

Program

FUTURE MEETING SITES

- 1979 - Chattanooga Choo-Choo
Chattanooga, Tennessee U.S.A.
July 15-18
- 1980 - Ramada Inn
Fort Walton Beach, Florida
U.S.A.
July 13-16
- 1981 - Downtown Holiday Inn
Jackson, Mississippi U.S.A.
July 12-15
- 1982 - Caesars Palace
Las Vegas, Nevada U.S.A.
July 18-21
- 1983 - Site to be
Selected by
Florida Chapter
July 17-20

EIGHTEENTH ANNUAL MEETING

THE AQUATIC PLANT MANAGEMENT SOCIETY, INC.



JACKSONVILLE HILTON

Jacksonville, Florida

July 9-12, 1978

Sunday through Wednesday

BOARD OF DIRECTORS 1977-78

OFFICERS

Donald V. Lee, President

Louisiana Wildlife & Fisheries
636 Maxine Drive
Baton Rouge, Louisiana 70808

Julian J. Raynes, First Vice President

United States Army Corps of Engineers
1567 Knob Hill Drive, N.E.
Atlanta, Georgia 30329

William N. Rushing, Second Vice President

United States Army Corps of Engineers
Post Office Box 631
Vicksburg, Mississippi 39180

Robert W. Geiger, Past President

The 3M Company
Post Office Box 460
Noblesville, Indiana 46060

Brandt G. Watson, Treasurer

Collier Mosquito Control District
Post Office Box 7069
Naples, Florida 33940

David L. Sutton, Editor

University of Florida
3205 S. W. 70th Avenue
Fort Lauderdale, Florida 33300

T. W. Miller, Jr., Secretary

Lee County Hyacinth Control District
Post Office Box 2237
Fort Myers, Florida 33902

DIRECTORS

Leslie E. Bitting, Sr.

Old Plantation Water Control District
8800 N. New River Canal Road
Plantation, Florida 33324

Roy P. Clark

U. S. Environmental Protection Agency
1421 Peachtree Street, N.E.
Atlanta, Georgia 30309

James A. Foret

University of Southwestern Louisiana
Post Office Box 4-4492
Lafayette, Louisiana 70504

Harry McGill

General Development Corporation
Post Office Box 2507
Port Charlotte, Florida 33952

George Suci

Zero Defects Design Limited
Box 74 - Montreal, P. Q. H3P 3B8
Canada

Nelson Virden

Virden Weed Control Service
Route 3, Box 414
Jackson, Mississippi 39213

NEWSLETTER EDITOR

L. V. Guerra

Texas Parks & Wildlife Department
134 Braniff
San Antonio, Texas 78204

THE PROGRAM



EIGHTEENTH ANNUAL MEETING of THE AQUATIC PLANT MANAGEMENT SOCIETY, INC.

July 9-12, 1978

Jacksonville Hilton
Jacksonville, Florida

SUNDAY, JULY 9, 1978

Board of Directors—Duval Room B

12:00 noon Luncheon—1:30 P.M. Meeting of the Board

3:00 - 6:00 P.M. Registration - Lobby

6:30 - 7:30 P.M. Reception - Plantation Room

Registration Required for Admission

MONDAY, JULY 10, 1978

8:00 A.M. - 5:00 P.M. Registration - Lobby
Commercial Exhibits -
Gator Room

GENERAL SESSION

9:00 A.M. - 12:00 Noon

Arcadia Room

Presiding: Donald V. Lee, President
The Aquatic Plant Management Society, Inc.

9:00 A.M. **Call to Order**

9:05 A.M. **Invocation:** Robert J. Gates,
Past President

9:10 A.M. **Presidential Address:**
Donald V. Lee, President

Invitational Addresses

9:30 A.M. "An Engineer Looks at Aquatic
Plant Management" - B. G. Drake
Wilson, Deputy Director, Civil Works,
U.S. Army-Corps of Engineers, Depart-
ment of the Army, Washington, D.C.
9:50 A.M. "EPA Update" - Douglas D. Campt,
Director
Registration Division, Environmental
Protection Agency, Washington, D.C.

INTERNATIONAL SESSION

10:15 A.M. - 12:00 Noon

Arcadia Room

Presiding: Lou V. Guerra

Texas Parks & Wildlife Department

San Antonio, Texas

- 10:15 A.M. "Aquatic Plant Management Program - British Columbia" - Dr. Peter R. Newroth, Water Investigations Branch, British Columbia Ministry of the Environment, Victoria, British Columbia, Canada
- 10:30 A.M. "The Invasion of the Nile River by the Waterhyacinth" - M. Tag El Seed, University of Khartoum, Sudan
- 10:45 A.M. "The Chinampa: Agricultural System that Utilizes Aquatic Plants" - Antonio Lot, Alejandro Novelo & Agustin Quiroz, Instituto De Investigaciones Sobre Recursos Bioticos, Mexico, D.F.
- 11:00 A.M. "*Elodea canadensis* in the Irrigation Areas of South-East Australia" - Kathleen H. Bowmer & G. R. Sainty, CSIRO Division of Irrigation Research and Water Resources Commission, Griffith, Australia.
- 11:15 A.M. "Management of *Elodea* in the Irrigation of South-East Australia" - Kathleen H. Bowmer, G.R. Sainty, G. Smith & K. Shaw, CSIRO Division of Irrigation Research, Griffith, Australia and Water Resources Commission, Finley, Australia
- 11:30 A.M. "A Survey of Organisms Impacting Waterhyacinth in the Panama Canal Zone Prior to the Release of *Sameodes albiguttalis*" - R. F. Theriot, D. R. Sanders, USAE Waterways Experiment Station, Aquatic Plant Research Branch, Vicksburg, Mississippi
- 11:45 - 12 Noon Discussion

