



AQUATIC PLANT NEWS

A Newsletter of The Aquatic Plant Management Society, Inc., Issue No. 70 June 2002
Linda Nelson, Editor, CEERD-EP-P, 3909 Halls Ferry Road, Vicksburg, MS 39180-6199

42nd Annual Meeting – Have You Made Arrangements?



Make arrangements today to join your friends at the Keystone Resort for the 42nd Annual Meeting of the Aquatic Plant Management Society, July 21-24, 2002. Located in the Rocky Mountains west of Denver, Colorado, Keystone offers spectacular views of snow-capped mountains, fresh air, and an array of amenities. This will be a memorable meeting, so make your room reservation and pre-register now!

Although the cutoff date for making room reservations has passed, Keystone Resort will continue to honor our special guest room rates as long as space is available. To make a reservation, call Keystone Reservations at 800-258-0437 and be sure to mention the Aquatic Plant Management Society group code, CY1CAQU. Special guest room rates at the Inn at Keystone are \$125.00 single and \$140.00 double, at the Keystone Lodge rates are \$162.00 single and \$177.00 double, and for a resort one Bedroom Condominium Suite rates are \$170.00 single and \$180.00 double. All room rates are per occupancy night plus 4.7% surcharge and applicable taxes, currently 5.65%. A deposit equal to one night's lodging must accompany all reservations. A check or credit card for the deposit is due within 14 days of the date the reservation is made. Reservation cancellations within 30 days of arrival are subject to forfeiture of full deposit amount. Cancellations outside of 30 days of arrival will result in return of deposit less a \$25.00 processing fee. No-shows, late arrivals, and early departures will be charged the room rate for the entire reserved stay. Check in time is 4:00 p.m. and check out time is 11:00 a.m. Room rates are good for 3 days prior and/or 3 days after the meeting. When making your guest room reservation, be sure to ask about Keystone's special airfare and ground transportation rates.

The Pre-Registration Form available in this newsletter can save you money and help us in planning for meeting functions. The meeting registration fees are \$200.00 for delegates and \$75.00 for guests (spouse, partner, child over 12 years of age), if you pre-register before July 1, 2002. After this date, registration fees at the door will be \$250.00 for delegates and \$100.00 for guests. Please complete the Pre-Registration Form and submit it to the APMS Treasurer prior to July 1, 2002.

- Continued on next page -

42nd Annual Meeting - continued

As you can see by the Pre-Final Program available in this newsletter, our committees have been very busy developing a program of interesting technical presentations and exciting social events. Keystone Lodge will be the setting for a couple of events on Sunday, with the Meeting Registration in the Lobby in the afternoon and the President's Reception on the Lodge Terrace overlooking Keystone Lake in the evening. Monday through noon Wednesday, Meeting Registration will be held in the Keystone Conference Center, as will the General Sessions, Exhibits, and Posters. On Monday, registered spouses and guests will enjoy a historical tour of Montezuma (an old silver mine), rustic Ski Tip Lodge, and Old Keystone; as well as a cooking demonstration and luncheon at the Keystone Ranch Restaurant. As always, our premier event will be the Tuesday night Banquet, featuring magnificent mountain views while riding the gondolas to the top of North Peak (11,444 feet) for a memorable evening at the Der Fondue Chessel for a fun alpine experience featuring a four-course dinner and Bavarian music. Our program will end with the Awards and Installation of Officers Luncheon, Wednesday afternoon on the Shavano Peak Terrace.

Keystone Resort offers an abundance of activities for your leisure time, and will provide each registered resort guest with a Mountain Activities Passport. The Mountain Activities Passport is your pass to free activities, including afternoon discovery stroll, barn dance, basic horsemanship class, bike rental, beginner mountain bike clinic, boat rental, ecology trek, fly-fishing clinic, golf range pass, guided hike, historic tour, horse-drawn wagon ride, in-line skate rental, pony rides, tennis clinic, tennis court rental, wine tasting, and yoga. For dining, you may experience one of Keystone's fine dining restaurants or enjoy one of the many casual and family dining restaurants. The nightlife is exciting at Keystone and includes an array of taverns, bars, lounges, and saloons featuring cocktails, appetizers, and a variety of entertainment.

Check the APMS web site at www.apms.org for more information about the meeting and the Keystone Resort. This will be a great meeting, so plan to attend, and bring the family!

