

WAPMS NEWS-
Spring 1999 Issue
Newsletter of the
Western Aquatic Plant Management Society

Editor's note:

Hello everyone, this is the first edition of the newsletter in electronic format. Next fall sometime we hope to get a web site (thanks to Kathy Hamel), so at that time I will post a potentially fancier newsletter there. But until then, I will keep it pretty simple and basic in the hopes that everyone will be able to read it with all your various software. If you have problems, let me know! And thanks for your patience.

- Jenifer Parsons jenp461@ecy.wa.gov

The 18TH Annual Meeting:

Auspiciously, snow skies parted and allowed attendees to reach the 18th annual WAPMS gathering at the festive Peppermill Casino in Reno, Nevada at the end of March. The group may have seemed comparatively sombre within the brightly colored, clanging chiming backdrop of casino machines and mirrored dayglo rococco, but by the breadth and interest sparked in the topics, most will have considered this meeting another lively and thought-provoking encounter.

Talks covered current and some literally emerging issues, including the Jaws-like westward incoming *Salvinia molesta* (currently a southern discomfort in Texas). All appreciated the PMIS and APIS CD-ROMs **Mike Grodowitz** provided, courtesy of Army Corps Western Experimental Station Vicksburg, MS. CDFA's **Bif Sandige** also reassured us that California's Prevent is in place (no easy task, and we're counting on it). The recent work on *Spartina*, providing a scientific basis for possible control strategies, may help encourage some action before this invasive cordgrass becomes widespread in S.F. Bay. Thank you, all speakers, for giving your time so generously.

The meeting was also earmarked with a record number of sponsors (16, check the bottom of this newsletter) and high attendance. Thank you, members, for making this a good one.

For the calendar, CALMS members reminded us of the upcoming North American Lake Management Society meeting, also in Reno, December 4-6. Take note! If you are interested in attending the conference, or would like more information about the conference, please visit the website at <http://www.nalms.org>

New president-elect **Ron P. Crockett** of Monsanto will serve up the Sky High 19th in Montana at the end of March, 2000 (see announcement below). So set your calendars and prepare your out-of-state travel arrangements. We should have a good one to look forward to. More will be forthcoming in subsequent newsletters.

- Valerie VanWay

Board of Directors Meeting:

The meeting was called to order at 8:15 p.m. March 23, 1999, Reno, Nevada. Members present were **Jenifer Parsons, Kathy Hamel, Mike Mizumoto, Stewart Perry, Valerie Van Way** and **Nathan Dechoretz**. Minutes and Treasurer's report were presented by Nathan. Balance as of March 23, 1999 was \$14,519.97. Approval to accept both reported was moved, seconded and passed unanimously. Nathan requested approval to move our funds to a new bank. Current bank does not provide good service nor does it have a competitive package where WAPMS can receive better interest. Stewart Perry so moved, Parsons seconded; motion passed unanimously.

Stewart Perry presented the name of the winner of our \$500 scholarship award. The winner was **Margaret McCauley** from the University of Washington. **Special thanks to all who contributed to the scholarship fund!** WAPMS Board of Directors will ask the scholarship committee to develop and submit a new set of criteria or qualifications for future selection of scholarship. Committee members include **Dr. Mark Sytsma** (Portland State University), **Dr. David Spencer** (USDA-ARS), **Mike Mizumoto** (Imperial Irrigation District) and **Dr. Paul Beaty** (Southwest Aquatics, Inc.). This is a two year appointment. Dechoretz moved, Van Way seconded; motion passed unanimously. Val Van Way moved WAPMS increase the scholarship grant from \$500 to \$1000. Kathy Hamel seconded. The motioned passed unanimously.

Kathy Hamel agreed to develop a WAPMS web page after this year's summer programs are over. She felt any cost would be minimal but would let the Board of Directors know if significant funds were needed.

Jenifer Parsons asked if the newsletter would be sent out electronically as an attachment by electronic mail. This would save considerable amount of money in printing and mailing costs. Board of Directors agreed and the motion passed unanimously.

