions and achieve their potential both professionally and personally. Amy is on the Board of Directors of the Midwest Aquatic Plant Management Society, chairing the Membership and Publicity committees. She also currently serves the Aquatic Plant Management Society as Special Representative for Women of Aquatics.



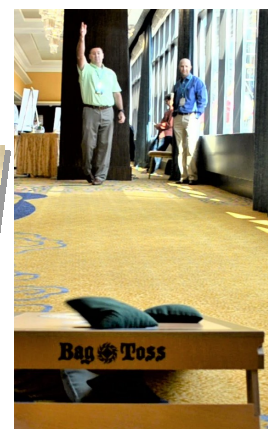
Seeking Raffle and Silent Auction Donations for Student Initiatives

The Scholastic Endowment Committee would like to remind our generous Members, Vendors, Exhibitors, and others that we will be contacting you soon to ask for your continued support. At last year's meeting, we were fortunate to have excellent raffle and silent auction donations from our membership. Generous and desirable prizes are essential to attracting the impressive number of raffle ticket sales from meeting attendees, which means more proceeds to the APMS Scholastic Endowment—and we THANK YOU!

This year we will have a return of the APMS Duck Race and Bag Toss fundraising events. Tickets for

the Duck Race will be on sale at the Registration Desk. The Duck race is scheduled for 5:00 pm Tuesday on the 5th Floor, North Tower Pool Deck; just before the Awards Reception. Look for the Bag Toss outside Coquina FGH Meeting and Awards Banquet Hall. There will be great prizes for the Duck Races and participation awards for competing in the Bag Toss. If you have questions or would like to contact the Scholastic Endowment Chair, please contact:

Tom Warmuth of BioSafe Systems
twarmuth@biosafesystems.com
or call 336-402-4449



Meeting Sponsorship and Exhibitors

Sponsors: The APMS Annual Meeting is the most ambitious education and outreach event organized by the Society. This meeting would be impossible without the generous contributions of the meeting sponsors. Responding to suggestions from our members and sponsors, the APMS Board has implemented several changes that correspond with different levels of meeting sponsorship. Sponsors at all levels will continue to be recognized in the Annual Meeting Program, on the APMS web site, and at individual meeting events. Additionally, Platinum and Gold Level Sponsors now have an opportunity to present new product research or novel uses of their products or services that forward aquatic plant management during the Annual Meeting Program. Platinum Level Sponsors will be granted ten minutes, and Gold Level Sponsors will be allotted

five minutes. Please visit the [APMS Sponsorship](#) page for a complete list of benefits for each Annual Meeting Sponsorship Level.

Exhibitors: The Annual Meeting provides an excellent forum to exhibit products and services and interact with key people involved in aquatic plant management across the country. The Exhibit Hall is also the site of daily continental breakfasts and refreshment breaks as well as the Monday evening Poster Reception to increase interactions and discussion among Exhibitors and meeting attendees.

Please contact Exhibits Committee Chair [Dean Jones](#) or visit the [APMS website](#) to exhibit at the 2017 APMS Annual Meeting.

Aquatic Plant Resources Available on the APMS Web Site

National Silent Invaders Video

APMS has worked with the University of Florida to create a national version of the [Silent Invaders](#) video, relevant to all regions in the U.S. Teachers and environmental learning center instructors from across the country can now introduce students to the differences among plant types and how invasive plants impact the nation's lakes, rivers, wetlands and natural areas.

The Florida Invasive Plant Education Initiative and Curricula provides teachers with aquatic plant related classroom information, lessons, materials, and activities for all grade levels. The Silent Invaders audio-visual presentation is the core lesson upon which all other activities and lessons are based. The 20-minute presentation provides a basic (and fun) introduction to aquatic and terrestrial plants found in Florida along with the key concepts of aquatic versus terrestrial, and native, non-native and invasive plants. The National version now expands these concepts with examples from across the U.S.

Silent Invaders is the keystone lesson for the Invasive Plant Education Initiative. We encourage you to discover other lessons and materials that you can access or adapt to your area to increase awareness of invasive plants and their management by visiting the [Florida Invasive Plant Education Initiative](#).

Control Definition

The terms aquatic plant control and management are often considered synonymous. Many resource managers regard control efforts as operational in nature, and management as a process more aligned with program goals and objectives. APMS seeks to clarify this issue by providing a manager's working definition of aquatic plant control.

APMS defines aquatic plant control as techniques used alone or in combination that result in a timely, consistent, and substantial reduction of a target plant population to levels that alleviate an existing or potential impairment to the uses or functions of the water body.

