

WESTERN AQUATIC PLANT MANAGEMENT SOCIETY



JANUARY 2018 NEWSLETTER

President's Message

The Western Aquatic Plant Management Board of Directors is excited to invite you to our 37th annual conference at the Grand Sierra Resort in Reno Nevada March 26-28. Our Vice President, Andrea Sealock has been working hard to develop a program with something for everyone. (See page 2 for more details on what's planned).

The WAPMS Board has also been busy with the following activities over the last several months:

- ◆ We finalized the WAPMS Strategic Plan and have started the process to implement several of the tasks.
- ◆ We revamped the WAPMS website to provide improved functionality for our members. A special thanks to Secretary/Treasurer, Toni Pennington, for spearheading this effort. It's been quite the process, requiring a significant amount of time. Be sure to thank Toni when you see her in Reno!
- ◆ We restructured the membership process to make it more straightforward. Previously, member dues were tied to conference registrations. Memberships are now due annually, making it easier for individuals to join the society at any time of the year.
- ◆ We defined the meeting sponsorship levels and clearly outlined tangible benefits based on the respective sponsorship levels. Our meeting sponsors are very important to our society and we want to be sure that they are recognized appropriately.
- ◆ We continue to be active on social media and have made valuable connections with other APMS chapters and other relevant groups and societies. We will continue to use these tools to look for opportunities to collaborate with like-minded initiatives.
- ◆ We have established a communications committee to begin to develop a strategic plan for education and outreach activities. We are actively seeking members for this committee – please consider getting involved!
- ◆ We have re-structured the Barbra H. Mullin Scholarship. Ryan Thum kindly offered to spearhead this effort. His background in academia will allow us to better serve our student members and encourage them to become active participants in the society.



Amy Ferriter, President WAPMS

In this issue:

President's Message	1
WAPMS Meeting Info	2
Water temperature effect on waterhyacinth	4
Aquatic Seminars	5
Board of Directors	6

◆ We continue to be active partners with the Women of Aquatics, and we look forward to helping to promote more women in the aquatic plant management field in the West.

Please consider getting involved in the Society – either by serving on the Board or through a committee. I especially want to encourage students to actively engage and take advantage of our scholarship opportunities. Please feel free to contact me directly if you have questions or ideas on how the society can better serve its members. We need *your* help to promote WAPMS as an interdisciplinary forum for aquatic plant management in the West.

I am looking forward to seeing everyone in Reno!



37th Annual Conference Update



Grand Sierra Resort and Casino Reno, Nevada March 26-28, 2018

The 37th Annual Conference of the Western Aquatic Plant Management Society is just around the corner! If you haven't yet, please consider joining us in Reno, Nevada, on March 26-28, 2018, at the newly remodeled Grand Sierra Resort and Casino. To register, please visit the "Events" page of our website, www.wapms.org. We have been working hard to put together a fun and informative meeting!

We will kick things off with the PRESIDENT'S RECEPTION, on the evening of March 26, 2018, hosted by our current chapter president, Amy Ferriter. Stay tuned for details, because I've heard Amy is working on a virtual golf and shooting event for us that evening!

Talks will begin on the morning of March 27, 2018. We hope to have a preliminary agenda soon, including details on our keynote speaker, session topics, etc. Finally, we will end the day with our ANNUAL DINNER BANQUET. Don't forget to pack your grass skirt and ukulele, because we will be enjoying a tropical evening complete with a whole roasted pig!

March 28, 2018, is the final day of our meeting, and sessions will run throughout the day. Please join us that afternoon for our ANNUAL BUSINESS MEETING, at which time we will provide a chapter update, including changes implemented to our annual membership fees, next year's joint meeting with APMS, and more.

If you plan to attend the conference, don't forget to make your room reservations soon. Amy Ferriter and Andrea Sealock toured the Grand Sierra Resort in October, and were excited to see the resort has recently undergone a major renovation. Our conference room rate is \$64.00 for a Grand King/Queen and \$84.00 for a Summit King/2 Queens. To make your reservations, please visit the following link:

<https://aws.passkey.com/event/49107198/owner/16854/home>



For those of you travelling to Reno by air, the Grand Sierra Resort offers a complimentary airport shuttle from the Reno-Tahoe International Airport between the hours of 4:15am and 12:00am. You can catch the shuttle daily every 15 minutes at the far end of the baggage claim or at the front entrance of the hotel. If you are travelling by car, the hotel offers valet parking for a fee, or free self-parking. For more information on everything the Grand Sierra has to offer, please visit www.grandsierraresort.com.

Additional Items to consider:

Call for Papers – If you'd like to participate in this year's program, there is still time to submit an abstract for a presentation or poster! Please visit our website to submit an abstract by January 31, 2018: www.wapms.org/events.

Contact Andrea Sealock for more details: asealock@cygnetenterprises.com.