2001-2002 APMS Sustaining Members

Applied Biochemists, Inc.
Milwaukee, WI

Aquarius Systems
North Prairie, WI

AquaTechnex, Inc.
Centralia, WA

Aquatic Control, Inc.
Seymour, IN

Aquatic Nuisance Plant Control
Littleton, NC

Aquatics Unlimited
Martinez, CA

Becker Underwood
Ames, IA

Biosonics, Inc.
Seattle, WA

Brewer International
Vero Beach, FL

Cerexagri, Inc.
Philadelphia, PA

Cygnat Enterprises, Inc.
Flint, MI

Dow AgroSciences, LLC
Indianapolis, IN

Griffin, LLC
Valdosta, GA

Ion Man Wash Systems
Yorba Linda, CA

Lake Restoration, Inc.
Rogers, MN

Monsanto
St. Louis, MO

ReMetrix, LLC
Carmel, IN

SePRO Corporation
Carmel, IN

Syngenta Professional Products
Greensboro, NC

2002 APMS Officer/Director Nominees

Biographical Information

Vice President: Eric P. Barkmeyer

Eric P. Barkmeyer is the Southern Region Manager for Cygnet Enterprises, Inc. He has a B.S. degree from Mississippi State University in Agricultural Economics. He has focused his career within the commercial agricultural and specialty chemical sectors, managing products, marketing programs and sales personnel. This has included five years at Occidental Petroleum and twenty years at Pennwalt/Elf Atochem before joining Cygnet in 1999. Eric's introduction to the aquatic industry began with Pennwalt products in 1984, attending his first APMS meeting in Richmond in 1985 and maintaining his membership and involvement ever since. He has served as a Director on the APMS Board, has been active on various committees, plus held a Director Position with both the South Carolina and MidSouth APMS Chapters.

Editor: David L. Sutton

Dr. David L. Sutton, Professor of Agronomy (Aquatic Plants), has worked since 1970 at the University of Florida's Fort Lauderdale Research and Education Center. He received a Ph.D. in Plant Physiology from Virginia Polytechnical Institute and State University in 1968 followed by a Postdoctoral fellowship for study of copper uptake by aquatic plants. A member of APMS since 1967, he has served as Editor and President of the Society. In addition to conducting research on aquatic plants, he teaches Weed Science, Identification and Ecology of Aquatic Plants, and Culture and Production of Aquatic Plants as part of the undergraduate degree program in Environmental Horticultural Program at the University of Florida.

Director: Mark D. Sytsma

Dr. Mark D. Sytsma is an Associate Professor and Director of the Center for Lakes and Reservoirs at Portland State University. He has served in this capacity since 1998 with four years prior experience as a Research Assistant Professor at Portland State plus previous experience in the private sector as an Aquatic Ecologist. Mark's published research has focused on nutrient relationships in aquatic plants however, his involvement in the management of nuisance aquatic species extends to serving and assisting numerous state, regional and federal task forces, committees and associations. He is also active within the North American Lake Management Society. Mark has his B.S. in Biology from Iowa State University, an M.S. in Environmental Engineering and Science from the University of Washington, and a Ph.D. in Ecology from the University of California-Davis. He is past president of the Western Aquatic Plant Management Society and the Oregon Lakes Association, and has served the APMS as an Associate Editor and as a member of the Education and Outreach Committee.

Director: Jim Petta

Jim Petta is the Business Manager for Syngenta Corporation. He has worked in various technical capacities with Syngenta (and its predecessors ICI, Zeneca, etc.) for the past eighteen years. Jim's focus since 1992 has been directly involved in aquatics, having responsibility for providing worldwide technical support. This has included assistance in Europe, Asia, South America and Africa. Jim earned a B.S. in Entomology from Texas A&M University and a M.S. in Agriculture from California State University. He was an active member of the Florida Aquatic Plant Management Society while residing there, and has since become active with the Texas Chapter after moving back to his home state. Jim has been a member of APMS since 1992.

APMS Website: www.apms.org

For members only features use:

Username: APMS

Password: Duckweed

Proposed Changes to the APMS By-Laws

The Board of Directors has approved changes to the Society's Bylaws to increase annual membership dues (starting in 2003) for Active and Student members and to add the Website Committee (presently Ad Hoc) as an additional Standing Committee. These changes were submitted by the Bylaws Committee for Board approval, which was granted by vote at the February 2002 mid-winter Board of Directors meeting.

As required under Article IX of the Bylaws, this announcement has been prepared to notify voting members of the Society of proposed changes. All voting members (i.e. Active, Student, Honorary, and Sustaining) should familiarize themselves with these proposed changes as they will be put before the full membership for vote during the 2002 Annual Business Meeting to be held Monday, July 22, 2002. The Bylaws were last amended in July 2001.

The proposed changes and/or additions are in **bold type**.

Article XII. Dues. Section B. Annual dues shall be as follows: Active members, **\$50.00**; Student members, **\$20.00**; Sustaining members, \$500.00; Honorary members, none.

Article XIII. Committees and Representatives. Section A. Standing Committees.

16. Website Committee. The committee will be responsible for maintaining the website and will coordinate all structural modifications therein. In addition, the committee will be responsible for approving all postings on the site.

◆ EXHIBITOR NOTICE ◆

Please Take Note: Specific shipping documents will be required when sending exhibit display materials to the Keystone Resort.

The necessary blank documents are being sent with the exhibit booth space agreements. You may also visit the APMS website at www.apms.org (click on Annual Meeting) or call **Joe Bondra**, Exhibit Committee Chair, at (810) 744-0540, for more information.

