THIRTY-FIRST ANNUAL MEETING
OF
THE AQUATIC PLANT
MANAGEMENT SOCIETY, INC.

July 14-17, 1991

HYATT REGENCY DEARBORN
Dearborn, Michigan

PROGRAM SUMMARY

SUNDAY, JULY 14, 1991
10:00 a.m. COMMITTEE MEETINGS (TBA)
12:00 Noon BOARD LUNCHEON, CORD ROOM, 2nd level
1:00 p.m. MEETING OF THE BOARD, Stutz Bearcat Room, lower level
3:00 p.m. REGISTRATION
6:00 p.m. Hubbard Foyer
6:30 p.m. PRESIDENT'S RECEPTION, Hubbard Foyer
7:30 p.m. Exhibits on Display

MONDAY, JULY 15, 1991
8:00 a.m. REGISTRATION
5:00 p.m. Hubbard Foyer
9:00 a.m. EXHIBITS ON DISPLAY
5:00 p.m. Hubbard Foyer
9:30 a.m. SPOUSES BREAKFAST AND ACTIVITY REVIEW, Atlanta Room.
9:00 a.m. SESSION I, Springwells Room — Welcome, Chapter 11:20 a.m. Reports, Invited Addresses
11:20 a.m. ANNUAL BUSINESS MEETING — President Joe Joyce, Presiding
1:30 p.m. SESSION II, Springwells Room — The Role of Government Agencies and Institutions in Aquatic Plant Management: "Where Has All the Money Gone . . . ?"
5:00 p.m. MONDAY EVENING PROGRAM. Dinner at Eagle Tavern, the Henry Ford Museum and Greenfield Village — awards and presentations.
PROGRAM SUMMARY CONT . . .

TUESDAY, JULY 16, 1991

6:45 a.m.- LOCAL CHAPTER PRESIDENT'S BREAKFAST
8:00 a.m. - Stearns Room
8:00 a.m.- REGISTRATION
3:00 p.m. - Hubbard Foyer
8:30 a.m.- EXHIBITS ON DISPLAY
5:00 p.m. - Hubbard Foyer
8:00 a.m.- SESSION III
12:15 p.m. - Springwells Room — Physiology and Ecology
1:30 p.m.- SESSION IV, Springwells Room — Aquatic Plant
5:15 p.m. - Management in the Midwest
5:30 p.m. - FEDERAL AQUATIC PLANT MANAGEMENT WORKING GROUP, Stanley Room

WEDNESDAY, JULY 17, 1991

8:30 a.m.- EXHIBITS ON DISPLAY
12:00 Noon - Hubbard Foyer
8:00 a.m.- SESSION V
12:15 p.m. - Springwells Room — Management Options
12:15 p.m. - FINAL BUSINESS MEETING AND INSTALLATION OF 1991-92 OFFICERS
President Joe Joyce, Presiding
12:30 p.m. - ADJOURNMENT OF 31st ANNUAL MEETING
12:30 p.m. - BOARD OF DIRECTORS LUNCHEON AND MEETING
Stutz Bearcat Room

SPOUSES' SPECIAL

In addition to the PRESIDENT'S reception on Sunday evening and the Monday evening dinner at the Eagle Tavern, the Henry Ford Museum and Greenfield Village along with all delegates
A SPECIAL BREAKFAST AND ACTIVITY REVIEW WILL BE SPONSORED BY LOCAL AQUATIC PLANT MANAGEMENT OPERATORS A representative of Kirby Tours will present possibilities for activities in the area and Sac's Fifth Avenue will sponsor a fashion show during the breakfast.
9:30 A.M. Monday, July 15, 1991
Atlanta Room

