MIDSOUTH AQUATIC PLANT MANAGEMENT SOCIETY

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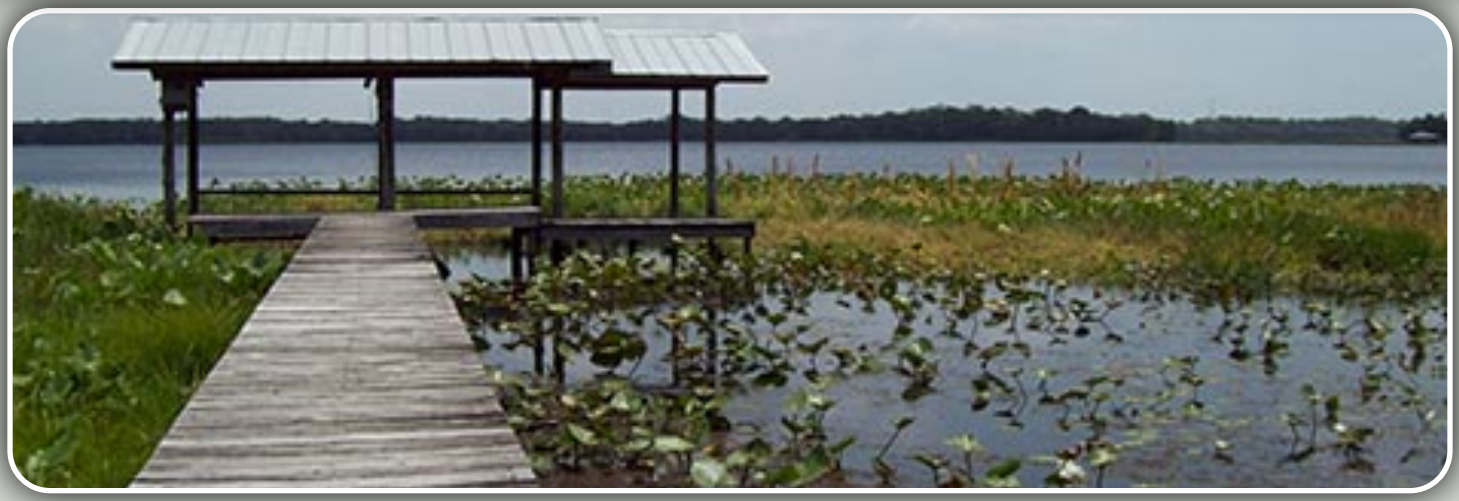

Board of Directors

MSAPMS Society Meeting

The MidSouth Aquatic Plant Management Society will be holding our 35th annual meeting at the Hilton Baton Rouge Capitol Center in Baton Rouge, Louisiana. The meeting will be held September 12 to 14 so make your reservations for the first MSAPMS to be held in Louisiana. Events will include the President's reception the evening of September 12, the annual aquatic plant management workshop on September 13, and the banquet on Wednesday September 14.

Please visit the conference webpage at http://msapms.org/conferences/2016/ to make reservations for this meeting. Our special room rate for the meeting is $129.00 per night plus applicable tax, and the room blocks are for September 11 to 14. The deadline for room reservations at our Society rate is August 21, 2016 so please make your reservations accordingly. This is sure to be a great meeting, so plan to attend and bring the family! There is plenty to see and do in downtown Baton Rouge.

Nominees for 2016-2017 Board of Directors

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Taste test? Deer preferences seem to be helping non-native invasive plants spread

Selective browsing by white-tailed deer likely is promoting the spread of some invasive plant species in northeastern U.S. forests, as deer avoid eating vegetation they find unpalatable. That's the conclusion of researchers who conducted a study of deer dietary choices at the Penn State Deer Research Center, during which captive deer were simultaneously offered a selection of eight nonnative invasive and seven native plants to determine the animals' preferences.

The research is important because it quantifies interactions between deer and invasive plants -- and how, over time, deer might be exacerbating problems with nonnative plant species, according to researcher David Mortensen, professor of weed ecology in Penn State's College of Agricultural Sciences. He expects the findings to contribute to the conservation of forest understories and natural areas.

"This study provides evidence that deer impacts on plant invaders depend on plant species' palatability," he said. "Consequently, deer selectivity likely plays an important role in the invasion process. To the extent that herbivory impacts plant communities, these results suggest that deer promote the spread of some plant invaders by avoiding them."

In the study, published this month in the journal *Biological Invasions*, researchers documented feeding preferences of eight mature does without fawns through three seasons -- late summer, early autumn and spring. The 15 plant species were offered in containers where deer could choose among them. A camera activated by a motion detector and infrared-enabled for night viewing allowed the researchers to observe and record deer behaviors. The amount of each plant consumed also was measured.

While deer consumed more native than introduced plant biomass overall, their food preference varied strongly by plant species. Results show consistent deer avoidance of several invasive, introduced plants -- garlic mustard, Japanese barberry and Japanese stiltgrass.

