

# WESTERN AQUATIC PLANT MANAGEMENT SOCIETY FALL/WINTER NEWSLETTER

*Robert Leavitt, WAPMS Newsletter Editor  
November 2005*

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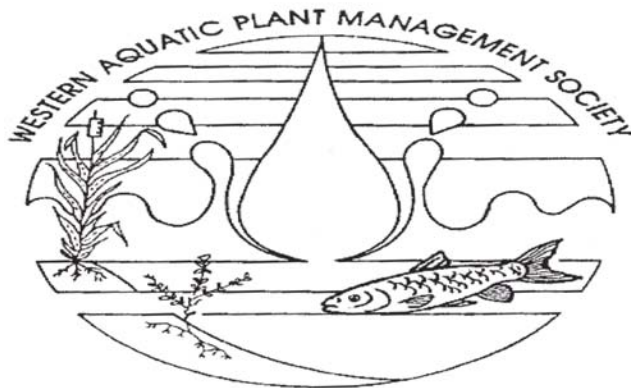
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As WAPMS Newsletter Editor, I would like to thank all those who have contributed articles to this edition of the Newsletter. If you would like to contribute to the next Newsletter, please email me at [rleavitt@cdfa.ca.gov](mailto:rleavitt@cdfa.ca.gov)

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## **P RESIDENT'S MESSAGE**

*Jenifer Parsons, WAPMS President*

It is with great sadness that I must relate the untimely death of our chapter Vice President Ross O'Connell. We will all miss his capable and untiring work against aquatic weeds. Please see the next article in the newsletter, a *Tribute to Ross*.

Now that fall is here, we are in the thick of planning our 25<sup>th</sup> annual meeting to be held at the end of March 2006. Please see the meeting announcement in this newsletter for information about dates and the hotel. It promises to be a great meeting, with an expanded program (from the usual 1.5 to 2.5 days) to accommodate an international session and an applicators session. Since the Vice President usually handles the bulk of the meeting planning, I nominated, and the board approved, the appointment of Lars Anderson as our replacement Vice President. Lars was already deeply involved in the meeting planning as the local arrangements coordinator, and his long history with both WAPMS and the national society (APMS) make him a real asset in this position. Thank you Lars for stepping in during this difficult time for the society!

To aid with meeting organization, we have split up the Vice President's normal meeting planning duties as listed below:

Program Chairperson for the regular sessions:

Lars Anderson ([lwanderson@ucdavis.edu](mailto:lwanderson@ucdavis.edu))

Program Chairperson for the international session:

Jenifer Parsons ([jenp461@ecy.wa.gov](mailto:jenp461@ecy.wa.gov))

Program Chairperson for the applicator session:

Scott Schuler ([scotts@sepro.com](mailto:scotts@sepro.com))

Local Arrangements Chairperson:

Lars Anderson ([lwanderson@ucdavis.edu](mailto:lwanderson@ucdavis.edu))

Corporate Sponsorships Chairperson:

George Forni ([gforni@aquamog.com](mailto:gforni@aquamog.com))

Please contact any of us if you have questions about any aspect of the meeting!

Please also see the call for papers/posters in this Newsletter and plan to present your latest research or application methods!

## **Special International Session At This Year's WAPMS Meeting**

For our 25<sup>th</sup> annual meeting coming up March 27-29, 2006 we will have the pleasure of being joined by several prominent scientists from New Zealand and possibly some from Australia. We will have a special one-day session devoted to topics of interest to both the Western US and New Zealand/Australia. Planning is still in the works, but subjects will include the most troublesome aquatic weeds in both countries, methods of control and management, new research on weeds we have in common (likely *Egeria* (Brazilian elodea)) will be a highlight, and potential for future collaboration.

If you have ideas for the sessions, or would like to participate by presenting a paper or joining on panel discussions, please contact me at [jenp461@ecy.wa.gov](mailto:jenp461@ecy.wa.gov)

Thanks!