No single definition of aquatic plant control can cover each contingency. The above definition and [white paper](#) are intended to address factors that relate directly and indirectly to aquatic plant control.

Herbicide Resistance Stewardship in Aquatic Plant Management

APMS, working with the Weed Science Society of America, has developed a module addressing herbicide resistance in aquatic plant management venues. The clarification document compares and contrasts aquatic plant control with crop management and addresses how the types of aquatic plants, settings in which they are controlled, and the relatively few available control options, influence herbicide resistance management strategies.

Resistance management measures that applicators routinely implement into aquatic plant control programs are reviewed along with conditions in aquatic venues that challenge incorporating stewardship actions that are successful in production crop settings. [PowerPoint Lessons](#) summarize key points in the document and case examples further illustrate the complexities in managing aquatic plants with herbicides.

Benefits of Controlling Nuisance Aquatic Plants and Algae in the U.S.

APMS has collaborated with the Council for Agricultural Science and Technology (CAST) to publish a [Commentary Paper](#) that addresses key concepts in aquatic plant and algae control. Information is available to assist managers in conveying to policy makers and the public, economic and environmental problems associated with invasive aquatic plants and algae.

The paper stresses the value of protecting and conserving water resources through early detection and rapid response to new plant invasions. Integrated plant management is discussed along with the importance of aquatic registered herbicides used alone or in combination with other control methods.

In Memoriam – Chip Welling

On April 28, 2017, we lost a champion of science-based invasive species management, and many of us also lost a cherished friend and colleague. Charles “Chip” H. Welling passed away on that day, after a ten month battle with cancer. Chip joined the Minnesota Department of Natural Resources and APMS in 1993 and, for most of that time, was the Eurasian watermilfoil or invasive aquatic species coordinator. While in that position, he was adamant that management be based on good science, and would often ask to “see the journal article.” This scientific skepticism was learned, in part, while a graduate student under the famous wetland ecologist Arnold van der Valk at Iowa State University. Given Dr. van der Valk’s reputation, I am sure that Chip’s M.S. was hard-won. Over the years, Chip could be counted on to give a thorough yet impartial review of journal articles and, more than once, I received a tough review from him on my submissions.

Many of us have worked with Chip on research projects in Minnesota – from the early years of triclopyr registration to the flowering rush invasion. Chip was eager to have studies conducted on management of Minnesota’s invasive aquatic plant issues, and would play host to the annual invasion of researchers from federal and state agencies, universities, and private companies. Chip was also an advocate of state-funded applied research, and supported many projects utilizing various control technologies to find practical solutions to invasive plant problems. Even before the field work was completed, he’d start asking about the peer-reviewed journal article. Chip clearly recognized the value of scientific support for managing invasive species. That science-driven approach influenced other Midwestern aquatic invasive species resource agencies.

I don’t remember exactly when I first met Chip, but I do know that by the early 1990s I was on his rolodex. He’d call with a question about Eurasian watermilfoil or to dispute a point in a paper, but eventually the talk would turn to walleye fishing (or any fishing, for that matter). He’d ask about my last trip to the North Country, or if I was coming to chase ditch parrots in Dakota. He loved angling and, if he was fishing with his daughter, Robin, then all things were perfect. Chip had a keen, but dry, sense of humor, laughing at the follies of others, and occasionally at his own. A few years ago he sent me a clipping from the Stockton paper that had a picture of hippos eating waterhyacinth, asking if we (in California) were really that desperate to control weeds. “How about using manatee?” he asked.

Sadly, Minnesota has lost a champion of her lakes, and we all lost a proponent of science-based management – and many of us lost a friend. If Chip is crossing the Styx, I am sure he’d ask Charon if the fish are biting.

John Madsen, President, APMS



Chip Welling inspecting flowering rush on Detroit Lakes, Minnesota in 2011

APMS Graduate Student Research Grant Update

Student initiatives are among the most important core values of the Aquatic Plant Management Society. High on the list of student support programs is the APMS Graduate Student Research Grant (GSRG). This \$40,000 academic grant, co-sponsored by APMS and the seven regional APMS chapters, provides funding for a full-time graduate student to conduct research in an area involving aquatic plant management techniques or in aquatic ecology related to the biology or management of regionally or nationally recognized nuisance aquatic vegetation. Following is an update of the most recent GSRG awarded to the Louisiana State University in 2016.

