



# Aquatic Plant News

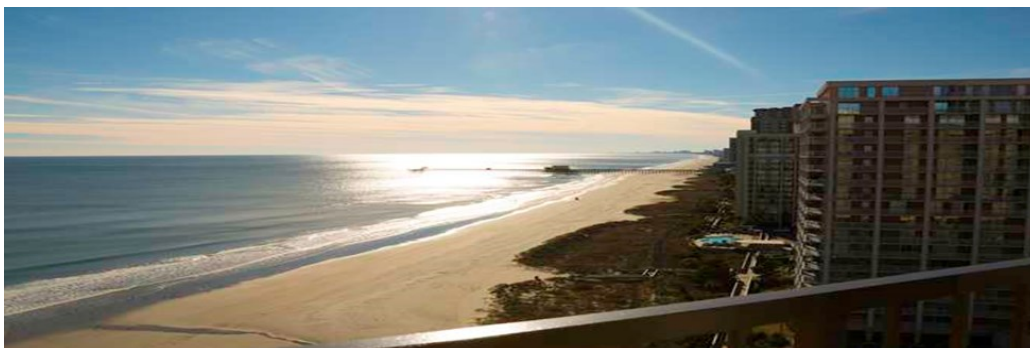
The Newsletter of The Aquatic Plant Management Society, Inc.  
7922 NW 71st Street, Gainesville, FL 32653

[Karen Brown](#), Editor

Issue 109

June 2015

## North Myrtle Beach, SC—Site of APMS 55th Annual Meeting



*North Myrtle Beach, South Carolina*

The South Carolina Aquatic Plant Management Society will be hosting the 55th Annual Meeting of the Aquatic Plant Management Society July 12-15, 2015 at the Hilton Myrtle Beach Oceanfront Resort at Kingston Plantation. Hilton Myrtle Beach Resort on the Grand Strand is at the north end of Myrtle Beach, minutes from many attractions such as Broadway at the Beach, Myrtle Beach House of Blues, Tanger Outlet Mall, and over 100 golf courses. The 385 resort guest rooms have private balconies, many offering spectacular ocean views. Guests have access to all Kingston Plantation Resort amenities including SPLASH! Caribbean Family Water Playground and Lazy River, resort pools, lighted tennis courts, and the Sport and Health Club.

Hotel reservations at the Hilton can be made online at:

[www.hilton.com/en/hi/groups/personalized/M/MYRBHHH-AQU-20150708/index.jhtml](http://www.hilton.com/en/hi/groups/personalized/M/MYRBHHH-AQU-20150708/index.jhtml) or by calling the Hilton Myrtle Beach at 843-449-5000. **Please make your reservations now.** When making reservations by phone, be sure to mention that you are with the Aquatic Plant Management Society. The cut-off date for the special group rate is **June 19, 2015**. Our special APMS guest room rate is \$164.00 for single and double occupancy per night plus applicable tax. These group rates are available three days prior to the conference and three days post conference subject to availability. Two bedroom condos at the Royal Palms next door are also available at a reduced rate of \$369 per night. The Hilton Myrtle Beach requires that all reservations be guaranteed with a major credit card or a deposit. Cancellations must be made five days prior to arrival or you will be charged one night's room and tax. Check in time is 4:00 p.m. and checkout time is 11:00 a.m. If you choose to depart earlier than your reserved departure date, the hotel will charge one night room and tax.

## 55th Annual Meeting—continued

Due to the high demand for rooms at the Hilton, the conference room block is nearly full. **Please call TODAY** to make your reservations. **Here are some additional options:**

**1. Some condos next door at the Royal Palms have been converted to suites for our conference at \$184 for single and double occupancy plus applicable tax. These rooms are normally \$289 per night.** Use the same phone number above for these reservations.

**For the rooms below, use the same phone number above, but check-in is at the Embassy Suites Hotel rather than the Hilton:**

**2. Ten guest rooms** are available at the Brighton Tower at \$189 per night. These rooms are in the Kingston Plantation complex and a 10 minute walk to the Hilton along the boardwalk.

**3. Seven ocean view guest rooms** are available in the South Hampton Tower at \$209 per night. This tower is also in the Kingston Plantation complex and a 10 minute walk to the Hilton along the boardwalk.

The Society will continue to use a 2½ day format for the meeting. The technical program will begin Monday morning and end around noon on Wednesday. Our meeting will kick off with the President's Reception on Sunday evening. As the official welcoming event of the meeting, this reception is an excellent time to reacquaint with old friends and meet new friends. Heavy hors d'oeuvres and your favorite beverages will be served. The Monday evening Poster Session and Reception presents a great opportunity to view posters and exhibits while enjoying great food and beverage. The APMS Reception and Awards Banquet on Tuesday evening will be another memorable event where we will recognize those who have served and contributed to APMS and SCAPMS, welcome new officers and directors, and present student paper and other awards. These special events are included for all registered delegates, students, and guests. Non-registered guests may purchase individual tickets for these events at the registration desk.

This year, spouses, children, and guests will be treated to a tour of Brookgreen Gardens, one of Myrtle Beach's most dearly loved attractions. You will be picked up at the Hotel at 10:00 a.m. and will return by 3:30 p.m. The experience begins with a guided tour of the Gardens, named by TripAdvisor as One of the Top Ten Gardens in the United States. Experience the guided cruise on a 48 foot pontoon boat along historic rice fields, now home to alligators, waterfowl, and osprey. The Dalton and Linda Floyd Domestic Animals of the Plantation Exhibit provides an element of education not only for the Lowcountry Zoo, but it connects the zoo to the Lowcountry Trail and Brookgreen's history. Lunch will be served at the Gardens. Round out your visit by strolling through the Cypress Aviary, the only known aviary built over an existing cypress swamp, observing herons, mergansers, and egrets.

The Society will bring back the popular **Scholarship Duck Race** at the Lazy River just outside the Pavilion before the Banquet. Also there will be a **Scholarship Golf Tournament** on the Sunday before the meeting (July 12) at the Arcadian Shores course near the hotel. If you have an interest in playing golf, please contact Larry Feller at [larry.feller@syngenta.com](mailto:larry.feller@syngenta.com). Tee times start at 1PM.

## 55th Annual Meeting—continued

The APMS Board has made a concerted effort to keep registration costs at a reasonable level. 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 19, 2015**. After this date, registration fees will be \$330.00 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 students not competing is \$75.00. Delegate and student registration includes all technical sessions, President's Reception, refreshment breaks, Poster Reception, and Awards Banquet. Guest registration includes President's Reception, refreshment breaks, Guest Tour, Poster Reception, and Awards Banquet. Non-registered guests may purchase individual tickets for these events.

The Hilton Myrtle Beach is a 30 minute drive from the Myrtle Beach International Airport and is accessible by taxi, limousine, rental car or commercial shuttle service. A typical taxi fee is \$42 one way. Flights into Charleston SC (112 miles) and Wilmington NC (69 miles) may offer a cheaper alternative than flying into Myrtle Beach.

This is guaranteed to be a wonderful meeting so plan to attend and bring the family. Stay through the weekend. Please assist us in planning for the 55th Annual Meeting by submitting the **Meeting Registration Form** enclosed in this newsletter by **June 19, 2015**.