## TRIBUTE TO ROSS O'CONNELL

*Robert Leavitt, WAPMS Newsletter Editor*

Ross was known to many of us as "Mr. Hydrilla". Though Ross had a successful career in vertebrate pest control for the State of California before entering into hydrilla eradication, most of us in the WAPMS know Ross because he spent much of the last two decades working with hydrilla. In particular, Ross spent the last four years concentrating on eradicating hydrilla from Yuba and Nevada Counties in California. I don't think there was anyone, except perhaps for Nathan Dechoretz, who knew more about hydrilla and hydrilla eradication in California than did Ross.

I know that Ross was proud to be elected as 2005 Vice President and Program Chair for the Western Aquatic Plant Management Society. This was a great honor to him, an affirmation of his career, and a tribute from his peers. I'm glad he received this honor before he passed away.

I first met Ross when I was working with an experimental aquatic herbicide and was immediately impressed with his dedication to aquatic weed management. At about the same time, Ross, Nathan Dechoretz, Tom Patrick, Denis Griffin and I worked on a perennial peppergrass control project near Bishop. Then I had the privilege of working with Ross at the Department of Food and Agriculture for the past four and one-half years. Ross was my right arm for hydrilla eradication, just as he had been for Nathan Dechoretz for many years, and could always be counted on for technical advice and historical perspective.

I don't think that anyone who ever knew Ross didn't like his warm personality and offbeat sense of humor. He loved to go trout fishing in Nevada, gold prospecting, and to play the stock market and the penny slots.

Ross passed away peacefully on October 16, 2005 in Folsom, California, from cancer. He was born in September 1952 in Sacramento, California, in the Tahoe Park district, and lived most of his life in the Sacramento area. He is survived by his wife, Patty, his mother, his brother, one son, two daughters, and a granddaughter, and many friends.

## **2006 WAPMS CONFERENCE SITE**

*Lars Anderson, Local Arrangements Chair*

The 2006 WAPMS annual conference will be March 27-29 at the beautiful Handlery Hotel and Resort in San Diego, California. The hotel is located in Mission Valley at 950 Hotel Circle North, which is about a 10 minute drive from the airport. The hotel is adjacent to a golf course, within walking distance of Fashion Valley Mall, and within a few minutes drive of the world famous San Diego Zoo, Sea World, Old Town, Seaport Village, and the Gas Lamp Quarter. Mexico is just a short drive away. You can take a video tour of the hotel at their website [www.handlery.com](http://www.handlery.com). The conference room rate is \$89/night. Reservations can be made over the Internet as follows: on the Handlery home page, click "San Diego"; then on the next screen click "Reservations"; then on the third screen enter "WAPMS" in the "Promo Code" field. Or, you can reserve a room by calling the reservation desk at 1-800-434-6835 and ask for the WAPMS group. The final date for this great rate is March 6, 2006, so be sure and make your reservations as soon as possible!

**CALL FOR PAPERS/POSTERS**  
**THE WESTERN AQUATIC PLANT MANAGEMENT SOCIETY**  
**2006 ANNUAL MEETING, MARCH 27-29, 2006**

The meeting will be held at the Handlery Hotel and Resort, San Diego, California. Oral presentations will be 20 minutes, including questions. Posters will be mounted in the main meeting room. Presentations are encouraged on all aspects of aquatic and wetland plant management, biology and ecology.

Please e-mail the Title Form, attached below, and a brief abstract (less than 250 words) by January 10<sup>th</sup> to:

**Salee Bryant**  
California Department of Food and Agriculture  
1220 "N" Street, Room A-357  
Sacramento, CA 95814  
e-mail: [Sbryant@cdfa.ca.gov](mailto:Sbryant@cdfa.ca.gov)

Salee will forward the Title Form and abstracts to the appropriate Program Chair.

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

\*\*\*\*\*

Title Form

Presentation Format: Oral Presentation \_\_\_\_\_ Poster \_\_\_\_\_

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 WESTERN AQUATIC PLANT MANAGEMENT SOCIETY

**FONT:** Arial, pitch 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 title or specialty, 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, Alexia Pascua<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 herbicide names, use the WSSA approved common names whenever possible (for example, diquat dibromide).

**SCIENTIFIC UNITS:** Use of American units, such as acres, acre-feet, pounds per acre, is acceptable, but it is recommended that these be followed by metric units in parenthesis. Use of standard abbreviations is acceptable.

