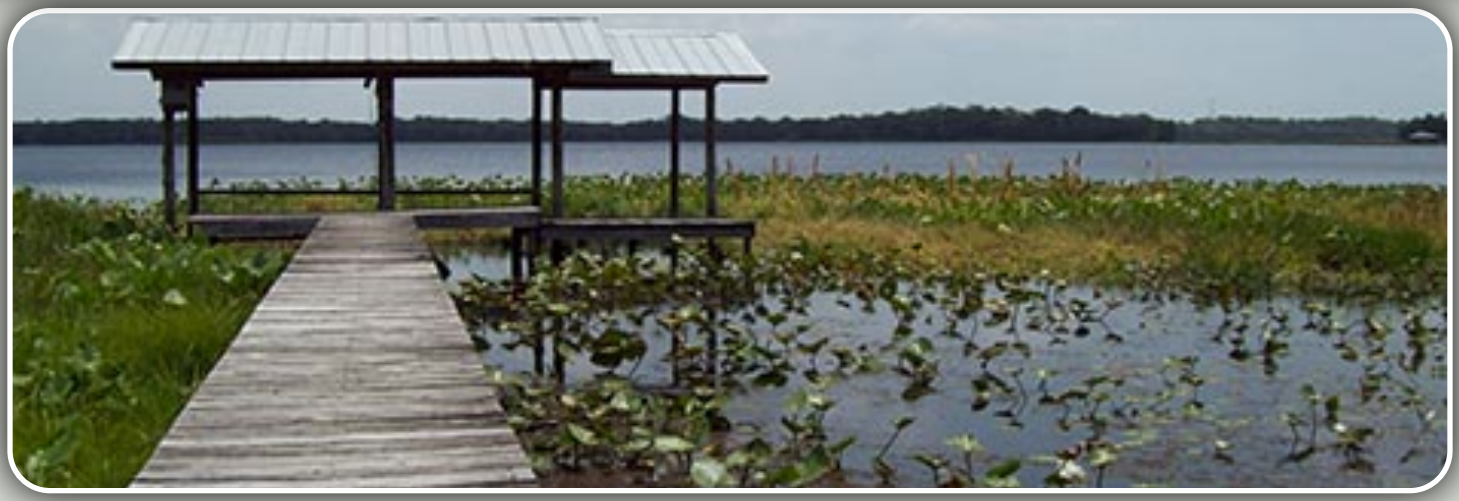
MIDSOUTH AQUATIC PLANT MANAGEMENT SOCIETY

Vol.36
Issue 1



Board of Directors

President: Ryan Wersal
Lonza- Water Technology
Alpheretta Innovation &
Technology Center
1200 Bluegrass Lakes Pkwy.
Alpharetta, GA 30004
678-624-5891
ryan.wersal@lonza.com

President Elect: Jeremy Slade
Accounts Manager, Aquatics
UPI
4003 NW 65th Ave
Gainesville, FL 32653
662-617-4571
jeremy.slade@uniphos.com

Secretary: Brett Hartis
Program Manager
Aquatic Plant Management Program
Tennessee Valley Authority
Phone: 256-891-6607
Fax: 256-891-6601
bmhartis@tva.gov

Treasurer: Sherry Whitaker
US Army Engineer Research &
Development Center
3909 Halls Ferry Rd.
Vicksburg, MS 39180
601-634-2990
sherry.l.whitaker@usace.army.mil

Editor: Jonathan Fleming
Department of Geography
University of North Alabama
UNA Box 5225
Florence, AL 35632
256-765-5216
jpfleming@una.edu

Directors:
Craig Aguillard
Winfield Solutions LLC
3015 Tiger Lane
Ville Platte, LA 70586
337-363-6032
caguillard@landolakes.com

Chris Mudge
School of Plant, Environmental &
Soil Sciences. LSU AgCenter
108 Sturgis Hall
Baton Rouge, LA 70803
225-578-1208
cmudge@agcenter.lsu.com