Exhibits will be located in the "Longs Peak" room in the Keystone Conference Center. Set-up will start on Sunday, July 21, 9:00 a.m.

PRE-FINAL PROGRAM

"Improve Aquatic Resources with Educated Minds"

Program Summary for Sunday, July 21

8:00 am - 5:00 pm APMS Board of Directors Meeting (*Board Room*)
2:00 pm - 5:00 pm Meeting Registration (*Lobby, Keystone Lodge*)
2:00 pm - 5:00 pm Exhibit Set-up (*Longs Peak*)
2:00 pm - 5:00 pm Poster Set-up (*Longs Peak*)
5:00 pm - 6:00 pm Presenter's Preview Room (*Board Room*)
7:00 pm - 9:00 pm President's Reception (*Terrace, Keystone Lodge*)

Sponsor: SePRO Corporation

Program Summary for Monday, July 22

7:30 am - 8:00 am Continental Breakfast (*Longs Peak*)
7:30 am - 5:00 pm Meeting Registration (*Longs Peak Foyer*)
7:30 am - 5:00 pm Presenter's Preview Room (*Board Room*)
8:00 am - 5:00 pm Exhibits Open (*Longs Peak*)
8:00 am - 5:00 pm Posters Open (*Longs Peak*)
8:00 am - 11:45 am Session I: Plenary (*Quandary Peak 1-2*)
9:00 am - 2:00 pm Guest Tour and Luncheon (*Meet in Lobby of Keystone Lodge*)
Sponsor: Applied Biochemists
9:40 am - 10:05 am Refreshment Break (*Longs Peak*)
Sponsor: Cerexagri, Inc.
11:45 am - 1:15 pm Lunch
11:45 am - 1:15 pm AERF Luncheon and Meeting - AERF Members and Invited Guests (*Quandary Peak 3*)
1:15 pm - 4:40 pm Session II: Aquatic Plant Mapping/Remote Sensing, Plant Invasions, and Herbicide-Fish Interactions (*Quandary Peak 1-2*)
2:55 pm - 3:20 pm Refreshment Break (*Longs Peak*)
Sponsor: Cerexagri, Inc.
4:40 pm - 5:30 pm APMS Annual Business Meeting (*Quandary Peak 1-2*)

Session I: Plenary (*Quandary Peak 1-2*)

Moderator: David Tarver, APMS President, SePRO Corporation, Tallahassee, FL

8:00 am Opening Remarks
David Tarver, APMS President, SePRO Corporation, Tallahassee, FL
8:05 am Announcements
Richard Hinterman, APMS President Elect and Program Chair, Cygnet Enterprises, Inc., Flint, MI
8:10 am Presidential Address - APMS, Reflections of the Past Year, Current Opportunities, and Future Challenges
David Tarver, APMS President, SePRO Corporation, Tallahassee, FL
8:40 am Keynote Address - Managing Aquatic Issues: Benefits of Working with a National Association
Allen James, Responsible Industry For A Sound Environment (RISE), Washington, DC
9:20 am The Aquatic Ecosystem Restoration Foundation: An Innovative Approach to Research
Michael D. Moore, Aquatic Ecosystem Restoration Foundation (AERF), Lansing, MI
9:40 am Refreshment Break (*Longs Peak*)
10:05 am Update on Federal Liaison Activities
Rob Hedberg, National and Regional Weed Science Societies, Washington, DC

- 10:25 am Environmental Protection Agency Update
Don Stubbs, U.S. Environmental Protection Agency, Washington, DC
- 10:45 am Commercialization of Submersed Aquatic Vegetation Mapping System Technology
Mark Heilman, ReMetrix, LLC, Carmel, IN, Bob McClure, Biosonics, Inc., Seattle, WA, and Bruce M. Sabol, U.S. Army Engineer Research and Development Center, Environmental Laboratory, Vicksburg, MS
- 11:05 am Invasive Aquatic Plant Mapping Using Airborne and Satellite Remotely Sensed Imagery: An Evaluation and Comparison of Methods
Mark E. Jakubauskas, Dana L. Peterson, Kansas Applied Remote Sensing Program, Lawrence, KS, Scott W. Campbell, Kansas Biological Survey, Lawrence, KS, Sam D. Campbell, TerraMetrics, Inc., Lawrence, KS, and David Penny, AquaSolutions, Lawrence, KS
- 11:25 am A Five-Year Vegetation Management Plan Incorporating a Detailed Quantitative Vegetation Assessment
Douglas Henderson, ReMetrix, LLC, Carmel, IN and Scott Shuler, Aquatic Control, Inc., Seymour, IN
- 11:45 am **Lunch**

Session II: Aquatic Plant Mapping/Remote Sensing, Plant Invasions, and Herbicide-Fish Interactions (*Quandary Peak 1-2*)
Moderator: Eric Barkemeyer, Cygnet Enterprises, Inc., Oxford, NC