**SEE EXAMPLE BELOW:**

**MECHANICAL CONTROL OF WATER HYACINTH IN AN IRRIGATION SLOUGH.** Alexia Pascua; Water Quality Specialist, Aquatic Environments, Inc., P.O. Box 1406 Alamo, CA 94507. E-mail: Apascua@Aquamog.com

Water hyacinth (*Eichhornia crassipes*) growing in ponds, sloughs, channels, streams and lakes creates slow moving water and stagnant conditions, which not only affect irrigation but also pose a serious health threat, such as the West Nile Virus. This affects sensitive habitats and communities within the United States, especially in Tom Paine Slough (TPS) in Tracy, California. The use of highly specialized equipment for control and remediation has proven viable in the management and long-term control of growth. Work is typically performed over the water with no peripheral site damage. As the balance between habitat preserves and growth management intensifies, the use of alternative methods will become increasingly more exploited.

# WAPMS 2006 CONFERENCE REGISTRATION

## AND MEMBERSHIP APPLICATION

Name: \_\_\_\_\_

Company or Affiliation: \_\_\_\_\_

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

\_\_\_\_\_

Phone #: \_\_\_\_\_

FAX #: \_\_\_\_\_

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

Pre-registration (before Feb. 17, 2006)      **\$ 70.00\***

Registration (after Feb. 17, 2006 or at door)      **\$ 90.00\***

Corporate Exhibits      **\$300.00**

\* includes membership dues to WAPMS

Membership only (no conference registration) **\$ 10.00**

**NOTE: REGISTRATION IS FREE FOR STUDENTS**

Make Checks Payable to:

**Western Aquatic Plant Management Society or WAPMS**

Send this form and payment to:

WAPMS

**Attention:** Nate Dechoretz

CA Dept. of Food & Agriculture

1220 N. Street, Rm A-357

Sacramento, CA 94271-0001

**For additional information, contact Jenifer Parsons 509-457-7136 or**

**[jenp461@ecy.wa.gov](mailto:jenp461@ecy.wa.gov)**



# INTERIM TREASURER'S REPORT

*Nathan Dechoretz, WAPMS Treasurer*

<b>WAPMS Treasurer Report March 4, 2005 to October 31, 2005</b>	
<b>Balance as of March 4, 2005</b>	<b>\$13,465.54</b>
<b>Income</b>	
Pre Registration & Corporate Donations	\$2,640.00
Registration & Corporate Donations at Meeting	\$3,070.00
Post Registration & Corporate Donation & Membership	\$1,560.00
<b>Subtotal</b>	<b>\$20,685.54</b>
<b>Expenditures</b>	
President Plaque	\$47.19
Conference Cost	\$6,891.11
Scholarships	\$1,000.00
Deposit for 2006 Conference	\$2,000.00
<b>Subtotal</b>	<b>\$9,648.30</b>
<b>Balance as of October 31, 2005</b>	<b>\$10,747.24</b>

## ***Egeria densa* IN OREGON AND CALIFORNIA: RESEARCH OVERVIEW**

*Toni Pennington and Mark Sytsma, Center for Lakes and Reservoirs, Portland State University*

*Egeria densa* is a submersed macrophyte native to South America and is now widespread outside its native range. It is problematic in numerous freshwater ecosystems where it impedes navigation, alters water quality and quantity, and is a general nuisance to anglers, waterfront residents, and recreational boaters. In California's Central Valley, *E. densa* covers approximately 1580 ha of the Sacramento-San Joaquin Delta (California Department of Boating and Waterways 2000). *E. densa* is common in coastal lakes and in the Willamette Valley of Oregon and in the Puget Sound lowlands and the southern coast of Washington.

The purpose of this research is to model the growth and production of *E. densa* in the waterways of Oregon and California. The models will be used to improve management of this highly successful invasive species. Additionally, greenhouse studies are currently being used to evaluate viability of plant fragments, which is the primary mode of dispersal and reproduction by this plant.

*E. densa* populations from Oregon and California were each monitored for two years. Winter senescence of *E. densa* was not observed in either population as reported elsewhere. In fact, positive growth rates were measured throughout the winter. A bimodal growth pattern was observed in the California and Oregon populations. In April, the average growth rate of *E. densa* tips in California was ca. 0.7 cm d<sup>-1</sup> and 0.2 cm d<sup>-1</sup> in Oregon. In the fall, the average growth rate of tips in both populations was ca. 0.3 cm d<sup>-1</sup>.