**Tommy Bowen,  
Meeting Planning Committee**

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# 55th Annual Meeting of the APMS Registration Form

## Delegate/Student Information

Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_ M.I: \_\_\_\_\_

Affiliation: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State/Province: \_\_\_\_\_ Zip/Postal Code: \_\_\_\_\_

Country: \_\_\_\_\_ E-mail Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

## Registration *(Includes Refreshment Breaks, President's Reception, Poster Reception, and Banquet)*

	<b>Early</b> <i>(by June 19, 2015)</i>	<b>On-site</b>	
<input type="checkbox"/> Delegate Registration	\$ 275.00	\$ 330.00	\$ _____
<input type="checkbox"/> Student Paper Competition Registration	\$ 0.00	\$ 0.00	\$ 0.00
<input type="checkbox"/> Regular Student Registration (non-competing)	\$ 75.00	\$ 75.00	\$ _____
<input type="checkbox"/> Guest Registration (spouse, partner, child over 12 years-of-age) <i>(also includes the Guest Tour)</i>			
Name(s): _____	\$ 130.00	\$ 155.00	\$ _____
<input type="checkbox"/> One-day Meeting Registration <i>(includes refreshment breaks on day of attendance only)</i>			
Day of Attendance: _____	\$ 100.00	\$ 100.00	\$ _____
<input type="checkbox"/> APMS/SCAPMS Scholarship Golf Tournament	\$ 50.00	\$ 50.00	\$ _____
<b>Individual Special Event Tickets for Non-registered Guests</b>			
<input type="checkbox"/> President's Reception      Name(s): _____	\$ 40.00	\$ 50.00	\$ _____
<input type="checkbox"/> Guest Tour                      Name(s): _____	\$ 40.00	\$ 50.00	\$ _____
<input type="checkbox"/> Poster Reception              Name(s): _____	\$ 40.00	\$ 50.00	\$ _____
<input type="checkbox"/> Banquet                          Name(s): _____	\$ 55.00	\$ 65.00	\$ _____

## Membership Dues (2015)

<input type="checkbox"/> Individual	\$ 75.00	\$ _____
<input type="checkbox"/> Student	\$ 20.00	\$ _____
<input type="checkbox"/> Sustaining	\$500.00	\$ _____

**Total Payment Amount:** \$ \_\_\_\_\_

## Payment Method (Check One)

☐ Check *(Make Payable to APMS, Inc.)*      Credit Card: ☐ Visa      ☐ Master Card      ☐ American Express

Credit Card Number: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

Name as it Appears on Card: \_\_\_\_\_ Signature of Card Holder: \_\_\_\_\_

**Send Completed Form and Payment to:**  
The Aquatic Plant Management Society, Inc.  
7922 NW 71<sup>st</sup> Street  
Gainesville, FL 32653  
Fax: 352-392-3462

**Early registration accepted if form and payment received by June 19, 2015. Registration questions, please phone: 662-617-4571 or E-mail: APMS14@Hotmail.com**

**Cancellation/Refund Policy:** Registration fees are fully refundable prior to June 30, 2015, less a \$25.00 processing and handling fee. No refund of any fees will be issued if cancellation of participation is received after June 30, 2015. Notice of cancellation must be received by APMS via mail, fax, or e-mail. **Phone cancellations will not be accepted.**

# APMS 2015 PRE-FINAL AGENDA

(Consult the website ([apms.org](http://apms.org)) for updates to the Program and Agenda)

**Meeting-at-a-Glance** (Note: See the daily Agendas-at-a-Glance below for specific event times and locations)

- Sunday:** APMS Board of Directors Meeting  
Exhibits Setup  
Poster Setup  
Registration  
Golf Tournament  
President's Reception – Live Entertainment!
- Monday:** General Meeting Opens  
General Session – Student Presentations  
Guest Tour  
Student Luncheon  
APMS Annual Business Meeting  
Poster Session & Reception
- Tuesday:** General Session – Student Presentations  
APMS Past Presidents' Luncheon  
State Chapter Presidents' Luncheon  
SCAPMS Annual Business Meeting & Board Meeting  
Duck Races – Awards Reception  
Awards Banquet – APMS and SCAPMS Awards Presentations
- Wednesday:** General Session – Updates  
Aquatic Plant ID Session  
General Meeting Adjourns – Noon  
APMS Board of Directors Meeting

## SUNDAY, JULY 12

### Sunday's Agenda-at-a-Glance

- |          |   |         |  |
|----------|---|---------|--|
| 7:30 am  | - | 5:00 pm | APMS Board of Directors Meeting ( <i>Palisades H – Convention Center</i> )     |
| 12:00 pm | - | 5:00 pm | Exhibits Setup ( <i>Palisades DEF – Convention Center</i> )                    |
| 12:00 pm | - | 5:00 pm | Poster Setup ( <i>Palisades DEF – Convention Center</i> )                      |
| 1:00 pm  | - | 5:00 pm | Registration ( <i>Group Registration South – Convention Center</i> )           |
| 1:00 pm  | - | 6:00 pm | APMS / SCAPMS Scholarship Golf Tournament ( <i>Arcadian Shores Golf Club</i> ) |
| 7:00 pm  | - | 9:00 pm | President's Reception ( <i>Dunes Ballroom – Hotel, 16<sup>th</sup> Floor</i> ) |
- Provided by Silver Level Sponsors*

## MONDAY, JULY 13

### Monday's Agenda-at-a-Glance

- |  |   |          |   |
|--|---|----------|---|
| 7:00 am                                  | - | 8:00 am  | Continental Breakfast ( <i>Palisades DEF – Convention Center</i> )                                |
| <i>Provided by Bronze Level Sponsors</i> |   |          |   |
| 7:00 am                                  | - | 5:00 pm  | Exhibits Open ( <i>Palisades DEF – Convention Center</i> )  |
| 7:00 am                                  | - | 5:00 pm  | Posters Open ( <i>Palisades DEF – Convention Center</i> )   |
| 7:30 am                                  | - | 5:00 pm  | Registration ( <i>Group Registration South – Convention Center</i> )                              |
| 8:00 am                                  | - | 11:30 am | Session I – General Session ( <i>Palisades ABC – Convention Center</i> )                          |
| 10:00 am                                 | - | 3:30 pm  | Guest Tour – Pre-registered Guests meet at the Hilton Main Lobby at 9:45 am                       |
| <i>Provided by Bronze Level Sponsors</i> |   |          |   |
| 9:50 am                                  | - | 10:10 am | Refreshment Break ( <i>Palisades DEF – Convention Center</i> )                                    |
| <i>Provided by Bronze Level Sponsors</i> |   |          |   |
| 11:30 am                                 | - | 1:00 pm  | Lunch (on your own)   |
| 11:30 am                                 | - | 1:00 pm  | APMS Student Affairs Luncheon ( <i>Palisades I – Convention Center</i> )                          |
| <i>Provided by Silver Level Sponsors</i> |   |          |   |
| 1:00 pm                                  | - | 4:30 pm  | Session II – General Session & Student Presentations ( <i>Palisades ABC – Convention Center</i> ) |
| 2:40 pm                                  | - | 3:10 pm  | Refreshment Break ( <i>Palisades DEF – Convention Center</i> )                                    |
| <i>Provided by Bronze Level Sponsors</i> |   |          |   |
| 4:30 pm                                  | - | 5:00 pm  | APMS Annual Business Meeting ( <i>Palisades ABC – Convention Center</i> )                         |
| 6:00 pm                                  | - | 7:30 pm  | Poster Session and Reception ( <i>Palisades DEF – Convention Center</i> )                         |
| <i>Provided by Silver Level Sponsors</i> |   |          |   |