THE PROGRAM

SUNDAY, JULY 14, 1991

10:00 a.m. COMMITTEE MEETINGS
Locations To Be Announced
12:00 Noon BOARD LUNCHEON
Cord Room — 2nd Level
1:00 p.m. MEETING OF THE BOARD OF DIRECTORS
Stutz Bearcat Room — Lower Level
3:00 p.m.- REGISTRATION
6:00 p.m. Hubbard Foyer
6:30 p.m.- PRESIDENT'S RECEPTION
7:30 p.m. Hubbard Foyer
Exhibits on Display

MONDAY, JULY 15, 1991

SESSION I
Springwells Room
Presiding: Joseph Joyce, President

9:00 a.m. CALL TO ORDER
9:05 a.m. STATEMENT OF FELLOWSHIP
9:10 a.m. WELCOME: (Security, crowd-control, and common sense dictate that this individual remain a surprise . . .)
9:15 a.m. LOCAL BRIEFING — what to do, and where to go in the Dearborn/Detroit area
9:25 a.m. ANNOUNCEMENTS
9:30 a.m. APMS CHAPTER REPORTS
Florida: Dan Thayer
Midsouth: Mark W. Thomas
Midwest: G. Douglas Pullman
South Carolina: Howard Roach
Texas: Joyce Johnson
Western: David Spencer

10:00 a.m. PRESIDENTIAL ADDRESS — “The Issues of the 1990's"
Joseph C. Joyce, Director, Center for Aquatic Plants, University of Florida, Gainesville; FL 32606 and President of The Aquatic Plant Management Society, Incorporated

10:15 a.m. INVITED ADDRESS — “Early Perspectives on Aquatic Plant Management”
T. Wayne Miller, Lee County Hyacinth Control District, Box 06005, Fort Myers, FL 33906

10:30 a.m. INVITED ADDRESS — “The Corps' Lewisville Aquatic Ecosystem Research Facility: New Opportunities for Aquatic Plant Research”
R. Michael Smart, Lewisville Aquatic Ecosystem Research Facility, RR#3 Box 446, Lewisville, TX 75056
10:45 a.m. INVITED ADDRESS — "The Laurentian Great Lakes: Problems and Solutions"
Alfred M. Beeton, Director, Great Lakes Environmental Research Laboratory, National Oceanic and Atmospheric Administration, 2205 Commonwealth Blvd., Ann Arbor, MI 48105-1593

11:05 a.m. INVITED ADDRESS — "The Drying of the Aral Sea: A Man Made Environmental Disaster In the U.S.S.R."
Philip Micklin, Department of Geography, Western Michigan University, Kalamazoo, MI 49008

11:20 a.m. ANNUAL BUSINESS MEETING
President Joyce, Presiding

12:00 Noon ADJOURN FOR LUNCH

SESSION II
Springwells Room

THE ROLE OF GOVERNMENT AGENCIES AND INSTITUTIONS IN AQUATIC PLANT MANAGEMENT

"Where Has All the Money Gone . . . "
Moderator: Kurt Getsinger
USAE Waterways Experiment Station
Vicksburg, Mississippi

1:30 p.m. The Corps of Engineers' Role in Aquatic Plant Management
J.L. Decell, Manager, Aquatic Plant Control Research Program, U.S. Army Engineer Waterways Experiment Station, 3909 Halls Ferry Road, Vicksburg, MS 39180

1:50 p.m. Administrative and Research Perspective of U.S. Department of Agriculture's Role in Development of Improved Methods for Aquatic Weed Management: History and Future Trends
Lars W.J. Anderson and Joe Antognini, U.S. Department of Agriculture, Agricultural Research Service, Aquatic Weed Research, Botany Department, University of California, Davis, CA 95616 and USDA National Program Staff, Beltsville, MD 20705

2:05 p.m. The Role of TVA in Aquatic Plant Management
A. Leon Bates, Earl R. Burns, and David H. Webb, Aquatic Biology Department, Tennessee Valley Authority, Muscle Shoals, AL 35660

2:20 p.m. Reclamation’s Research Response to Challenges from Aquatic Weeds
L.O. Timblin, JR., U.S. Bureau of Reclamation, Denver Office D-3740, P.O. Box 25007, Denver, CO 80225