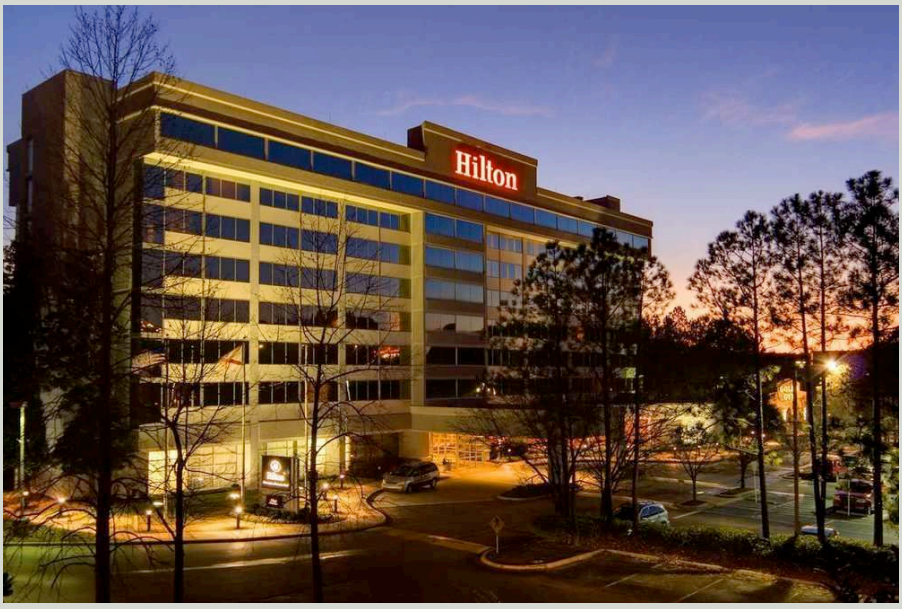
Warren Wagner
Environmental Analyst
Georgia Power
2480 Maner Road
Atlanta, GA 30339
Tel: 404-799-2152
Mobile: 404-851-4841
whwagner@southernco.com

Bradley Sartain
School of Plant, Environmental & Soil
Sciences. LSU AgCenter
104 M.B. Sturgis Hall
Baton Rouge, LA 70803
601-540-7041
bsartain@agcenter.lsu.com

Register Now for the 2017 MSAPMS Society Meeting

The MidSouth Aquatic Plant Management Society will be holding our 36th annual meeting at the Hilton Birmingham-Perimeter Park, Birmingham, AL. The meeting will be held September 11-13, 2017. Events will include the President's reception the evening of September 11 and the banquet on Wednesday, September 13. More information is coming soon!

Please visit the conference webpage at www.msapms.org 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 10 to 13. The deadline for room reservations at our Society rate is August 20, 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 Birmingham.



A Message from the President

Hello Membership,

Summer is finally here in the MidSouth as it seemed to be a long, cool, and wet spring; at least here in Georgia. The weather is now hot and I hope the plants are cooperating with whatever endeavors you find yourself in, whether it be research or application. Many of us have recently returned from the APMS meeting in Daytona Beach. I'm proud to say the MidSouth region continues to be one of the most represented Societies at the national level both from attendance at the meeting and on the board of directors. This level of participation outside of our region speaks volumes as to the dedication and passion our members have for aquatic plant management. Though once the national meeting is over please remember to make plans to attend our MSAPMS meeting in September.

We will be holding our 36th annual meeting at the Hilton Birmingham Perimeter Park in Birmingham, Alabama. The meeting will be held September 11-13 so make your reservations to attend now as our special room rate is $129.00 and deadline for room reservations at our Society rate is August 20, 2017 This is sure to be a great meeting, so plan to attend and bring the family! Jeremy Slade and Chris Mudge are working hard on the agenda. Events will include the President's Reception the evening of Monday September 11th, the annual Aquatic Plant Management Workshop on Tuesday September 12th, and a variety of oral presentations and the Awards Banquet on Wednesday September 13.

