

Agenda

Sunday, July 14

Sunday's Agenda-at-a-Glance

- 7:30 am - 5:00 pm APMS Board of Directors Meeting (*Camino Real*)
12:00 pm - 5:00 pm Exhibits Setup (*Navarro Ballroom*)
12:00 pm - 5:00 pm Poster Setup (*Navarro Ballroom*)
1:00 pm - 5:00 pm Registration (*Navarro Pre-function*)
7:00 pm - 9:00 pm President's Reception (*Navarro Pre-function*)
Cosponsored by Syngenta Professional Products and Winfield

Monday, July 15

Monday's Agenda-at-a-Glance

- 7:00 am - 8:00 am Continental Breakfast (*Navarro Ballroom*)
Sponsored by Crop Production Services
7:00 am - 5:00 pm Exhibits Open (*Navarro Ballroom*)
7:00 am - 5:00 pm Posters Open (*Navarro Ballroom*)
7:30 am - 5:00 pm Registration (*Navarro Pre-function*)
8:00 am - 12:00 pm Session I (*Hidalgo*)
10:00 am - 3:00 pm Guest Tour
Sponsored by Applied Biochemists
10:10 am - 10:40 am Refreshment Break (*Navarro Ballroom*)
Sponsored by Crop Production Services
12:00 pm - 1:30 pm Lunch on your own
12:00 pm - 1:30 pm APMS Student Affairs Luncheon (*El Rincon de Maria - Lobby Level*)
Sponsored by SePRO Corporation
12:00 pm - 1:30 pm Aquatic Ecosystem Restoration Foundation Meeting (*Lantana - Lobby Level*)
1:30 pm - 4:20 pm Session II (*Hidalgo*)
2:50 pm - 3:20 pm Refreshment Break (*Navarro Ballroom*)
Sponsored by Crop Production Services
4:20 pm - 5:00 pm APMS Annual Business Meeting (*Hidalgo*)
6:00 pm - 7:30 pm Poster Session and Reception (*Navarro Ballroom*)
Cosponsored by Helena Chemical Company and SePRO Corporation

Session I – Special Opening Session and General Presentations

8:00 am - 12:00 pm

Hidalgo

Moderator: Dr. Michael D. Netherland - APMS President Elect, Program Committee Chair
U.S. Army Corps of Engineers, Engineer Research and Development Center, Gainesville, FL

8:00 am **Welcome, Opening Remarks and Announcements**

8:05 am **Presidential Address**
Terry Goldsby
Aqua Services, Incorporated, Guntersville, AL

Opening Session I: Perspectives on Research and Management Progress in Three Disciplines Closely Related to Aquatic Plant Management: Toxic Algae Mitigation, Terrestrial Weed Science, and Mosquito Control

8:15 am **Research and Management Progress in Mitigating and Controlling Toxic Algae Blooms**
Dan Roelke
Texas A&M University, College Station, TX

8:40 am **Successes and Challenges in Terrestrial Weed Research and Control over the Past Five Years**
Scott Senseman
University of Tennessee, Knoxville, TN

9:05 am **The Science of Mosquito Control: Successes and Challenges in Management and Research over the Past Five Years**
Clark Wood
Clarke Mosquito Control, Batavia, IL

General Session I

9:30 am **Eradicating Hydrilla from New Zealand**
Deborah E. Hofstra and John S. Clayton
National Institute of Water and Atmospheric Research, Hamilton, New Zealand

9:50 am **Monoecious Hydrilla - The Aquatic Weed for the New Century?**
John D. Madsen
Mississippi State University, Mississippi State, MS

10:10 am **Refreshment Break** (*Navarro Ballroom*)

10:40 am **Citizen Science: A New Role for APMS Chapters?**
Lars W. Anderson
Waterweed Solutions, Davis, CA

11:00 am **Innovations in Citizen-Based Aquatic Plant Monitoring and Collaborations**
Matthew B. Johnson and Ray D. Valley
Contour Innovations, LLC, Minneapolis, MN