Exploring alternative giant salvinia (*Salvinia molesta* D.S. Mitchell) management strategies

Bradley T. Sartain (LSU)

Christopher R. Mudge (USACE/LSU)

First, I want to thank the Aquatic Plant Management Society for providing me with this great assistantship. It has been a huge help as I pursue my PhD.



The main objective of my dissertation research is to investigate alternative management strategies for the invasive floating fern giant salvinia (*Salvinia molesta* Mitchell). My first year of giant salvinia research has provided valuable data regarding the

effectiveness of winter herbicide applications, the impact of aquatic herbicides on defoliated bald cypress trees, and the efficiency of remote sensing technology for mapping herbicide injury. Although I have not analyzed all the data for these projects, I will provide some details of what I have observed thus far.

- Severe cold periods after herbicide application may improve giant salvinia control; however, this is highly dependent on the status of the plant, herbicide applied, and the severity of winter.

- Some aquatic herbicides applied to defoliated bald cypress will and will not negatively affect tree health and re-foliation in the spring.

- Remote sensing is a powerful tool and I predict it will be used more frequently in aquatic plant management.

I am hopeful that the information gathered from this research will enable managers to monitor herbicide efficacy in large scale treatments without leaving the office.

In addition to the aforementioned projects, I plan to investigate herbicide tolerance of giant salvinia from different areas of Louisiana to determine if populations that have been managed for an extended period of time are more or less tolerant to herbicide applications.

It is definitely going to be a busy summer, but I am looking forward to continuing my dissertation research.



Giant salvinia plants frozen during January 2017



Bald cypress exposed to a winter herbicide application

Board Approves 2017-2021 APMS Strategic Plan

As reported in the March Newsletter, the APMS Board participated in a day-long strategic planning session on January 24, 2017. Seven APMS Past Presidents and key Committee Chairs joined the event, facilitated by Dr. Ed Osborne of the University of Florida, in Daytona Beach. After several revisions, the Board approved the following 2017-2021 APMS Strategic Plan. The Plan is now available for comments from the APMS Membership. Please address any comments or suggestions to APMS Strategic Planning Committee Chair, Mark Heilman at: markh@sepro.com

Aquatic Plant Management Society (APMS) 2017-2021 Strategic Plan¹

Vision

The vision of APMS is to be the leading international organization for scientific information on aquatic plant and algae management.

Mission

The mission of APMS is to provide a forum for the discovery and dissemination of scientific information that advances aquatic plant and algae management policy and practice.

Strategic Goals

Goal 1: Develop and adhere to a comprehensive financial management plan that aligns with the APMS mission.

Key Outcome: APMS will have the financial resources to support and sustain ongoing programs and new initiatives for advancing the society.

Action Steps:

1. Create a two-year reserve account of dedicated funds to be used only for emergency support if the annual meeting is cancelled or must be relocated.
2. Decide the dollar amount to be held in the reserve account.
3. Cycle through the currently authorized Graduate Student Research Grant (GSRG) and reevaluate the APMS budget before approving an additional grant award.
4. Create a stand-alone GSRG foundation/trust to fund a sustainable GSRG program.

Measures of Success:

- Balanced budget for annual expenses
- \$400-500K in a GSRG endowment
- \$120,000 held in an emergency reserve account
- Adequate remaining balance available for discretionary programs

Leadership Team:

Team Co-Leaders – Jeff Schardt and Jeremy Slade

APMS 2017-2021 Strategic Plan

Feedback Loop:

The leadership team will provide a written implementation progress report at the 2018 mid-year board meeting and the annual conference. Implementation concerns, needs, and challenges will be included in these reports. The financial management plan should be completed and in action by no later than the July 2018 annual meeting.

Budget Needed:

To be determined and voted upon by the Board of Directors

Goal 2: Design and implement a broad marketing and outreach plan.

Key Outcome: APMS and its programs and impacts will be valued and well-known by scientists, agency leaders, policymakers, applicators, and the general public.

Action Steps:

1. Form a five-member ad hoc committee charged with developing and overseeing implementation of the marketing plan.
2. Develop a Request for Proposals for developing the marketing plan.
3. Consider the feasibility of hiring a professional firm that offers a cost-effective approach for outreach.
4. Define the target audiences for the marketing and outreach plan, including regional chapter members, state resource agencies, students, reservoir operators, lake associations, government agencies, and universities.
5. Define and promote the APMS brand and its features and benefits. Consider developing a video to post on YouTube.
6. Develop two annual issue case studies or review papers that highlight the APMS brand. Provide an honorarium for the selected authors.
7. Design and implement a social media campaign. Consider appointing a paid social media leader under the Education and Outreach Committee.
8. Post highlights of every journal article on social media.

