

# Midsouth Aquatic Plant Management Society

## Newsletter

Volume 31 Number 1

January 2013

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### Message from the President

Dear Fellow MSAPMS Members,

Over the past 3 years, one topic has taken the headlines in practically every organization dedicated to or, related to aquatics: NPDES permitting. The APMS and Regional Chapters, RISE and AERF have dedicated considerable time to this new requirement mandated by the U.S. Courts and EPA.

I would like to reflect on something more positive, and that's some of the resources we have across the Mid-South to help protect our countless ponds, lakes, reservoirs, rivers and streams from invasive aquatic weeds. Most of us enjoy these waters bodies in our jobs and leisure time. Practically every member of the MSAPMS has spent time fishing, hunting, boating or just relaxing on one of these waters and likely has fond memories of these experiences.

Unfortunately, many of our ponds, lakes, and reservoirs along with some streams and rivers are infested with invasive aquatic weeds such as hydrilla, watermilfoil, and hyacinth that have been around for several decades, and now giant salvinia and crested floating heart have invaded several waters across the MidSouth. We are fortunate to have some of the best research resources on the planet to develop control methods for such invasive species. These include the U.S. Army Corps of Engineers, Mississippi State University, Auburn University, the University of Georgia and Louisiana State University.

Each of these institutions, have dedicated personnel to develop control techniques or determine the impact of invasive aquatic plants. Research conducted by the Corps of Engineers involves all techniques; mechanical, biological and chemical, and has provided resources to all segments of our industry at some point. Funding is uncertain for the Corp of Engineers Aquatic Plant Research program and many thanks to those that have contacted Congressmen encouraging them to continue financial support for this effort.

Hydrilla is marching north and has been found in the Erie Canal in NY and as far north as Green Bay, WI and in the state of Maine. The Corps of Engineers and Mississippi State have been working to educate those involved in aquatic plant management in the states of New York, Connecticut, Wisconsin and others with background information, as well as, ideas on how to proceed with control efforts to stem the spread of Hydrilla throughout the northern U.S. The impacts of Hydrilla in the northern states could have many more negative impacts as many of these lakes have excellent populations of native aquatic plants that support some of the best sport fishing in the country. I know; I fish them as often as I can.

Dr. John Madsen has built facilities at Mississippi State University that are capable of conducting much needed research on invasive aquatic plants. Mesocosms and greenhouse facilities are needed to study physiology of aquatic plants, as well as, potential control methods or techniques. Controlled studies are needed to provide recommendations for initial controls, as field trials face so many variables, meaningful data can take years to develop. New products, or product formulations, must be tested to determine efficacy as well.

The University of Georgia is a leader in AVM (Avian Vacuolar Myelinopathy) research and has brought to light another impact of hydrilla on the aquatic environment thanks to Dr. Susan Wilde. Protecting the Bald Eagle, as well as, other waterfowl is an important aspect of our industry: we are stewards of our water resources including all wildlife. Management of hydrilla is one way of maintaining healthy populations of wildlife including fish and waterfowl.

LSU is more than a football powerhouse although some of the MSAPMS members that are LSU alumni might argue that point. Dr. Sanders has been involved in developing control methods for one of the newest invasives, giant salvinia. This floating plant might be the most aggressive weed we've ever seen in the U.S. covering entire water bodies in just weeks, or months.

Mississippi State and Auburn Universities have long provided support for invasive species control through fisheries research. Drs. Eric Dibble and Mike Maceina have conducted studies that determined that too much hydrilla and other invasives can actually be detrimental to bass and other sport fisheries, in spite of bass angler's belief that "more grass equals more bass". The aforementioned research, along with help from organizations like B.A.S.S., has helped anglers understand the impacts of invasive aquatic plants on bass and the aquatic environment.

These are only a few of the resources we are fortunate to have in the MidSouth. Whether you're an aquatic applicator, supplier, resource manager, regulator, or employed in another field related to aquatic plant management, please support these resources. They will be even more important in the future as more invasive aquatic plant species are found in our waters.

*Gerald Adrian*

President - MSAPMS



**Minutes of the MidSouth  
Aquatic Plant Management Society  
Annual Business Meeting  
September 19, 2012  
Renaissance Riverview Plaza Hotel  
Mobile, Alabama**

The meeting was called to order by President Troy Goldsby at 11:45 a.m.

**Officer Reports**

**Secretary's Report:**

The attendance at this year's meeting is as follows:

Delegates & Students: 70

Exhibitors: 17 paid and 2 non-profit

Guests: 5

This year's workshop and meeting agenda were sent to the following 10 states for consideration of CEU's: Alabama, Georgia, Mississippi, Tennessee, Texas, Florida, Louisiana, North Carolina, Kentucky and South Carolina. The current membership numbers of the Society are 44 individual and 16 Sustaining. Secretary Sherry Whitaker stated that minutes from the last annual business meeting are available at the registration desk if anyone is interested in looking at them.

**Treasurer's Report:**

Treasurer Craig Aguillard stated that the breakdown of the Society finances is as follows:

Business Money Market - \$13,520.46

Lifegreen Checking - \$43,951.11

Small Business CD - \$32,213.38

The books were audited by Jeremy Slade and Michael Grodowitz and all were found to be in order. A breakdown of the yearly income and expenses are available at the desk if anyone would like to look them.

**Editor's Report:**

Ryan Wersal stated to the membership that the September newsletter will be sent out in October this year in order to include events of the Annual meeting. Any information that needs to be included should be sent to Ryan as soon as possible.

Terry Goldsby made a motion to accept the Officer Reports as presented, Jeremy Slade seconded and voice vote made by all to accept.

**Committee Reports**

**Program Committee, Site Selection:**

No report.

**Editorial Committee:**

No report. (Covered in Editor's report)

**Scholarship Committee:**

The annual scholarship award will be presented at the Banquet.