- 1:15 pm Phyto-Benthic Observer: An Underwater Surveillance Technique (*Student Presentation*) (1)
Carolyn L. Link, Joseph Shannon, G. Allen Haden, and Emma P. Beneath, Northern Arizona University, Merriam Powell Research and Education Center, Biological Sciences, Flagstaff, AZ
- 1:35 pm The Abundance and Distribution of Water Hyacinth in Lake Victoria and the Kagera River Basin, 1988-2001
Thomas Albright, Raytheon, U.S. Geological Survey/EROS Data Center, Sioux Falls, SD, Thomas Moorhouse, Clean Lakes, Inc., Kampala, Uganda, and Thomas McNabb, Clean Lakes, Inc., Martinez, CA
- 1:55 pm Rates of Unintentional Plants in Aquatic Plant Orders (*Student Presentation*) (2)
Kristine Maki and Susan Galatowitsch, University of Minnesota, St. Paul, MN
- 2:15 pm *Cryptocoryne beckettii*: A "pretty" Aquarium Plant Threatens Endangered Aquatic Plant Species in the San Marcos River, TX
Robert Doyle, Baylor University, Department of Biology, Waco, TX
- 2:35 pm Riparian Vegetation Responses to Two Flow Regimes in Grand Canyon, AZ (*Student Presentation*) (3)
Marianne E. Porter and M. J. C. Kearsley, Northern Arizona University, Flagstaff, AZ
- 2:55 pm **Refreshment Break** (*Longs Peak*)
- 3:20 pm The Use of Herbicides to Replace Hydrilla with Native Submersed Plants and Impact on Juvenile Largemouth Bass in Lake Seminole
Michael J. Maceina and Jeffrey W. Slipke, Department of Fisheries, Aquacultures, and Aquatic Sciences, Auburn University, Auburn, AL
- 3:40 pm A Fish and Macroinvertebrate Population Assessment Relative to a Herbicide Application in Perch Lake, Michigan (*Student Presentation*) (4)
Christine L. Pedlow and Eric D. Dibble, Department of Wildlife and Fisheries, Mississippi State University, Mississippi State, MS

- 4:00 pm Toxicity of 19 Adjuvants to *Lepomis macrochirus* (Bluegill Sunfish)
Randall K. Stocker and William T. Haller, Center for Aquatic and Invasive Plants, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL
- 4:20 pm Diquat Dibromide: Toxic Pesticide or Medicine? A Real Case for Safety Margins and Perceptions Using an Aquatic Herbicide
Jim F. Petta, Syngenta Professional Products, New Braunfels, TX
- 4:40 pm **APMS Annual Business Meeting**
- 5:30 pm **Adjourn**

Program Summary for Tuesday, July 23

- 6:30 am - 8:00 am APMS Regional Chapters Presidents' Breakfast (*Windwood, Keystone Lodge*)
- 7:30 am - 8:00 am Continental Breakfast (*Longs Peak*)
- 7:30 am - 5:00 pm Meeting Registration (*Longs Peak Foyer*)
- 7:30 am - 5:00 pm Presenter's Preview Room (*Board Room*)
- 8:00 am - 5:00 pm Exhibits Open (*Longs Peak*)
- 8:00 am - 5:00 pm Posters Open (*Longs Peak*)
- 8:00 am - 11:45 am Session III: Aquatic Plant Biology, Ecology, and Restoration (*Quandary Peak 1-2*)
- 9:40 am - 10:05 am Refreshment Break (*Longs Peak*)
Sponsor: Cerexagri, Inc.
- 11:45 am - 1:15 pm Lunch
- 1:15 pm - 5:00 pm Session IV: Aquatic Herbicides and Surfactants - Chemical Studies (*Quandary Peak 1-2*)
- 2:55 pm - 3:20 pm Refreshment Break (*Longs Peak*)
Sponsor: Cerexagri, Inc.
- 6:00 pm - 9:00 pm APMS Banquet (*Der Fondue Chessel, Timber Ridge*)
Sponsor: Griffin, LLC

Session III: Aquatic Plant Biology, Ecology, and Restoration (*Quandary Peak 1-2*)

