

PROGRAM

**THIRTY-SIXTH
ANNUAL MEETING**

**THE AQUATIC
PLANT MANAGEMENT
SOCIETY, INC.**



**RADISSON HOTEL
BURLINGTON, VERMONT
JULY 14 - 17, 1996**

SUSTAINING APMS MEMBERS

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THE PROGRAM

THIRTY-SIXTH ANNUAL MEETING

**THE AQUATIC PLANT
MANAGEMENT SOCIETY, INC.**

JULY 14-17, 1996

**RADISSON HOTEL
BURLINGTON, VERMONT**

SUNDAY, 14 JULY 1996

12:00-4:00 pm	Board of Directors Meeting/Lunch <i>Vermont Room</i>
2:00-5:00 pm	Exhibitor Display Set Up <i>Montpelier Room</i>
3:00-6:00 pm	Registration <i>Prefunction Area (between Adirondack Ballroom and Montpelier Room)</i>
3:00-6:00 pm	Workshop - "Evaluating the Potential for a Coordinated Biocontrol Program for Eurasian Watermilfoil" - Bernd Blossey, Chair <i>Green Mountain AB Room</i>
7:00-9:00 pm	President's Reception <i>Prefunction Area</i>

MONDAY, 15 JULY 1996

- 8:00-5:00 pm Registration
Prefunction Area
- 9:00-5:00 pm Exhibits on Display
Montpelier Room
- 10:00-11:30 am Spouses' Lake Champlain Brunch Cruise
On board the "Spirit of Ethan Allen II"
Spirit Landing, Burlington Boathouse
Meet in Main Lobby at 9:30 am.

SESSION I

Adirondack Ballroom

- Presiding: **Terence McNabb**, President APMS
Resource Management, Inc., Tumwater, WA
- 8:30 am Call to Order
- 8:35 am Welcome: **Virginia Garrison**, Lakes & Ponds Section,
Vermont Department of Environmental Conservation,
Waterbury, VT
- 8:45 am Announcements: **Kurt Getsinger**, 1996 APMS Program Chair
USAE Waterways Experiment Station, Vicksburg, MS
- 9:00 am APMS Regional Chapter Reports:
Midwest South Carolina MidSouth
Florida Texas Western
- 9:30 am Presidential Address: **Terence McNabb**
- 10:45 am Aquatic Weeds: A Global Problem.
William T. Haller, Center for Aquatic Plants, Agronomy
Department, University of Florida-IFAS, Gainesville, FL
- 11:05 am **BREAK**

- 10:20 am Exotic Plants: What's the Problem?
R. Michael Smart, USAEWES Lewisville Aquatic
Ecosystem Research Facility, Lewisville, TX
- 10:40 am Funding for Aquatic Weed Control.
John Thorne, Capitolink, Washington, DC
- 10:55 am The Future of Federal Support for Aquatic Weed Management.
Faith Campbell, National Association of Exotic Pest Plant
Councils, Springfield, VA
- 11:10 am Chemical Control R&D: Government/Private Partnerships.
Kurt Getsinger, US Army Engineer Waterways Experiment
Station, Vicksburg, MS
- 11:25 am Customized Insurance Program for Aquatic Applicators and
Companies. **Michael H. Hall**, Cobb-Hall Insurance,
Howell, MI
- 11:40 am **ANNUAL APMS BUSINESS MEETING**
- 12:00 pm **LUNCH**

SESSION II

Adirondack Ballroom

AQUATIC PLANT MANAGEMENT IN THE NORTHEAST

- Moderator: **Gerald Smith**, Aquatic Control Technology, Inc.,
Northborough, MA
- 1:15 pm Nuisance Aquatic Vegetation in the Northeast U.S..
Gerald Smith, Aquatic Control Technology, Inc.,
Northborough, MA
- 1:30 pm Managing Invasive Exotic Plants in Aquatic and Wetland
Habitats in Vermont. **Holly Crosson**, Lakes & Ponds Section,
Vermont Department of Environmental Conservation,
Waterbury, VT
- 1:45 pm Biology, Ecology, and Management of Waterchestnut.
John D. Madsen, USAEWES Lewisville Aquatic Ecosystem
Research Facility, Lewisville, TX