Nathan Dechoretz reported that 65 people have registered for the Reno meeting. Over half paid at the door. This has made planning for the annual meeting difficult especially for breaks and no host cocktail hour. Stewart Perry moved that the society increase registration at the door to \$70 and keep preregistration costs at \$50. Van Way seconded. Motion passed unanimously.

Nominations for Vice President/Program Chair was **Ron Crockett** (Monsanto Corporation) and **Kathy Hamel** for Director. No other nominations were received.

The next annual meeting will be held in Montana during the last week in March. The annual meeting in 2001 will be held in Portland, Oregon.

Meeting was adjourned at 9:30pm.

- *Nate Dechoretz*

Plans Already Forming for Next Year's Meeting:

Ron Crockett is our new Vice President, and as such is charged with planning our 2000 meeting in Montana. He has enlisted the help of **Barbara Mullin** of the Montana Department of Agriculture to do the local coordination. Plans are to have the meeting in Bozeman at the GranTree Best Western the last week of March, 2000. Mark your calendars, and stay tuned for more information in upcoming newsletters!

Please Pay Dues!

We plan to start culling the mailing list, deleting members who have not paid the annual dues. I will be sending out notices soon if you have not paid in a couple of years as a warning that your name will soon be deleted. Please support our organization through your annual dues.

Send your dues of \$10 to:

Nate Dechoretz
CA Department of Food and Agriculture
1220 N. Street, Rm A-357
Sacramento, CA 94527-0001

Calendar:

SOCIETY OF WETLAND SCIENTISTS, 20TH ANNUAL MEETING. June 6-12, 1999. Norfolk, Virginia.

The theme of the meeting is, "Wetlands Function, Assessment and Management", with sessions on wetland ecosystem types, dynamic processes and functions, wetland modification and manipulation, analytic techniques, wetland policy and management, and wetland education and outreach. For more information, E-mail: sws@vimw.edu; WWW: <http://www.sws.org>

INTERNATIONAL TRAINING COURSE ON AQUATIC PLANT BIOLOGY AND CONTROL. June 28-July 14, 1999. Gainesville, Florida.

Produced by the University of Florida Center for Aquatic and Invasive Plants, this three-week course will include 1) a week of intensive classroom training on aquatic plant biology and control; 2) a week of field work collecting and rearing insects and applying herbicides; and 3) attendance at the Aquatic Plant Management Society annual meeting, in Asheville, North Carolina. Attendees will be responsible for travel and living expenses. For more information, contact Center for Aquatic and Invasive Plants, IFAS-University of Florida, 7922 NW 71 ST, Gainesville, FL 32653; (352) 392-9613; E-mail: aqplants@gnv.ifas.ufl.edu

AQUATIC PLANT MANAGEMENT SOCIETY ANNUAL CONFERENCE. July 11-14, 1999. Radisson Hotel, Asheville, North Carolina. <http://www.apms.org>. Hotel phone is 800-438-3960.

This year, in addition to the usual range of interesting topics, two special sessions are planned. One will be related to the recent introduction of giant salvinia in the southern U.S. The other will cover aquatic habitat restoration.

MANAGING FOR ECOSYSTEM HEALTH, an international congress on ecosystem health. Sacramento Convention Center. August 15-20, 1999.
<http://www.vetmed.ucdavis.edu/centers/iseh/ecosystemhealth.html>

THE 84th ANNUAL MEETING OF THE ECOLOGICAL SOCIETY OF AMERICA. Spokane, Washington

August 8 - August 12 1999

The 84th Annual Meeting of the Ecological Society of America (ESA) will be held in Spokane, Washington starting on Sunday, August 8, 1999 and will continue until Thursday, August 12 at noon. The location of registration and most of the meeting sessions is the Spokane Riverside Convention Center and Opera House. Also meeting jointly with ESA is the North American Chapter of the International Society for Ecological Modeling (ISEM). Additional information <http://esa.sdsc.edu/99meet.htm>

AQUATIC WEED SCHOOL 1999 at UC DAVIS. A two day session October 6th, 7th 1999. You can find out current info at: <http://wric.ucdavis.edu>. Hosted by the University of California Weed Research and Information Center. Learn about the biology, ecology and management of important aquatic weeds and algae. All methods of practical management including mechanical, biological and chemical will be discussed. Nancy Muller is handling sign-ups at:

muller@vegemail.ucdavis.edu

MARKETING & SHIPPING LIVE AQUATIC PRODUCTS 99. November 14-17, 1999. Seattle, Washington.