Moderator: Ken Manuel, Duke Power Company, Huntersville, NC

- 8:00 am Hybridity in Invasive Milfoil Populations: Unveiling a Hidden Management Concern? (*Student Presentation*) (5)
Michael L. Moody and Donald H. Les, University of Connecticut, Department of Ecology and Evolutionary Biology, Storrs, CT
- 8:20 am Biodiversity in Restoration
Katharina A. M. Engelhardt, University of Maryland Center for Environmental Science, Appalachian Laboratory, Frostburg, MD
- 8:40 am Seasonal Biomass and Carbohydrate Allocation in Southern Minnesota Curlyleaf Pondweed Populations (*Student Presentation*) (6)
Thomas E. Woolf and John D. Madsen, Minnesota State University, Department of Biological Sciences, Mankato, MN
- 9:00 am Effects of Macrophyte Colonization on Some Water Quality Characteristics Under Mesocosm Conditions
R. A. Pitelli and W. Spindola, Paulista State University, Jaboticabal, Sao Paulo, Brazil
- 9:20 am Phytomass Dynamics and Distribution of *Egeria densa* in Neusa, a Tropical High Mountain Reservoir (Colombia) (*Student Presentation*) (7)
Yolima Carillo, Institute of Ecology, University of Georgia, Athens, GA, Alejandro Guarin, Department of Geography, Pennsylvania State University, University Park, PA, and Gabriel Guillot, Laboratorio de Ecologia Acuatica, Departamento de Biologia, Universidad Nacional de Colombia, Bogota, Colombia

- 9:40 am **Refreshment Break** (*Longs Peak*)
- 10:05 am Phenology and Impacts of *Egeria densa* in a Drinking Water Reservoir (*Student Presentation*) (8)
Toni G. Pennington and Mark D. Sytsma, Portland State University, Center for Lakes and Reservoirs, Portland, OR
- 10:25 am Cooperative Revegetation Projects in Central Florida Lakes - Getting Everybody Wet and Muddy
David R. Douglas, Rue S. Hestand III, and Boyd Z. Thompson, Bruce V. Jagers, Lowell L. Trent, Florida Fish and Wildlife Conservation Commission, Eustis Fisheries Research Lab, Eustis, FL, and Craig T. Mallison, Florida Fish and Wildlife Conservation Commission, Kissimmee Fisheries Field Office, Kissimmee, FL
- 10:45 am Quantification of the Aquatic Vegetation of Heron Lake, Jackson County, Minnesota (*Student Presentation*) (9)
Morgan L. Chase and John D. Madsen, Minnesota State University, Department of Biological Sciences, Mankato, MN
- 11:05 am Organizing an Effort to Fight Purple Loosestrife Invading the Denver, Colorado Area
David Weber, Colorado Division of Wildlife, Denver, CO
- 11:25 am A Spatial Model of Macrophyte Habitat in Fossil Creek, AZ: Recommendations for Decommissioning a Dam (*Student Presentation*) (10)
Charles E. Jones Jr. and Nancy Collins Johnson, Northern Arizona University, Flagstaff, AZ
- 11:45 am **Lunch**

Session IV: Aquatic Herbicides and Surfactants - Chemical Studies (*Quandary Peak 1-2*)

Moderator: Jim F. Petta, Syngenta Professional Products, New Braunfels, TX

- 1:15 pm Evaluation of Fluridone for Selective Control of Eurasian Watermilfoil in Lake Horton, Vermont: I. Application Strategy and Herbicide Residues
Kurt D. Getsinger, Robert M. Stewart, U.S. Army Engineer Research and Development Center, Environmental Laboratory, Vicksburg, MS, John D. Madsen, Minnesota State University, Mankato, MN, Adam Way, Dyntel Corporation, U.S. Army Engineer Research and Development Center, Environmental Laboratory, Vicksburg, MS, Chetta S. Owens, Analytical Services, Inc., U.S. Army Engineer Research and Development Center, Environmental Laboratory, Lewisville Aquatic Ecosystem Research Facility, Lewisville, TX, Holly Crosson, Vermont Department of Environmental Conservation, Waterbury, VT, and Alan Bo Burns, SePRO Corporation, Carmel, IN
- 1:35 pm Evaluation of Fluridone for Selective Control of Eurasian Watermilfoil in Lake Horton, Vermont: II. Impacts on Plant Communities
Robert M. Stewart, Kurt D. Getsinger, U.S. Army Engineer Research and Development Center, Environmental Laboratory, Vicksburg, MS, John D. Madsen, Minnesota State University, Mankato, MN, Adam Way, Dyntel Corporation, U.S. Army Engineer Research and Development Center, Environmental Laboratory, Vicksburg, MS, Chetta S. Owens, Analytical Services, Inc., U.S. Army Engineer Research and Development Center, Environmental Laboratory, Lewisville Aquatic Ecosystem Research Facility, Lewisville, TX, Holly Crosson, Vermont Department of Environmental Conservation, Waterbury, VT, and Alan Bo Burns, SePRO Corporation, Carmel, IN
- 1:55 pm Three and a Half-Years of Laboratory and Field Monitoring of Fluridone-Tolerant Hydrilla: What Have We Learned?
Michael D. Netherland, SePRO Corporation, Carmel, IN, Franck Dayan, Brian Scheffler, and Steve Cockreham, SePRO Corporation, Sacramento, CA