## Session I – General Session

8:00 am – 11:30 am – Palisades ABC – Convention Center

- 8:00 am      **Presidential Address**  
**Cody Gray**, *UPI, Peyton, CO*
- 8:10 am      **EPA and Aquatic Pesticide Registration – Managing Risks in Aquatic Areas**  
**Dan Kenny**, *U.S. Environmental Protection Agency, Office of Pesticide Programs, Alexandria VA*
- 8:30 am      **Movement Towards an Adaptive Systems Approach to Freshwater Management and Initial Treatment Results from Jordan Lake, a 14,000-Acre Reservoir**  
**H. Kenneth Hudnell**, *Medora Corporation, New Bern, NC*
- 8:50 am      **North Carolina Wildlife Resources Commission's Role with Aquatic Plant Management in the North Carolina Piedmont**  
**Mark Fowlkes**, *North Carolina Wildlife Resources Commission, Elkin, NC*
- 9:10 am      **Past, Present, and Future of Aquatic Plant Management in Florida Public Waters**  
**Jeffrey D. Schardt**, *APMS Secretary, Thomasville, GA*
- 9:30 am      **The Tennessee Valley Authority Aquatic Plant Management Program – A Look at the Past, Present, and Future**  
**Brett M. Hartis**, *Tennessee Valley Authority, Aquatic Plant Management Program, Guntersville, AL*
- 9:50 am      **Refreshment Break** (*Palisades DEF – Convention Center*)
- 10:10 am     **Prospects for (Meaningfully) Integrating Molecular Biology into Aquatic Plant Management**  
**Ryan A. Thum**, *Montana State University, Plant Sciences Department, Bozeman, MT*
- 10:30 am     **Scientific-based Technology or Stupid Lake Trick? A Suggestion for Improving Aquatic Plant Management**  
**John Madsen**, *U.S. Dept of Agriculture, Agriculture Research Service, Exotic & Invasive Weeds Research, Davis, CA*
- 10:50 am     **The Underappreciated Economic and Ecological Return from Eradication Programs for Invasive Aquatic Plant Infestations**  
**Mark Heilman**, *SePRO Corporation, Carmel, IN*
- 11:10 am     **Linking Plant Biology with Management Strategies for Control of Monoecious Hydrilla**  
**Michael D. Netherland<sup>1</sup>**, **Robert J. Richardson<sup>2</sup>**, and **Justin J. Nawrocki<sup>2</sup>**  
<sup>1</sup>*U.S. Army Corps of Engineers, Engineer Research and Development Center, Gainesville, FL*  
<sup>2</sup>*North Carolina State University, Crop Science Department, Raleigh, NC*
- 11:30 am     **Lunch (on your own)**

## Session II – Hydrilla Management Perspectives and Student Presentations

1:00 pm – 4:30 pm – Palisades ABC – Convention Center

**Moderator: Dr. Vernon V. Vandiver, Jr.** – APMS Board of Directors

*Professor Emeritus, University of Florida, Gainesville, FL*

- 1:00 pm      **Cayuga Lake Watershed Hydrilla Project: Early Detection and Rapid Response to Hydrilla in Central NY**  
**James Balyszak**, *Hydrilla Task Force, Cayuga Lake Watershed, Program Manager, Ithaca, NY*
- 1:20 pm      **Response of Sprouting Monoecious Hydrilla Turions to Varying Temperature and Salinity Levels**  
**(Student Presentation)**  
**Shannon M. Auell and Robert J. Richardson**  
*North Carolina State University, Crop Science Department, Raleigh, NC*
- 1:40 pm      **Monoecious Hydrilla in the Chowan River, North Carolina**  
**Rob Emens<sup>1</sup>** and **Robert J. Richardson<sup>2</sup>**  
<sup>1</sup>*North Carolina Department of Environment and Natural Resources, Raleigh, NC*  
<sup>2</sup>*North Carolina State University, Crop Science Department, Raleigh, NC*



- 2:00 pm      **Hydrilla Management at Claytor Lake, Virginia: A Cautionary Tale**  
**John R. Copeland<sup>1</sup>**, William B. Kittrell, Jr.<sup>2</sup>, Matt Weberg<sup>3</sup>, Brian Murphy<sup>4</sup>, and Andrew Rypel<sup>5</sup>  
<sup>1</sup>Virginia Department of Game and Inland Fisheries, Blacksburg, VA; <sup>2</sup>Virginia Department of Game and Inland Fisheries, Marion, VA; <sup>3</sup>Minnesota Department of Natural Resources, Grand Marais, MN; <sup>4</sup>Virginia Tech University, College of Natural Resources and the Environment, Blacksburg, VA; <sup>5</sup>Wisconsin Department of Natural Resources, Madison, WI
- 2:20 pm      **Submersed Plant Population Dynamics over Time in Roanoke Rapids Lake**  
**(Student Presentation)**  
**Andrew Howell**, Justin J. Nawrocki, Steve T. Hoyle, and Robert J. Richardson  
North Carolina State University, Crop Science Department, Raleigh, NC
- 2:40 pm      **Refreshment Break** (Palisades DEF – Convention Center)
- 3:10 pm      **Aquatic Invaders – Plant Camp Carolinas**  
**Anne Ellis**, Horizons Unlimited, Salisbury, NC
- 3:30 pm      **Effects of Copper Ethylenediamine on Hydrilla in Pickwick Lake, AL**  
**Lee G. Turnage<sup>1</sup>**, Ryan M. Wersal<sup>2</sup>, and Harry Knight<sup>3</sup>  
<sup>1</sup>Mississippi State University, Geosystems Research Institute, Starkville, MS; <sup>2</sup>Applied Biochemists, Alpharetta, GA; <sup>3</sup>Applied Biochemists, Cullman, AL
- 3:50 pm      **Field Evaluation of Tradewind Herbicide for Control of Suspected Fluridone Resistant Hydrilla**  
**Leif Willey<sup>1</sup>** and Bo Burns<sup>2</sup>  
<sup>1</sup>Aquatic Systems, Inc., Lutz, FL; <sup>2</sup>Nufarm Americas, Inc., Raleigh, NC
- 4:10 pm      **Impacts of Herbicide Management on Watermilfoil Species Dynamics in a Field Setting**  
**Syndell Parks<sup>1</sup>** and **Ryan Thum<sup>2</sup>** **(Student Presentation)**  
<sup>1</sup>Grand Valley State University, Biology Department, Muskegon, MI  
<sup>2</sup>Montana State University, Plant Sciences Department, Bozeman, MT
- 4:30 pm      **APMS ANNUAL BUSINESS MEETING** (Palisades ABC – Convention Center)
- 5:00 pm      **ADJOURN GENERAL SESSION**
- 6:00 pm      **POSTER SESSION AND RECEPTION** (Palisades DEF – Convention Center)

## POSTER SESSION

6:00 pm – 7:30 pm – Palisades DEF – Convention Center

**Developing an Integrated, Adaptive Approach to Hydrilla Management to Reduce Risk of Avian Vacuolar Myelinopathy at J. Strom Thurmond Reservoir (GA/SC)** **(Student Presentation)**

**Garon Brandon<sup>1</sup>**, Michael D. Netherland<sup>2</sup>, and Susan Wilde<sup>1</sup>

<sup>1</sup>University of Georgia, Warnell School of Forestry and Natural Resources, Athens, GA

<sup>2</sup>U.S. Army Corps of Engineers, Engineer Research and Development Center, Gainesville, FL

**Utilizing Phylogenetic Analysis and Population Genetics to Track the Movement of the Cyanobacterium**

*Cylindrospermopsis raciborskii*

**Clay Britton**, Methodist University, Department of Biology, Fayetteville, NC

**Variable-leaf Milfoil Response to Herbicides: A Five Year Summary** **(Student Presentation)**

**Evan Calloway<sup>1</sup>**, Justin J. Nawrocki<sup>1</sup>, Trevor Israel<sup>2</sup>, and Robert J. Richardson<sup>1</sup>

<sup>1</sup>North Carolina State University, Crop Science Department, Raleigh, NC

<sup>2</sup>University of Tennessee, Department of Plant Science, Knoxville, TN

**Sediment Copper Concentrations, *in situ* Benthic Abundance, and Sediment Toxicity: Comparison of Coves Treated with Copper-Based Algaecides and Untreated Coves in a Southern Reservoir** **(Student Presentation)**

**Tyler D. Geer<sup>1</sup>**, Kyla J. Iwinski<sup>2</sup>, Alyssa J. Calomeni<sup>1</sup>, and John H. Rodgers<sup>1</sup>, Jr.