Measures of Success:

- A minimum of 1 and a goal of 2 white papers published each year
- At least 1,000 social media impressions each month
- A minimum of 2 *Journal of APM* press releases each year
- Marketing and outreach plan developed and implemented
- Target audiences defined and priority ranked

Leadership Team:

To be determined

Feedback Loop:

The leadership team will provide a written implementation progress report at the 2018 mid-year board meeting and the annual conference. Implementation concerns, needs, and challenges will be

APMS 2017-2021 Strategic Plan

included in these reports. The marketing and outreach plan should be completed and in action by no later than the July 2018 annual conference.

Budget Needed:

To be determined and voted upon by the Board of Directors

Goal 3: Increase APMS membership and annual meeting participation.

Key Outcome: APMS will be a vibrant organization for the exchange of information on aquatic plant and algae management with a membership that includes a high percentage of students, researchers, policymakers, and practitioners in the field.

Action Steps:

1. Connect with regional chapters to compare membership lists and identify potential new members at both the regional and national levels.
2. Update the membership brochure to highlight APMS membership benefits for regional chapter members and members of related professional societies.
3. Offer regional members a dues discount for membership in APMS.
4. Develop a plan for offering CEUs for workshops delivered at the conference or online.
5. Continue presentations at regional meetings by the APMS president or his/her designee.
6. Encourage members of related societies (e.g., NALMS) to become active member of APMS.
7. Establish one or more positions on standing committees or the board for representatives from the Women of Aquatics organization.

Measures of Success by 2021:

- 20 new members who have not been regional chapter members (Alternate Language: A net increase of 10 new members annually who have not been regional chapter members)
- 50 new members who have previously been only regional chapter members (Alternate Language aligned with point above: A net increase of 10 new members annually who have previously been only regional chapter members.
- 15% growth in female membership
- 15% increase in conference attendance

Leadership Team:

Mark Heilman, John Madsen, Chris Mudge

Feedback Loop:

The leadership team will provide a written implementation progress report at the 2018 mid-year board meeting and the annual conference. Implementation concerns, needs, and challenges will be included in these reports.

Budget Needed:

To be determined and voted upon by the Board of Directors

APMS 2017-2021 Strategic Plan

Goal 4: Enhance the society's sustainability by sponsoring student initiatives and stimulating increased job opportunities in the field.

Key Outcome: The flow of young scientists into the field of aquatic plant and algae management will be increased as evidenced by more student members and enhanced placement in relevant employment in the discipline.

Action Steps:

1. Identify post-graduate opportunities.
2. Identify internships and incentives for undergraduate students.
3. Develop links between students and employers.
4. Utilize social media and the membership directory.
5. Contact faculty members who may have students interested in becoming APMS members.
6. Increase awareness of APMS in universities.
7. Contact fisheries and natural resource departments to identify potential student members.
8. Provide travel grants for undergraduate students to attend the annual meeting.

Measures of Success:

- 30% of student members continue as members after graduation
- 10 undergraduate student members
- 15% of student members become employed in the field

Leadership Team:

Brett Hartis, Ryan Thum, Sam Sardes

Feedback Loop:

The leadership team will provide a written implementation progress report at the 2018 mid-year board meeting and the annual conference. Implementation concerns, needs, and challenges will be included in these reports.

Budget Needed:

To be determined and voted upon by the Board of Directors

Strategic Planning Steps



Washington Report - Lee VanWychen - WSSA Science Policy Director

Zinke Confirmed as Secretary of Interior

Ryan Zinke was confirmed as the 52nd Secretary of the Interior by the Senate on March 1, 2017 by a vote of 68-31. The native Montanan served 23 years as a U.S. Navy Seal officer, retiring in 2008. He has a B.S. in Geology from the University of Oregon, a Masters in Business Finance from National University, and a Masters in Global Leadership from the University of San Diego.