Exhibitor & Sponsorship Opportunities – We have recently updated sponsorship opportunities including Platinum, Gold, and Silver which include three, two, or one full registrations to the conference including invites to the President's Reception and banquet. These three upper most levels of sponsorship also include an exhibitor space and recognition during the meeting, in the program, and throughout the year on the WAPMS website providing the best valued outreach for your organization. We also have Bronze and Refreshment Break categories for those seeking sponsorship alternatives without the conference attendance built-in and without an exhibition booth. Of course, if you choose one of these alternatives, you are encouraged to sign up to attend the conference as a regular registrant. Please visit our website, www.wapms.org/sponsors, for a complete list of sponsorship packages. For more information, contact Doug Kleweno: dkleweno@cygnetenterprises.com

Scholarship Raffle – Please consider supporting our Barbra H. Mullin Student Scholarship Fund. Each year the WAPMS awards travel funds to undergraduate and graduate students who commit to presenting research papers or posters at the annual society conference. The society covers the cost of lodging at the conference venue, and will also reimburse costs for travel to and from the conference based on the availability of funds. The moneys to support these students are primarily raised through a raffle we hold at our annual conference each year. You can support the scholarship fund by donating a raffle item and/or purchasing raffle tickets at the conference on March 26 or 27. The raffle drawing will occur at the dinner banquet the evening of March 27. If you'd like to donate a raffle item, please contact Mike Blankinship, mike@h2osci.com, or Doug Kleweno, dkleweno@cygnetenterprises.com, for more information.

Questions? Please contact Andrea Sealock:

asealock@cygnetenterprises.com

We look forward to seeing you in Reno!

Water temperature effect on waterhyacinth regrowth

Author: John Miskella

Posted by: Guy B Kyser

Published on: November 27, 2017

Waterhyacinth (*Eichhornia crassipes*) is a floating perennial species that has become a serious management issue as it invades aquatic ecosystems around the world. In the Sacramento-San Joaquin Delta in California, the species forms large, dense mats on the water surface that inhibit boating, fishing, water access, and decrease light availability below the floating mat.

While the leaves of waterhyacinth generally turn brown and die during the winter, many waterhyacinth plants survive the winter and grow new leaves in the spring. Warmer spring temperatures also cause the plants to grow stolons, or spreading stems, from which daughter plants grow (Figure 1). Stolon growth is a key driver of waterhyacinth dispersal. Daughter plants growing from stolons expand plant mats away from banks, where forces such as tidal movement, wind, water flow, or boats cause portions of mats to break away and disperse (Figure 2).



Figure 1. Example of a water hyacinth daughter plant growing from a stolon.

Figure 2. Water hyacinth mats floating near Mildred Island in the Sacramento-San Joaquin Delta, CA.



In 2016, we performed a study to test how three different water temperatures affect waterhyacinth leaf and stolon growth. Plants were grown in growth chambers in one of three water temperature regimes [5°C (41°F), 10°C (50°F), or 15°C (59°F)].

Plants grown at 15°C developed roughly 9 times as many leaves as plants at 5°C or 10°C (Figure 3). After 54 days at 15°C, an average of 2.8 leaves grew on each stembase,

while an average of 0.2 leaves grew on each stembase at 5°C and 0.3 leaves grew on each stembase at 10°C. This increased leaf growth at the higher water temperature decreases light availability in the water column below the plant mat.

At 54 days, no stolons grew on plants in 5°C or 10°C water, while 40% of plants at 15°C were developing stolons - thus beginning to produce daughter plants.

With greatly reduced leaf and stolon production at 5°C and 10°C, waterhyacinth would disperse at a far lower rate, and would be easier to manage than the plants exposed to 15°C. This understanding of specific water temperature's effect on leaf and stolon production can help identify locations that may be susceptible to invasion and allow managers to allocate resources accordingly. It will also allow for better timing of management, before established populations begin rapid dispersal to new locations.

John Miskella is a biological technician with the USDA-ARS Aquatic Weed Laboratory, UC Davis, CA.

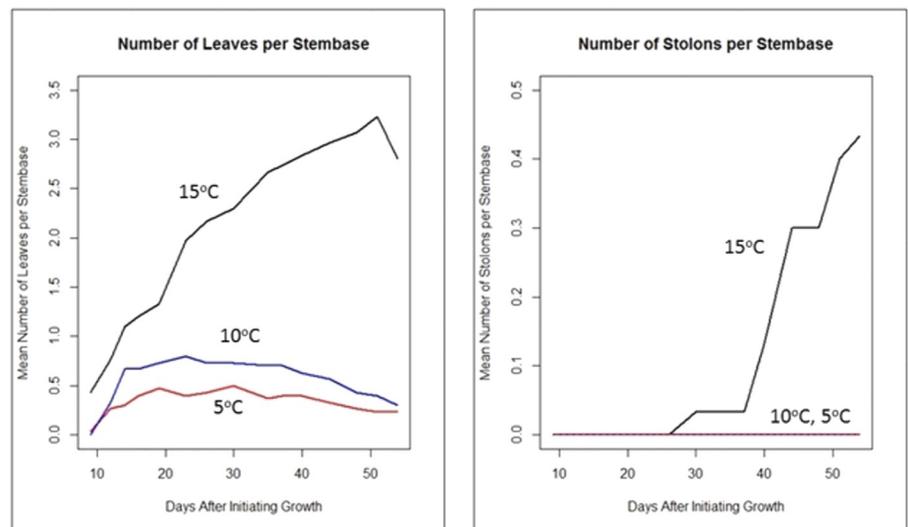


Figure 3.