"Technological refinements are revitalizing the centuries old practice of providing live aquatic products for display or consumption far from the point of harvest...This conference will assist fishermen, growers and marketers of aquatic products to supply the expanding market while complying with increased restrictions and regulations." Major topics include: resources, shipping, harvesting, physiology, exotics, holding, reconditioning, regulations, packaging, water quality, marketing, research, and environmental, sociological, political and humanitarian considerations.

Contact Conference Manager, John B. Peters, Nor'Westerly Food Technology Services, 20455 - 1st Ave. NE, Suite C 303, Poulsbo, WA 98370-9329. E-mail: johnbpeters@compuserve.com

NORTH AMERICAN LAKE MANAGEMENT SOCIETY. California Lakes Management Society is hosting the annual conference. December 1-4, 1999. Reno, Nevada. The title for this year's conference is 'Water, 21st Century Gold'. The call for papers is out for this conference! More Information at <http://www.nalms.org>.

40th ANNUAL MEETING, AQUATIC PLANT MANAGEMENT SOCIETY. July 2000. San Diego, CA. Look on the APMS website for updates <http://www.apms.org>.

Saltcedar Consortium Formed

Local, state, and federal agencies and academia have formed the Saltcedar Consortium which is designed to provide leadership in the biological control of saltcedar, *Tamarix ramosissima*, and specific monitoring of biotic and abiotic factors at insect release sites, once USDA-APHIS approval has been received.

Consortium Mission: Develop and implement a cooperative science-based team that will study the release of biological control agents and their effect in controlling saltcedar (Tamarix) and associated riparian responses. This meets the monitoring requirement required by the U.S. Fish and Wildlife Service.

Goals:

1. Restore and/or rehabilitate using biological control western riparian ecosystem dominated by saltcedar, and
2. Evaluate the effectiveness of biological control agents in controlling saltcedar and restoring western riparian systems.

Membership in the consortium is open to all interested parties. If you are interested, contact one of the people listed below.

Information: Dr. C. Jack DeLoach, Research Entomologist, USDA-ARS, Grassland, Soil, and Water Research Lab., 808 E. Blackland Rd., Temple, TX 76502 (254-770-6500; e-mail, deloach@brc.tamus.edu).

Scott Stenquist, R-1 Integrated Pest/Weed Mgmt. Coord., USDI-Fish and Wildlife Service (ARW-OPR), 911 N.E. 11th Ave., Portland, OR 97232-4181 (503-231-6172; e-mail, scott_stenquist@fws.gov).

Lee C. Otteni, Saltcedar Consortium Chair, USDI-BLM, Farmington District Office, 1235 La Plata Hwy., Suite A, Farmington, NM 87401 (505-599-8910, FAX 505-599-8940; e-mail, lotteni@nm.blm.gov)

Scott Stenquist

NEW BOOKS ON AQUATIC PLANTS:

THE STRUCTURING ROLE OF SUBMERGED MACROPHYTES IN LAKES, edited by E. Jeppesen, M. Sondergaard, M. Sondergaard, and K. Christoffersen. 1997. 423 pp.

(Order from Springer-Verlag New York, Inc. Phone: 1-800-Springer. \$138.00 plus S/H.)

Here are many reviews as well as 18 case studies on the relationships between submersed macrophytes and grazing birds, herbivores, microbes, phytoplankton, zooplankton, snails, fish, molluscs, and other biological and biogeochemical components of lakes.

According to the editors, research "so far suggests that submerged macrophytes are of significant importance for the food web interactions and environmental quality of lakes, even at relatively low aerial plant coverage ... by affecting the interactions between predacious, planktivorous and benthivorous fish and between fish and invertebrates ... Changes in these interactions in turn may have cascading effects on the entire food web in both the pelagial and the littoral zone."