GENERAL SESSION

1:30 P.M. - 5:00 P.M.

Arcadia Room

Presiding: George Suci, Zero Defects

Design Limited, Montreal, Canada

- 1:30 P.M. "Changes in Florida's Aquatic Plant Control Program" - William L. Maier, Florida Department of Natural Resources, Tallahassee, Florida

1:45 P.M.

"Obnoxious Aquatic Plants in Georgia" Wayne Thomaston, Department of Natural Resources, Game and Fish Commission, Fort Valley, Georgia

2:00 P.M.

"A Prevention and Contingency Control Plan for Hydrilla" - A. Leon Bates, Terry L. Goldsby and W. Michael Dennis, Tennessee Valley Authority, Division of Environmental Planning, Muscle Shoals, Alabama

2:15 P.M.

"Arthropods Attacking Salviniaceae in Southern Florida: A Preliminary Report" - Dr. Ernest S. Del Fosse, Lee County Hyacinth Control District, Fort Myers, Florida

2:30 P.M.

"Storage and Retrieval of Aquatic Herbicide Information" - Dr. V. V. Vandiver, Jr. and Dr. D. L. Sutton, Institute of Food and Agricultural Sciences, University of Florida, Fort Lauderdale, Florida

2:45 P.M.

"Okauchee Lake: A Case History of Lake Management" Sarah B. Bausch and James Schmidt, Applied Biochemists, Inc., Mequon, Wisconsin

3:00 P.M.

Refreshment Break

3:15 P.M.

"Aeration Efficiency as a Means of Comparing Devices for Lake Restoration" - Joseph E. Carr and Dean F. Martin, Department of Chemistry, University of South Florida, Tampa, Florida

3:30 P.M.

"Using *Tilapia zillii* Fish for Aquatic Weed Control" - Thomas Camp, Aquatic Management Company, Division of Eco-Systems Inc., Glendale, Arizona

3:45 P.M.

"A New Measurement and Evaluation Tool for Submerged Aquatics" - Lou V. Guerra, Texas Parks & Wildlife Department, San Antonio, Texas

4:00 P.M.

"Pesticide Registration and Applicator Certification" - Ray Spirnock, Florida Department of Agriculture, Tallahassee, Florida

4:15 P.M.

"The Role and Impact of Introduced Grass Carp (*Ctenopharyngodon idella* Val.) in the Union of Soviet Socialist Republics and Several Other European Countries" - W. W. Miley, II and Dr. D. L. Sutton, Florida Department of Natural Resources, Tallahassee, Florida and University of Florida, Ft. Lauderdale, Florida.

- 4:30 P.M. "Regional and State Role in the Rebuttable Presumption Against Registration (RPAR) Process" - Sam S. Fluker, EPA, Atlanta, Georgia
 4:45 - 5:00 P.M. Discussion

TUESDAY, JULY 11, 1978

8:00 A.M. - 5:00 P.M. Registration - Lobby
 Commercial Exhibits -
 Gator Room

GENERAL SESSION

8:30 A.M. - 11:00 A.M.

Arcadia Room

Presiding: John Gallagher, Amchem Company,
 Ambler, Pennsylvania

- 8:30 A.M. "Pesticides - A Closer Look" - Dennis Hale, Dow Chemical Company, Atlanta, Georgia
 9:00 A.M. "What If" - Panel Discussion
 John Gallagher - Amchem Company,
 Donald V. Lee - Louisiana Wildlife and Fisheries
 Edward O. Gangstad - Corps of Engineers
 Roy Clark - EPA
 Ray Spirnock - Florida Department of Agriculture
 Pete Pederson - Chevron Chemical Company
 10:30 - 10:45 A.M. Discussion
 10:45 A.M. Refreshment Break

ANNUAL BUSINESS MEETING

11:00 A.M. - 12:00 Noon

Presiding: Donald V. Lee, President
 The Aquatic Plant Management Society, Inc.

12:05 P.M. Recess For Lunch

RESEARCH SESSION

1:30 P.M. - 5:00 P.M.

Apollo Room

Presiding: Ron A. Stanley, EPA, Washington, D.C.