AQUATIC WEED SCHOOL

University of California, UC Davis September 5th-6th, 2018

The Aquatic Weed School is an intensive two-day course focusing on issues associated with developing weed management strategies in a variety of aquatic ecosystems.

The school is designed for those involved in consulting, research, and management of aquatic weed systems throughout the western United States. Lecture notes will be provided in a comprehensive notebook. The Aquatic Weed School provides a rare opportunity for professionals to efficiently update their understanding of aquatic weeds and the action of herbicides in the plant and the environment.

Additional information will be posted on this website few months before the event. Questions can be directed to the UC Weed Research & Information Center at (530) 752-1748 or wric@ucdavis.edu.



AQUATIC WEED CONTROL Short Course

May 7th-10th, 2018
Coral Springs, Florida
www.conference.ifas.ufl.edu/aw

For 42 years, the University of Florida has offered to benefit those new to the industry and experienced professionals seeking a comprehensive uptraining and continuing education for Florida's pesticide applicators through the Aquatic Weed Control Short Course. The Short Course features leading experts in Aquatic and Upland vegetation management, and is designed date.

Questions? For more information about the Aquatic Weed Control Short Course, visit the course website and join the mailing list. Should you have specific questions, please email mstage@ufl.edu.

Flowering Rush Summit

by Columbia River Basin Cooperative Weed Management Area

February 27-28, 2018

The Columbia River Basin Cooperative Weed Management Area is pleased to announce the Flowering Rush Summit on February 27 and 28, 2018, in Spokane, WA. The Summit will be a one and a half day event that will address flowering rush in the Columbia River Basin. The goal of the Summit is to share current information on distribution, ecology and management of flowering rush. Summit discussions are intended to influence the development of a regional management plan.

Questions: If you have any questions regarding the summit, would like to sponsor the event or would like to present relevant information on flowering rush, please contact Leah Elwell leah@stopais.org or 406-222-7270.



2017-2018 Western Aquatic Plant Management Board of Directors

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Vice President	Andrea Sealock	925-685-8081	asealock@cygnetenterprises.com
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Director	Cody Greer	208-407-7678	cgreer@scbid.org
Director	Carolyn Ruttan	707-263-2256	carolyn.ruttan@lakecountyca.gov
Director	Tom Warmuth	336-402-4449	twarmuth@biosafesystems.com
Director	Mike Blankinship	530-219-1040	mike@h2osci.com

The **Western Aquatic Plant Management Society (WAPMS)** is the western chapter of the **Aquatic Plant Management Society** – an international organization. The geographic region of WAPMS includes the states of: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Oregon, Nevada, New Mexico, Montana, Utah, Washington, and Wyoming. WAPMS produces a bi-annual newsletter (sent electronically), holds an annual conference, and maintains a membership list. Members also receive the *Aquatics Magazine*.

- The purpose of the WAPMS is to:
- Promote the management of non-native and nuisance aquatic vegetation.
 - Encourage scientific research.
 - Promote student scholarships.
 - Provide scientific advancement and knowledge to its members.
 - Extend and develop public interest in aquatic plant management activities.

Editorial Guidelines for Members’ Submissions: Articles may be on any subject of general interest to the Society, such as news on members, updates on projects, or announcements of new products. They must include a byline with the authors’ names. Responsibility for the article lies with the authors. All articles of 300 words or less will be printed, as long as they pertain to the business of the Society. The Newsletter editor will edit them only for spelling, grammar, or readability. Articles longer than 300 words will be submitted to the editorial board for approval. They may be edited for length or content, in consultation with the author. Articles may be submitted as a Word document, a text file, or text in an email message.

Upcoming 2018 APMS and Related Events

- Northeast (NEAPMS) - January 9-11 (Portsmouth, New Hampshire)
- Weed Science Society of American (WSSA) - January 29-Feb. 1 (Arlington, Virginia)
- Northwest Irrigation Operators Conference - February 20-21 (Boise, Idaho)
- International Symposium on Aquatic Plants - February 18-23 (Queensland, New Zealand)
- Mid-West (MAPMS) - February 26-March 1 (Cleveland, Ohio)
- Western (WAPMS) - March 26-28 (Reno, Nevada)
- National (APMS) - July 15-18 (Buffalo, New York)
- American Fisheries Society - August 19-23 (Atlantic City, New Jersey)