**Membership Committee:**

The new Secretary will send out an e-mail to remind those, not in attendance, to update their membership.

**Website Committee:**

Send photos to Ryan Wersal to be included on the banner on the MSAPMS website.

Presentations of the workshop will be available on the website next week.

**Internal Audit:**

Covered in Treasurer's Report

**Nominating Committee:**

The following slate was presented to the membership:

President-Elect – Sherry Whitaker

Secretary – Cliff Young

Treasurer – Craig Aguillard

Editor – Ryan Wersal

Director (1 yr term) - Harvey Hawkins

Director (2 yr term) – Melissa Barron

Director (2 yr term) – Josh Yerby

No nominations were made from the floor. Jason Carlee made a motion to accept this slate of nominees, Jim Petta seconded, voice vote by all to accept.

A motion was made by Cliff Young to accept the committee reports. Terry Goldsby seconded, voice vote by all to accept.

## Old Business

A By-laws change was voted on by the Board and was presented to the membership in the May newsletter. The change is as follows:

### ***Current By-Laws Read:***

**Section I. Term of Office.** The President, President Elect, and Immediate Past President serve for one (1) year in those capacities and may not succeed themselves. The Secretary, Treasurer, and Editor, elected annually, may be elected to six consecutive annual terms. Two (2) directors shall be elected each year for a two (2) year term of office, and may be elected for a consecutive term, but then must relinquish said office of Director for a like period of time equal to their term of office. Officers and Directors elected at any annual meeting shall begin their duties at the close of said meeting.

### ***Proposed Change Will Read:***

**Section I. Term of Office.** The President, President Elect, and Immediate Past President serve for one year in those capacities and may not succeed themselves.

***The Secretary, Treasurer, and Editor, offices do not have term limits, but must be elected annually by the membership.*** Two (2) directors shall be elected each year for a two (2) year term of office, and may be elected for a consecutive term, but then must relinquish said office of Director for a like period of time equal to their term of office. Officers and Directors elected at any annual meeting shall begin their duties at the close of said meeting.

A motion was made by Jason Carlee to accept the change to the bylaws, Jeremy Slade seconded the motion. The motion was unanimously by a voice vote of the Society.

## New Business

None

Terry Goldsby made a motion to adjourn the meeting, David Webb seconded and the meeting was adjourned by voice vote at 11:55 a.m.

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# Too Many Weeds Spoil the Fishing



Exotic invasive aquatic plants such as Hydrilla, Eurasian Watermilfoil and Curlyleaf Pondweed, can be detrimental to a healthy fishery in lakes across the country.

These invasive plants when left unmanaged can alter the ecosystem of lakes and reservoirs, cause a decline in the fishery, and interfere with other valued uses of waterbodies.

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**MidSouth Aquatic Plant Management  
Society 32<sup>nd</sup> Annual Conference  
Harrah's Grand Tunica  
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September 16-18, 2013**

***First Call for Papers***

Oral presentations will be 15 minutes, including questions. Presentations are encouraged on all aspects of aquatic and wetland plant management, biology, and ecology. Presenters are requested to register for the conference.

Please e-mail the Title Form, attached below, and a brief abstract (250 words or less) by June 31, 2013:

Sherry Whitaker  
US Army Engineer Research and Development Center  
sherry.l.whitaker@usace.army.mil

A computer and projector to handle Power Point presentations will be provided. No other presentation format will be supported. Please bring your presentation on a USB compatible flash or CD.

---

**Title Form**

Title: \_\_\_\_\_

Corresponding Author: \_\_\_\_\_

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

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

Phone: \_\_\_\_\_ E-mail: \_\_\_\_\_

PLEASE DO NOT DELAY. MAKE PLANS TO ATTEND, PRESENT, AND PARTICIPATE IN THIS CONFERENCE. INVITE THOSE YOU ASSOCIATE WITH TO SUBMIT AN ABSTRACT AS WELL!

# Editorial Guidelines

The MidSouth Aquatic Plant Management Society

**Font:** Times New Roman, size 12

**Title:** Bold, upper case. Align Left. End with period.

**Author:** Name follows Title, sentence case. Underline name of presenting author. Separate authors with commas. End with semicolon.

**Affiliation:** Sentence case. Include author's affiliation, address with zip code, e-mail address. If needed, insert semicolon and follow with second author's information. If there are three or more authors, add superscripts for clarity (for example, John Smith<sup>1</sup>). Justify.

**Body of Abstract:** Leave one blank line between title/author/affiliations and the body of the abstract. No indentation; one paragraph only. Justify.

**Scientific Names:** For plants, animals, and microbes, etc., use the WSSA approved common name followed by the genus and species names in italics, wherever possible (for example, diquat dibromide).

**Scientific Units:** Use of Metric or English units are acceptable. Use of standard abbreviations is acceptable.

**See example below:**

## LITTORAL ZONE PLANT COMMUNITIES IN THE ROSS BARNETT RESERVOIR, MS.

Wersal, R.M.<sup>1</sup>, J.D. Madsen<sup>1</sup> and M.L. Tagert<sup>2</sup>; <sup>1</sup>GeoResources Institute, Mississippi State University, Box 9652 Mississippi State, MS 39762-9652, [rwersal@gri.msstate.edu](mailto:rwersal@gri.msstate.edu). <sup>2</sup>Mississippi Water Resources Research Institute, Mississippi State University, Box 9680 Mississippi State, MS 39762-9680