- 1:30 P.M. "Current Research on a Selective Control for Carp (*Cyprinus carpio*)" - Ralph M. Burrell, Phillip A. Gilderhus, Lief L. Marking and Donald P. Schultz, Fish Control Laboratories, Warm Springs, Georgia and La Crosse, Wisconsin
 1:45 P.M. "Effect of Grass Carp on Vegetation and Water Quality in Four Experimental Ponds" - John A. Osborne, Department of Biological Sciences, Florida Technological University, Orlando, Florida
 2:00 P.M. "The Use of Remote Sensing for Determining Effectiveness and Planning of Aquatic Plant Control Operations in the Tennessee Valley" - Terry L. Goldsby, A. Leon Bates and W. Michael Dennis, Tennessee Valley Authority, Division of Environmental Planning Muscle Shoals, Alabama
 2:15 P.M. "Monitoring Eurasian Watermilfoil with Color Infrared Aerial Photography, 1977-78" - Wallace W. Snell, Arthur R. Benton, Carolyn Clark, Remote Sensing Center, Texas A & M University, College Station, Texas
 2:30 P.M. "Cutgrass (*zizaniopsis miliacea*) Clipping for Sustained Harvest or Control" - J. B. Birch, Institute of Ecology, University of Georgia, Athens, Georgia
 2:45 P.M. "Residue Studies of 2, 4-D in Fish" - E. O. Gangstad, Corps of Engineers, Washington, D.C.
 3:00 P.M. "Effects of Product Design on Controlled Release Herbicide" - G. A. Janes, Creative Biology Laboratory, Inc., Barberton, Ohio
 3:15 P.M. "Association of Epiphytic Bacteria with the Annual Decline of Hydrilla" - R. Howard Berg, L. A. Garrard, Dr. W. T. Haller, Botany Department and Agronomy Department, IFAS, University of Florida, Gainesville, Florida
 3:30 P.M. Refreshment Break
 3:45 P.M. "Comparative Algicide Evaluation Using Laboratory and Field Algae" - Dr. George P. Fitzgerald and Dr. Daniel F. Jackson, Florida International University, Miami, Florida
 4:00 P.M. "Hydrilla Tuber Formation in Response to Growth Regulators" - T. K. Van, L. A. Garrard and W. T. Haller, Agronomy

- Department, University of Florida,
Gainesville, Florida
- 4:15 P.M. "Uptake of Inorganic Nutrients by
Hydrilla verticillata (L.F.) FOYLE" -
Fouad M. Basiouny, W. T. Haller and L.
A. Garrard, University of Florida,
Gainesville, Florida
- 4:30 P.M. "The Influence of Microclimate on Net
Carbon Flux in *Eichhornia*" - Gary D.
Stough, Botany Department, Univer-
sity of Nevada, Las Vegas, Nevada
- 4:45 P.M. "The Influence of Culture Solution
Water Potential on Net Production in
Eichhornia" - Gary D. Stough, Botany
Department University of Nevada, Las
Vegas, Nevada
- 4:45 - 5:00 P.M. Discussion

FOURTH ANNUAL STUDENT PAPER CONTEST

1:30 P.M. - 3:30 P.M.

Arcadia Room

Presiding: Dr. Ernest S. Del Fosse,
Lee County Hyacinth Control District
Fort Myers, Florida

- 1:30 P.M. Introduction
- 1:40 P.M. "Inhibition of Hydrilla Growth by Ex-
tracts Prepared from Lake Sediments" -
Patricia M. Dooris and Dean F. Martin,
Departments of Biology and Chemistry,
University of South, Tampa, Florida
- 1:50 P.M. "Ecology of *Utricularia* in the
Okefenokee Swamp" - Robert W.
Bosserman, Institute of Ecology,
University of Georgia, Athens, Georgia
- 2:00 P.M. "Distribution of Floodwater Mosquito
Eggs in a Partially Wooded, Michigan
Lowland" - John R. Cassani and Roger
G. Bland, Department of Biology, Cen-
tral Michigan University, Mt. Pleasant
Michigan
- 2:10 P.M. "Accumulation of Kepone® By
Aquatic Macrophytes" -
K. A. Langeland, S. W. Bingham and
J. Swader, Department of Plant
Pathology and Physiology, Virginia
Polytechnic Institute and State Univer-
sity, Blacksburg, Virginia
- 2:20 P.M. "The Effects of Waterhyacinths on the
Physicochemical Environment of
Grassy Pond, Georgia" - Stephen P.
Schreiner, Department of Zoology,
Clemson University, Clemson, S.C.

- 2:30 P.M. "Aquatic Insect - Aquatic Plant
Relationships in Meginnis Arm, Lake
Jackson" - Harry M. Savage, Thomas J.
Fink and Sarah Fuller, Laboratory of
Aquatic Entomology, Florida A & M
University, Tallahassee, Florida
- 2:40 P.M. "Seasonal Differences in the Photosyn-
thesis and Biomass of Hydrilla" - Scott
Holaday, George Bowes and William
Haller, Departments of Botany and
Agronomy, University of Florida,
Gainesville, Florida
- 2:50 P.M. "Aeration as a Nutrient Alteration
Technique to Improve Water Quality
and Control Aquatic Weed Growth" -
Thomas N. Cooley, Patricia M. Dooris
and Dean F. Martin, Departments of
Biology and Chemistry, University of
South Florida, Tampa, Florida
- 3:00 - 3:30 P.M. Discussion

AQUATIC HARVESTING SESSION

3:45 P.M. - 5:00 P.M.