We measured maximum nitrogen concentrations in tips (upper 3 cm) during the winter in the California population (5% dry weight) and in the spring in the Oregon population (4.4% dw). Photosynthetic efficiency was positively associated with increased nitrogen concentration ( $p = 0.04$ ) and negatively associated with increased surface irradiance ( $p < 0.001$ ). Using the Michaelis-Menton kinetics model, highest maximum net photosynthetic rates were observed during the summer and, on average, the onset of light saturation occurred around 150  $\mu\text{mol s}^{-1} \text{m}^{-2}$ . We measured total nonstructural carbohydrate (TNC) concentration of *E. densa* collected from Oregon and found less pronounced seasonal changes compared to similar studies conducted on *E. densa* and on other plant species in other regions of the U.S.

These data suggest that controlling populations of *E. densa* in more temperate climates may pose unique problems because growth rates remain positive through the winter and seasonal low points in TNC concentration may not be sufficient to negatively impact regrowth after treatment. Additionally, nitrogen concentrations in the populations examined do not appear growth limiting.

This research is supported by the California Bay-Delta Program, Washington Department of Ecology, Aquatic Ecosystem Restoration Foundation, Perry Lake Management, and USDA-ARS.

*Egeria densa* grows completely submersed with leaves in whorls of four, except branching nodes where leaves occur in whorls of 8 to 12.



*E. densa* growing to the water surface in the Sacramento-San Joaquin Delta, California.



Disappointment Slough in the Sacramento-San Joaquin Delta at high tide. White buoys in the background are tied to submersed pots of tagged *E. densa* for seasonal measurement of growth rates (inset).



Disappointment Slough in  
the Sacramento-San  
Joaquin Delta at low tide.



# News Release



## Habitat<sup>®</sup> Herbicide Now Approved for Use in California

*Habitat labeled for use on some undesirable floating, emergent and woody wetland weeds found in California*

Research Triangle Park, N.C., October 6, 2005 – Habitat<sup>®</sup> herbicide, **from BASF Professional Vegetation Management (ProVM), has received approval from The California Department of Pesticide Regulation for use in California. Habitat is labeled for controlling various undesirable emergent, shoreline and woody wetland aquatic vegetation in and around standing and flowing water – including lakes, rivers, streams, ponds, seeps, drainage ditches, canals, reservoirs, terrestrial, estuarine, marine and aquatic sites and seasonal wet areas.**

**Habitat** is specifically developed for use in sensitive aquatic environments, the herbicide helps stem the tide against the invasion of undesirable aquatic plants and restore aquatic environments to their desirable condition. The herbicide uses less active ingredient and breaks down quickly, yet is highly effective. It provides targeted vegetation control by affecting enzymes found only in plants, not in humans, animals, birds, fish or insects.

Each year, undesirable aquatic plant species cause extensive damage and cost millions of dollars in control and restoration to wetlands and riparian areas nationwide. These weeds can also damage habitat that is essential to the recovery of threatened and endangered species.

FOR IMMEDIATE RELEASE

For more information contact:

Amie Dunn  
BASF Professional Vegetation  
Management  
919.547.2627  
[dunnam@basf.com](mailto:dunnam@basf.com)

Amy Fisher  
Padilla Speer Beardsley Inc.  
612.455.1773  
[afisher@psbpr.com](mailto:afisher@psbpr.com)

In California, **Habitat** controls the following:

- Brazilian pepper
- Cattail
- Chinese Tallow Tree
- Cogongrass
- Giant reed
- Junglerice
- Knapweeds
- Knotweed and Japanese knotweed
- Melaleuca
- Phragmites
- Purple loosestrife
- Reed canarygrass
- Swamp rose
- Russian-olive
- Saltcedar
- Smartweed
- Spartina
- Sumac
- Swamp morning glory or water spinach
- Torpedo grass
- Willow

"The registration of **Habitat** in California is a very welcome addition to the toolkit for managing unwelcome weeds. I hope that resource managers will use **Habitat** alone and in combination with glyphosate in an environmentally responsible manner for a long time to come," said Dr. Nelroy E. Jackson, member of the California Invasive Weed Awareness Coalition and vegetation management consultant.