The Ross Barnett Reservoir is a 33,000 acre surface water impoundment created on the Pearl River near Jackson, Mississippi. The Reservoir is the primary source of potable water for the city of Jackson. It provides recreational opportunities in the form of fishing, boating, water sports, and onshore camping and hiking. In recent years, non-native aquatic macrophytes have increased in distribution, impeding navigation, fishing, and reduced the aesthetics of waterfront properties. We conducted a whole-lake survey in June 2005 to assess the distribution and abundance of plant communities in the Reservoir to serve as a starting point for a long term management plan. In October 2006 a survey of the littoral zone (water depths of  $\leq 10$  feet) was conducted based on the points sampled in 2005. A plant rake was deployed at each of 508 points visited. Species presence was mapped using handheld computers outfitted with GPS receivers, and data stored in database templates using Farm Site Mate software. A total of 21 aquatic or riparian plant species were observed growing in or along the shoreline of the littoral zone. American lotus and water primrose were the most common plant species observed in the littoral zone (17.7 % and 7.4% respectively). Non-native plants included alligatorweed (*Alternanthera philoxeroides*) (3.9%), waterhyacinth (*Eichhornia crassipes*) (2.9%), and hydrilla (*Hydrilla verticillata*) (0.6%). Bladderwort (*Utricularia vulgaris*), a native submersed aquatic plant was also observed (0.4%) for the first time. Overall, species occurrence was lower during in 2006 than in 2005.



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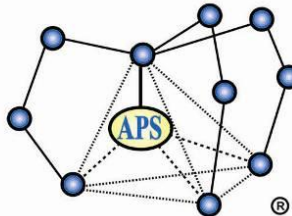
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## 2013 MidSouth Aquatic Plant Management Society Scholarship Opportunity

The MSAPMS is seeking applications for the 2013 graduate student scholarship to be awarded at the 2013 annual meeting. We request that the successful applicant attend the meeting and give a presentation, if possible. One scholarship of \$2,000 will be awarded to a qualified student applicant.

To apply, The Scholarship Committee should receive the following information before June 1, 2013:

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 the 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 graduate 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. John D. Madsen  
Mississippi State University  
Geosystems Research Institute  
Box 9627  
Mississippi State, MS 39762-9627  
Ph. 662-325-2428  
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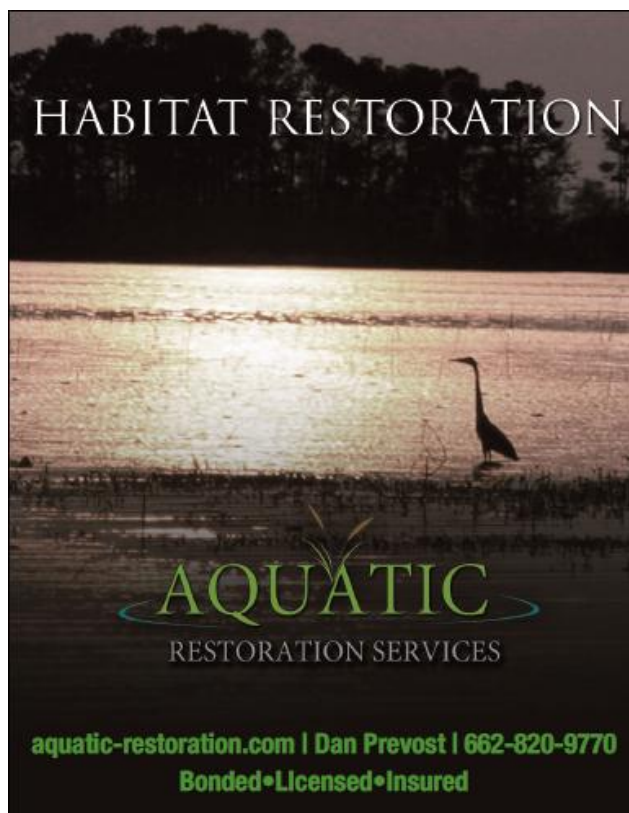


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## For Immediate Release

### SCIENTISTS RECOMMEND BANISHING DANGEROUS AQUATIC WEED FROM WATER GARDENS

**Contact:** Lee Van Wychen, Director of Science Policy for the Weed Science Society of America  
[Lee.VanWychen@wssa.net](mailto:Lee.VanWychen@wssa.net)  
202-746-4686

Lawrence Kansas – January 14, 2013 - If you are tempted to purchase a lovely specimen of crested floating heart (*Nymphoides cristata*) for your backyard water garden, you might want to reconsider. While this plant is marketed as an ornamental lily, experts from the Weed Science Society of America (WSSA) say it can be a real nuisance if it escapes its intended home – impacting water supplies and hydropower production, disrupting natural ecosystems and impeding recreational activities such as boating, swimming and fishing.

Crested floating heart has highly invasive traits that are making it a major weed in Southeastern bodies of water. Despite intense control efforts, escaped plants have thrived in cypress swamps, lakes and water management canals across Florida since the late 1990s. By 2006 crested floating heart had made its way to South Carolina's Lake Marion, a large body of water sometimes characterized as an inland sea. In just two years, a 20-acre infestation ballooned to more than 2,000 acres. The latest estimates suggest it now covers 6,000 acres of the lake's surface.

"Despite the danger it represents, crested floating heart is still readily available online and through local garden stores," says Ken Langeland, Ph.D., University of Florida Center for Aquatic and Invasive Plants. "Until regulators address the problem by eliminating the source of supply, buyers are encouraged to beware."

Crested floating heart was introduced to the U.S. from Asia. It grows quickly and forms dense canopies that float along the surface of a body of water.

Unfortunately crested floating heart is also easily spread. Small plant fragments can be transported by wind, flowing water, boats and trailers. In addition, clusters of miniature plants called "ramets" can easily break away from established colonies of the plant to spread and take root elsewhere.

To date, scientists have found little in their aquatic weed toolbox to be effective in the battle against crested floating heart. Despite the large mass of leaves floating on the water surface, foliar herbicides, including those that work effectively on other floating-leaf aquatic weeds, have had little success. Weed-eating sterile grass carp don't like crested floating heart, and attempts at mechanical harvesting have actually spread the plant by breaking off small fragments. It has survived a lowering of water levels and even freezing temperatures.