Arcadia Room

Presiding: William N. Rushing, U. S. Army
Corps of Engineers, Vicksburg, Mississippi

- 3:45 P.M. "Development and Performance of
Waterhyacinth Crimping Harvesters" -
Larry O. Bagnall, Agricultural
Engineering Department, University of
Florida, Gainesville, Florida
- 4:00 P.M. "Effects of Mechanical Cutting on Sub-
mersed Vegetation in a Louisiana Lake"
- Robert E. Johnson, Louisiana Depart-
ment of Wildlife and Fisheries, Tioga,
Louisiana
- 4:15 P.M. "Mechanical Hydrilla Control - Orange
Lake, Florida" - James T. McGehee,
Corps of Engineers, Jacksonville, Fla.
- 4:30 P.M. "What's New in Harvesting?" -
C. Brate Bryant, Aquamarine Cor-
poration, Waukesha, Wisconsin
- 4:45 - 5:00 P.M. Discussion



Tuesday Evening

July 11, 1978

6:30 P.M.

Reception

Plantation Room

7:45 P.M.

Annual Banquet

Ballroom

Speaker

Jo Ann Dunaway Zeiger

The Psychic Mystique
(Demonstration)



WEDNESDAY, JULY 12, 1978

RESEARCH SESSION

8:30 A.M. - 10:45 P.M.

Apollo Room

Presiding: Edward O. Gangstad,
Corps of Engineers
Springfield, Virginia

- 8:30 A.M. "Seed Anatomy and Germination of *Eleocharis coloradoensis*" - Richard R. Yeo, U. S. Department of Agriculture, Davis, California
- 8:45 A.M. "Germination and Survival of Seeds and Tubers of the Aquatic Weed Competitor, *Eleocharis coloradoensis*" - Richard R. Yeo, U. S. Department of Agriculture, Davis, California
- 9:00 A.M. "Fluridone, A New Herbicide for Aquatic Plant Management" - Max C. McCowen, C. L. Young, S. D. West, S. J. Parks and Dr. W. R. Arnold, Lilly Research Laboratories, Division of Eli Lilly and Company, Greenfield Indiana
- 9:15 A.M. "Fluridone - A New Aquatic Herbicide" - Dr. Wendel R. Arnold, Lilly Research Laboratories, Greenfield, Indiana
- 9:30 A.M. "Evaluation of Two Bottom-Applied Fluoridone Formulations for the Control of Hydrilla in Gatun Lake, Panama Canal Zone" - D. R. Sanders, F. F. Theriot, Dr. W. R. Arnold, LTC P. E. Custer, Waterways Experiment Station, Eli Lilly Company and Panama Canal Company, Vicksburg, Mississippi, Boynton Beach, Florida, Balboa Heights, Panama Canal Zone
- 9:45 A.M. "Environmental and Chemical Control of Growth and Development of *Proserpinaca*" - Michael E. Kane and Luke S. Albert, Tampa Bay Regional Planning Council and Department of Botany, University of Rhode Island, St. Petersburg, Florida and Kingston, Rhode Island
- 10:00 A.M. "Composting Characteristics of Waterhyacinth and Hydrilla" - Larry O. Bagnall, Agricultural Engineering Department, University of Florida, Gainesville, Florida

- 10:15 A.M. "Bulk Mechanical Properties of Waterhyacinth" - Larry O. Bagnall, Agricultural Engineering Department, University of Florida, Gainesville, Florida
- 10:30 A.M. "Experimental Use of Diquat in Gunter'sville Reservoir" - Terry L. Goldsby, A. Leon Bates and W. Michael Dennis, Tennessee Valley Authority, Division of Environmental Planning, Muscle Shoals, Alabama
- 10:30 - 10:45 A.M. Discussion

FIELD OPERATIONS

8:30 A.M. - 10:45 A.M.

Arcadia Room

Presiding: Robert P. Blakeley,
Old Plantation Water Control District
Plantation, Florida

- 8:30 A.M. "Operational Collection and Release of Waterhyacinth Weevils" - Charles F. Zeiger, Aquatic Plant Control Section, Operations Division, U. S. Army Corps of Engineers, Jacksonville, Florida
- 8:45 A.M. "Establishment of Hyacinth Weevil Populations in Louisiana" - James H. Manning, Louisiana Department of Wildlife and Fisheries, Baton Rouge, Louisiana
- 9:00 A.M. "A Comparison of Herbicides and the Grass Carp for Controlling Hydrilla Regrowth" - Dr. David L. Sutton, Dr. V. V. Vandiver, Jr. and L. E. Bitting, University of Florida, Agricultural Research Center and the Old Plantation Water Control District, Fort Lauderdale, Florida and Plantation, Florida
- 9:15 A.M. "A Versatile Aquatic Spray System" - Robert D. Blackburn and Ken E. Wanner, Joyce Environmental Consultants, Inc. and Minnesota Wanner Company, Casselberry, Florida and Minneapolis, Minnesota
- 9:30 A.M. "Use Techniques of Polymers" - George E. Wortley, Jr., Nalco Chemical Company, Longwood, Florida
- 9:45 A.M. "The Use of Multiple Inversion and Clean-Flo Lake Cleanser in Controlling Aquatic Plants" - Clean-Flo Laboratories, Inc. Hopkins, Minnesota