AQUATIC AND WETLAND PLANTS OF NORTHEASTERN NORTH AMERICA, by G.E. Crow and C.B. Hellquist. 1999.

(For a pre-publication discount, and for more information, contact Mr. Steve Salemsen, Associate Director, The University of Wisconsin Press, 2537 Daniels Street, Madison, WI 53718-6772.

Phone: (608) 224-3889, Fax: (608) 224-3924. E-mail: salemsen@facstaff.wisc.edu)

This all new 2 volume reference manual is by two eminent aquatic plant botanists, G.E. Crow of the University of New Hampshire and C. Barre Hellquist of the Massachusetts College of Liberal Arts. The anticipated publication date is early 1999. The work includes 1139 plant species which are native or have become naturalized in aquatic and wetland habitats of the northeast United States, with 92% of the taxa illustrated. The range of the manual covers Newfoundland to Minnesota, south to Virginia and Missouri.

This "sorely needed" field-oriented reference includes keys to 1186 taxa. Volume 1 contains the Introduction, Nuisance Aquatic Plants of the Northeast, General Keys, Pteridosperms, Gymnosperms and Angiosperms/Dicots. Volume 2 contains the Angiosperms/Monocots. Both volumes have a full index.

AQUATIC PLANT MANAGEMENT IN LAKES AND RESERVOIRS, edited by M.V. Hoyer and D.E. Canfield. 1997. 103 pp.

(Order from North American Lake Management Society, POB 5443, Madison, WI 53705-5443. \$20 members, \$15 non-members. Or the entire manual can be accessed through the APIRS Web site.)

This trustworthy manual, meant for informed citizens and management/regulatory professionals, summarizes the "whys and wherefores" of aquatic plant management, and presents practical information for designing and implementing aquatic plant management programs. Presented in a refreshingly austere format (the editors are more interested in subject matter than in typography), chapters cover the history and development of aquatic weed control, aquatic plant biology, management problems, management techniques, and developing management plans.

Journal Articles of Interest to Aquatic Vegetation Watchers:

- Acosta, L. W., M. R. Sabbatini, L. F. Hernandez, and O. A. Fernandez. 1998. Regeneration of reproductive structures of *Potamogeton pectinatus*, *Ruppia maritima*, *Zannichellia palustris* and *Chara contraria*: Effect of temperature. *Phyton-International Journal of Experimental Botany* 63: 167-178.
- Creed, R. P. 1998. A biogeographic perspective on Eurasian watermilfoil declines: Additional evidence for the role of herbivorous weevils in promoting declines? *Journal of Aquatic Plant Management* 36: 16-22.
- Gee, D., and L. W. J. Anderson. 1998. Influence of leaf age on responsiveness of *Potamogeton nodosus* to ABA-induced heterophylly. *Plant Growth Regulation* 24: 119-125.
- Gornall, R. J., P. M. Hollingsworth, and C. D. Preston. 1998. Evidence for spatial structure and directional gene flow in a population of an aquatic plant, *Potamogeton coloratus*. *Heredity* 80: 414-421.
- Hafez, N., S. Abdalla, and Y. S. Ramadan. 1998. Accumulation of phenol by *Potamogeton crispus* from aqueous industrial waste. *Bulletin of Environmental Contamination and Toxicology* 60: 944-948.
- Hofstra, D. E., J. Clayton, J. D. Green, and M. Auger. 1999. Competitive performance of *Hydrilla verticillata* in New Zealand. *Aquatic Botany* 63: 305-324.
- Hollingsworth, P. M., C. D. Preston, and R. J. Gornall. 1998a. Euploid and aneuploid evolution in *Potamogeton* (Potamogetonaceae): a factual basis for interpretation. *Aquatic Botany* 60: 337-358.
- Hollingsworth, P. M., C. D. Preston, and R. J. Gornall. 1998b. Lack of detectable isozyme variability in British populations of *Potamogeton epihydrus* (Potamogetonaceae). *Aquatic Botany* 60: 433-437.
- Idestam Almquist, J. 1998. Waterfowl herbivory on *Potamogeton pectinatus* in the Baltic sea. *Oikos* 81: 323-328.
- Madeira, P. T., T. K. Van, and T. D. Center. 1999. Integration of five Southeast Asian accessions into the world-wide phenetic relationships of *Hydrilla verticillata* as elucidated by random amplified polymorphic DNA analysis. *Aquatic Botany* 63: 161-167.
- Mader, E., W. vanVierssen, and K. Schwenk. 1998. Clonal diversity in the submerged macrophyte *Potamogeton pectinatus* L. inferred from nuclear and cytoplasmic variation. *Aquatic Botany* 62: 147-160.
- Madsen, J. D. 1998. Predicting invasion success of Eurasian watermilfoil. *Journal of Aquatic Plant Management* 36: 28-32.
- Menendez, M., and A. Sanchez. 1998. Seasonal variations in P-I responses of *Chara hispida* L. and *Potamogeton pectinatus* L. from stream mediterranean ponds. *Aquatic Botany* 61: 1-15.
- Natura, G., and I. Dahse. 1998. Potassium conductance of *Egeria* leaf cell protoplasts: Regulation by medium pH, phosphorylation and G-proteins. *Journal of Plant Physiology* 153: 363-370.
- Qais, N., M. R. Mandal, M. A. Rashid, A. Jabbar, H. Koshino, K. Nagasawa, and T. Nakata. 1998. A furanoid labdane diterpene from *Potamogeton nodosus*. *Journal of Natural Products* 61: 156-157.
- Schall, D. G., and M. J. DiGregorio. 1998. Barnstable county records for *Scleria pauciflora* var. *Caroliniana* and *Potamogeton amplifolius*. *Rhodora* 100: 314-315.