In the absence of effective control measures, many communities have resorted to training volunteers to detect and report new infestations in the hope that the weed can be isolated and contained. They also caution water enthusiasts to clean boats and trailers carefully after navigating waters and shorelines that might be infested.

"It is clear that additional research is necessary to develop effective controls," Langeland says. "In the meantime, it is important that each of us do our part to minimize the spread of crested floating heart. Buy native

species for your water garden or those non-native species that have proven unlikely to become invaders. If you already have crested floating heart, remove it immediately and dispose of it far from any body of water."

### ***Additional Background on Crested Floating Heart and Its Relatives***



**An infestation of crested floating heart in South Carolina.**  
*Photo courtesy of Larry McCord, Santee Cooper, Bugwood.org.*

- Crested floating heart reproduces vegetatively from tubers, daughter plants, rhizomes and small fragments.
- It features small white flowers that bloom from summer to fall.
- Each flower has five petals with ruffled crests that resemble a rooster's comb.
- Heart-shaped leaves float on the water's surface, supported by slender tuberous roots that are typically submerged in sediment.
- The plant can grow in shallow drainage ditches and along shorelines, but also has been found to thrive in 10 feet or more of water.

- Yellow floatingheart (*Nymphoides peltata*) and water snowflake (*Nymphoides indica*) are also known to be invaders.
- Big floatingheart (*Nymphoides aquatica*) and little floatingheart (*Nymphoides cordata*) are native to North America.



**The large root mass of a crested floating heart plant.**  
*Photo courtesy of Leif Willey, University of Florida.*



**The distinctive, crested petals of the crested floating heart plant.**  
*Photo courtesy of Leif Willey, University of Florida.*

For further information on crested floating heart and other invasive species, visit [www.invasive.org](http://www.invasive.org).

### ***About the Weed Science Society of America:***

The Weed Science Society of America, a nonprofit scientific society, was founded in 1956 to encourage and promote the development of knowledge concerning weeds and their impact on the environment. The Weed Science Society of America promotes research, education and extension outreach activities related to weeds, provides science-based information to the public and policy makers, fosters awareness of weeds and their impact on managed and natural ecosystems, and promotes cooperation among weed science organizations across the nation and around the world. For more information, visit [www.wssa.net](http://www.wssa.net).



## U.S. National Early Detection and Rapid Response System for Invasive Plants

### EDRR Fact Sheet

Randy G. Westbrooks, Invasive Plant Control, Inc., Whiteville, North Carolina. USA  
Larry McCord, Santee Cooper, Moncks Corner, South Carolina. USA  
Steven T. Manning, Invasive Plant Control, Inc., Nashville, Tennessee. USA

**Common Name:** Crested Floating Heart

**Scientific Name:** *Nymphoides cristata* (Roxb.) O. Ktze.

**Family:** Menyanthaceae

**Description:** An herbaceous aquatic plant with floating stems from a buried rootstock. **Slender tuberous roots** dangle from the stem-leaf node. **A Single Heart-shaped Leaf** with smooth margins, cordate base, and short petiole at the tip of each stem. **Flowers** white, with membranous margins, 0.3-0.9" wide, petal lobes with a ruffled crest (like a rooster's comb) along the upper midvein, blooming from summer to fall. **Fruit** an oblong capsule, with smooth, rounded seeds.



**Plant Images:** Crested Floating Heart on Lake Marion, South Carolina. Photos courtesy of Jim Huff, Santee Cooper, Moncks Corner, South Carolina.

**Similar Plants:** Big Floating Heart (*N. aquatica*), Little Floating Heart (*N. cordata*), and Water Snowflake (*N. indica*).

**Habitat:** Crested floating heart grows in ditches, canals, ponds, and lakes.

**Native Range:** Asia.

**Pathways of Introduction and Spread:** Crested floating heart was first introduced to the U.S. as a water garden plant. Once established in a waterway, fragments of the plant are spread by wind, flowing water, boats, and trailers.

**Crested Floating Heart in Florida:** Free living populations of Crested floating heart were first observed in cypress swamps and water management canals in southeast Florida in the late 1990s. Within a few years, large canals and suburban lakes in the central and eastern parts of the state had become infested. There is serious concern about this plant because herbicides that control other floating and emergent invasive plants have had little effect on it. *It is still being sold in the water garden trade.*

**Crested Floating Heart in South Carolina:** Crested floating heart was first detected in a 20 acre cove near Eutaw Creek at the southeastern end of Lake Marion (Orangeburg County), South

Carolina, in August, 2006. This was the first time that free living populations of the plant had been found outside of Florida. The plant was most likely introduced into the Santee Cooper Lake System (Lake Marion and Lake Moultrie) from backyard water gardens, or by recreational boaters. Initial applications

of herbicides that control other aquatic weeds were largely ineffective – *as already seen in Florida*. Low water levels experienced during of 2007-2008, as well as freezing winter temperatures also had little effect on the plant. By mid-2007, about half of the cove at Eutaw Creek was covered by the plant. By late 2008, the plant had spread to other areas of the lake, both downstream and upstream from the original infestation. In 2009, it was estimated that about 2,000 surface acres of Lake Marion are infested with the plant. It has also been found in nearby Lake Moultrie, as well as the Santee River below the Lake Marion dam. Crested floating heart has also been detected in a golf course pond on Pawleys Island, South Carolina (Jack Whetstone, Clemson University, Georgetown, South Carolina. Personal Communication, May 19, 2010). Control efforts have continued in the Santee Cooper System with limited effectiveness. Chemical applications by airboat and helicopter have shown positive results, however the plant continues to demonstrate the ability to regrow from root crowns that survive the initial treatment. Crested Floating Heart has continued to spread throughout the lake system with a total of some 6,000 acres infested as of October, 2012.