- 10:00 A.M. "Organic Muck Removal Through Multiple Inversion" - Robert L. Laing, Clean-Flo Laboratories, Inc., Hopkins, Minnesota
- 10:15 A.M. "Effects of Water Fluctuation on Lake Miccosukee, 1977" - David P. Tarver, Florida Department of Natural Resources Bureau of Aquatic Plant Research and Control, Tallahassee, Florida
- 10:30 A.M. "The Use of Polymers in the Application of Aquatic Herbicides" - Robert J. Gates, Southwest Florida Water Management District, Brooksville, Florida

10:30 - 10:45 A.M. Discussion

FINAL BUSINESS MEETING

11:00 A.M. - 11:30 A.M.

Arcadia Room

Presiding: Donald V. Lee, President
The Aquatic Plant Management Society, Inc.

11:30 A.M. Adjourn Eighteenth Annual Meeting

* * * * *

Board of Directors — Duval Room B

- 12:00 Noon Luncheon
- 1:30 P.M. Meeting of the Board

American Society for Testing and Materials

1:30 P.M. - 5:30 P.M.

Duval Room A

Presiding: Ron A. Stanley, EPA, Washington, D.C.

Subcommittee on Aquatic Plant Control Agents of the
Committee on Pesticides (E-35.14)

Task Groups Will Work on 3 Proposed Methods:

1. Field Trials in Standing Water
2. Screening Method for Phytotoxicity
3. Scuba Diving Observations of Aquatic Plant Plants

Other Methods Will Be Covered If Time And Interest Are Available

BYLAWS

THE AQUATIC PLANT MANAGEMENT SOCIETY, INCORPORATED (A Corporation not for profit)

ARTICLE I

The name of this Society shall be THE AQUATIC PLANT MANAGEMENT SOCIETY, INCORPORATED.

ARTICLE II

The principal place of business shall be located at such place as the Board of Directors may decide.

ARTICLE III

OFFICERS

Section A. The Officers of the Society shall be President, ~~First Vice President~~ Elect, ~~Second Vice President~~, Secretary, Treasurer and Editor.

The Board of Directors of this Society shall consist of not more than thirteen members and shall include the active officers of the Society.

Section B. President. The President shall preside at all business meetings of the Society, annual and special, and at all meetings of the Board of Directors. He shall maintain and exercise general supervision over the affairs of the Society, subject to the authority of the Board of Directors, and shall discharge such other duties as usually pertain to the office of the President. Upon completion of his term in office he shall become a Director at Large for one year.

Section C. President Elect. ~~The First Vice President~~ Elect shall exercise the powers and perform the duties of the President in the absence or disability of the President, or in case of a vacancy in the office of the President. He shall also perform such duties as may be assigned to him by the President or the Board of Directors.

Section D. Vice President. The ~~Second Vice President~~ shall exercise the powers and perform the duties of the ~~First Vice President~~ Elect in the absence or disability of the ~~First Vice President~~ Elect, or in case of a vacancy in the office of the President. He shall also perform such duties as may be assigned to him by the President or the Board of Directors.

Section E. Secretary. The Secretary shall keep full

and correct minutes of all meetings of this Society and of the Board of Directors. He shall be responsible for

the maintenance of membership records and shall issue notices of meetings and shall conduct such part of the correspondence of the Society as is usually conducted by the Secretary of similar organizations.

Section F. Treasurer. The Treasurer shall collect and receipt all dues, assessments and other income. He shall deposit promptly all funds of the Society in such depository as shall be approved and designated by the Board of Directors. Checks in payment of obligations of this Society shall be signed by the Treasurer. He shall, under the direction of the Board of Directors, pay all bills of this Society and make such other disbursements as are necessary and incidental to the operation of the Society. He shall at the annual meeting of the Society, and if directed by the Board of Directors at special meetings, make full and true report of the financial condition of this Society. He shall perform such other duties as are usually incident to the office of Treasurer and as may be assigned to him by the Board of Directors. The Treasurer shall before assuming office be required to make and execute a good and sufficient surety bond in an amount of not less than Five thousand (\$5,000.00) Dollars conditioned on the faithful performance of the duties of his office, the expense of said bond to be borne by the Society. The Treasurer shall provide for an annual audit of all books, vouchers and necessary documents of the Society by a Certified Public Accountant prior to each annual meeting of the Society, the cost of said audit to be borne by the Society. The financial statement as prepared during the audit shall be included as a part of the annual proceedings of the Society.