- 2:00 pm Development of an Integrated Plant Management Plan for Lake George, NY, **Kenneth J. Wagner**, Fugro, Inc., Northborough, MA
- 2:15 pm Biological Weed Control: Sleeping Beauty or Ugly Duckling? **Bernad Blosssey**, Department of Natural Resources, Cornell University, Ithaca, NY
- 3:30 pm Heterophylly in a Water Lily: Interacting Effects of [CO₂] with Sediment and Water Depth. **John E. Titus**, Department of Biological Sciences, Binghamton University, Binghamton, NY
- 2:45 pm Littoral Zone Dynamics: The Accumulation and Retention of Sediments in Submerged Aquatic Macrophyte Beds. **Glenn Benoy** and **Jacob Kalf**, Department of Biology, McGill University, Montreal, Canada **Student Paper**
- 3:00 pm **BREAK**
- 3:15 pm Aquatic Plant Management Strategies: The Lake George Experience. **Charles W. Boylen**, **Lawrence W. Eichler**, Darrin Freshwater Institute, **Reisselaer Polytechnic Institute**, Troy, NY and **James W. Sutherland**, New York State Department of Conservation, Albany, NY
- 3:30 pm Phragmites: A Threat to Biodiversity in Vermont Wetlands. **Alan Emerson** and **R.J. Villanil**, Department of Natural Sciences, Trinity College of Vermont, Burlington, VT **Student Paper**
- 3:45 pm The Potential for Biological Control of Eurasian Watermilfoil with the Weevil *Euhrychiopsis lecontei*: Work in the Upper Midwest. **Raymond M. Newman**, Fisheries and Wildlife, University of Minnesota, St. Paul, MN
- 4:00 pm Taxonomic Studies of the Yellow Water Lilies. **Donald J. Padgett**, **Donald H. Les**, and **Garrett E. Crow**, Department of Plant Biology, University of New Hampshire, Durham, NH and Department of Ecology and Evolutionary Biology, University of Connecticut, Storrs, CT **Student Paper**

- 4:15 pm Aquatic Plant Training for Volunteer Water Quality Monitors. **Elizabeth M. Herron**, **Linda T. Green**, and **Hope Lesson**, URI Watershed Watch, Kingston, RI
- 4:30 pm Genetic Variation Among and Within Populations of *Neobeckia aquatica* (Eaton) Greene (Lake Cress), a Rare Triploid. **John D. Gabel** and **Donald H. Les**, Department of Ecology and Evolutionary Biology, University of Connecticut, Storrs, CT **Student Paper**
- 4:45 pm A Biogeographic Perspective on Watermilfoil Declines: Additional Evidence for the Role of Herbivorous Weevils in Promoting Declines? **Robert Creed**, Department of Biology, Hood College, Frederick, MD
- 5:00 pm **ADJOURNMENT**
- 5:00 pm **Federal Aquatic Plant Management Working Group Meeting**
Vermont Room
- 6:30 pm "Discover the Grass Roots of Vermont"
Reception, Sponsored by SePRO Corporation
Lake Champlain Room/Mezzanine

TUESDAY, 16 JULY 1996

- 7:00-8:30 am APMS Regional Chapter Presidents Breakfast (Sponsored by Zeneca)
Burlington Room
- 7:00-8:30 am Aquatic Ecosystem Restoration Foundation Breakfast and Board of Directors Meeting
Vermont Room
- 8:00-5:00 pm Registration
Prefunction Area
- 9:00-5:00 pm Exhibits on Display
Montpelier Room