If you have not thought about it previously I would encourage you to become more active in the Society by joining a committee or volunteering for a position on the Board of Directors. We are always on the lookout for new faces and ideas to make the Society better. I will close by thanking our current Board of Directors for all of their hard work and dedication to the Society. Without their efforts it would be difficult to have an organization that runs as smoothly as the MidSouth does.

Sincerely,

Ryan M. Wersal,

President, MidSouth Aquatic Plant Management Society, 2016-2017

Mississippi Aquatic Invasive Species Council update

In 2016, the Mississippi Aquatic Invasive Species Council (MAISC) was formed. The group consists of individuals from the MS Department of Environmental Quality (MDEQ), the MS Department of Agriculture and Commerce (MDAC), the Mississippi Department of Wildlife Fisheries and Parks (MDWFP), the MS Department of Marine Resources (MDMR), the Gulf States Marine Fisheries Commission (GSMFC), and researchers from Mississippi State University (MSU). The purpose of the MAISC is to educate people in MS about issues associated with aquatic invasive species, prevent the spread of invasive species into and around MS, and to control or eradicate invasive species when possible.

In 2016, the MAISC engaged in a number of outreach activities that informed the public about invasive marine and freshwater species in MS. The council also sent one teacher to the TVA plant camp that is organized by Dr. Brett Hartis of TVA to educate teachers from grades K-12 about issues surrounding invasive aquatic species so that teachers can then incorporate this information into their class curricula. The program was so successful that in 2017 the MAISC will be sending three new teachers to the event.

In 2017, the council has engaged in a survey of high traffic waterbodies within the state to determine if invasive species are present within these waterbodies. The purpose of this survey is to determine the extent of invasion into MS so that appropriate control methods can be implemented to halt the spread of invasive species within the state.

Aquatic Plant Survey of Mississippi Waterbodies

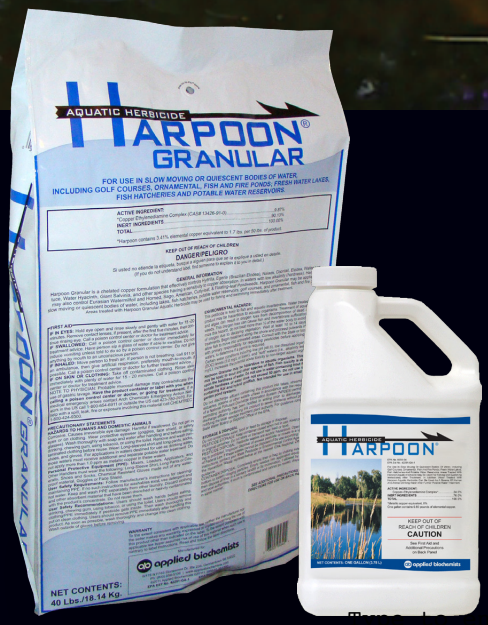
In 2017, researchers from Mississippi State University (MSU) engaged in a survey of high traffic waterbodies in the state of MS. High traffic waterbodies are those that receive a lot of daily use and therefore have a higher probability of being infested with an invasive species. Invasive species are typically introduced to new waterbodies via boat traffic. Invasive plants or plant fragments can become attached to boat trailers or motors and 'hitchhike' from infested to un-infested waterbodies. To date, researchers have found new infestations of the invasive species hydrilla (Hydrilla verticillata), Cuban bulrush (Oxycarum cubense), water hyacinth (Eichornnia crassipes), alligatorweed (Alternanthera philoxeroides), common salvinia (Salvinia minima), giant salvinia (Salvinia molesta), common reed (Phragmites australis), and torpedo grass (Panicum repens) within MS waterbodies. The final results of this project aren't available yet as the project is ongoing through summer 2017, however the final results will be available in fall 2017.