11:20 am **Private / Public Partnership in Aquatic Plant Management: The Complex and Dynamic Process of Industry, Government, and Citizen Participation in Collaboration for Improved Management and Stewardship of Our Aquatic Resources**
Mark A. Heilman
SePRO Corporation, Carmel, IN

11:40 am **NPDES and Operational Reporting Requirements and Results for Aquatic Plant Management in FL Public Waters**
Jeffrey D. Schardt
Florida Fish and Wildlife Conservation Commission, Tallahassee, FL

12:00 am **Lunch on your own**

Session II – General Session and Student Presentations

1:30 pm - 4:20 pm
Hidalgo

Moderator: Dr. Rob Richardson - APMS Editor
North Carolina State University, Raleigh, NC

1:30 pm **A Novel Method for SAV Restoration**
Lyn A. Gettys
University of Florida, Institute of Food and Agricultural Sciences, Ft. Lauderdale Research and Education Center, Davie, FL

- 1:50 pm **Efficacy of Three Algaecides on the Epiphytic Cyanobacterium (Order Stigonematales) Associated with Avian Vacuolar Myelinopathy (*Student Presentation*)**
Jamie Morgan¹, Rebecca S. Haynie¹, West M. Bishop², Susan Wilde¹
¹*University of Georgia, Athens, GA*
²*SePRO Corporation, Whitakers, NC*
- 2:10 pm **Refining Chemical Control of Floating Heart (*Student Presentation*)**
Justin J. Nawrocki, Steve T. Hoyle, and Rob J. Richardson
North Carolina State University, Raleigh, NC
- 2:30 pm **Flumioxazin Alone and in Combination with Endothall, Glyphosate, Imazamox and Bispyribac-sodium for the Control of Giant Salvinia**
Dearl E. Sanders
Louisiana State University AgCenter, Clinton, LA
- 2:50 pm **Refreshment Break (*Navarro Ballroom*)**
- 3:20 pm **An Initial Test into the Selectivity of Eight Herbicides for Management of Hydrilla in the Presence of Eight Co-occurring Native Plant Species (*Student Presentation*)**
Bradley T. Sartain and John D. Madsen
Mississippi State University, Mississippi State, MS
- 3:40 pm **Metabolic Profiles of Monoecious Hydrilla Treated with Penoxsulam and Endothall (*Student Presentation*)**
Sarah T. Meadows, Rob J. Richardson, and Jim Burton
North Carolina State University, Raleigh, NC
- 4:00 pm **Response of Non-target Emergent Plants to Low Doses of Imazamox and Penoxsulam Plus Contact Herbicides**
Christopher R. Mudge¹ and Michael D. Netherland²
¹*U.S. Army Corps of Engineers, Engineer Research and Development Center, Vicksburg, MS*
²*U.S. Army Corps of Engineers, Engineer Research and Development Center, Gainesville, FL*
- 4:20 pm **APMS Annual Business Meeting (*Hidalgo*)**
- 5:00 pm **Adjourn**

Poster Session

6:00 pm - 7:30 pm

Navarro Ballroom

Grass Carp Feeding Preference and Control of *Egeria densa*

Claudinei Cruz¹, Adilson F. Silva², Silvio C. Santos³, and Robinson A. Pitelli⁴

¹*FEB Barretos, Barretos, Brazil*

²*Unesp Jaboticabal, Jaboticabal, Brazil*

³*AES Tiete, Promissao, Brazil*

⁴*Ecosafe Ltda, Jaboticabal, Brazil*

Imazamox Toxicity to Non-target Organisms and Its Efficacy on the Control of Submerged Aquatic Weeds

Claudinei Cruz¹, Adilson F. Silva², and Robinson A. Pitelli³

¹*FEB Barretos, Barretos, Brazil*

²*Unesp Jaboticabal, Jaboticabal, Brazil*

³*Ecosafe Ltda, Jaboticabal, Brazil*

Developing a Risk Assessment Tool for Identifying Potential Aquatic Invasive Plants in Texas (Student Presentation)