<sup>1</sup>Clemson University, Department of Forestry and Environmental Conservation, Clemson, SC

<sup>2</sup>Clemson University, Department of Fisheries and Wildlife Biology, Clemson, SC

**Stocking Grass Carp – Is the Reward Worth the Risk? An Examination of Virginia's Grass Carp Program**

**Johnathan Harris** and Bonnie Brown, Virginia Department of Game and Inland Fisheries, Richmond, VA

### **Establishment of a New Cool Climate Mesocosm Facility**

**Tyler J. Harris<sup>1</sup>**, Robert J. Richardson<sup>1</sup>, Tracy Taylor<sup>2</sup>, Steve T. Hoyle<sup>1</sup>, Justin J. Nawrocki<sup>1</sup>, Andrew Howell<sup>1</sup>, and Alexander M. Stewart<sup>3</sup>

<sup>1</sup>North Carolina State University, Crop Science Department, Raleigh, NC; <sup>2</sup>North Carolina Department of Agriculture and Consumer Services, Upper Mountain Research Station, Laurel Springs, NC; <sup>3</sup>North Carolina Department of Agriculture and Consumer Services Research Station Division, Raleigh, NC

### **Maximizing Water Quality using Passive Polymer Enhanced Treatment Systems**

**Seva I. Iwinski**, Applied Polymer Systems, Inc., Woodstock, GA

### **Aquatic Weeds in Botswana: Historical Perspective and Management**

**C. N. Kurugundla<sup>1</sup>**, B. Mathangwane<sup>2</sup>, and S. Sakuringwa<sup>2</sup>

<sup>1</sup>Department of Water Affairs, Maun, Botswana; <sup>2</sup>Department of Water Affairs, Gaborone, Botswana

### ***Ficaria verna* (Fig buttercup) – An Emerging Weed in the Southeastern U.S.**

**Bridget R. Lassiter<sup>1</sup>** and Anthony L. Koop<sup>2</sup>

<sup>1</sup>North Carolina Department of Agriculture and Consumer Services, Plant Industry Division, Raleigh, NC

<sup>2</sup>U.S. Department of Agriculture, Plant Epidemiology and Risk Analysis Laboratory, Plant Protection & Quarantine, Raleigh, NC

### **Aquatic Plants: A Free Android and Apple App from North Carolina State University**

**Robert J. Richardson<sup>1</sup>**, Steve T. Hoyle<sup>1</sup>, Tyler J. Harris<sup>1</sup>, and Bridget Lassiter<sup>2</sup>

<sup>1</sup>North Carolina State University, Crop Science Department, Raleigh, NC

<sup>2</sup>North Carolina Department of Agriculture and Consumer Services, Plant Industry Division, Raleigh, NC

### **A Novel Invasive Species of Water Chestnut Found in the Potomac River near Washington, D.C.**

**Nancy B. Rybicki<sup>1</sup>**, Elizabeth Striano<sup>2</sup>, and Ryan A. Thum<sup>3</sup>

<sup>1</sup>U.S. Geological Survey, National Research Program, Reston, VA; <sup>2</sup>Rails to Trails Conservancy, Washington, DC; <sup>3</sup>Montana State University, Plant Sciences Department, Bozeman, MT

### **How Ultrasonic Technology Kills and Controls Algae for Better Pond Management**

**Kirk Whatley**, Sonic Solutions, LLC, West Hatfield, MA

## **TUESDAY, JULY 14**

### **Tuesday's Agenda-at-a-Glance**

7:00 am	-	8:00 am	Continental Breakfast ( <i>Palisades DEF – Convention Center</i> ) <i>Provided by Bronze Level Sponsors</i>
7:00 am	-	5:00 pm	Exhibits Open ( <i>Palisades DEF – Convention Center</i> )
7:00 am	-	5:00 pm	Posters Open ( <i>Palisades DEF – Convention Center</i> )
7:30 am	-	5:00 pm	Registration ( <i>Group Registration South – Convention Center</i> )
8:00 am	-	11:30 am	Session III – General Session and Student Presentations ( <i>Palisades ABC – Convention Center</i> )
9:40 am	-	10:10 am	Refreshment Break ( <i>Palisades DEF – Convention Center</i> ) <i>Provided by Bronze Level Sponsors</i>
11:30 am	-	1:00 pm	Lunch on your own
11:30 am	-	1:00 pm	APMS Past Presidents' Luncheon ( <i>Palisades H – Convention Center</i> ) <i>Provided by Silver Level Sponsors</i>
11:30 am	-	1:00 pm	APMS Regional Chapter Presidents' Luncheon ( <i>Palisades I – Convention Center</i> ) <i>Provided by Silver Level Sponsors</i>
1:00 pm	-	5:00 pm	Session IV – General Session and Student Presentations ( <i>Palisades ABC – Convention Center</i> )
3:00 pm	-	3:20 pm	Refreshment Break ( <i>Palisades DEF – Convention Center</i> ) <i>Provided by Bronze Level Sponsors</i>
5:00 pm	-	6:30 pm	SCAPMS Annual Business Meeting & Board Meeting ( <i>Palisades ABC – Convention Center</i> )
6:00 pm	-	7:30 pm	Duck Races ( <i>Splash Lazy River, Embassy Suites Hotel</i> )
6:00 pm	-	7:30 pm	Awards Reception ( <i>Splash Lazy River, Embassy Suites Hotel</i> ) <i>Provided by Silver Level Sponsors</i>
7:30 pm	-	10:00 pm	Awards Banquet ( <i>Palmetto Pavilion, Embassy Suites Hotel</i> ) <i>Provided by Silver Level Sponsors</i>
8:30 pm	-	10:00 pm	APMS and SCAPMS Awards Presentations ( <i>Palmetto Pavilion, Embassy Suites Hotel</i> )



### Session III – General Session and Student Presentations

8:00 am – 11:30 am – Palisades ABC – Convention Center

#### Moderator: Christopher R. Mudge

U.S. Army Corps of Engineers, Engineer Research and Development Center, Baton Rouge, LA