2:35 p.m. The Past, Present and Future of Aquatic Plant Research in Florida
Joseph C. Joyce, Center for Aquatic Plants, University of Florida, Gainesville, FL 32606

2:50 p.m. Florida's Aquatic Plant Management Program
Jeffrey Schardt, Bureau of Aquatic Plant Management, Florida Department of Natural Resources, 2051 E. Dirac Drive, Tallahassee, FL 32310

3:05 p.m. Aquatic Plant Management in California: Current Perspectives and Future Policy
Nate Dechorez, California Department of Food and Agriculture, 1220 N Street, Rm A-357, Sacramento, CA 94710-0001

3:20 p.m. BREAK (Introduce Commercial Exhibitors)

3:45 p.m. South Carolina’s Aquatic Plant Management Program — The Same But Different
Steven J. de Kozlowski, South Carolina Water Resources Commission, 1201 Main Street, Suite 1100, Columbia, SC 29201

4:00 p.m. The Role of Universities in Agency-Sponsored Aquatic Plant Management Research
Carole A. Lembi, Department of Botany and Plant Pathology, Purdue University, West Lafayette, IN 47907

4:15 p.m. Role of the Province of British Columbia in Aquatic Plant Management
Peter R. Newroth, Water Quality Branch, Ministry of Environment, Parliament Buildings, Victoria, British Columbia, Canada V8V 1X5

4:30 p.m. A Five-Year Hydrilla Management Plan for Florida
Bill Zattau, Aquatic Plant Control Operations Support Center, U.S. Army Engineer District, Jacksonville, P.O. Box 4970, Jacksonville, FL 32232-0019

4:45 p.m. Discussion and Questions

5:00 p.m. ADJOURN

MONDAY EVENING PROGRAM

JULY 15, 1991

6:00 p.m. - Till
Annual Dinner and Social
Eagle Tavern at the Henry Ford Museum and Greenfield Village

NOTE: Trolley Transportation will be provided from the Hotel. Please help by staggering your time of arrival for transportation. Everyone will be accommodated but we cannot all go at one time.
TUESDAY, JULY 16, 1991

SESSION III
Springwells Room

PHYSIOLOGY AND ECOLOGY

Moderator: David Spencer
USDA-ARS Aquatic Weed Research
Botany Department, UC Davis, Davis, CA

8:00 a.m. Acclimation of Mikania scandens to Flooding
Melanie Moon, Mark Rattray and George Bowes,
Botany Department, University of Florida,
Gainesville, FL 32611

STUDENT PAPER CONTEST

8:15 a.m. Seasonality in Southern Naiad in South Florida
J.R. Cassani, H.P. Allaire and E. Lasso de la Vega,
Lee County Hyacinth Control District, Box 06005,
Fort Myers, FL 33906

STUDENT PAPER CONTEST

8:45 a.m. Differences in Sediment Nitrogen Supply Can Influence Growth Interactions Between Potamogeton americanus and Hydrilla verticillata
Nancy J. McCready, Department of Biology,
Lafayette College, Easton, PA 18042 and John W. Barko,
U.S. Army Engineer Waterways Experiment Station,
3909 Halls Ferry Road, Vicksburg, MS 39180

9:00 a.m. Ecological Changes Associated with Invasion of Lakes by Eurasian Watermilfoil
Craig S. Smith, U.S. Army Engineer Waterways
Experiment Station, 3909 Halls Ferry Road,
Vicksburg, MS 39180

9:15 a.m. Aquatic Macrophyte Interactions in Chautauqua Lake, New York
Susan Monteleone, Environmental Resources Center, State University of New York at Fredonia,
Fredonia, NY 14063