SESSION III
Adirondack Ballroom

ECOLOGY AND PHYSIOLOGY

- Moderator: **R. Michael Smart**, USAEWES Lewisville Aquatic Ecosystem Research Facility, Lewisville, TX
- 8:30 am Exotic Plant Invasions in Florida. **Randall Stocker**, Center for Aquatic Plants, Agronomy Department, University of Florida-IFAS, Gainesville, FL
- 8:45 am Effects of Increased Inundation and *Spartina* Wrack Deposition on a Saltmarsh Plant Community. **Patricia M. Tolley** and **Robert R. Christian**, Department of Biology, East Carolina University, Greenville, NC **Student Paper**
- 9:00 am Growth of the Emerged Form of Hygrophila. **David L. Sutton**, Fort Lauderdale Research and Education Center, University of Florida-IFAS, Fort Lauderdale, FL
- 9:15 am Phenology of Monoecious Hydrilla in Lake Gaston. **Chad R. Coley** and **Stratford H. Kay**, Department of Crop Science, North Carolina State University, Raleigh, NC **Student Paper**
- 9:30 am Propagule Production and Viability in Submersed Macrophytes. **John W. Barko** and **Dwilette G. McFarland**, US Army Engineer Waterways Experiment Station, Vicksburg, MS
- 9:45 am Competitive Interaction Between Hydrilla and Vallisneria as Influenced by the Biological Control Agent *Hydrellia pakistanae*. **T.K. Van**, **G.S. Wheeler**, and **T.D. Center**, USDA/ARS Aquatic Plant Control Research Unit, Ft. Lauderdale, FL
- 10:00 am **BREAK**
- 10:15 am The Importance of Chemistry, Behavior, and Phenotypic Plasticity in Evaluating *Eubrychiopsis lecontei* (Curculionidae) as a Biocontrol Agent for Eurasian Watermilfoil. **Susan L. Solarz** and **Raymond M. Newman**, Department of Fisheries and Wildlife, University of Minnesota, St. Paul, MN **Student Paper**

- 10:30 am *Nuphar* (Spatterdock), a Neglected Native. **Ken Langeland**, **Brian Smith**, and **Neil Hill**, Center for Aquatic Plants, Agronomy Department, University of Florida-IFAS, Gainesville, FL
- 10:45 am The Comparative Efficacy of Triclopyr and Glyphosate to Control Purple Loosestrife (*Lythrum salicaria* L.) Under Field and Growth Room Conditions. **Natalie Feisthauer**, **M.J. Perkins**, **J. Glaser** and **G.R. Stephenson**, Department of Environmental Biology, University of Guelph, Ontario, Canada **Student Paper**
- 11:00 am Direct Impacts of Navigation Traffic on Submersed Aquatic Macrophytes in the Upper Mississippi River System. **Mike Stewart**, **Dwilette McFarland**, **Sandra Martin**, and **Don Ward**, US Army Engineer Waterways Experiment Station, Vicksburg, MS
- 11:15 am Waterhyacinth Growth and Nutrient Uptake from Swine Lagoon Effluent. **Stratford H. Kay**, Department of Crop Science and **John J. Classen**, Department of Biological Agricultural Engineering, North Carolina State University, Raleigh, NC
- 11:30 am Selecting Submersed and Emergent Species for Phytoremediation of Explosives in Constructed Wetlands. **Susan L. Sprecher**, US Army Engineer Waterways Experiment Station, Vicksburg, MS, and **Elly P.H. Best**, AScI Corporation, Vicksburg, MS
- 11:45 pm **LUNCH**

SESSION IV
Adirondack Ballroom

MANAGEMENT STRATEGIES AND TECHNIQUES

- Moderator: **Mike Stewart**, US Army Engineer Waterways Experiment Station, Vicksburg, MS
- 1:00 pm Modeling Growth of Submerged Aquatic Macrophytes and Application Possibilities. **Elly P.H. Best**, AScI Corporation, Vicksburg, MS, and **William A. Boyd**, US Army Engineer Waterways Experiment Station, Vicksburg, MS