**Control Strategies:** In October, 2009, Santee Cooper aerially sprayed 350 surface acres of Lake Marion that had become infested with the plant. Currently, Santee Cooper is using a tank mix of glyphosate (**Touchdown Pro**) plus imazamox (**Clearcast**), combined with **TopFilm** (a pesticide adjuvant/sticker), or the surfactant **AquaBuph**, in efforts to control Crested floating heart. Santee Cooper has also found that endothall (**Aquathol K**) provides short term control of the plant in enclosed water bodies with still water. Early results from the 2009 treatment effort show a small reduction in total surface acres infested in the Santee Cooper lakes. Treatments have continued through 2010, 2011 and 2012, with similar results. Efforts continue toward discovery of more effective control agents throughout the plant's expanding range.

**The Role of Volunteers in Detection and Reporting of Crested Floating Heart:** Based on suitable habitat for the plant, biologists estimate that Crested floating heart could ultimately infest as much as 40% of the 160,000 acre Santee Cooper Lake System if it is not controlled. As a result, Santee Cooper is conducting ongoing early detection and delimiting surveys across the lake system, and will conduct additional treatments, based on the effectiveness of recent control efforts. However, surveys are also needed on the Santee River and on area golf courses. At this point, it is critical that preventative measures be taken by boaters and water garden enthusiasts to minimize the spread of this new invader. New infestations should be reported to state officials, and eradicated to prevent further establishment and spread. *This is a good example of the field work that EDRR volunteers could do to assist agencies such as SC-DNR and Santee Cooper in their efforts to detect and manage new invasive species such as Crested floating heart.*

**Regulatory Status:** Crested floating heart is currently regulated as a State Noxious Weed in North Carolina. Plant regulatory specialists continue to pursue listing of Crested floating heart as a State Noxious Weed in South Carolina.

**Online Resources:**

Crested Floating Heart in Lake Marion, South Carolina. Southeast Exotic Pest Plant Council – EDDMapS. URL: <http://www.eddmaps.org/southeast/distribution/point.cfm?id=633409>

Crested Floating Heart Profile – U-FL Center for Aquatic and Invasive Plants. URL: <http://plants.ifas.ufl.edu/node/291>

Crested Floating Heart Supplier – The Water Garden, Chattanooga, TN. URL: <http://www.watergarden.org/Pond-Supplies/Lily-like-Aquatics/White-Snowflake>

Florida's Floating Heart Fact Sheet – Comparison of the Four Floating Heart Species that Occur in Florida. Colette Jacono, U.S. Geological Survey, Gainesville, Florida. URL: <http://plants.ifas.ufl.edu/misc/pdfs/nymphoides.pdf>

New Nymphoides in Lake Marion. S.C. Aquatic Plant Management Society Newsletter. 28(1):3. URL: <http://www.scapms.org/images/mav2007news.pdf>

Santee Cooper plans aerial spraying to fight invasive lilies. The DigitalCharleston. 10-1-2009. URL: <http://charleston.thedigital.com/green/santee-cooper-plans-aerial-spraying-fight-invasive-6353-1001>

**Draft Date:** October 31, 2012





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NISC NEWSLETTER

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Phone: (202) 513-7243 • Fax: (202) 371-1751 • [www.invasivespecies.gov](http://www.invasivespecies.gov)

JANUARY 2013

## Announcements

### Secretary Salazar Announces New Members of Invasive Species Advisory Committee

January 8, 2013—Washington, DC—Secretary of the Interior Ken Salazar has appointed new members to the Invasive Species Advisory Committee, which provides advice and recommendations to the National Invasive Species Council.

For more information, see [www.invasivespecies.gov](http://www.invasivespecies.gov).

The members of the eighth convening Invasive Species Advisory Committee are:

**Charles Barger** (New)  
University of Georgia

**Joseph Bischoff, Ph.D. (New)**  
American Nursery and Landscape Association

**Patrick Burch**  
Dow AgroSciences

**Jerry Cook, Ph.D. (New)**  
Sam Houston State University

**Phillip Cowan (New)**  
Landcare Research NZ

**Tammy Davis (New)**  
Alaska Department of Fish and Game

**Joseph DiTomaso, Ph.D.**  
University of California, Davis

**Otto Doering, III, Ph.D.**  
Purdue University

**Susan Ellis**  
California Department of Fish and Game

**James Furnish (New)**  
Forestry Consultant

**Bonnie Harper-Lore**  
Restoration Ecology Consultant

**Katherine Howe, Ph.D. (New)**  
Midwest Invasive Plant Network  
Purdue University

**William Hyatt (New)**  
Connecticut Department of Environmental Protection

**Phyllis Johnson, Ph.D. (Reappointed)**  
University of North Dakota

**Eric Lane (Reappointed)**  
Colorado Department of Agriculture

**Janis McFarland, Ph.D. (New)**  
Syngenta Crop Protection, LLC.

**N. Marshall Meyers, Esq.**  
Pet Industry Joint Advisory Council

**Edward L. Mills, Ph.D.**  
Cornell University

**Carol L. Okada (New)**  
Hawaii Department of Agriculture

**Roland Quitigua (New)**  
University of Guam

**David Reed, Ph.D. (New)**  
St. Lawrence Seaway Development Cooperation

**Timothy Schaeffer, Ph.D., J.D. (New)**  
Pennsylvania Fish and Boat Commission

**David E. Starling, D.V. M.**  
Aqueterinary Services, P.C.

**Nathan Stone, Ph.D.**  
University of Arkansas at Pine Bluff

**John Peter Thompson**  
Maryland Nursery and Landscape Association

**William Toomey**  
The Nature Conservancy

#### Special points of interest:

- NEW MEMBERS OF ISAC
- NOMINATIONS DEADLINE FOR NISAW

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**Robert Van Steenwick, Ph.D.**  
University of California, Berkeley