Elizabeth A. Edgerton¹, Michael Masser¹, Lucas Gregory², William Grant¹, and Allen Knutson³

¹Texas A&M University, College Station, TX

²Texas Water Resources Institute, College Station, TX

³Texas A&M AgriLife Extension Service, College Station, TX

Characterization, and Evaluation of Biotechnological Potential of Waterhyacinth (*Eichhornia crassipes*) (Student Presentation)

Hector A. Fileto-Perez¹, Mark D. Sytsma², Jose G. Rutiaga-Quiñones³, Jesus B. Paez-Lerma¹, Javier Lopez-Miranda¹, and Olga M. Rutiaga-Quiñones¹

¹Durango Institute of Technology, Durango, Mexico

²Portland State University, Portland, OR

³Universidad Michoacana de San Nicolas de Hidalgo, Morelia, Mexico

Modeling the Potential Geographic Distribution of *Hydrilla verticillata* in North America and Beyond (Student Presentation)

Brett M. Hartis and Rob J. Richardson

North Carolina State University, Raleigh, NC

Increasing the Selectivity of Contact Herbicides on Hydrilla: Sensitivity Tests with American Lotus

John D. Madsen¹, Gray Turnage¹, and Ryan M. Wersal²

¹Mississippi State University, Mississippi State, MS

²Applied Biochemists, Alpharetta, GA

Grass Carp Feeding Preferences for Two Novel Invasive Aquatic Plants

Michael Masser¹, Dan Roelke¹, Michael T. Neisch²

¹Texas A&M University, College Station, TX

²Texas A&M AgriLife Extension Service, College Station, TX

Effects of *Eichhornia azurea* and *Pistia stratiotes* Biomass Soil Incorporation on Chemical Properties of a Degraded Soil

Antonio Nader Neto¹, Monicke O. Vieira², Alfredo F. Yamauchi¹, Robinson A. Pitelli³, and Robinson L. Pitelli³

¹Unesp Jaboticabal, Jaboticabal, Brazil

²Light Energia SA, Pira, RJ, Brazil

³Ecosafe Ltda, Jaboticabal, Brazil

Herbicide Exposure from the Perspective of Submersed Aquatic Plants

Michael D. Netherland¹ and Leif Willey²

¹U.S. Army Corps of Engineers, Engineer Research and Development Center, Gainesville, FL

²University of Florida, Center for Aquatic and Invasive Plants, Gainesville, FL

Evaluation of Aquatic Macrophyte Community with Emphasis on *Hydrilla verticillata* in Porto Primavera Reservoir, Brazil

Robinson L. Pitelli¹, Robinson A. Pitelli¹, Carlos J. Rodrigues², and Joao H. Dias²

¹Ecosafe Ltda, Jaboticabal, Brazil

²Sao Paulo Energy Company, Ilha Solteira, Brazil

Response of *Urochloa subquadriflora* and *U. mutica* Accesses to Herbicide Doses, under Greenhouse Conditions

Robinson L. Pitelli¹ and Dagoberto Martins²

¹Ecosafe Ltda, Jaboticabal, Brazil

²Unesp Botucatu, Botucatu, Brazil

The Use of Algaecides in Adaptive Water Resource Management

John H. Rodgers, Jr. and Alyssa Calomeni

Clemson University, Clemson, SC

Floating Aquatic Weed Control Using Imazapyr

Adilson F. Silva¹, Claudinei Cruz², Natalia S. Shiogiri¹, Robinson A. Pitelli³, and Robinson L. Pitelli³

¹*Unesp Jaboticabal, Jaboticabal, Brazil*

²*FEB Barretos, Barretos, Brazil*

³*Ecosafe Ltda, Jaboticabal, Brazil*

Phenology of Curlyleaf Pondweed (*Potamogeton crispus*) in the Southeastern U.S.