Section G. Editor. The duties of the Editor shall be to publish and distribute the Journal and other publications of this Society.

Section H. The Directors shall assist in administering the affairs of this Society.

ARTICLE IV

TERM OF OFFICE

All officers except the President and President Elect shall be elected for one year or until the successors shall be duly elected and qualified. The President Elect shall be elected for a term of two years, to include one year as President Elect and a succeeding year as

President. No officers except the Secretary, Treasurer and/or the Editor shall succeed himself. Officers elected at any annual meeting shall begin their duties

on the close of the meeting at which they are elected. Nominees for President shall be selected from the Board of Directors. Two (2) new members of the Board of Directors shall be elected each year for a term of three (3) years or until their successors shall be duly elected and qualified. The nomination to this first year's Board only shall consist of two (2) members for three (3) years, two (2) members for two (2) years and two (2) members for one (1) year.

ARTICLE V BOARD OF DIRECTORS

Section A. The President of the Society shall be Chairman of the Board of Directors.

Section B. The Board of Directors shall meet upon the call of the President or upon the request of five or more members of the Board of Directors directed in writing to the Secretary. At least fifteen (15) five days prior notice in writing shall be given by the Secretary to all members of the Board of Directors as to any meetings of the Board of Directors. The time and place of such meetings shall be designated by the President. A majority of the members of the Board of Directors shall constitute a quorum for the transaction of business. An action of the Board of Directors shall be upon the vote of the majority of its members present. The Board of Directors shall meet no less than three times annually. One meeting shall be held immediately before the annual meeting of the Society; one meeting shall be held immediately after the annual meeting of the Society; and one additional meeting shall be held during the interim between the annual meeting.

Section C. The Board of Directors shall manage the affairs of the Society and shall have the power: (1) to fill any vacancies among the officers of the Society including the membership of the Board of Directors; except as provided in Article X, Section C (2) to prescribe the duties of the officers of the Society not otherwise prescribed in the ByLaws of this Society; (3) to provide rules and regulations for the conduct of the affairs of this Society as are not inconsistent with the provisions of the ByLaws; (4) to accept or reject applications for membership in this Society; (5) to increase the amount of the Treasurer's bond if the Board deems Five thousand (\$5,000.00) Dollars insufficient;

the Board of Directors shall have full power of the Society in all matters demanding action between meetings and shall submit at the next succeeding meeting of the Society a report of all actions taken by them under authority of this section.

ARTICLE VI QUORUM

A quorum of any meeting of the Society shall consist of not less than forty fifteen voting members, or 10 50% of the membership, whichever is smaller, at least two of whom shall be officers of the Society.

ARTICLE VII MOTIONS AND RESOLUTIONS

All motions and resolutions presented at any annual meeting of the Society involving matters of policy, administration or business shall be referred to the Board of Directors who shall consider the same and report its recommendation back to the Society; provided, however, that should any matter require immediate action by the Society, such matters may be considered immediately by consent of three-fourths of the active members present and voting.

ARTICLE VIII MEETINGS

Section A. There shall be an annual meeting of the Society for the election of officers, the presentation of papers and discussion on noxious aquatic weed control, uses of aquatic vegetation and related subjects and such other business as may be properly brought before it. Such annual meeting shall be held at such time and place as the Board of Directors may decide. At least sixty days prior notice shall be given in writing to all members as to time and place of the annual meeting.

Section B. Special meetings of the Society may be held whenever the Board of Directors deem such meetings necessary or whenever ten or more active members shall make a written request therefor, presented to the Secretary. Such request shall be placed with the Board of Directors which shall designate a time and place for such special meeting. The Secretary shall give written notice of all special meetings of the Society to all members at least four weeks seven days prior to the date of such special meetings.

ARTICLE IX FISCAL YEAR

The fiscal year of the Society shall be the calendar September 1 through August 31 of each year.

ARTICLE X ELECTION OF OFFICERS

Section A. Officers of the Society shall be elected by majority vote of the voting members present at the annual meeting of the Society and shall serve until the close of the next annual meeting of the Society and shall serve until the close of the next annual meeting following their election or until the election of their successors, except the President Elect shall automatically become President.

Section B. No member shall be eligible for office who has not been a voting member of the Society for three years.

Section C. Vacancies in the office of President between terms shall automatically be filled through succession in the following order: ~~First Vice President Elect, Second Vice President~~, Secretary, Treasurer, Editor. All vacancies, other than that in the office of President, shall be filled through appointment by the Board of Directors.

Section D. The election of officers of the Society shall be held as a part of the business meeting which shall be held prior to noon of the second full day of the annual meeting.

ARTICLE XI DUES

Section A. Membership dues shall be payable in advance, and shall in no case be paid later than the first full day of the annual meeting.

Section B. Annual dues shall be as follows: Active members, \$8.00; Student members, \$5.00; Associate members, \$5.00; Commercial members (a) individual \$25.00, (b) firms \$95.00; Honorary members, none.