**Damon E. Waite, Ph.D.**  
Lady Bird Johnson Wildflower Center  
University of Texas at Austin

**Robert H. Wiltshire**  
Invasive Species Action Network  
(Representing the Federation of Fly Fishers)

**Kenneth Zimmerman (New)**  
Lone Tree Cattle Company

### Nominations For 2013 National Invasive Species Achievement Awards—Due January 21, 2013

In 2013, non-monetary awards will again be presented for outstanding achievement in the categories of leadership, volunteerism and education/outreach. An additional category of Lifetime Achievement will be added. In 2013, anyone may submit a nomination or multiple nominations for the awards. Awardees for both terrestrial and aquatic achievement may be selected for each category, if warranted. Awards will consist of an eco-friendly plaque recognizing accomplishments of the recipients. The awards will be presented during National Invasive Species Awareness Week March 3-8, 2013. Information about the awards and nomination forms are available at [www.nisaw.org](http://www.nisaw.org)

Nominations must be received by email or fax by C.O.B. Monday, January 21, 2013. Fax # is 202-371-1751 or email: [Lori.Williams@ios.doi.gov](mailto:Lori.Williams@ios.doi.gov)

### Coast Guard Volume II of "Frequently Asked Questions" on Ballast Water Management

The Coast Guard has posted Volume II of "Frequently Asked Questions" on its Ballast Water Management webpage: <http://www.uscg.mil/hq/cg5/cg522/cg5224/bwm.asp>

Frequently Asked Questions and Answers, Volume II (Alternate Management Systems (AMS) and Type Approval of BWMS), 21 December 2012

These provide more details on how the Coast Guard will make determinations for Alternate Management Systems (AMS) and type-approval of Ballast Water Management Systems (BWMS).

Please send any questions or suggestions to us at [environmental\\_standards@uscg.mil](mailto:environmental_standards@uscg.mil)

## In the News

### EPA Appoints 11 New Members to the National Environmental Education Advisory Council

*EPA, Dale Kemery*

U.S. Environmental Protection Agency (EPA) Administrator Lisa P. Jackson has appointed 11 environmental education professionals to serve on the agency's National Environmental Education Advisory Council (NEEAC). The National Environmental Education Advisory Council is comprised of representatives from organizations outside the federal government who provide EPA with advice and recommendations on environmental education. The council provides EPA with a better understanding of the needs of schools, universities, state departments of education and natural resources. The first meeting of the NEEAC is scheduled for December 13-14, 2012.

"The National Environmental Education Advisory Council provides EPA with insight from men and women with first-hand environmental education experience. This is essential to our work to support environmental education efforts across the country and help Americans understand how protecting the environment is really about protecting our health and the health of our communities," said Administrator Jackson. "I congratulate our new NEEAC members on their appointments and look forward to continuing to work with the council." To read the entire article, visit: <http://yosemite.epa.gov/opa/admpress.nsf/0/0704636CCB03E6A085257AC900517BF5>



### Python Challenge: 400 Sign Up For Dangerous Everglades Snake Hunt

*HuffPost Miami, David Flesher*

January 6, 2013: Nearly 400 people have signed up to enter the Everglades and do battle with Burmese pythons, the giant constrictors that have emerged as the latest and weirdest threat to South Florida's wildlife.

The 2013 Python Challenge, which begins Saturday, has attracted participants and media interest from around the United States for a monthlong event that will feature prizes of \$1,000 for catching the longest snakes and \$1,500 for catching the most. To read the entire article, visit: <http://www.huffingtonpost.com/2013/01/07/python->

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## Algae, invasive species threaten lake

PortClintonNewsHerald, Associated Press

January 1, 2013: Lake Erie is one of the most threatened of the five Great Lakes as a result of toxic blue-green algae and invasive species of fish, mussels and plants, according to a new report.

The Great Lakes Environmental Assessment and Mapping Project concluded that Lake Erie was the second-most threatened of the lakes, behind Lake Ontario. To read the entire article, visit: <http://www.portclintonnewsheald.com/viewart/20130101/NEWS01/301010016/Algae-invasive-species-threaten-lake>



## Judge tosses Asian carp suit; states can amend it

KSL.com, John Flesher and Tammy Webber

December 3, 2012—CHICAGO (AP) - A federal

judge Monday threw out a lawsuit filed by five states that want barriers placed in Chicago-area waterways to prevent Asian carp from invading the Great Lakes, but said he would consider new arguments if the case were filed again.

Michigan, Wisconsin, Minnesota, Ohio and Pennsylvania claimed that the U.S. Army Corps of Engineers and Chicago's Metropolitan Water Reclamation District are causing a public nuisance by failing to physically separate a network of rivers and canals from Lake Michigan. To read the entire article, visit: <http://www.ksl.com/?nid=157&sid=23234272&title=judge-to-toss-asian-carp-suit-if-its-not-changed>

## Grants

**Water Quality Program—Freshwater Algae Control Program Grant Cycle:** The Washington Department of Ecology (Ecology) has approximately \$250,000 available for Freshwater Algae Control Program (FACP) grants beginning fiscal year 2014 (July 1, 2013). Please contact Lizbeth Seebacher at [Lizbeth.Seebacher@ecy.wa.gov](mailto:Lizbeth.Seebacher@ecy.wa.gov) or 360-407-6938 with questions.

## Conferences

**January 22, 2013: The 2013 North American Invasive Plant Ecology and Management Short Course (NAIPSC)** begins "Using computer vision for species identification" from 3:30-4:30 Seminar via University of Nebraska-Lincoln [Big Ideas Semi-](#)

[nar Series](#), with Dr. David Jacobs, University of Maryland. For a listing of all courses offered, and registration visit the NAIPSC website <http://ipscourse.unl.edu/>. The NAIPSC Special Session for 2013 is on the topic of biocontrol.