- 1:15 pm Species-Selective Control of Eurasian Watermilfoil with Triclopyr. **R. Michael Smart***, Kurt D. Getsinger, US Army Engineer Waterways Experiment Station, Vicksburg, MS, Gary O. Dick, University of North Texas, Denton, TX and John G. Skogerboe, *USAEWES Lewisville Aquatic Ecosystem Research Facility, Lewisville, TX
- 1:30 pm Response of Eurasian Watermilfoil and the Native Plant Community to a Triclopyr Application in Lake Minnetonka, MN: One Year Posttreatment. **John D. Madsen**, USAEWES Lewisville Aquatic Ecosystem Research Facility, Lewisville, TX and Kurt D. Getsinger, US Army Engineer Waterways Experiment Station, Vicksburg, MS
- 1:45 pm Using Chemical Control Technologies to Restore Aquatic Habitats Impacted by Invasive Exotic Weed Species. **Terence McNabb**, Resource Management Inc, Tumwater, WA
- 2:00 pm Integrated Hydroacoustic/GPS System for Mapping Underwater Vegetation. **Bruce M. Sabot**, US Army Engineer Waterways Experiment Station, Vicksburg, MS
- 2:15 pm Establishing Native Vegetation in Southern Reservoirs: Why and How? **R.D. Doyle**, **R.M. Smart**, USAEWES, Lewisville Aquatic Ecosystem Research Facility, Lewisville, TX and **G.O. Dick**, University of North Texas, Denton, TX
- 2:30 pm **BREAK**
- 2:45 pm Use of Fluridone for Selectively Controlling Eurasian Watermilfoil in a Mixed Plant Community: Outdoor Mesocosm Studies. **Michael D. Netherland** and Kurt D. Getsinger, US Army Engineer Waterways Experiment Station, Vicksburg, MS
- 3:00 pm Interactions Between Waterhyacinth and a Dilute Organic Acid. **D.F. Spencer** and **G.G. Kasander**, USDA-ARS Aquatic Weed Laboratory, Weed Science Program, UC-Davis, Davis, CA, and **J.D. Madsen**, USAEWES Lewisville Aquatic Ecosystem Research Facility, Lewisville, TX and **C.S. Owens**, ASci Corporation, Lewisville, TX
- 3:15 pm Selective Control of Purple Loosestrife with Triclopyr. **Linda S. Nelson**, Kurt D. Getsinger and Jan E. Freedman, US Army Engineer Waterways Experiment Station, Vicksburg, MS

3:30 pm Architectural Effect of *Myriophyllum spicatum* and *Potamogeton nodosus* on the Diet of Largemouth Bass. **Eric D. Dibble**, Department of Wildlife and Fisheries, Mississippi State University, Mississippi State, MS and **Sherry L. Harrel**, US Army Engineer Waterways Experiment Station, Vicksburg, MS

3:45 pm A New Way of Doing Business. **Fred Kerpel**, US Environmental Protection Agency, Pesticide Section, Region 4, Atlanta, GA

4:00 pm Effect of Bialaphos Application Rates, Methods and Surfactant Combinations on Waterhyacinth (*Eichhornia crassipes*). **E.O. Abasteit**, Cairo University, Giza, Egypt, and **F.T. Corbin** and **S.H. Kay**, Department of Crop Science, North Carolina State University, Raleigh, NC

4:15 pm **ADJOURNMENT**

5:30 - 10:00 pm EVENING AT SHELBURNE FARMS

EVENING PROGRAM at SHELBURNE FARMS

On the Shore of Lake Champlain

Tour of Grounds

Social Hour

(Sponsored by Applied Biochemists and Rhone-Poulenc)

New England Barbecue

(Catered by New England Culinary Institute)

Awards Ceremony

Music and Dancing by The Unknown Blues Band

(Sponsored by Elf Atochem)

Transportation provided from the hotel.