Gray Turnage and John D. Madsen

Mississippi State University, Mississippi State, MS

Evaluation of Nutrients Leaching during Decomposition of Aquatic Weeds: Lysimeters Studies

Monicke O. Vieira¹, Robinson L. Pitelli², Alfredo F. Yamauchi³, Antonio Nader Neto³, and Robinson A. Pitelli²

¹*Light Energia SA, Pira, RJ, Brazil*

²*Ecosafe Ltda, Jaboticabal, Brazil*

³*Unesp Jaboticabal, Jaboticabal, Brazil*

Comparative Phyto-uptake Across Distribution Coefficients of Pharmaceutical Compounds and Aquatic Macrophytes: Carbamazepine and Amiodarone Uptake in *Lemna* spp. (Student Presentation)

Kristy Woodard

University of North Texas, Denton, TX

Tuesday, July 16

Tuesday's Agenda-at-a-Glance

- 6:30 am - 8:00 am APMS Regional Chapters Presidents' Breakfast (*El Rincon de Maria - Lobby Level*)
Sponsored by Brewer International
- 7:00 am - 8:00 am Continental Breakfast (*Navarro Ballroom*)
Sponsored by Crop Production Services
- 7:00 am - 5:00 pm Exhibits Open (*Navarro Ballroom*)
- 7:00 am - 5:00 pm Posters Open (*Navarro Ballroom*)
- 7:30 am - 5:00 pm Registration (*Navarro Pre-function*)
- 8:00 am - 12:10 pm Session III (*Hidalgo*)
- 10:00 am - 10:30 am Refreshment Break (*Navarro Ballroom*)
Sponsored by Becker Underwood, Inc.
- 10:15 am - 11:00 am TAPMS Annual Business Meeting (*La Babia*)
- 12:10 pm - 1:40 pm Lunch on your own
- 12:10 pm - 1:40 pm APMS Past Presidents' Luncheon (*El Rincon de Maria - Lobby Level*)
Sponsored by Alligare, LLC
- 1:40 pm - 5:10 pm Session IV (*Hidalgo*)
- 2:50 pm - 3:20 pm Refreshment Break (*Navarro Ballroom*)
Sponsored by Aqua Services, Inc.
- 6:00 pm - 7:00 pm Awards Reception (*Navarro Pre-function*)
Sponsored by Valent USA Corporation
- 7:00 pm - 10:00 pm Awards Banquet (*Hidalgo*)
Sponsored by United Phosphorus, Inc.