**USDA -ARS National Program 104 Stakeholder Webinar:** You are invited to participate in the stakeholder webinar workshop sessions for the USDA Agricultural Research Service's Veterinary, Medical, and Urban Entomology National Program. Sessions offered are:

February 20: Public Health Entomology  
February 21: Military Entomology  
February 22: Veterinary Entomology  
February 25: Ants

You can learn more about the program and previous action plans by visiting plans by visiting: [http://www.ars.usda.gov/research/programs/programs.htm?NP\\_CODE=104](http://www.ars.usda.gov/research/programs/programs.htm?NP_CODE=104)

**March 3-6, 2013: National Invasive Species Awareness Week (NISAW)** is being held at the Sheraton Pentagon City, 900 South Orme Street, Arlington, VA 22204. Information will be available beginning on September 15, 2012 on [www.nisaw.org](http://www.nisaw.org)

**March 7-8, 2013: Invasive Species Advisory Committee Meeting** is being held at the Sheraton Pentagon City, 900 South Orme Street, Arlington, VA 22204

**March 11-15, 2013: River Crossings: Linking River Communities** is being hosted by River Management Society, Tamarisk Coalition and International Submerged Lands Management at the Colorado Mesa University Campus in Grand Junction, CO. Contact Audrey Butler at (970) 256-7400 or [abutler@tamariskcoalition.org](mailto:abutler@tamariskcoalition.org) with questions.

**March 12-13, 2013: International Didymo Conference** is being hosted by the Invasive Species Action Network and Northeast Panel on Aquatic Nuisance Species at the Providence Biltmore in Providence, RI. For more information, go to: [http://www.stopans.org/Didymo\\_Conference\\_2013.htm](http://www.stopans.org/Didymo_Conference_2013.htm)

**April 2-4, 2013: The First National Adaptation Forum** will be held at the Denver Marriott City Center in Denver, CO. For more information, please visit: <http://www.nationaladaptationforum.org/>

**April 14-18, 2013: Biodiversity Without Boundaries 2013: The NatureServe Conservation & Natural Heritage Conference** will be held at the Tremont Plaza Hotel in Baltimore, MD. For more information go to: <https://connect.natureserve.org/BWB2013>

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Department of Defense • Department of Homeland Security • Department of Transportation  
Department of the Treasury • Department of Health and Human Services • Environmental Protection Agency  
U.S. Agency for International Development • U.S. Trade Representative • National Aeronautics and Space Administration



**April 21-25, 2013: 18th International Conference on Aquatic Invasive Species** is being held at the Sheraton-on-the-Falls in Niagara Falls, Ontario, Canada. Go to [www.icaais.org](http://www.icaais.org) for details regarding preparation and submission of abstracts.

## Miscellaneous

**Gulf and Caribbean Fisheries Institute (GCFI)** has released *Invasive Lionfish: A Guide to Control and Management*. To view/download a free copy please visit: <http://lionfish.gcfi.org/manual/>

**Tamarisk Coalition Funding Webinar Series:** The Tamarisk Coalition is initiating a series of webinars focused on funding opportunities and strategies specific to riparian restoration work and collaborative partnerships. For more information, contact *Kristen Jespersen* at (970) 846-0102 or [kjesper-sen@tamariskcoalition.org](mailto:kjesper-sen@tamariskcoalition.org)

**Global Compendium of Weeds - Second Edition (Randall, Rod)** is available at the following link: [http://www.agric.wa.gov.au/object/rwrf/imported\\_assets/content/pw/weed/global-compendium-weeds.pdf](http://www.agric.wa.gov.au/object/rwrf/imported_assets/content/pw/weed/global-compendium-weeds.pdf)

**Outsmart Invasive Species Program:** The University of Massachusetts in collaboration with Mass Division of Conservation and Recreation (DCR) has announced *Outsmart Invasive Species*. Join the Outsmart Invasive Species Project to help stop the spread of non-native plants and insects that threaten our environment.

You can help researchers cover more ground by looking for invasive species anytime - whether walking the dog, hiking, fishing, gardening, or working outdoors. All you need is a smartphone, or a digital camera. More information here <http://masswoods.net/outsmart>

**Raising Native Plants in Nurseries: Basic Concepts:** Produced by US Forest Service's Rocky Mountain Research station. This booklet is for the novice who wants to start growing native plants as a hobby; however, it can also be helpful to someone with a bit more experience who is wondering about starting a nursery. The booklet introduces important concepts, and provides basic information about collecting, processing, storing, and treating seeds. Later chapters focus on using seeds to grow plants in the field or in containers, and how to start native plants from cuttings. The final chapter offers advice on moving native plants from the nursery and establish them in their final planting location. To download a free copy, go to: [http://www.fs.fed.us/rm/pubs/rmrs\\_qtr274.pdf](http://www.fs.fed.us/rm/pubs/rmrs_qtr274.pdf)

**River Management Society's journal spotlighting invasive species**—Go to: <http://www.river-management.org/assets/Journals-Newsletters/2012%20summer.pdf> to read the entire

**Bureau of Reclamation Equipment Inspection and Cleaning Manual (addresses quagga/zebra mussels):** See <http://www.usbr.gov/mussels/>, link to manual (13 MB) is on right side under "Documents".

**New Edition! Preventing the Spread of Invasive Plants - Best Management Practices for Land Managers:** The California Invasive Plant Council (Cal-IPC) has published a new edition of its prevention best management practices (BMPs) manual for land managers. The manual presents guidelines that help land managers prevent the inadvertent spread of terrestrial invasive plants. The new edition includes a section on prevention BMPs associated with wildfire suppression and fuel management activities, including fuel breaks and post-wildfire rehabilitation.

The manual can be purchased through Cal-IPC, and an electronic version can also be downloaded from the Cal-IPC website (<http://www.cal-ipc.org/ip/prevention>). Other prevention resources, including a BMPs manual for those managing transportation and utility corridors, several prevention training videos, and resources for weed-free forage and weed-free aggregate, are also available on the website.