STUDENT PAPER CONTEST

9:45 a.m. Adaptive Significance of the Variable C4/C3 Photosynthetic Physiology in Hydrilla verticillata
W.E. Spencer and J.A. Teeri, Department of Biology,
University of Michigan, Ann Arbor, MI 48109-1048
R.G. Wetzel, Department of Biology, University of Alabama, Tuscaloosa, AL 35487-0344

STUDENT PAPER CONTEST

10:00 a.m. BREAK
SESSION IV
Springwells Room
AQUATIC PLANT MANAGEMENT IN THE MIDWEST
Moderator: Richard Hinterman
Aquatic Nuisance Plant Control, Inc.
Linden, MI

1:30 p.m. Mortality of Fish and Aquatic Macroinvertebrates in Mechanical Aquatic Weed Harvesters
Stephen G. Metzer, Central Michigan University, Mt. Pleasant, MI 48858
STUDENT PAPER CONTEST

1:45 p.m. Eurasian Watermilfoil Management in Minnesota
George Orning, Research Director, The Fresh Water Foundation, PO Box 90, Navarre, MN 55392-0090

2:05 p.m. Expressing Ideas in a Hostile Environment
Sam Barrick, DowElanco, 4040 Vincennes Circle, Suite 400, Indianapolis, IN 46268

2:55 p.m. BREAK

3:10 p.m. Radioactive Sulfate Uptake in Watermilfoils
Daniel T. Gerber, Donald H. Les, and Russell Cuhel, University of Wisconsin-Milwaukee, Department of Biological Science, Lapham Hall, Box 413, Milwaukee, WI 53201
STUDENT PAPER CONTEST

3:25 p.m. Swimmer's Itch — The Latest News
Harvey Blankespoor, Hope College, 137 East 12th Street, Holland, MI 49423

3:55 p.m. Transporting Aquatic Chemicals LEGALLY
Karen Lanphear, U.S. Department of Transportation, Office of Motor Carrier Safety, 315 West Allegan, Room 205, Lansing, MI 48933

4:20 p.m. Regulations, Regulations
Terese St. Peter, Valant U.S.A. Corporation, 1333 North California, Suite 600, Walnut Creek, CA 94596-8025

4:45 p.m. Waterside Landscaping and Wetland Mitigation
Russell James, Ecocience, RD 4 Box 4294, Moscow, PA 18444

5:15 p.m. ADJOURN

5:30 p.m. Federal Aquatic Plant Management Working Group
Stanley Room

WEDNESDAY, JULY 17, 1991
SESSION V
Springwells Room
MANAGEMENT OPTIONS
Moderator: Alison Fox
Center for Aquatic Plants
University of Florida, Gainesville

8:00 a.m. Updates with Komene
E.F. Koldenhoven and J.R. Bone, Griffin Corporation, Box 1847, Valdosta, GA 31603-1847

8:15 a.m. Phenoxy "2,4-D" Herbicides — An Update
Horace Johnson, Rhone-Poulenc Ag Company, Box 12014, 2 T.W. Alexander Drive, Research Triangle Park, NC 27709

8:30 a.m. Chemical Control of Submersed Plants in High Water-Exchange Environments
K.D. Getsinger and M.D. Netherland, U.S. Army Engineer Waterways Experiment Station, 3909 Halls Ferry Road, Vicksburg, MS 39180 and W.T. Haller and A.M. Fox, University of Florida, Center for Aquatic Plants, Gainesville, FL 32606

8:45 a.m. Improving Herbicide Efficacy by Application Methods
Alison M. Fox and W.T. Haller, Center for Aquatic Plants, University of Florida, Gainesville, FL 32606

9:00 a.m. Getting the Bugs Out, or Off the Shelf and On the Water, Biocontrol Agents for Operational Wayne T. Haller, Aquatic Plant Control Operations Support Center, U.S. Army Engineer District, Jacksonville, P.O. Box 4020, Jacksonville, FL 32225-0019

9:15 a.m. Perspectives on the Biological Control of Alligatorweed in North Carolina
Stratford H. Kay, North Carolina State University, Raleigh, NC 27695