- 8:00 am      **Evaluating the Potential for Herbicide Resistance Evolution in Hybrid Watermilfoil using a Temporal Genetic Analysis Pre- Versus Post-treatment with Auxinic Herbicides**  
**(Student Presentation)**  
**Jeff Pashnick<sup>1</sup>**, Ryan A. Thum<sup>1</sup>, Syndell Parks<sup>2</sup>, and Gregory Chorak<sup>3</sup>  
<sup>1</sup>Montana State University, Plant Sciences Department, Bozeman, MT; <sup>2</sup>Grand Valley State University, Biology Department, Muskegon, MI; <sup>3</sup>Grand Valley State University, Annis Waters Resources Institute, Muskegon, MI
- 8:20 am      **Status of *Arundo donax* as a Biofuel Crop in North Carolina and Potential Containment Strategies**  
**Steve T. Hoyle<sup>1</sup>**, Robert J. Richardson<sup>1</sup>, Sam Brake<sup>2</sup>, and Jacob Barney<sup>3</sup>  
<sup>1</sup>North Carolina State University, Crop Science Department, Raleigh, NC; <sup>2</sup>North Carolina Department of Agriculture and Consumer Services, Bioenergy Research Initiative, Oxford, NC  
<sup>3</sup>Virginia Tech, Department of Plant Pathology, Physiology, and Weed Science, Blacksburg, VA
- 8:40 am      **Laboratory Crosses Demonstrate that Interspecific and Intraspecific Hybridization Can Lead to Rapid Increases in Invasive Growth (Student Presentation)**  
**Danielle E. Grimm** and Ryan A. Thum, Montana State University, Plant Sciences Department, Bozeman, MT
- 9:00 am      **The Effect of Glyphosate and PPO Herbicide Combinations on Difficult to Control Aquatic Plants**  
**Christopher R. Mudge<sup>1</sup>** and Michael D. Netherland<sup>2</sup>  
<sup>1</sup>U.S. Army Corps of Engineers, Engineer Research and Development Center, Baton Rouge, LA  
<sup>2</sup>U.S. Army Corps of Engineers, Engineer Research and Development Center, Gainesville, FL
- 9:20 am      **2,4-D Absorption and Translocation in Eurasian Watermilfoil (*Myriophyllum spicatum*) and a 2,4-D Tolerant Milfoil Hybrid (*M. spicatum* x *M. sibiricum*) (Student Presentation)**  
**Kallie C. Kessler** and Scott J. Nissen  
Colorado State University, Bioagricultural Sciences and Pest Management, Fort Collins, CO
- 9:40 am      **Refreshment Break (Palisades DEF – Convention Center)**
- 10:10 am      **Growth and Control of *Miscanthus* spp. in Wetland Environments**  
**Lee G. Turnage<sup>1</sup>**, Nicole Barksdale<sup>2</sup>, John D. Byrd<sup>2</sup>, and John D. Madsen<sup>3</sup>  
<sup>1</sup>Mississippi State University, Geosystems Research Institute, Mississippi State, MS; <sup>2</sup>Mississippi State University, Plant and Soil Sciences, Mississippi State, MS; <sup>3</sup>U.S. Department of Agriculture, Agriculture Research Service, Exotic and Invasive Weeds Research, Davis, CA
- 10:30 am      **Responses of a Cyanobacterium (*Planktothrix agardhii*) and a Green Alga (*Pseudokirchneriella subcapitata*) to a Chelated and Non-chelated Copper Algaecide (Student Presentation)**  
**Alyssa J. Calomeni** and John H. Rodgers, Jr.  
<sup>1</sup>Clemson University, School of Agricultural, Forest and Environmental Sciences, Clemson, SC
- 10:50 am      **Macroinvertebrate and Sport Fish Response to Native Plants**  
**Justin J. Nawrocki** and Robert J. Richardson  
North Carolina State University, Crop Science Department, Raleigh, NC
- 11:10 am      **Establishment of Native Aquatic Vegetation in Conjunction with an Integrated Invasive Aquatic Vegetation Management Program (Student Presentation)**  
**Haley N. Kokel<sup>1</sup>**, Michael P. Masser<sup>1</sup>, and Mark A. Webb<sup>2</sup>  
<sup>1</sup>Texas A&M University, Department of Wildlife and Fisheries Sciences, College Station, TX  
<sup>2</sup>Texas Parks and Wildlife Department, Inland Fisheries Division, Snook, TX
- 11:30 am      **Lunch (on your own)**

## Session IV – General Session and Student Presentations

1:00 pm – 5:00 pm – Palisades ABC – Convention Center

**Moderator: Dr. Michael D. Netherland** – APMS Immediate Past President, Awards Committee Chair  
U.S. Army Corps of Engineers, Engineer Research and Development Center, Gainesville, FL

- 1:00 pm      **Incorporating Geospatial Ecological Modeling in Aquatic Invasive Risk Assessments; An Overview of Methods and Applications (Student Presentation)**  
**Amanda M. West**<sup>1</sup>, Paul Evangelista<sup>1,2</sup>, Catherine S. Jarnevich<sup>3</sup>, Nicholas Young<sup>1</sup>, Matthew W. Luizza<sup>1</sup>, Stephen Chignell<sup>2</sup>, Tewodros Wakie<sup>1</sup>, and Melissa Haeffner<sup>4</sup>  
<sup>1</sup>Colorado State University, Natural Resource Ecology Laboratory, Fort Collins, CO; <sup>2</sup>Colorado State University, Department of Ecosystem Science & Sustainability, Fort Collins, CO; <sup>3</sup>U.S. Geological Survey, Fort Collins Science Center, Fort Collins, CO; <sup>4</sup>Colorado State University, Department of Anthropology, Fort Collins, CO
- 1:20 pm      **Restoration and Management of Submersed Aquatic Macrophytes after Carp Removal in Minnesota Lakes**  
**Raymond M. Newman**<sup>1</sup>, Jonathan D. JaKa<sup>2</sup>, and Joshua Knopik<sup>2</sup>  
<sup>1</sup>University of Minnesota, Dept of Fisheries, Wildlife, & Conservation Biology, Minneapolis, MN  
<sup>2</sup>University of Minnesota, Dept of Fisheries, Wildlife, & Conservation Biology, St. Paul, MN
- 1:40 pm      **Modes of Reproduction in Crested Floating Heart (*Nymphoides cristata*) (Student Presentation)**  
**Erika J. Haug and Robert J. Richardson**, North Carolina State University, Crop Science Dept, Raleigh, NC
- 2:00 pm      **Movement of Triploid Grass Carp in the Regulated Pee Dee River, North Carolina**  
**Troy Thompson**, North Carolina Wildlife Resources Commission, Wadesboro, NC
- 2:20 pm      **Movement Patterns of Stocked Grass Carp in a Lentic and Lotic System of North Carolina**  
**Kelsey J. Lincoln**<sup>1</sup>, Jessica R. Baumann<sup>2</sup>, and Corey N. Oakley<sup>1</sup>  
<sup>1</sup>North Carolina Wildlife Resources Commission, Division of Inland Fisheries, Mebane, NC  
<sup>2</sup>North Carolina Wildlife Resources Commission, Division of Inland Fisheries, Swepsonville, NC
- 2:40 pm      **Efficacy and Movement Patterns of Triploid Grass Carp in the Presence of a Reduced Hydrilla Tuber Bank in Tar River Reservoir, NC**  
**Kirk Rundle**, North Carolina Wildlife Resources Commission, Division of Inland Fisheries, Whitakers, NC
- 3:00 pm      **Refreshment Break (Palisades DEF – Convention Center)**
- 3:20 pm      **Cellular and Aqueous Microcystin-LR Following Laboratory Exposures of *Microcystis aeruginosa* to Copper Algaecides (Student Presentation)**  
**Kyla J. Iwinski**<sup>1</sup>, Alyssa J. Calomeni<sup>2</sup>, Tyler D. Geer<sup>2</sup>, and John H. Rodgers, Jr.<sup>2</sup>  
<sup>1</sup>Clemson University, Department of Fisheries and Wildlife Biology, Clemson, SC  
<sup>2</sup>Clemson University, School of Agricultural, Forest and Environmental Sciences, Clemson, SC
- 3:40 pm      **Azoxystrobin Bioremoval Capacity of Aquatic Plants**  
**Travis W. Gannon** and Matthew D. Jeffries, North Carolina State University, Crop Science Dept, Raleigh, NC
- 4:00 pm      **Creeping Water-Primrose (*Ludwigia grandiflora*/ *hexapetala*) Management with Combination Treatments utilizing Clearcast® (Imazamox) and Stingray® (Carfentrazone)**  
**Kelli L. Gladding**<sup>1</sup>, Ben E. Willis<sup>2</sup>, and Todd C. Horton<sup>3</sup>  
<sup>1</sup>SePRO Corporation, New Smyrna Beach, FL; <sup>2</sup>SePRO Corporation, SePRO Research & Technology Campus, Whitakers, NC; <sup>3</sup>SePRO Corporation, Anderson, SC
- 4:20 pm      **Grass = Bass: Getting B.A.S.S. Members Involved in the Equation**  
**Gene Gilliland**, Bass Anglers Sportsman Society, Norman, OK
- 4:40 pm      **Hyperspectral Imaging: Species Delineation**  
**John Merrill**, Galileo Group, Research Triangle Park, NC
- 5:00 pm      **ADJOURN GENERAL SESSION**