Deer also avoided one native plant, hay-scented fern. That species, which some researchers consider a "native invader," is spreading in areas of forest underbrush where deer are abundant. But other invasive, introduced plants -- Oriental bittersweet, European privet, and Morrow's honeysuckle, and a native plant, red maple -- were highly preferred by deer.

Deer clearly avoid certain invasive plants that are increasing in abundance in natural areas, suggesting that the herbivores are indirectly contributing to the growth and spread of unpalatable invasive plant species, noted lead author Kristine Averill, who spearheaded the research while pursuing her doctoral degree in Ecology at Penn State. Now a research associate in Cornell University's Soil and Crop Sciences Section, she suggested that deer preferences play an influential role in determining the species that make up plant communities.

"Together, these biomass consumption and behavior data indicate that deer selectivity likely depends more on species and growing season than on native or invasive introduced plant status," she said. "The extreme preference and avoidance among plant species observed in the preference trials suggest that deer-browsing selection occurs on a species-by-species basis, and likely according to species' traits."

At a minimum, Averill explained, the research indicates that deer might play an important and indirect role in the invasion processes of introduced plants. "These species-level, deer-plant interactions should contribute to deeper understanding of the variable patterns of invasive introduced plants across the northeastern U.S.," she said.

"It's pretty revealing that the findings in this study correspond to what we have been seeing in the field and confirm that deer preferences play a major role in plant community assembly."
Still, some invasive plants that deer seemed to highly prefer are increasing in abundance in natural areas. That pattern may be exacerbated by the deer because these plants produce fleshy fruits that deer eat, and then the seeds of the plant are spread in their feces, Averill noted

Date: April 28,2016
Source: Penn State; Original item written by Jim Mulhollem

Aquatic Plant Management Society Annual Meeting

56th Annual Meeting
July 17–20, 2016
Grand Rapids, MI
Amway Grand Plaza Hotel
187 Monroe Ave NW
Grand Rapids, MI 49503

Pre-final Agenda
Download the Pre-Final Agenda

Call for Papers
CLOSED

Registration
Member Registration
Non-Member Registration
Printable Registration Form
The meeting registration fees are $275.00 for a delegate and $130.00 for a guest (spouse, partner, child over 12 years of age) if received by **June 17, 2016**.
After this date, registration fees at the door will be $330.00 for a delegate and $155.00 for a guest.

Room Reservations
Website: https://resweb.passkey.com/Resweb.do?mode=welcome_ei_new&eventID=14232510
Toll Free: (800) 253–3590
Local Phone: (616) 776–6450
When making your reservations by phone, be sure to mention that you are part of the Aquatic Plant Management Society
Special APMS guest room rate is $134.00 for single and double occupancy per night plus applicable tax.
The hotel reservation special group rate ends **June 23, 2016.**

2016 MSAPMS Scholarship Opportunity

The MSAPMS is seeking applications for the 2016 graduate student scholarship to be awarded at the annual meeting. We request that the successful applicant attend the meeting and give a presentation, if possible. One scholarship of $2,500 will be awarded to a qualified student applicant.

To apply, the Scholarship Committee should receive the following information on or before July 31, 2015:

1. A cover letter which includes the applicant's previous, current, and future relationship to the aquatic plant management industry, and a comment on the importance of their proposed research to aquatic plant management;
2. Copies of unofficial or official transcripts of undergraduate and any graduate work completed to date (these transcripts may be those issued directly to the student by the institution);
3. A letter from the student's major professor recommending the student for the scholarship, indicating that the student is currently enrolled and in good standing and has had their research proposal approved by their graduate advisory committee;
4. A copy of the approved research proposal; and
5. One letter of recommendation (other than the major professor)

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

To enter an application or request more information, contact:
Dr. Brett Hartis
Program Manager
Aquatic Plant Management Program
Tennessee Valley Authority
bmhartis@tva.gov
Phone: 256-891-6607
Fax: 256-891-6601

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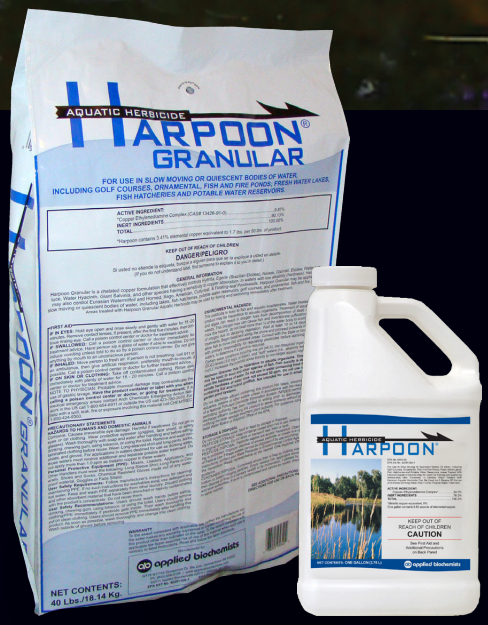

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A Note From the Editor

Summer is here and I hope you are all having a successful season dealing with nuisance aquatic plants. I wish you all the best of luck to get through the dog days of summer until the cooler temperatures of fall arrive.