During his confirmation hearings, Zinke said he would take a “multi-use approach” to federal land management on the more than 500 million acres of public land managed by the Department of Interior. He also vowed to clear the estimated \$12 billion backlog in maintenance and repair at national parks. More on Secretary Zinke at:

<https://www.doi.gov/pressreleases/ryan-zinke-sworn-52nd-secretary-interior>

Perdue Confirmed as Secretary of Agriculture

Sonny Perdue was confirmed as the 31st Secretary of Agriculture by the Senate on April 24, 2017 by a vote of 87-11. The Senate Agriculture Committee approved his nomination by a voice vote on March 30, 2017. Perdue, 70, was born and raised on a diversified row crop and dairy operation in central Georgia and earned a doctorate in veterinary medicine from the University of Georgia in 1971. Following a brief tenure as a practicing veterinarian, Perdue started two businesses from the ground up, concentrating in agribusiness and transportation. Perdue also served two terms as Georgia’s governor from 2003-2011. Perdue is only the third Secretary of Agriculture out of 31 to actually have lived and worked in agriculture during their adult career. More on Secretary Perdue at:

usda.gov/our-agency/about-usda/our-secretary.



Congress Approves FY 2017 Funding

On May 1, Congress reached an agreement on funding the government at updated levels through September 30, 2017. The government had been operating on a series of continuing resolutions for the first seven months of FY 2017. Most funding lines related to aquatic weed management and research remained at the same level as FY 2016. The Army Corp of Engineers Aquatic Plant Control Research Program received \$4 million, the Great Lakes Restoration Initiative was funded at \$300 million, and the National Sea Grant College Program received \$67 million. The same was true for USDA’s National Institute of Food and Agriculture (NIFA) where most accounts were funded at the same level as FY 2016 with the exception being the Agriculture and Food Research Initiative (AFRI), which received a \$25 million increase to \$375 million. Funding for USDA-APHIS was increased \$52 million over FY 2016 to \$946 million and funding for USDA-ARS was increased \$27 million to \$1.17 billion.

President Proposes FY 2018 Budget

On May 23, the President released his FY 2018 “skinny” budget. Details of the President’s FY 2018 budget proposal can be found [here](#).

For the 9th year in a row, the Army Corp of Engineers did not request funding for the Aquatic Plant Control Research Program, but we will work with Congress to try and maintain at least \$4 million for the program. The biggest impact for aquatic weed management was that the National Sea Grant College Program and the Great Lakes Restoration Initiative were both zeroed out in the President’s budget proposal. However, there is strong bipartisan support in both the House and Senate from the states affected by these programs. We are also working with other stakeholder coalitions, such as the Healing Our Waters-Great Lakes Coalition and the Healthy Oceans Coalition, to support funding for those programs.

Most programs in USDA’s Research, Education, and Economics mission area did not fare as badly with

Washington Report - Lee VanWychen - WSSA Science Policy Director

NIFA facing an 8 percent cut, the Economic Research Service (ERS) an 11 percent cut, and the Agricultural Research Service (ARS) a 15 percent cut. One glimmer of light is that the President's budget did propose to maintain level funding for a couple of the land grant capacity programs (Hatch Act, Smith-Lever 3(b) & (c)), as well as IR-4.

It is important to remember that this is the Administration's budget "proposal" and over the next several months members of Congress will work to develop the final FY 2018 appropriations bills. It will be important that Congress hears from the stakeholders of these programs.

Court Ruling on Lacey Act Interstate Commerce Clause is Mixed News

The [Lacey Act](#) is a law that dates back to 1900 and is one of the oldest wildlife-related laws on the books. Under the Lacey Act, the Secretary of the Interior is authorized to regulate the importation and transport of species, including offspring and eggs, determined to be injurious to the health and welfare of humans, the interests of agriculture, horticulture or forestry, and the welfare and survival of wildlife resources of the U.S. Wild mammals, wild birds, fish, mollusks, crustaceans, amphibians, and reptiles are the only organisms that can be added to the injurious wildlife list.

In September 2016, the Center of Invasive Species Prevention (CISP) had submitted a petition to the U.S. Fish and Wildlife Service (USFWS) asking them to add 43 fish, crayfish, and mollusk species to the Injurious Wildlife list under the Lacey Act. Among those species on the petition were grass carp (*Ctenopharyngodon idella*), blue tilapia (*Oreochromis aureus*), and Nile tilapia (*Oreochromis niloticus*). As aquatic weed managers know very well, grass carp and blue tilapia have been important aquatic weed biocontrol agents, if managed properly.

When the USFWS designates an animal species as "injurious" under the Lacey Act, the USFWS can

"prohibit any importation of the species into the United States or its possessions or territories". Additionally, the Lacey Act bars "any shipment between the continental United States, the District of Columbia, Hawaii, the Commonwealth of Puerto Rico, or any possession of the United States." Around 1989, the USFWS interpreted the latter clause as meaning they could bar shipments of injurious wildlife among states via interstate commerce (i.e. Florida pet stores could NOT ship pythons to Georgia). In 2013, in DC District Court, the U.S. Association of Reptile Keepers brought a lawsuit that claimed USFWS lacked statutory authority under the Lacey Act to regulate interstate commerce in large constrictor snakes among the 49 continental States. The DC District Court agreed and that issue was promptly appealed to the DC Circuit Court of Appeals. On April 7, 2017, the DC Circuit Court of Appeals agreed with the lower court's ruling: Under the Lacey Act, the federal government does not have the authority to restrict interstate commerce of injurious wildlife in the continental United States.