In Southern California, **Habitat** will be used to control a giant reed infestation on 10,000 acres in the Santa Ana river basin. **Habitat** will also be used to control spartina, an invasive cordgrass in San Francisco Bay that is invading habitat for native species and changing the ecology of the bay's mudflats. **Habitat** will also be used to treat saltcedar, an invasive weed that can consume up to twice the water of native plants like willow and cottonwood trees, posing a serious threat to the stability of native plant communities.

"In light of the registration of **Habitat** in California, our plans are for almost the exclusive use of **Habitat** for spartina control in San Francisco Bay," said Erik Grijalva, field operations manager, Invasive Spartina Project. "Without the full registration, it would have been extremely difficult for us to pursue a large scope treatment effort in the bay. With **Habitat** we're able to treat the entire infestation. Also, with **Habitat** we use a lot less chemical and it enables aerial application, which makes it much more appropriate for what we need done here in the bay."

To learn more about **Habitat** call **1-800-545-9525** or visit [www.vmanswers.com](http://www.vmanswers.com).

BASF: Helping Make Products Better™

With sales of €3,354 million in 2004, BASF's Agricultural Products division is a leader in crop protection and a strong partner to the farming industry providing well-established and innovative fungicides, insecticides and herbicides. Farmers use these products and services to improve yields and quality of agricultural crops. Other uses include public

health, structural/urban pest control, turf and ornamental plants. BASF aims to turn knowledge rapidly into market success. The vision of BASF's Agricultural Products division is to be the world's leading innovator, optimizing agricultural production, improving nutrition, and thus enhancing the quality of life for a growing world population. Further information can be found on the web at [www.agro.basf.com](http://www.agro.basf.com).

*BASF: The Chemical Company*

BASF is the world's leading chemical company: The Chemical Company. Its portfolio ranges from chemicals, plastics, performance products, agricultural products and fine chemicals to crude oil and natural gas. As a reliable partner to virtually all industries, BASF's intelligent solutions and high-value products helps its customers to be more successful. BASF develops new technologies and uses them to open up additional market opportunities. It combines economic success with environmental protection and social responsibility, thus contributing to a better future. In 2004, BASF had approximately 82,000 employees and posted sales of more than €37 billion. BASF shares are traded on the stock exchanges in Frankfurt (BAS), London (BFA), New York (BF) and Zurich (AN). Further information on BASF is available on the Internet at [www.basf.com](http://www.basf.com).

1. California Coastal Conservancy's San Francisco Estuary Invasive Spartina Project

Always read and follow label directions.

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## CALENDAR OF UPCOMING EVENTS

### 2005

Dec 06-07      Advanced Invasive Plant School, Ontario, CA  
[www.wsweedsociety.org/Events/Event%20Flyers/Advanced%20IPS%20Flyer.doc](http://www.wsweedsociety.org/Events/Event%20Flyers/Advanced%20IPS%20Flyer.doc) (click CANCEL if a Network Password dialogue box appears)

### 2006

Jan 16-18      California Weed Science Society Annual Conference,  
Ventura, CA [www.cwss.org](http://www.cwss.org)

Feb 12-16      Weed Science Society of America, 50<sup>th</sup> Annual Meeting,  
New York, NY [www.wssa.net](http://www.wssa.net)

Feb 26-Mar 03      National Invasive Weed Awareness Week VII, Washington,  
D.C. [www.nawma.org/niwaw/niwaw\\_index.htm](http://www.nawma.org/niwaw/niwaw_index.htm)

Mar 14-16      Western Society of Weed Science Meeting, Reno, NV  
[www.wsweedsociety.org](http://www.wsweedsociety.org)

**Mar 27-29      Western Aquatic Plant Management Society, 25<sup>th</sup> Annual  
Meeting, San Diego, CA [www.wapms.org](http://www.wapms.org)**

May 01-05      Florida Aquatic Weed Control Short Course, Coral Springs,  
FL <http://conference.ifas.ufl.edu/aw/>

July 16-19      Aquatic Plant Management Society Meeting, Portland, OR  
[www.apms.org](http://www.apms.org)