5:00 pm	<b>SCAPMS ANNUAL BUSINESS MEETING &amp; BOARD MEETING</b> ( <i>Palisades ABC – Convention Center</i> )
6:00 pm	<b>DUCK RACES AND AWARDS BANQUET RECEPTION</b> ( <i>Splash Lazy River, Embassy Suites Hotel</i> ) Take Shuttle or 5-10 minute walk south on the boardwalk or beach to the Embassy Suites Hotel Shuttle picks up and returns from in front of the Hilton Hotel Every 15 minutes from Hilton to Embassy Suites from 6:00 p.m. to 7:30 p.m. Every 15 minutes return to the Hilton from 9:45 p.m. to 11:00 p.m.
7:30 pm	<b>AWARDS BANQUET</b> ( <i>Palmetto Pavilion, Embassy Suites Hotel</i> )

## WEDNESDAY, JULY 15

### Wednesday's Agenda-at-a-Glance

7:00 am	-	8:00 am	Continental Breakfast ( <i>Palisades DEF – Convention Center</i> ) <i>Provided by Bronze Level Sponsors</i>
7:00 am	-	10:20 am	Exhibits Open ( <i>Palisades DEF – Convention Center</i> )
7:00 am	-	10:20 am	Posters Open ( <i>Palisades DEF – Convention Center</i> )
7:30 am	-	12:00 pm	Registration ( <i>Group Registration South – Convention Center</i> )
8:00 am	-	12:00 pm	Session V – General Presentations and Updates ( <i>Palisades ABC – Convention Center</i> )
8:00 am	-	5:00 pm	Aquatic Plant Identification Session <i>Check Registration Desk during Annual Meeting for exact times and location</i>
10:00 am	-	10:20 am	Refreshment Break ( <i>Palisades DEF – Convention Center</i> ) <i>Provided by Bronze Level Sponsors</i>
10:20 am	-	12:00 pm	Poster and Exhibit Breakdown ( <i>Palisades DEF – Convention Center</i> )
1:00 pm	-	5:00 pm	APMS Board of Directors Meeting ( <i>Palisades H – Convention Center</i> )

### Session V – General Presentations and Updates

8:00 am - 12:00 pm – *Palisades ABC – Convention Center*

**Moderator: Dr. John Madsen** – APMS Vice President

*U.S. Department of Agriculture, Agriculture Research Service, Exotic and Invasive Weeds Research, Davis, CA*

8:00 am	<b>RISE: Industry and Issues Update</b> <b>Aaron Hobbs</b> , <i>Responsible Industry for a Sound Environment, Washington, D.C.</i>
8:30 am	<b>The Most Common and Troublesome Aquatic Weeds – What the Experts Say</b> <b>Lee VanWychen</b> , <i>Weed Science Society of America, Science Policy Director, Alexandria, VA</i>
8:45 am	<b>Horned Pondweed (<i>Zannichellia palustris</i>) Control with Endothall Formulations in Greenhouse Mesocosms</b> <b>Scott J. Nissen</b> and <b>Kallie Kessler</b> <i>Colorado State University, Bioagricultural Sciences and Pest Management, Fort Collins, CO</i>
9:05 am	<b>Water Willow Habitat Projects on Georgia Reservoirs</b> <b>Tony Beck</b> , <i>Georgia BASS Nation, Lake Oconee Bassmasters, Eatonton, GA</i>
9:20 am	<b>Mapping Invasive Species using EDDMapS and Apps</b> <b>Rebekah D. Wallace</b> , <b>Charles T. Barger</b> , and <b>Karan A. Rawlins</b> <i>University of Georgia, Center for Invasive Species and Ecosystem Health, Tifton, GA</i>
9:40 am	<b>It's not just "For the Birds" Anymore: Expanding Locations and Species at Risk from Avian Vacuolar Myelinopathy (AVM)</b> <b>Susan Wilde</b> , <b>Bridgette Haram</b> , <b>Sonia Hernandez</b> , <b>Vanessa Kinney</b> , and <b>John Maerz</b> <i>University of Georgia, Warnell School of Forestry and Natural Resources, Athens, GA</i>
10:00 am	<b>Refreshment Break</b> ( <i>Palisades DEF – Convention Center</i> )
10:20 am	<b>Control of Algae Producing Taste and Odor in the Drinking Water Supply for the Anderson Regional Joint Water System</b> <b>John H. Rodgers, Jr.</b> <i>Clemson University, Department of Forestry and Environmental Conservation, Clemson, SC</i>

- 10:40 am     **The Evolution and Future of Lyngbya Management**  
**Ben E. Willis<sup>1</sup>**, West M. Bishop<sup>1</sup>, and Todd C. Horton<sup>2</sup>  
<sup>1</sup>*SePRO Corporation, SePRO Research & Technology Campus, Whitakers, NC*  
<sup>2</sup>*SePRO Corporation, Anderson, SC*
- 11:00 am     **Aeration's Effect on Algae: A Review of Success and Failures**  
**Patrick Goodwin**, *Vertex Water Features, Pompano Beach, FL*
- 11:20 am     **Planning Integrated Aquatic Plant Management in the Tahoe Keys: A Process in Stakeholder Collaboration**  
**Lars W. J. Anderson<sup>1</sup>** and Kris Kiehne<sup>2</sup>  
<sup>1</sup>*Waterweed Solutions, Point Reyes, CA*; <sup>2</sup>*Sierra Ecosystem Associates, Placerville, CA*
- 11:40 am     **APMS Regional Chapters: An Update on Key Initiatives within Each Region**  
**John Madsen**, Moderator  
*U.S. Department of Agriculture, Agriculture Research Service, Davis, CA*  
                Western                  Midwest                  Texas  
                MidSouth                  South Carolina                  Florida                  Northeast
- 12:00 pm     **ADJOURN 55<sup>TH</sup> ANNUAL MEETING**
- 1:00 pm     **APMS BOARD OF DIRECTORS MEETING** (*Palisades H – Convention Center*)

*Next year:*

**56<sup>th</sup> Annual Meeting**  
**Amway Grand Plaza Hotel**  
**Grand Rapids, MI**  
**July 17-20, 2016**

## Student Activities at APMS Annual Meeting — 2015

The Aquatic Plant Management Society 55<sup>th</sup> Annual Meeting will be held July 12-15, 2015 at the Hilton Myrtle Beach Oceanfront Resort at Kingston Plantation in Myrtle Beach, South Carolina.

The APMS has a strong ethic of student support. We had outstanding participation at the 2014 Savannah, GA meeting with 20 student presenters from 11 different universities! The 2015 annual meeting presents another opportunity for students to develop their presentation skills, learn about the field of aquatic plant management, and network with key government, university and industry representatives, and peers with similar educational and professional interests. The meeting registration fee for a student competing in the student oral presentation or poster contest is waived and the registration fee for a student not competing is \$75.00. Student registration includes all technical sessions, the President's Reception, refreshment breaks, the Student Luncheon, the Poster Reception, and the Awards Banquet.