It is important to note the effect is only on interstate commerce among the 49 states and it does not change USFWS' authority to regulate commerce between the continental United States (considered as a group of 49 states), the District of Columbia, Hawaii, and the Commonwealth of Puerto Rico (i.e. Florida pet store owners cannot ship pythons to Puerto Rico or Hawaii, but they now can ship them to Georgia). The court ruling does not affect the USFWS' authority to regulate imports of injurious species from other nations.

The DC Circuit Court of Appeals ruling pretty much finalizes this issue (unless Congress changes the law). It is extremely unlikely that the federal government would seek review from the Supreme Court or that the Supreme Court would even take the case.

Even if USFWS decides to list grass carp and blue tilapia as injurious species, the current system of rearing and distribution in the continental United

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States will not be affected. Many states already have laws governing their distribution. For example, 28 states only allow the stocking of triploid (sterile) grass carp that is certified by the USFWS. For more background information on this process, I found the J.M. Malone and Son company website helpful.

Several invasive species already on USFWS's injurious wildlife list will no longer be federally restricted via interstate commerce, including:

- reticulated python (*Python reticulatus*)
- DeSchauensee's anaconda (*Eunectes deschauenseei*)
- green anaconda (*Eunectes murinus*)
- Beni anaconda (*Eunectes beniensis*)
- snakeheads (Family: Channidae)
- bighead carp (*Hypophthalmichthys nobilis*)
- black carp (*Mylopharyngodon piceus*)
- silver carp (*Hypophthalmichthys molitrix*)
- largescale silver carp (*Hypophthalmichthys harmandi*)

One other species on the list, the zebra mussel (*Dreissena polymorpha*), is already so widespread in the U.S. that the removal of the interstate commerce restriction is probably not going to matter. However, there is nothing preventing individual states from adopting their own regulations restricting the commerce into their states. Some states may already have such restrictions in place.

Pesticide Registration Improvement Bill Passed by House

H.R. 1029, the Pesticide Registration Improvement Act (PRIA), passed the House by a voice vote on March 20 and now awaits action in the Senate. The current version of PRIA, which expires on September 30, 2017, sets fees for pesticide registrants seeking to get products registered in return for regular approval schedules. The law has bipartisan support because a proportion of the registrant user fees supports farmworker safety and environmental programs. Currently, registrants pay \$27 million per year in user fees. H.R. 1029 would increase those fees to \$31 million per year and reauthorize PRIA for seven years instead of five.

APHIS Seeks Comments on Revision of its Biotechnology Regulations

APHIS is proposing to revise its regulations regarding the importation, interstate movement, and environmental release of certain genetically engineered organisms in order to update the regulations in response to advances in genetic engineering and our accumulated experience in implementing the current regulations, as well as reduce the burden on regulated entities. This is the first comprehensive revision of the regulations since they were established in 1987. To view the proposed rule and submit public comments by June 19, 2017, see [Docket No. APHIS-2015-0057](#).

In concert with the proposed revised regulations, APHIS is developing a process that includes an evidenced-based, standardized approach to assessing risk prior to making the decision whether to require controls (e.g. movement permits). This upfront risk analysis process will include either (in most cases): A Weed Risk Assessment (WRA) to characterize weed risk, if any, of genetically engineered (GE) plants, OR: A Plant Pest Risk Assessment for invertebrates, microorganisms, and GE plants (where appropriate), to characterize plant pest risk, if any.

\$75 Million Available from APHIS for Pest Detection, Surveillance, and Identification

In July 2017, APHIS will be issuing a call for "suggestions" for its "Plant Pest and Disease Management and Disaster Prevention" program, also Known as the Farm Bill Section 10007 program. The program provides funding to strengthen the nation's infrastructure for pest detection and surveillance, identification, and threat mitigation.