ARTICLE XII COMMITTEES

Standing committees shall be appointed by the President Elect to serve during his term as President as follows:

1. Membership Committee. This committee shall consist of not less than five (5) active members of the Society one of whom shall be the Secretary, one of

whom shall be the Chairman of the Student Committee and one of whom shall be the Chairman of the International Committee. This committee shall investigate and promote memberships in the Society.

2. Publicity Committee. This committee shall consist of (3) members. The duties of this committee shall be to generate and distribute newsworthy items of the Society and such other duties as may be assigned by the Board of Directors.

3. Legislative Committee. This committee shall consist of not less than five (5) voting members whose duties shall be to inform itself as to any legislation pending of interest to the Society and to make recommendations to the Board of Directors on the same.

4. Program Committee. The program committee shall consist of the members of the Board of Directors, chaired by the First Vice President Elect, and its duty shall be to provide programs for each annual meeting.

5. Nominating Committee. The nominating committee shall consist of not less than five (5) members, preferably not less than one Past President, who shall recommend to the Society candidates for election to the several offices.

6. ByLaws and Resolutions Committee. This committee shall consist of not less than five (5) voting members of the Society. All resolutions and ByLaw changes to be considered shall be presented to this committee, who ~~in turn~~ shall present worthy suggestions ~~them~~ to the Society in a form appropriate for adoption, subject to ByLaws Article VII. All of voting members petitions with ten (10) or more signatures ^ shall be brought to the attention of the Society.

7. Student Affairs Committee. This committee should consist of three (3) members of the Society. The duties of this committee shall be to investigate and promote membership of students into the Society and make recommendations to the Board of Directors as to means of enhancing and encouraging student participation in the Society.

8. Past Presidents Advisory Committee. This committee shall consist of all past Presidents of the Society and shall be chaired by the immediate outgoing President of the Society. The duties of this committee shall be to examine the aims and goals of the Society and make recommendations to the Board of Directors related to achieving these aims and goals.

9. Special Committees. Such other committees as from time to time may be deemed necessary shall be appointed by the President.

ARTICLE XIII
RULES OF ORDER

Business sessions of the Society shall be conducted in accordance with Roberts' Rules of Order

ARTICLE XIV
PUBLICATIONS

All publications of the Society shall be issued under the direction of the Editor and shall become the property of the Society.

ARTICLE XV
HONORARY MEMBERS

Section A. Criteria for honorary membership. Before being considered for honorary membership a person must meet the following criteria:

1. He or she must have contributed significantly to the field of aquatic vegetation management during his or her career. (be retired and no longer employed in the field of aquatic vegetation management) ~~be retired and no longer employed in the field of hyacinth noxious aquatic weed control.~~

2. He or she must have been a voting member of the Society for no less than ten (10) years.

3. He or she must have actively promoted the Society and its affairs during their membership.

Section B. ~~Exemptions for Rights~~ of honorary members: Honorary members ~~cannot shall hold office in the Society and cannot vote, however they may hold committee appointments and participate in other Society functions~~ in perpetuity all rights of active membership.

Section C. Selection of Honorary Members. Nominees for honorary membership shall be submitted to the ByLaws and Resolutions Committee in the form of a petition signed by no less than ten (10) active members or may originate with the ByLaws and Resolutions Committee. Nominees will be evaluated by the ByLaws and Resolutions Committee to ascertain that they meet the criteria for eligibility as an honorary member. Eligible nominees will be presented by the ByLaw and Resolutions Committee to the Board of Directors and upon acceptance of nominees by the Board, a biographical sketch of the nominees will be printed in the Newsletter. The Board of Directors shall, at the next annual meeting, present the nominee to the Society. Honorary members shall be elected by a majority vote of the voting members present at the annual meeting of this Society.

ARTICLE XVI
AMENDMENTS

These ByLaws may be amended by three-fourths vote of the active members present at any annual meeting, provided the notice of the proposed amendment has been given in writing to the Secretary and transmitted by him to active members thirty days before the annual meeting and that notice of the time of said amendment is to be voted on has been announced at least twelve hours in advance.

The above and foregoing ByLaws of THE AQUATIC PLANT MANAGEMENT SOCIETY, INCORPORATED, were adopted on _____.

CERTIFICATE OF INCORPORATION
THE AQUATIC PLANT MANAGEMENT
SOCIETY, INCORPORATED
(A Corporation not for profit)

The undersigned for the purpose of organizing a corporation pursuant to the laws of the State of Florida, hereby adopt this Certificate of Incorporation.

ARTICLE I

The name of this corporation shall be The Aquatic Plant Management Society, Incorporated.

ARTICLE II

The general nature of the objects of this Society shall be to assist in promoting management-control of ~~water hyacinths and other noxious~~ aquatic vegetation weeds, to provide for the scientific advancement of members of the Society, to encourage scientific research, to promote university scholarships and to extend and develop public interest in the movement.

ARTICLE III

Section A. The membership of the Society shall consist of five classes: Active members, Student members, Associate members, Commercial members and Honorary members.

Section B. Active members shall consist of four Managers categories: ~~Directors~~, [^] Scientific Research Workers, Commissioners, Professional Advisory and Consulting Personnel.