- 2:15 pm Management of Variable-Leaf Milfoil (*Myriophyllum heterophyllum*) with Fluridone
Stratford H. Kay, Department of Crop Science, North Carolina State University, Raleigh, NC
- 2:35 pm Flavio Hirata Field Trials with Fluridone to Control *Ceratophyllum demersum* in Brazil
R. A. Pitelli, Paulista State University, Jaboticabal, Sao Paulo, Brazil
- 2:55 pm **Refreshment Break (Longs Peak)**
- 3:20 pm The Development and Performance Characteristics of a New Sonar Formulation: Interaction with Sediment Type
David P. Tarver, SePRO Corporation, Tallahassee, FL, and Michael D. Netherland, SePRO Corporation, Carmel, IN
- 3:40 pm Effects of Endothall in Irrigation Water on Selected Turf and Ornamental Species (*Student Presentation*) (12)
Tyler Koschnick, Center for Aquatic and Invasive Plants, University of Florida, Gainesville, FL
- 4:00 pm Use of the Aquatic Herbicide Renovate for Selective Management of Submersed and Emergent Vegetation
Shaun Hyde and Steve Cockreham, SePRO Corporation, Sacramento, CA
- 4:20 pm Restoration of Native Aquatic Vegetation and Largemouth Bass in Hydrilla-Infested Lake Bellwood, Texas
R. Michael Smart, U.S. Army Engineer Research and Development Center, Environmental Laboratory, Lewisville Aquatic Ecosystem Research Facility, Lewisville, TX, Richard Ott, Texas Parks and Wildlife Department, Tyler, TX, and Gary O. Dick, University of North Texas, Institute of Applied Science, Denton, TX
- 4:40 pm Control of Wild Taro Using Rodeo in Combination with Cygnet Plus Adjuvant
Steve Brewer, Brewer International, Vero Beach, FL, William T. Haller, and Tyler J. Koschnick, Center for Aquatic and Invasive Plants, University of Florida, Gainesville, FL
- 5:00 pm **Adjourn**

Program Summary for Wednesday, July 24

- 7:30 am - 8:00 am Continental Breakfast (*Longs Peak*)
- 7:30 am - 12:00 pm Meeting Registration (*Longs Peak Foyer*)
- 7:30 am - 12:00 pm Presenter's Preview Room (*Board Room*)
- 8:00 am - 12:00 pm Exhibit Tear-down (*Longs Peak*)
- 8:00 am - 12:00 pm Poster Tear-down (*Longs Peak*)
- 8:00 am - 12:00 pm Session V: Biocontrol, Mechanical Control, and Case Studies (*Quandary Peak 1-2*)
- 9:40 am - 10:05 am Refreshment Break (*Longs Peak*)
Sponsor: Cerexagri, Inc.
- 12:00 pm - 2:00 pm Awards and Installation of Officers Luncheon (*Shavano Peak Terrace*)
Sponsor: Syngenta Professional Products
- 2:00 pm - 5:00 pm APMS Board of Directors Meeting (*Castle Peak 1-2*)

Session V: Biocontrol, Mechanical Control, and Case Studies (*Quandary Peak 1-2*)

Moderator: TBA

- 8:00 am Demonstration of Aquatic Weed Control by Tilapia in South Carolina Irrigation Ponds
Jack M. Whetstone, Department of Aquaculture, Fisheries, and Wildlife, Clemson University, Georgetown, SC

- 8:20 am Potential Fecundity of the Milfoil Weevil on its Native and Exotic Host Plants (*Student Presentation*)
Michelle D. Marko, Raymond M. Newman, and Julie Krueger, Department of Fisheries, Wildlife, and Conservation Biology, University of Minnesota, St. Paul, MN
- 8:40 am Bio-Control of a Marine Invasive Weed? Novel Use Against *Spartina alterniflora* in Willapa Bay, Washington
Miranda Wecker, Fritz Grevstad, University of Washington, Olympic Natural Resources Center, Naselle, WA, Don Strong, Department of Evolution and Ecology, University of California, Davis, CA, and Dino Garcia-Rossi, Bodega Marine Laboratory, Bodega Bay, CA
- 9:00 am Biological Carriers for Submerged and Emerged Weed Control
Lucia G. I. Marshall and Richard L. Lowe, Biosorb, Inc., St. Charles, MO
- 9:20 am The Developing Mechanical Shredder Technology
David Penny, AquaSolutions, Lawrence, KS
- 9:40 am **Refreshment Break (Longs Peak)**
- 10:05 am Eradication of Hydrilla from the Eastman Lake/Chowchilla River Complex in California: 2002 Update
J. Robert Leavitt, Ross O'Connell, and Frank Zarate, California Department of Food and Agriculture, Plant Health and Pest Prevention Services, Integrated Pest Control Branch, Sacramento, CA
- 10:25 am Costs of Applying an Aquatic Herbicide with the New West Coast Rules (Lake Oswego, Oregon)
Steve Lundt, Lake Oswego Corporation, Lake Oswego, OR, and Mark Sytsma, Center for Lakes and Reservoirs, Portland State University, Portland, OR
- 10:45 am Aquatic Pest Control Jousting in the Wild West
Lars W. J. Anderson, USDA-ARS Exotic and Invasive Weed Research, Weed Science Program, Davis, CA, and Geoff Siemering, Aquatic Pesticide Monitoring Program, San Francisco Estuary Institute
- 11:05 am Control of Eurasian Watermilfoil in Mesocosms at Lake Tahoe
Robert J. Duvall, Division of Planning and Local Assistance, Department of Water Resources, Sacramento, CA, Lars W. J. Anderson, USDA-ARS Exotic and Invasive Weed Research, Weed Science Program, Davis, CA, and Charles R. Goldman, Department of Environmental Science Policy, University of California, Davis, CA
- 11:25 am APMS Regional Chapters Reports: Brazil, Florida, MidSouth, Midwest, Nile Basin, Northeast, South Carolina, Texas, Western
Chapter Officer or Delegate
- 12:00 pm **Adjourn Forty-Second Annual Meeting**