In FY 2017 there was \$62.5 million available with about \$5 million of that going to the National Clean Plant Network. APHIS received 720 proposals and funded 480, a 66% success rate. FY 2017 funded projects can be found at:

www.aphis.usda.gov/plant_health/farmbill-section10007/fy17/FY2017-PPDMDPP-Spending-Plan.pdf. There were only a few related to weeds,

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but only because there were not that many applications (i.e. “suggestions”) for weed and weed seed surveillance, identification, and threat mitigation.

For more information about the program, FAQs, and a PowerPoint presentation, visit:

www.aphis.usda.gov/aphis/ourfocus/planthealth/ppq-farm-bill/farmbill-activities-17

Some ideas for projects to consider:

- Risk assessment and pathways for herbicide-resistant (HR) weeds, risk based models and decision support tools.
- Weed surveillance: If a state is concerned about a particular injurious invasive weed and it impacts their production or exports.
- Targeting domestic weed and weed seed inspection activities at vulnerable points of entry into states and the country.
- Preventing the introduction of HR weeds from foreign countries.
- Creating new identification and testing methods to detect weed seed in various seed or commodities (i.e. pollinator seed mixes).
- Outreach and education for managing invasive and HR weeds.

A call for “suggestions”, i.e. applications, for FY 2018 projects will be issued around mid July 2017 and will be open for 6 weeks.

WOTUS Rewrite Ordered by President

On February 28, 2017, President Trump issued an [Executive Order](#) that directs the heads of the Army Corps of Engineers and EPA to “review and reconsider” the existing Waters of the United States (WOTUS) rule that took effect Aug. 28, 2015. That rule was an unprecedented expansion of the Clean Water Act jurisdiction beyond “navigable waters” and included waters with a “significant nexus” to navigable waters such as intermittent and ephemeral streams that farmers use for drainage and irrigation. The Executive Order instructs the two agency leaders to review a 2006 opinion written by late Supreme Court Justice Antonin Scalia in *Rapanos v.*

United States. In that opinion, Scalia argued that federal jurisdiction extends only to water bodies with a permanent flow or non-navigable waterways that connect via surface water with areas with permanent flow — definitions with a more limited approach than the EPA established in its 2015 WOTUS rule.

The proposed rule, “Definition of the ‘Waters of the United States’ — Recodification of Preexisting Rules” was sent to the Office of Management and Budget (OMB) for interagency review on May 2. This is the first step in the federal rule making process and will be followed by a public notice and comment period.

“NPDES Fix” Legislation Passes House

New “NPDES fix” legislation has been re-introduced in both the House and Senate in the 115th Congress. The Reducing Regulatory Burdens Act of 2017 (HR 953) was introduced on Feb. 7, 2017 by Rep. Bob Gibbs (R-OH). The House passed H.R. 953 by a vote of 256 to 165 on May 24.

This is the fourth time this legislation has been up for a vote in the past 7 years, each time passing the House, but stalling in the Senate. The National and Regional Weed Science Societies have supported the NPDES-fix from the start and endorsed a letter to Congress urging passage of H.R. 953, along with more than 100 other organizations on May 23.

The companion bill in the Senate is S. 340 and was introduced on Feb. 7 by Senators Mike Crapo (R-ID) and Claire McCaskill (D-MO). S. 340 is titled the “Sensible Environmental Protection Act of 2017” and has 15 cosponsors.

Lee Van Wychen, Ph.D.
Science Policy Director
National and Regional Weed Science Societies
5720 Glenmullen Pl, Alexandria, VA 22303
Lee.VanWychen@wssa.net
Phone: 202-746-4686

APMS Sustaining Membership

The Aquatic Plant Management Society is grateful for our Sustaining Members whose generous annual contributions sponsor our most important core values, especially education and outreach initiatives. Sustaining Membership costs \$500 and includes all membership privileges for one designated representative; subscription to the [*Journal of Aquatic Plant Management*](#), [APMS Newsletters](#), and access to

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APMS Chapter and Related Meetings

Date	Meeting	Location
2017		
July 16-19	Aquatic Plant Management Society	Daytona Beach, Florida
August 20-24	American Fisheries Society	Tampa, Florida
September 11-13	MidSouth Aquatic Plant Management Society	Birmingham, Alabama
October 16-19	Florida Aquatic Plant Management Society	Lake Buena Vista, Florida
October 22-26	International Conference on Aquatic Invasive Species	Coral Springs, Florida
November 6-9	North American Lake Management Society	Denver, Colorado
November 27-29	Texas Aquatic Plant Management Society	San Antonio, Texas
2018		
January 9-11	Northeast Aquatic Plant Management Society	Portsmouth, New Hampshire
Jan 29-Feb 1	Weed Science Society of America	Arlington, Virginia
February 18-23	15th International Symposium on Aquatic Plants	Queensland, New Zealand
October 4-6	South Carolina Aquatic Plant Management Society	Myrtle Beach, SC
Feb 26-Mar 1	Midwest Aquatic Plant Management Society	Cleveland, Ohio
March 26-28	Western Aquatic Plant Management Society	Reno, Nevada