Again I would like to thank our advertiser's for their support of the MidSouth Aquatic Plant Management Society. Please let me know if you or your company would like to purchase space for upcoming newsletters. I would also like to share your success stories or tips in the next issue. Any story is welcome and MSAPMS would love to share it with others.

Remember to register and book your hotel room early for the upcoming APMS and MSAPMS meetings. Also, please help us get the word out regarding scholarship opportunities for students. As always, if you have any comments or suggestions please feel free to let me know.

Thanks for your support!

--JF
jpfleming@una.edu

Upcoming Annual Meetings

2016

August 21-25 American Fisheries Society; Kansas City, MO
September 7-8 Aquatic Weed School 2016; Davis, CA
September 12-14 MidSouth APMS; Baton Rouge, LA
October 5-7 South Carolina APMS; Springmaid Beach, SC
October 17-20 Florida APMS; Daytona Beach, FL
November 1-4 North American Lake Management Society; Alberta, Canada

TBA Texas APMS

RECENT PUBLICATIONS OF INTEREST

Monoecious hydrilla – a review of the literature
Sarah True-Meadows, Erika J. Haug, and Robert J. Richardson

Response of seven aquatic plants to a new arylpicolinate herbicide
Robert J. Richardson, Erika Haug, and Michael D. Netherland

Evaluation of foliar herbicide and surfactant combinations for control of giant salvinia at three application timings.
Christopher R. Mudge, Alexander J. Perret, and Jonathan R. Winslow

The influence of invasive aquatic plant removal on diets of bluegill in Minnesota lakes
Krisan M. Webb, Rachel E. Schultz, and Eric D. Dibble

Ag quick CAST
CAST Commentary 2014-1-QC
July 2014
Material excerpted from original CAST document

Benefits of Controlling Nuisance Aquatic Plants and Algae in the United States

Invasive plants and algae have become major threats to rivers, lakes, wetlands, and riparian ecosystems.

- Once established in their new environment, they easily spread within and between water bodies, infest nearby watersheds, and disrupt the ecological status quo.
- Thousands of acres across the country are being degraded at an annual cost of tens of millions of dollars.
- Every watershed in the United States is at some level of risk.

Aquatic plants can harbor disease-causing organisms that adversely affect human health.

- Aquatic plants have entangled swimmers and caused or contributed to drowning.
- Toxin-producing cyanobacteria are a serious and emerging issue for freshwater resource managers.
- Approximately 50 species of cyanobacteria produce freshwater toxins that are harmful to vertebrates, including humans.

In the United States, invading alien species (plants and animals) cause major ecological damages and economic losses estimated at almost $120 billion per year.

- A major portion of commercial freight moves by water, and nuisance aquatic plants can interfere with movement of those goods.
- Direct impacts of nuisance aquatic plants to hydropower production include clogging turbines and penstocks, which increases costs of electricity to consumers.
- Lakes and reservoirs support a myriad of water-associated recreation.

Nuisance plants and algae have the ability to negatively impact aquatic communities and habitat in primarily four ways:

- Structurally changing habitat through fast growth rates, greatly increasing populations and biomass.
- Dominating the capture of energy from sunlight [outcompeting valuable native plants].
- Stabilizing and limiting water exchange processes [impairing water quality].
- Producing large amounts of dead plant material [which can degrade dissolved oxygen levels].

The detrimental effects of weeds on human water uses can be ameliorated and in some instances eliminated through [proactive and prudent] management.

- Drinking water supplies, water-based recreational activities, agricultural irrigation systems, and industrial water intakes depend on consistent and effective aquatic plant management programs.
- The most widespread management technique involves the use of environmentally compatible chemical herbicides [but other nonchemical techniques can help suppress plant growth].
- It should be noted that rapid-response approaches to eliminate pioneer infestations are becoming more accepted and that there are a few instances of active "eradication" programs.
- People must make the protection and conservation of [freshwater resources] a top priority for the future.

Experts to Contact for More Information:
Kurt Getsinger (Kurt.D.Getsinger@usace.army.mil); Eric Dibble (edibble@cfr.msstate.edu); John Rodgers (jrodger@clemson.edu); David Spencer (dfspencer@ucdavis.edu)

To view the complete text of this CAST Commentary, click here or visit the CAST website (www.cast-science.org) and click on Publications. For more information about CAST, visit the website or contact Linda Chimenti, Executive Vice President, at 515-292-2125 ext 231.

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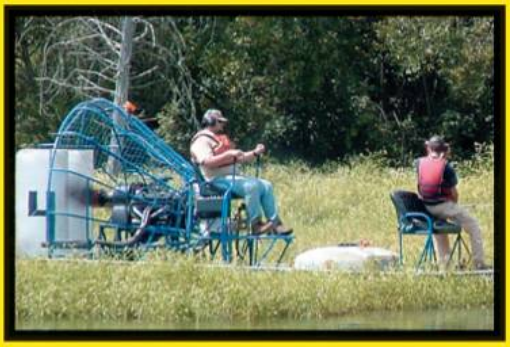

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