9:30 a.m. Movements and Habitat Utilization of Triploid Grass Carp in Lake Marion, S.C.
J. Samuel Chappelar, J.W. Foltz and Kevin Chavis, Department of Aquaculture, Fisheries and Wildlife, Clemson University, Clemson, SC 29634

9:45 a.m. Establishing Habitat Goals and Response to Water Clarity Using a GIS
Scott Painter, Environment Canada, Box 5050, Burlington, Ontario, Canada L7R 4A6

10:00 a.m. STUDENT AWARDS
APPLICATION FOR MEMBERSHIP IN:

THE AQUATIC PLANT MANAGEMENT SOCIETY, INC.

WILLIAM N. RUSHING, Secretary-Treasurer
Post Office Box 2695
Washington, DC 20013-2695

There are four regular classes of membership available upon application made in accordance with the Charter. These classes are:
(A) ACTIVE MEMBERSHIP ($35.00); (B) STUDENT MEMBERSHIP ($5.00); (C) SUSTAINING MEMBERSHIP ($200.00); and (D) SUBSCRIPTION MEMBERSHIP ($70.00).

Applicant's Name ____________________________________________
Home Address ____________________________________________
City, State, Zip____________________________________________
Home Telephone ____________________________________________
Title ______________________________________________________
Employer __________________________________________________
Business Address ____________________________________________
City, State, Zip____________________________________________
Business Telephone __________________________________________

Membership Class Desired:
   a. Active ($35.00):
   b. Student ($5.00):
   c. Sustaining ($200.00):
   d. Subscription ($70.00):

Amount of Remittance Herewith $ ____________________________

Signature of Applicant ______________________________________
Date ______________________________________________________

* Please indicate by asterisk which address you wish the Secretary-Treasurer's Office to use.

(Detach and Return)
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 called 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, chemical, and other methods of aquatic plant management and aquatic plant sciences. The Society has grown to include several regional and state chapters; and 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 shall be to:

1. Encourage scientific research and assist in promoting the control and management of aquatic plants through scientifically sound procedures.
2. Recognize and promote scientific advancement of the members and facilitate the education of aquatic plant scientists through scholarships and other assistance programs.
3. Publish the results of meritorious research and other information of value that pertains to aquatic plants and their management.
4. Extend and develop public interest in, and understanding of, aquatic plant management problems and solutions.
5. Cooperate with local chapters and other societies and organizations with similar and related interests.

SUSTAINING MEMBERS

AGROLINZ, INC.
Memphis, Tennessee

AMERICAN LAKE AND CANAL
Concord, California

APPLIED BIOCHEMISTS, INC.
Mequon, Wisconsin

AQUASHADE, INC.
Eldred, New York

AQUATICS UNLIMITED, N.W., INC.
Kent, Washington

ATOCHEM, NORTH AMERICA
Philadelphia, Pennsylvania

DOWELANCO
Indianapolis, Indiana

ECOSCIENCE, INC.
Moscow, Pennsylvania

GRIFFIN CORPORATION
Valdosta, Georgia

JOYCE ENVIRONMENTAL
CONSULTANTS, INC.
Orlando, Florida

KELPIN AQUATICS
INTERNATIONAL, INC.
Tyler, Texas

LAKE WEED-A-WAY, INC.
Alto, Michigan

MONSANTO
AGRICULTURAL COMPANY
St. Louis, Missouri

NALCO CHEMICAL COMPANY
Naperville, Illinois

RHONE-POULENC
AGRICULTURAL COMPANY
Research Triangle Park, North Carolina

UNIROYAL CHEMICAL COMPANY
Bethany, Connecticut

VALENT U.S.A.
Orlando, Florida
FUTURE MEETING SITES
OF
THE AQUATIC
PLANT MANAGEMENT
SOCIETY, INC.

1992 — Daytona Beach Florida
       July 12-16

1993 — Charleston, South Carolina
       July 11-14