Session III – General Session and Student Presentations

8:00 am - 12:10 pm

Hidalgo

Moderator: Dr. John Madsen - APMS Board of Directors

Mississippi State University, Mississippi State, MS

- 8:00 am **Investigation of Darwin’s Naturalization Hypothesis in Invaded Macrophyte Communities**
Jonathan P. Fleming¹, Eric D. Dibble², John D. Madsen², and Ryan M. Wersal³
¹*University of North Alabama, Florence, AL*
²*Mississippi State University, Mississippi State, MS*
³*Applied Biochemists, Alpharetta, GA*
- 8:20 am **Detection and Assessment of Harmful Algae in Georgia Waterbodies Using GIS and Proximal Remote Sensing Techniques (Student Presentation)**
Bradley Bartelme, Susan Wilde, Deepak Mishra, Rebecca S. Haynie, and Jamie Morgan
University of Georgia, Athens, GA
- 8:40 am **The Full Monty: How Simultaneously Assessing Both Plant Species Occurrence and Abundance using Standard Methodology is Critical for Good Lake Ecosystem Management**
Ray D. Valley
Contour Innovations, LLC, Minneapolis, MN
- 9:00 am **Incorporating Hydroacoustic Data Collection with Traditional Assessment Technologies to Evaluate Long-term Response of Submersed Vegetation to Management**
Dean Jones¹, Ray D. Valley², and Michael D. Netherland³
¹*University of Florida, Lake Alfred, FL*
²*Contour Innovations, LLC, Minneapolis, MN*
³*U.S. Army Corps of Engineers, Engineer Research and Development Center, Gainesville, FL*
- 9:20 am **Using Research Driven Criteria for Development of a Long Term Aquatic Plant Management Plan: Revitalization after 15 Years of Management on Lake Gaston (Student Presentation)**
Brett M. Hartis, Rob J. Richardson, Steve T. Hoyle, and Justin J. Nawrocki
North Carolina State University, Raleigh, NC
- 9:40 am **A Novel Flow-through Exposure System for Testing the Efficacy of Aquatic Herbicides in Irrigation Canals and Laterals**
Lauren Courter¹ and **Craig Gyselink**²
¹*Mount Hood Environmental, Portland, OR*
²*Quincy-Columbia Irrigation District, Quincy, WA*
- 10:00 am **Refreshment Break (Navarro Ballroom)**
- 10:15 am **TAPMS Annual Business Meeting – Concurrent with General Session III (La Babia)**
- 10:30 am **Pre-emergent Control of *Equisetum hyemale* (Scouringrush) in De-watered Irrigation Canals with Galleon™ (a.i. penoxsulam)**
Andrew Z. Skibo¹, Jill Schroeder², and Mark A. Heilman³
¹*SePRO Corporation, Fort Collins, CO*
²*New Mexico State University, Las Cruces, NM*
³*SePRO Corporation, Carmel, IN*
- 10:50 am **Selectivity and Efficacy of Tradewind Aquatic Herbicide**
Joe Chamberlin
Valent USA Corporation, Snellville, GA

- 11:10 am **Management Options for *Prymnesium parvum***
John H. Rodgers, Jr.
Clemson University, Clemson, SC
- 11:30 am **Rolling Down the River: Public Perceptions and Attitudes towards Invasive Species and Invasive Species Management in the San Marcos River**
Florence M. Oxley
Texas State University, San Marcos, TX
- 11:50 am **Confessions of an Applicator: How Our Industry Was Helped by NPDES and How We Continue to Grow**
Brett W. Bultemeier
Clarke Aquatic Services, Alachua, FL
- 12:10 pm **Lunch on your own**

Session IV – Texas Aquatic Plant Management Society Session

1:40 pm - 5:10 pm

Hidalgo

Moderator: Mr. Matt Ward – TAPMS President Elect

Total Lake Management, Bryan, TX

- 1:40 pm **Snake Recognition, Preservation, and Safety for the Aquatic Specialist**
Clint Pustejovsky
Texas Snakes, Houston, TX
- 2:30 pm **Interplay between Ambient Surface Water Mixing and Manipulated Hydraulic Flushing: Implications for Harmful Algal Bloom Mitigation**
Veronica M. Lundgren¹, **Daniel L. Roelke**¹, James P. Grover², Bryan W. Brooks³, Krista N. Prosser³, W. Casan Scott³, Coridon A. Laws², George D. Umphres¹
¹*Department of Wildlife and Fisheries Sciences, Texas A&M University, College Station, TX*
²*Department of Biology and Program in Earth and Environmental Sciences, University of Texas at Arlington, Arlington, TX*
³*Department of Environmental Science, Center for Reservoir and Aquatic Systems Research, Baylor University, Waco, TX*
- 2:50 pm **Refreshment Break** (*Navarro Ballroom*)
- 3:20 pm **Aquatic Vegetation Management in Texas: An Update**
Earl W. Chilton
Texas Parks and Wildlife Department, Austin, TX
- 3:40 pm **Assessment of *Arundo donax* control on Lady Bird Lake in Austin, TX**
Aaron Richter and Mary P. Gilroy
City of Austin, Austin, TX
- 4:00 pm **Aquatic Plant Identification and Management: Importance and Perceptions of Educational Outreach through the Texas A&M Agrilife Extension Service**
Todd D. Sink
Texas A&M Agrilife Extension Service, College Station, TX
- 4:20 pm **AERF Update – “You are going to like this one.”**
Carlton Layne
Aquatic Ecosystem Restoration Foundation, Marietta, GA