Meet in Main Lobby at 5:00 pm for bus transportation.

Casual Dress

WEDNESDAY, 17 JULY 1996

SESSION V

Adirondack Ballroom

MANAGEMENT STRATEGIES AND TECHNIQUES

Moderator: Joe Zolczynski, Alabama Department of Conservation and Natural Resources, Spanish Fort, AL

8:30 am Arsenal Aquatic Experimental Use Permit (EUP).
Joe Vissagio, American Cyanamid Company, Gainesville, FL

8:45 am The Rate of Dissipation of Endothall as a Result of Degradation Versus Dilution, Ronald C. Biever, Springborne Laboratories, MA

9:00 am Reduced Rate Endothall Application for Controlling Sago Pondweed in High-Flow Environments. David Sineros, Ecological Research and Investigations Work Group, US Bureau of Reclamation, Denver, CO

9:15 am The Use of the Fluridone FastEST as a New Management Tool to Optimize the Efficacy and Application of Sonar. Mark Mongin, SePRO Corporation, Carmel, IN

9:30 am Development of Immunoassay Methods for Aquatic Herbicides. Dave Nardone, Ohmicron Environmental Diagnostics, Inc., Newtown, PA

9:45 am Eurasian Watermilfoil in Lake Tahoe: A Threat to A National Treasure. L.W.J. Anderson and F.J. Ryan, USDA-ARS Aquatic Weed Laboratory, Weed Science Program, UC-Davis, Davis, CA

10:00 am **BREAK**

10:15 am The South Florida Ecosystem Restoration Task Force and Its Implications for Exotic Plant Management. William Zattau, US Army Corps of Engineers, Jacksonville District, Jacksonville, FL

10:30 am The Effects of Multiple-year Treatments of Fluridone on Hydrilla and Native Plant Populations. Alison Fox and Bill Haller, Center for Aquatic Plants, Agronomy Department, University of Florida-IFAS, Gainesville, FL

10:45 am Lake Seminole Hydrilla Action Plan: An Integrated Approach. Michael J. Eubanks, US Army Corps of Engineers, Mobile District, Mobile, AL

11:00 am Selective Aquatic Plant Management with Sonar Aquatic Herbicide. Craig S. Smith and G. Douglas Pullman, Aquest Corporation, Flint, MI

11:15 am Aquatic Dissipation of Triclopyr in a Whole-Pond Treatment. John G. Skogerboe, USAEWES Lewisville Aquatic Ecosystem Research Facility, Lewisville, TX, Kurt D. Getsinger, US Army Engineer Waterways Experiment Station, Vicksburg, MS and David G. Petty, DowElanco, Indianapolis, IN

11:30 am The Use of Information/Expert Systems for Technology Transfer Activities. Michael J. Grodowitz, US Army Engineer Waterways Experiment Station, Vicksburg, MS

11:45 am **FINAL BUSINESS MEETING AND INSTALLATION OF 1996-97 OFFICERS**
President Kurt D. Getsinger, Presiding

12:15 pm **ADJOURNMENT**

1:00 pm **APMS Board of Directors Lunch and Meeting**
Vermont Room

SPOUSES' PROGRAM

Sunday, July 14, 1996

7:00 pm

Presidents Reception

Prefunction Area

Monday, July 15, 1996

10:00 am - 11:30 am

Lake Champlain Brunch Cruise

Meet in Main Lobby at 9:30 am

Monday, July 15, 1996

6:30 pm

Reception - "Discover the Grass Roots of Vermont"

(Sponsored by SePRO Corporation)

Lake Champlain/Mezzanine

Tuesday, July 16, 1996

5:30 pm - 10:00 pm

Evening at Shelburne Farms

Meet in Main Lobby at 5:00 pm to board buses (Casual Dress)

(Refreshments sponsored by Applied Biochemists and Rhone-Poulenc)

(Music and Dancing sponsored by Elf Atochem)

MEETING SPONSORS

SePRO Corporation

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