The annual Student Luncheon, provided by Silver Level Sponsors, takes place on Monday, July 13. On Thursday, July 16, all students are invited to participate in a tour of local aquatic plant management activities. Tour funding is provided by APMS sponsors and will be hosted by Santee Cooper Power and the South Carolina Department of Natural Resources. An airboat tour will cover management of a variety of species, including crested floating heart (*Nymphoides cristata*) on the Santee Cooper Lakes. We thank our tour hosts and are looking forward to a great day in the beautiful South Carolina Low Country!!

Please log on to [www.apms.org](http://www.apms.org) to learn more about the Aquatic Plant Management Society and this year's meeting.

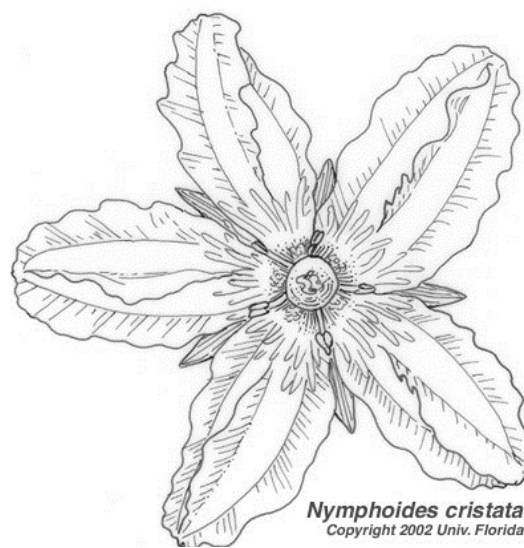
For more information, please contact the **APMS Student Affairs Committee**:

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[rebeccah@sepro.com](mailto:rebeccah@sepro.com)  
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225-578-1208



*Nymphoides cristata*  
Copyright 2002 Univ. Florida



## 2015 APMS Officer and Director Nominees

The following nominees have been selected by the Nominating Committee to serve on the APMS Board of Directors. Active members of the Society will vote on new Officers and Directors during the Annual Business Meeting to be held on Monday, July 13th, 2015 in Myrtle Beach, South Carolina.

### Dr. John Rodgers – Vice President

Dr. John H. Rodgers, Jr. is a professor of ecotoxicology in the Department of Forestry and Environmental Conservation in the College of Agriculture, Forestry and Life Sciences at Clemson University. Dr. Rodgers has been actively engaged in research on the ecology and management of noxious algae and vascular plants for more than 40 years. He has also been involved in design and rehabilitation of wetlands for water quality enhancement throughout the world. Dr. Rodgers received a Bachelor of Science in Botany and Plant Ecology in 1972 and a Master of Science in Botany and Aquatic Ecology in 1974 from Clemson University. He earned his Ph.D. in Aquatic Toxicology and Biology in 1977 from Virginia Polytechnic Institute and State University. Dr. Rodgers was at East Tennessee State University for two years (1977-1979), the University of North Texas for ten years (1979-1989), and the University of Mississippi for almost ten years (1989-1998) prior to coming to Clemson University. He served in active duty in the U.S. Air Force and was honorably discharged from the U.S. Air Force Reserves with the rank of Captain.

John Rodgers has been a member of APMS and attended annual meetings and presented scientific information along with his students for several decades. He has served on the APMS Board of Directors (2003-2006) and was the initial chair of the APMS Strategic Planning Committee (2008-2014). Dr. Rodgers has served on the Board of Directors of the SCAPMS (2007-2009) and was elected to serve as President of SCAPMS in 2010. He has also served as President of the Society of Environmental Toxicology and Chemistry (2000) and in numerous other positions in that organization.

Dr. Rodgers has published more than 100 peer reviewed papers in scientific journals on managing noxious algae and vascular plants as well as constructed wetlands and biogeochemistry. He has served on the editorial board of several journals and has reviewed numerous manuscripts for the Journal of the Aquatic Plant Management Society as well as several other scientific journals. He has received many awards for his work including the Aquatic Plant Management Society's T. Wayne Miller, Jr. Distinguished Service Award for Strategic Planning, the Council for Agricultural Science and Technology's Certificate of Excellence – Educational Materials Award for Benefits of Controlling Nuisance Aquatic Plants and Algae in the United States (with co-authors), and the Aquatic Plant Science Award from the Northeast Aquatic Plant Management Society, Saratoga Springs, NY.

### Dr. Jason Ferrell – Editor

Jason Ferrell is a Professor in the Agronomy Department at the University of Florida. Since joining the university in 2004 with a 65% extension and 35% research appointment, Dr. Ferrell has conducted over 400 extension meetings, written over 200 articles for extension newsletters and trade magazines, published 64 refereed scientific articles, and mentored 19 graduate students. He currently serves as Editor for the Journal of Aquatic Plant Management (2013-present). Dr. Ferrell has also been honored with the Dallas Townsend Extension Enhancement Award, Outstanding Specialist Award, Researcher of the Year by the Florida Cattleman's Association, Early Career Weed Scientist of the Year by the Southern Weed Science Society, and Outstanding Weed Scientist by the Florida Weed Science Society.



## 2015 APMS Officer and Director Nominees - continued

### Dr. Brett Hartis – Director

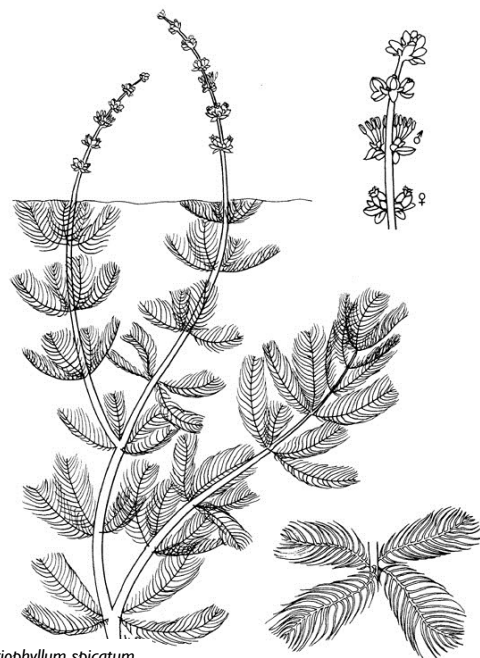
Brett Hartis is the Program Manager of the Tennessee Valley Authority's Aquatic Plant Management Program. Previously, he worked as an Aquatic Weed Extension Associate and co-instructor of remote sensing courses at North Carolina State University. In 2013, Hartis obtained his Ph.D. in Fisheries, Wildlife, and Conservation Biology at NC State where he also received his Master of Science in the same discipline years prior. Hartis attended East Carolina University where he received his B.S. in biology with a concentration in coastal resources management. His research interests include the development and utilization of mapping and monitoring techniques in aquatic communities of vegetation. His professional goals include broadening the understanding of spatial relationships in aquatic communities, developing precision mapping and management techniques, while also assessing human dimensions inherent in stakeholder involved management programs. In his current role, Hartis oversees aquatic plant management in TVA mainstem and tributary reservoirs across the Tennessee Valley with particular emphasis on Guntersville Reservoir. Hartis has served as a board member with the South Carolina Aquatic Plant Management Society and the North Carolina Invasive Plant Council.