2016-2017 APMS Officers, Directors, Committee Chairs, and Special Representatives

<u>Office</u>	<u>Name</u>	<u>Telephone</u>	<u>E-mail</u>
President	John Madsen	530-752-7870	jmadson@ucdavis.edu
Immediate Past President	Rob Richardson	919-515-5653	rob_richardson@ncsu.edu
President Elect	John Rodgers	864-656-0492	jrodger@clemson.edu
Vice President	Craig Aguillard	337-290-1096	caguillard@landolakes.com
Treasurer	Jeremy Slade	662-617-4571	jeremy.slade@uniphos.com
Editor	Jason Ferrell	352-392-7512	jferrell@ufl.edu
Secretary	Jeff Schardt	850-591-1242	jeff.schardt@gmail.com
Director	Dick Pinagel	248-634-8388	dick@aquaweed.com
Director	Ryan Wersal	678-624-5891	ryan.wersal@lonza.com
Director	Brett Hartis	256-891-6607	bmhartis@tva.gov
Director	Ryan Thum	406-994-4039	ryan.thum@montana.edu
Director	Scott Nissen	970-491-3489	scott.nissen@colostate.edu
Director	Todd Olson	561-719-9488	tolson@avcaquatic.com
Student Director	Samantha Sardes	561-201-0713	ssardes@ufl.edu
<u>Committee</u>	<u>Chair</u>	<u>Telephone</u>	<u>E-mail</u>
Awards	Michael Netherland	352-392-0335	mdnether@ifas.ufl.edu
Bylaws and Resolutions	Vernon Vandiver	954-683-1764	vvv@ufl.edu
Education and Outreach	Jeff Schardt	850-591-1242	jeff.schardt@gmail.com
Exhibits	Dean Jones	860-514-6934	kdjones@ufl.edu
Finance	John Gardner	954-977-7736	john.gardner@aquaticsystems.com
Legislative	Rob Richardson	919-515-5653	rob_richardson@ncsu.edu
Meeting Planning	Tommy Bowen	704-875-5422	tommy.bowen@duke-energy.com
Membership	Mark Heilman	317-338-3336	markh@sepro.com
Nominating	Rob Richardson	919-515-5653	rob_richardson@ncsu.edu
Past President's Advisory Program	Rob Richardson	919-515-5653	rob_richardson@ncsu.edu
Proposal Review	John Rodgers	864-656-0492	rodger@clemson.edu
Publications	Rob Richardson	919-515-5653	rob_richardson@ncsu.edu
Regional Chapters	Jason Ferrell	352-392-7512	jferrell@ufl.edu
Scholastic Endowment	Craig Aguillard	337-290-1096	caguillard@landolakes.com
Strategic Planning	Tom Warmuth	336-402-4449	twarmuth@biosafesystems.com
Student Affairs	Mark Heilman	317-338-3336	markh@sepro.com
Website	Chris Mudge	225-578-1208	christopher.r.mudge@usace.army.mil
	Karen Brown	352-273-3667	kpbrown@ufl.edu
<u>Special Representative</u>	<u>Name</u>	<u>Telephone</u>	<u>E-mail</u>
AERF Representative	Carlton Layne	678-773-1364	layn1111@bellsouth.net
BASS Representative	Gerald Adrian	610-594-1948	gerald.adrian@uniphos.com
CAST Representative	Joe Vassios	719-740-9291	joseph.vassios@uniphos.com
NALMS Representative	Terry McNabb	360-527-1271	tmcnabb@aquatechnex.com
RISE Representative	Sam Barrick	317-216-8073	samb@sepro.com
Women in Aquatics	Amy Kay	715-891-6798	akay@cleanlakesmidwest.com
WSSA Representative	Rob Richardson	919-515-5653	rob_richardson@ncsu.edu
Director of Science Policy	Lee Van Wychen	202-746-4686	lee.vanwychen@wssa.net



The Aquatic Plant Management Society, Inc.

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. The membership reflects a diversity of federal, state, and local agencies; universities and colleges around the world; corporations; and small businesses.

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The vision of APMS is to be the leading international organization for scientific information on aquatic plant and algae management.

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