The new edition of the prevention BMPs manual was funded by the USDA Forest Service, State and Private Forestry.

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**MSAPMS Board of Directors will hold their next board meeting at Mississippi State University in March 2013.**



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## AQUATIC WEED CONTROL SHORT COURSE

**May 6-9, 2013**

**Coral Springs Marriott Hotel  
Coral Springs, FL**

**[www.conference.ifas.ufl.edu/aw](http://www.conference.ifas.ufl.edu/aw)**

### Course Overview

The Annual Aquatic Weed Control Short Course is hosted by the University of Florida and brings together more than 450 applicators, educators, and industry representatives to learn new techniques and refresh core competencies in aquatic and upland weed control. This course focuses on invasive and exotic species affecting Florida and provides many networking opportunities so that participants may share field experiences and lessons learned.

The conference is generally divided into two types of sessions. General sessions which cover CORE standards and concurrent sessions on Aquatics and Right-of-Ways & Natural Areas. The course also features a number of special sessions which include Live Plant ID and Hands-On Calibration Training. Participants have the flexibility to attend multiple sessions in order to reach their CEU credit quotas.

For those looking to become licensed applicators, the course offers CORE and category testing at the conclusion of the course, as well as an exam study session the evening before exams.

### Who Should Attend

The Aquatic Weed Control Short Course is designed to benefit those new to the industry and experienced professionals seeking a comprehensive update. You will benefit from attending this program if you:

- Need Florida Pesticide Applicator CEUs for categories such as:
  - Aquatic
  - Right-of-Way
  - Natural Areas
  - General Standards (CORE)
  - Forestry
- Are responsible for aquatic weed control in canals, lakes, golf course ponds, rivers, parks, residential developments and other waterways.
- Are employed by a public agency or private company which is responsible for vegetation management along right-of-ways and in natural areas.
- Are an employee of a basic manufacturer or a distributor that markets aquatic or vegetation management herbicides.
- Use biological control techniques to suppress aquatic weed growth.

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**Early Rate** (by February 22, 2013) - \$240  
**Regular Rate** (by April 5, 2013) - \$290  
**Late Rate** (after April 5, 2013) - \$340  
**Student Rate** - \$115

### Why YOU Should Attend

- Earn 20+ Florida CEUs in 2.5 days!
- Fully recertify your Florida Aquatics, Natural Areas, or Right-of-Way license
- Get hands-on experience in Aquatic and Upland Plant Identification
- Network with your peers and industry representatives
- Learn new skills and emerging techniques
- Test for new categories or get your first license
- Learn from faculty that write the exams for Florida applicators

### Meeting Site & Hotel Information

**Coral Springs Marriott Hotel**  
 11775 Heron Bay Boulevard  
 Coral Springs, FL 33076  
 Phone: 954-753-5598  
**Block Cut-Off Date: April 12, 2013**

**Reduced Aquatic Weed Group Rate:**  
 \$102 plus applicable taxes (currently 11%) per night for 1-4 people per room. Upgraded rooms are also available at an increased group rate.

To make your reservation call 954-753-5598 and specify that you are attending the **Aquatic Weed Short Course**.

### Questions?

For more information about Aquatic Weed Control Short Course, visit the course website and join the mailing list.

Should you have specific questions, please contact Jhanna Gilbert, Short Course Coordinator at [jhanna@ufl.edu](mailto:jhanna@ufl.edu) or 352-392-5930.

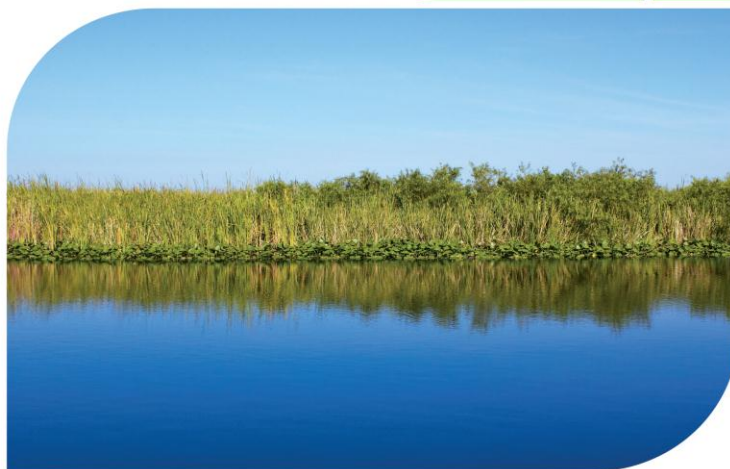
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## Calendar of Events

**Northeast Aquatic Plant Management  
Society Conference**

Jan 22-24, 2013  
Westbrook, CT  
[www.neapms.net](http://www.neapms.net)

**Weed Science Society of America  
Annual Meeting**

Feb 4-7, 2013  
Baltimore, MD  
[www.wssa.net](http://www.wssa.net)

**Midwest Aquatic Plant Management Society  
Annual Conference**

Mar 3-6, 2013  
Cleveland, OH  
[www.maps.org](http://www.maps.org)

**Western Aquatic Plant Management  
Society Conference**

Mar 25-27, 2013  
Coeur d'Alene, ID  
[www.wapms.org](http://www.wapms.org)

**Aquatic Plant Management Society  
Texas Aquatic Plant Management Society**

Jul 13-17, 2013  
San Antonio, TX  
[www.apms.org](http://www.apms.org)

**MidSouth Aquatic Plant Management Society**

Sep 16-18, 2013  
Tunica, MS  
[www.msapms.org](http://www.msapms.org)



**May newsletter deadline, April 15, 2013. Send information to [ryan.wersal@lonza.com](mailto:ryan.wersal@lonza.com).**