### Dr. Ryan Thum – Director

I received my Bachelor's Degree from Florida State University (1998), my PhD from Dartmouth College (2004), and was a postdoctoral fellow at Cornell University (2004-2006) and the University of Illinois at Urbana-Champaign (2006-2007). Between 2007 and 2014, I was a Senior Research Scientist, and then a Research Professor, at Grand Valley State University's Robert B. Annis Water Resources Institute (AWRI) in Muskegon, Michigan. I am currently an Assistant Professor at Montana State University in the Plant Sciences & Plant Pathology Department in Bozeman, Montana.

My research program focuses on the ecology, evolution, and genetics of invasive aquatic plants. The majority of my research to date has focused on invasiveness and herbicide response in Eurasian and hybrid watermilfoils, but I increasingly work on other aquatic plant species.

I am particularly interested in applying knowledge obtained from rigorous academic research to the development of aquatic plant management tools. I work closely with a variety of aquatic plant management stakeholders in this pursuit, and am continually impressed and humbled by the breadth of knowledge and perspectives of different stakeholders on the complex set of logistical, philosophical, and technical factors affecting aquatic plant management planning and decision making. I have a specific interest in developing meaningful and feasible ways to integrate molecular methods into components of aquatic plant management plans, such as aquatic plant surveys and treatment evaluations.



*Myriophyllum spicatum*  
Eurasian watermilfoil  
copyright University of Florida

## News from the Scholastic Endowment Committee

The Scholastic Endowment Committee would like to remind our generous Vendors, Exhibitors, Applicators and others that we will be contacting you soon to ask you for your continued support. We are also still asking for Silent Auction items. If anyone has any questions or would like to contact the Scholastic Endowment Chair, please contact Tom Warmuth of BioSafe Systems at [twarmuth@biosafesystems.com](mailto:twarmuth@biosafesystems.com)

**The Scholastic Endowment Committee would also like to announce that we have the great pleasure of hosting musician Ben Prestage this year. He will play Sunday evening during the President's Reception.** He is an amazing ONE MAN BAND from Florida, playing Juke Joint Country Stomp, Blues, and Blue Grass. He is a fantastic entertainer and his style is a perfect fit for the Society. We encourage everyone to be certain to get to the meeting in time for the President's Reception and plan on staying for some great music. Ben was a real hit at the last SCAPMS meeting and all who attended will tell you the same. IF YOU MISS HIM, YOU WILL REGRET IT!



<https://vimeo.com/2502258>

## Golf Tournament to Benefit Scholastic Endowment Fund

As we look forward to a great APMS event this summer, Syngenta will be sponsoring a golf tournament to benefit the Scholastic Endowment Fund. The tournament will be held at Arcadian Shores on July 12, 2015. A 2 person best ball format will be used. Each player will play their own ball and the best score will be used to calculate team totals. Tee times begin at 1pm. Your registration of \$50 per person goes directly towards the fund. Proximity and team prizes will be awarded. Please contact Larry Feller (info below) with handicaps, preferred playing partner, and any questions. Please register for the golf tournament on the APMS annual meeting registration sheet.

Larry Feller, Syngenta  
5155 River Rd.,  
Smyrna, SC 297543  
(843)693-2187  
[larry.feller@syngenta.com](mailto:larry.feller@syngenta.com)



## Notification of Proposed APMS Bylaws Changes

At the request of the Bylaws Committee, a legal review of our Bylaws was conducted last fall by Bruce Brashear, Esq. of Brashear & Associates, PL, a law firm in Gainesville, FL. Thank you to Dr. Vernon Vandiver for his efforts in getting the review completed. Two relatively brief recommendations were made by counsel to update and clarify language related to Florida tax laws. The following changes were submitted to the APMS Board of Directors and approved at the Winter board meeting. In accordance with our Bylaws, their full adoption requires a vote of the membership at the annual meeting.

**The following proposed APMS Bylaws changes are to be voted upon by the membership at the July 2015 Annual Business Meeting :**

**Article II Society Objectives** be amended by adding:

**6. The Society will operate under Section 501(c)(5) of the Internal Revenue Code of 1986, as amended, or the corresponding section of any future federal tax code.**

**Article XVIII Dissolution** be amended by adding the following underlined language:

The Society shall have perpetual existence but, if dissolved, its assets shall be donated to a non-profit organization or institution, **qualified under Section 501(c)(5) of the Internal Revenue Code of 1986 as amended,** to be selected by the last Board of Directors to be used for research or education outreach on aquatic plant management.

Thank you for your consideration of these changes.

Jim Schmidt, Chair – Bylaws & Resolutions Committee

## Upcoming Annual Meetings

### 2015

July 12-15	<a href="#">Aquatic Plant Management Society</a> , Myrtle Beach, SC
August 8-13	<a href="#">Phycological Society of America</a> , Philadelphia, PA
August 9-14	<a href="#">Ecological Science Society</a> , Baltimore, MD
August 16-20	<a href="#">American Fisheries Society</a> , Portland, OR
September 14-18	<a href="#">International Symposium on Aquatic Plants</a> , Edinburg, Scotland
October 5-8	<a href="#">Florida Aquatic Plant Management Society</a> , Lake Buena Vista, FL
October 12-14	<a href="#">Texas Aquatic Plant Management Society</a> , Hamilton, TX
November 17-20	<a href="#">North American Lake Management Society</a> , Saratoga Springs, NY

### 2016

January 12-14	<a href="#">Northeast Aquatic Plant Management Society</a> , Saratoga Springs, NY
February 8-11	<a href="#">Weed Science Society of America</a> , San Juan, Puerto Rico

## APMS Meeting Sponsorship and Exhibitors

Would you like to be a Meeting Sponsor and/or Exhibitor and assist the APMS in conducting an informative and successful meeting for the education, scientific, and operational advancement of aquatic plant management? Information on sponsorship at the annual meeting is available on the [Sponsor Information page](#). Information on exhibiting is on the [Exhibitor Information page](#). Please contact Craig Aguillard (phone: 337-290-1096, email: [caguillard@landolakes.com](mailto:caguillard@landolakes.com)) with any questions. Thank you for your support.

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## 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 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. Please read about [APMS Sustaining Members](#) and learn more about them by visiting their websites. Please join APMS as a Sustaining Member at [apms.org/society/membership/](http://apms.org/society/membership/)

## 2015 Sustaining Members

- Alligare, LLC
  - Applied Aquatic Management, Inc.
  - Applied Biochemists, A Lonza Business
  - Aqua Services, Inc.
  - AquaTechnex, LLC
  - Aquatic Control, Inc.
  - BioSafe Systems, LLC
  - Brewer International
  - Chem One Ltd.
  - Cygnet Enterprises, Inc.
  - Lake Restoration, Inc.
  - Lee County Hyacinth Control District
  - Nufarm Americas
  - Pond Boss PRO
  - SePRO Corporation
  - Syngenta
  - UPI
  - Vertex Water Features
- 

## APMS Promotional Information Available

The APMS has two tabletop displays and posters suitable for presentations at conferences and stakeholder meetings. Also available are tri-fold membership brochures and an eight-page color booklet with additional information about APMS programs and initiatives. You may borrow the display for your next conference and obtain copies of the brochure and booklet by contacting one of the following:

Jeff Schardt: 850-591-1242; [jeff.schardt@gmail.com](mailto:jeff.schardt@gmail.com)  
 Cody Gray: 954-562-0254; [cody.gray@uniphos.com](mailto:cody.gray@uniphos.com)

## 2014-2015 APMS Officers, Directors, Committee Chairs and Special Representatives

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## ***Mission***

**The Aquatic Plant Management Society (APMS) strives to promote environmental stewardship through scientific innovation and development of technology related to integrated plant management in aquatic and riparian systems.**

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