Posters (Longs Peak)

U.S. Army Corps of Engineers Aquatic Plant Control Research Program

Robert C. Gunkel, Jr. and John W. Barko, U.S. Army Engineer Research and Development Center, Environmental Laboratory, Vicksburg, MS

Technology Transfer for Invasive Species via Computer-Based Information Systems

Sherry G. Whitaker and Michael J. Grodowitz, U.S. Army Engineer Research and Development Center, Environmental Laboratory, Vicksburg, MS

Substrate Selection for the Propagation of Submersed Aquatic Vegetation

Todd B. Chadwell and Katia Engelhardt, University of Maryland Center for Environmental Science, Appalachian Laboratory, Frostburg, MD

----- UPCOMING MEETINGS AND EVENTS - 2002 -----

<u>DATE</u>	<u>EVENT</u>	<u>LOCATION</u>	<u>CONTACT</u>
July 21-24	42 nd Annual Meeting, Aquatic Plant Management Society (APMS)	Keystone Resort Keystone, Colorado	Richard Hinterman, Program Chair Cynet Enterprises, Inc. 1860 Bagwell Street Flint, MI 48503 Phone: 810-744-0540 E-mail: cygnetent@aol.com
August 14-18	24 th Annual Meeting, South Carolina Aquatic Plant Management Society (SCAPMS)	Springmaid Beach Retreat & Conference Center Myrtle Beach, SC	Troy Diel, President Santee Cooper Moncks Corner, SC Phone: 843-761-8000 E-mail: tndiel@santeecooper.com
August 18-22	132 nd Annual Meeting, American Fisheries Society (AFS)	Baltimore Convention Center Baltimore, MD	Betsy Fritz Phone: 301-897-8616, ext. 212 E-mail: bfritz@fisheries.org
September 2-6	11 th International Symposium on Aquatic Weeds, European Weed Research Society (EWRS)	Moliets et Maâ (Landes), France	Cemagref Unité de Recherche Qualité des Eaux 50 Avenue de Verdun 33612 CESTAS CEDEX, France E-mail: ewrs.2002@bordeaux.cemagref.fr
September 5-7	A Southeastern Symposium: Water Resources Restoration, Protection and Pollution Prevention	GA Center for Continuing Education Athens, GA	Brandon Anderson, Coordinator Georgia Stream Buffer Initiative Driftmier Engineering Center Athens, GA 30602-4435 E-mail: upperocmulgee@yahoo.com
September 24-26	Chesapeake Bay Watershed Restoration Conference: Riparian and Wetland Stewardship	Wyndham Baltimore Inner Harbor Hotel (formerly Omni Inner Harbor Hotel)	Hannah Kircher Phone: 812-723-0088 Email: hannahk@kiva.net
October 7-9	National Symposium, Wetlands 2002: Restoring Impaired Wetlands and Other Waters	Westin Hotel Indianapolis, IN	Tammy Taylor Email: taylor@ctic.purdue.edu or www.Core4.org/Wetlands
October 14-16	Symposium, International Organization for Biological Control (IOBC)	Agropolis Conference Center Montpellier, France	Mireille Montes de Oca, IOBC Sec. Phone: +33 (0)4 67 04 75 30 Fax: +33 (0)4 67 04 75 99 E-mail: iobc.symp@agropolis.fr
October 16-18	5 th International Symposium on Sediment Quality Assessment	Hotel Allegro Chicago, IL	Karen Bonnell E-mail: bonnellk@dfo-mpo.gc.ca
October 27-30	Janet Meakin Poor Research Symposium: Invasive Plants—Global Issues, Local Challenges	Congress Plaza Hotel & Convention Center Chicago, IL	Dr. Kay Havens, Director Inst. for Plant Conservation Biology Chicago Botanic Garden Chicago, IL 60022 Phone: 847-835-8378 E-mail: khavens@chicagobotanic.org
October 30-November 1	22 nd International Symposium, North American Lake Management Society (NALMS)	Anchorage Hilton & Westmark Hotel Anchorage, AK	Pam Leasure, Program Chair Phone: 727-464-4425 E-mail: pleasure@co.pinellas.fl.us or www.nalms.org