A New Infestation of Hydrilla in Lake Okhissa, MS

Lake Okhissa was constructed in 2007 in the Homochitto National Forest in southwest MS. The purpose of the lake is to provide recreational activities for visitors to the national forest. In June 2017, researchers from Mississippi State University surveyed the lake for aquatic plant species. The purpose of this survey was to determine the diversity of the plant community in the lake 10 years after construction. Instead of a diverse plant assemblage, the research team found the invasive aquatic plant hydrilla (Hydrilla verticillata). Hydrilla was present at 75% of the survey sites in the lakes littoral zone (area where plants can grow).

Hydrilla is widespread in waterbodies across the southeastern states and has been aptly nicknamed 'kudzu of the water' because of its rapid growth rate. Hydrilla is able to quickly outgrow, and thus outcompete, native plant species for resources. This allows hydrilla to become the dominant plant (in some cases the only plant) in many aquatic ecosystems. The loss of native plant species and the resources they provide to other organisms, like habitat or food, yields a less diverse ecosystem. This, in turn, can negatively affect other organisms, like sportfish populations, that humans utilize for recreational purposes.

Thanks to Gray Turnage, Mississippi State University, Geosystems Research Institute, for these updates!



Invasive and Nuisance Weed Control

HARPOON® Aquatic Herbicide
a great choice for anyone
who needs to target
copper-sensitive species
and cannot restrict their water use

applied biochemists
A Lonza Business

For more information, contact Harry Knight
Southern Regional Sales Manager
Ph: (256)-796-8704
harry.knight@lonza.com

The MSAPMS Selection Committee has submitted the following list of names for nomination to fill the corresponding open positions for the 2017-2018 year.

President-Elect: Scott Jackson, Syngenta
Secretary-Brett Hartis, TVA
Editor-Bradley Sartain, LSU
Director-Alex Perret, LDWF
Director-Gray Turnage, MSU

Thank you to Our Sustaining Members for Supporting the MidSouth Aquatic Plant Management Society!

- Winfield Solutions
- Alabama Power
- Aqua Services, Inc.
- Applied Biochemists (A Lonza Business)
- Nufarm Americas
- Helena Chemical Company
- Alligare, LLC
- Crop Production Services
- Cygnet Enterprises, Inc.
- SePro Corporation
- BioSafe Systems
- **Brewer International**
- **AquaMaster Fountains & Aerators**
- Syngenta
- Red River Specialties, Inc.
- Airmax Ecosystems
- KSU-CEP

International Conference on Aquatic and Invasive Species (ICAIS)

The 2017 International Conference on Aquatic Invasive Species, October 22-26, is widely considered the most comprehensive international forum on aquatic invasive species and continues to evolve to address new and emerging issues.

Sessions and presentations include the review of accumulated scientific knowledge; presentation of the latest field research; introduction of new technological developments for prevention, monitoring and control; discussion of policy and legislation; and mechanisms to raise awareness with the general public through education and outreach initiatives.

In recent years the conference has typically involved over 400 participants from over 30 countries, representing academia, industry, government agencies, NGOs and other stakeholders involved in the issues. Many are seeking opportunities for international cooperation and collaboration to address AIS issues from a global perspective.

The conference website and registration information can be found here: http://www.icais.org/;

Upcoming Annual Meetings

2017

August 20–24 American Fisheries Society, Tampa, FL

September 11–13 MidSouth APMS, Birmingham, AL

Have something interesting to share with MSAPMS?

Please consider sending us your updates and stories.

Newsletter Ad Update

Beginning in 2017 we will be offering newsletter advertisements on the MSAPMS Conference Registration form. Please consider advertising with us!

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.

We Can Handle Any Of Your Lake & Pond Management Needs.

At Aqua Services, we have over 20 years of experience meeting the lake and pond management needs of land owners throughout the South. Put our experience to work for you.

- Aquatic Vegetation Management
- Electro-Fishing Surveys
- Fish Stocking
- Lake and Pond Design
- Water Quality Testing
- Liming and Fertilizing
- Grass Carp
- Yearly Maintenance Plans

Aqua Services, Inc.

1-888-669-3337

23360 Hwy. 431, Guntersville, AL 35976
www.aquaservicesinc.com