4:45 pm **Laws and Regulations “I am so happy I could…”**
 Carlton Layne
 Aquatic Ecosystem Restoration Foundation, Marietta, GA

5:10 pm **Adjourn**

Wednesday, July 17

Wednesday’s Agenda-at-a-Glance

7:00 am - 8:00 am Continental Breakfast (*Navarro Ballroom*)
 Sponsored by Brewer International

7:00 am - 10:30 am Exhibits Open (*Navarro Ballroom*)

7:00 am - 10:30 am Posters Open (*Navarro Ballroom*)

7:30 am - 12:00 pm Registration (*Navarro Pre-function*)

8:00 am - 12:00 pm Session V (*Hidalgo*)

10:05 am - 10:35 am Refreshment Break (*Navarro Ballroom*)
 Sponsored by Vertex Water Features

10:30 am - 12:00 pm Poster and Exhibit Breakdown (*Navarro Ballroom*)

12:30 pm - 5:00 pm APMS Board of Directors Meeting (*Camino Real*)

Session V – General Presentations and Special Session on Herbicide Resistance Management in Aquatics

8:00 am - 12:00 pm

Hidalgo

Moderator: Dr. Cody Gray, APMS Vice President
United Phosphorous, Incorporated, Colorado Springs, CO

8:00 am **Lake Restoration Using Aeration and Alum: A Florida Case Study**
 Josette M. La Hee
 Vertex Water Features, Pompano Beach, FL

8:20 am **Interactivity of Phosphorus and Copper in Algae Management**
 West M. Bishop and Ben E. Willis
 SePRO Corporation, Whitakers, NC

8:40 am **Herbicide Applications to Dried Ponds: Will it Prevent the Growth of Submersed Vegetation in Arkansas Baitfish Culture Ponds?**
 George Selden
 University of Arkansas at Pine Bluff, Jonesboro, AR

Special Session on Herbicide Resistance Management in Aquatics

9:00 am **Session Introduction**
 Michael D. Netherland
 U.S. Army Corps of Engineers, Engineer Research and Development Center, Gainesville, FL

9:05 am **Perspectives from Industry and the Working Relationship with WSSA**
 Cody J. Gray
 United Phosphorous, Incorporated, Colorado Springs, CO

9:15 am **Perspectives from a Public Management Agency**
 Jeffrey D. Schardt
 FL Fish and Wildlife Conservation Commission, Tallahassee, FL

- 9:25 am **Perspectives from Academia**
Rob J. Richardson
North Carolina State University, Raleigh, NC
- 9:35 am **Perspectives from a Private Applicator**
David Isaacs
Aquatic Control, Seymour, IN
- 9:45 am **Open Discussion on Herbicide Resistance Management**
- 10:05 am **Refreshment Break** (*Navarro Ballroom*)
- 10:35 am **Fate of Copper from Herbicide and Algaecide Applications: Myths and Data**
John H. Rodgers, Jr.
Clemson University, Clemson, SC
- 10:55 am **Optimizing the Use of Clipper Aquatic Herbicide**
Bo J. Burns¹, Joe Chamberlin², and Jason Fausey³
¹*Valent USA Corporation, Raleigh, NC*
²*Valent USA Corporation, Snellville, GA*
³*Valent USA Corporation, Fremont, OH*
- 11:15 am **APMS Regional Chapters: An Update on Key Initiatives within Each Region**
Dr. Cody Gray, Moderator
United Phosphorous, Incorporated, Colorado Springs, CO
- Western
Texas
South Carolina
Northeast
Midwest
MidSouth
Florida
- 11:45 am **Highlights from the 53rd Annual Meeting and Thoughts on the Direct and Indirect Impacts of a Wave of Imminent Retirements**
Michael D. Netherland
U.S. Army Corps of Engineers, Engineer Research and Development Center, Gainesville, FL
- 12:00 pm **Adjourn 53rd Annual Meeting**