- Schneider, I. A. H., R. W. Smith, and J. Rubio. 1999. Effect of mining chemicals on biosorption of Cu(II) by the non-living biomass of the macrophyte *Potamogeton lucens*. *Minerals Engineering* 12: 255-260.
- Smither-Kopperl, M. L., R. Charudattan, and R. D. Berger. 1999. *Plectosporium tabacinum*, a pathogen of the invasive aquatic weed *Hydrilla verticillata* in Florida. *Plant Disease* 83: 24-28.
- Summers, J. E., and M. B. Jackson. 1998. Light- and dark-grown *Potamogeton pectinatus*, an aquatic macrophyte, make no ethylene (ethene) but retain responsiveness to the gas. *Australian Journal of Plant Physiology* 25: 599-608.
- Unmuth, J. M. L., D. J. Sloey, and R. A. Lillie. 1998. An evaluation of close-cut mechanical harvesting of Eurasian watermilfoil. *Journal of Aquatic Plant Management* 36: 93-100.
- Valley, R. D., and R. M. Newman. 1998. Competitive interactions between Eurasian watermilfoil and northern watermilfoil in experimental tanks. *Journal of Aquatic Plant Management* 36: 121-126.
- Van, T. K., G. S. Wheeler, and T. D. Center. 1999. Competition between *Hydrilla verticillata* and *Vallisneria americana* as influenced by soil fertility. *Aquatic Botany* 62: 225-233.
- VandenBerg, M. S., H. Coops, J. Simons, and A. deKeizer. 1998. Competition between *Chara aspera* and *Potamogeton pectinatus* as a function of temperature and light. *Aquatic Botany* 60: 241-250.
- vanGinkel, L. C., and H. B. A. Prins. 1998. Bicarbonate utilization and pH polarity. The response of photosynthetic electron transport to carbon limitation in *Potamogeton lucens* leaves. *Canadian Journal of Botany-Revue Canadienne De Botanique* 76: 1018-1024.
- Warwick, N. W. M., and P. C. E. Bailey. 1998. The effect of time of exposure to NaCl on leaf demography and growth for two non-halophytic wetland macrophytes, *Potamogeton tricarinatus* F. Muell. and *A. Benn. Ex A. Benn. and Triglochin procera* R Br. *Aquatic Botany* 62: 19-31.
- Wiegleb, G., and Z. Kaplan. 1998. An account of the species of *Potamogeton* L. (*Potamogetonaceae*). *Folia Geobotanica* 33: 241-316.