----- UPCOMING MEETINGS AND EVENTS - 2002 -----

<u>DATE</u>	<u>EVENT</u>	<u>LOCATION</u>	<u>CONTACT</u>
July 21-24	42 nd Annual Meeting, Aquatic Plant Management Society (APMS)	Keystone Resort Keystone, Colorado	Richard Hinterman, Program Chair Cynet Enterprises, Inc. 1860 Bagwell Street Flint, MI 48503 Phone: 810-744-0540 E-mail: cygnetent@aol.com
August 14-18	24 th Annual Meeting, South Carolina Aquatic Plant Management Society (SCAPMS)	Springmaid Beach Retreat & Conference Center Myrtle Beach, SC	Troy Diel, President Santee Cooper Moncks Corner, SC Phone: 843-761-8000 E-mail: tndiel@santeecooper.com
August 18-22	132 nd Annual Meeting, American Fisheries Society (AFS)	Baltimore Convention Center Baltimore, MD	Betsy Fritz Phone: 301-897-8616, ext. 212 E-mail: bfritz@fisheries.org
September 2-6	11 th International Symposium on Aquatic Weeds, European Weed Research Society (EWRS)	Moliets et Maâ (Landes), France	Cemagref Unité de Recherche Qualité des Eaux 50 Avenue de Verdun 33612 CESTAS CEDEX, France E-mail: ewrs.2002@bordeaux.cemagref.fr
September 5-7	A Southeastern Symposium: Water Resources Restoration, Protection and Pollution Prevention	GA Center for Continuing Education Athens, GA	Brandon Anderson, Coordinator Georgia Stream Buffer Initiative Driftmier Engineering Center Athens, GA 30602-4435 E-mail: upperocmulgee@yahoo.com
September 24-26	Chesapeake Bay Watershed Restoration Conference: Riparian and Wetland Stewardship	Wyndham Baltimore Inner Harbor Hotel (formerly Omni Inner Harbor Hotel)	Hannah Kircher Phone: 812-723-0088 Email: hannahk@kiva.net
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THE AQUATIC PLANT MANAGEMENT SOCIETY, INC.

The Aquatic Plant Management Society, Inc. is an international organization of scientists, educators, students, commercial pesticide applicators, administrators, and concerned individuals interested in the management and study of aquatic plants. The membership reflects a diversity of federal, state, and local agencies; universities and colleges around the world; corporations; and small businesses.

Originally The Hyacinth Control Society, Inc. when founded in 1961, The Aquatic Plant Management Society, Inc., is a respected source of expertise in the field of biological, mechanical, and chemical aquatic plant management and aquatic plant sciences. The Society has grown to include several regional and state chapters. Through these affiliates, annual meetings, newsletters, and the *Journal of Aquatic Plant Management*, members keep abreast of the latest developments in the field.

The objectives of the Society are to assist in promoting the management of nuisance aquatic plants, to provide for the scientific advancement of members of the society, to encourage scientific research, to promote university scholarship, and to extend and develop public interest in the aquatic plant science discipline.

Send this form to:

The Aquatic Plant Management Society, Inc.

Post Office Box 1477

Lehigh, FL 33970-1477

Application for Membership

Name of Applicant _____
Home Address _____ Zip Code _____
Current Title and Business or Institution Name & Address _____

Phone _____ Fax _____ e-mail _____ Zip Code _____

There are three regular classes of membership available to applicants, according to the Charter of our Society which was adopted in 1961. These membership classes are:

ACTIVE MEMBERSHIP	\$ 35.00
STUDENT MEMBERSHIP	\$ 5.00
COMMERCIAL SUSTAINING MEMBERSHIP	\$ 500.00

*Each of these membership classes provides an individual (Active or Student) or an organization (Commercial Sustaining) a single vote in society elections, and single copies of both the Journal and the newsletter. Commercial sustaining membership also includes exhibit space at the annual meeting. In addition to these membership classes, the Society also provides a Subscription Membership class for those wanting to be added to the mailing list for the Journal **only** (i.e., Libraries). This class does not include the newsletter, nor are members allowed to vote in Society elections.*

SUBSCRIPTION MEMBERSHIP \$ 70.00

AMOUNT OF REMITTANCE \$ _____ (Make checks to APMS, Inc.)

SIGNATURE OF APPLICANT: _____

Please check the following to request additional information on APMS regional chapters!

<input type="checkbox"/> Florida APMS	<input type="checkbox"/> Mid-South APMS	<input type="checkbox"/> Midwest APMS	<input type="checkbox"/> Nile Basin APMS
<input type="checkbox"/> South Carolina APMS	<input type="checkbox"/> Western APMS	<input type="checkbox"/> Texas APMS	<input type="checkbox"/> Northeast APMS
<input type="checkbox"/> Brazil APMS			

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Lehigh, Florida 33970-1477