Managers

1. A ~~Director~~ [^] member shall be any individual actively engaged in direct supervision of a local government aquatic vegetation management ~~hyacinth-control~~ program.
2. A research member shall be any individual or non-profit organization interested in or concerned with scientific research in the management-control of ~~hyacinths or other noxious~~ aquatic vegetation weeds.
3. A Commissioner member shall be any individual duly elected or appointed to serve as a member of the governing board of a local government aquatic

vegetation management ~~hyacinth-control~~ program.

4. Professional advisory and consulting personnel members shall be those individuals employed by various Federal, State or Local agencies employed primarily to lend technical aid and assistance to local ~~hyacinth-control~~ aquatic vegetation management programs, or those Federal, and state, local and private employees directly administering aquatic vegetation management ~~hyacinth-control~~ activities.

Section C. Student members shall be those individuals actively enrolled in a full time college level study of aquatic weeds, or related types of college level studies approved by the Board of Directors.

Section D. Associate members shall be those individuals or organizations desiring to maintain contact with the work of the Society by receiving its bulletins and other publications.

Section E. Commercial members shall consist of two categories: Individual and profit making organizations.

This class of membership is intended for individuals or profit making organizations wishing to aid in scientific research as well as to give financial support to the Society irrespective of whether or not they are in a position to participate otherwise in the affairs of the Society.

Section F. Honorary memberships may be conferred on any person who has rendered such service to the cause of aquatic vegetation management ~~hyacinth-control~~ as to entitle him to special recognition.

Section G. Voting members shall be all members in good standing except those individuals classified as Associate ~~and Honorary~~ members as defined by Sections C, D ~~and E~~ ~~and F~~ of this article.

Section H. All applications for membership shall be subject to the approval of the Board of Directors.

ARTICLE IV

This corporation shall have perpetual existence. ; but if disbanded, its assets shall be passed on to a tax-free organization to be named by the last Board of Directors.

ARTICLE V

Name and residences of the subscribers are as follows:

Name	Address
T. W. Miller, Jr.	Fort Myers, Florida
A. S. Chipley	Bokeelia, Florida
Herbert J. Friedman	Tampa, Florida
William Dryden	Fort Myers, Florida
Thomas O. Fultz	Bartow, Florida
Edwin L. Seabrook	West Palm Beach, Florida
Donald E. Seaman	Fort Lauderdale, Florida

ARTICLE VI

The affairs of this corporation are to be managed by a Board of Directors and Officers of the Society.

The officers of the Society shall be President, ~~First Vice President~~ Elect, ~~Second Vice President~~, Secretary, Treasurer and Editor.

The Board of Directors of this Society shall consist of not more than thirteen members and shall include the active officers of the Society.

The officers of this Society shall be elected by majority vote of the voting members present at the annual meeting of this Society and shall serve until the close of the next annual meeting following their election or until their successors are duly elected and qualified. No member shall be eligible for office who has not been a voting member of the Society for three years.

ARTICLE VII

Names of the officers and directors who are to manage all the affairs of this corporation until the first election under this charter are as follows:

Name	Office	Address
T. W. Miller, Jr.	President	Fort Myers, Florida
A. S. Chipley	Vice President	Bokeelia, Florida
Herbert J. Friedman	Secretary-Treasurer	Tampa, Florida
William Dryden	Editor	Fort Myers, Florida
Thomas O. Fultz	Director	Bartow, Florida
Edwin L. Seabrook	Director	West Palm Beach, Fla.
Donald E. Seaman	Director	Fort Lauderdale, Fla.

ARTICLE VIII

The Articles of Incorporation and/or ByLaws of this Society shall be made and adopted, altered or rescinded by three-fourths vote of the active members present at

any annual meeting, provided the notice of the proposed amendment has been given in writing to the Secretary and transmitted by him to active members thirty days before the annual meeting and that notice of the time said amendment is to be voted on has been announced at least twelve hours in advance.

ARTICLE IX

The highest amount of indebtedness or liability to which this corporation at any time may subject itself is One hundred thousand (\$100,000.00) Dollars.

ARTICLE X

The amount in value of real estate which the corporation may hold is Two hundred fifty thousand (\$250,000.00) Dollars.

WITNESS the hands and seals of the incorporators on Useppa Island, Lee County, State of Florida, this 19th day of July, 1961.

/s/ T. W. Miller, Jr., Fort Myers, Florida (LS)
/s/ A. S. Chipley, Bokeelia, Florida (LS)
/s/ Herbert J. Friedman, Tampa, Florida (LS)
/s/ William Dryden, Fort Myers, Florida (LS)
/s/ Thomas O. Fultz, Bartow, Florida (LS)
/s/ Edwin L. Seabrook, West Palm Beach, Florida (LS)
/s/ D. E. Seaman, Fort Lauderdale, Florida (LS)

State of Florida)

) ss

County of Lee)

Personally appeared before me the undersigned authority, a Notary Public in and for the County of Lee, T. W. Miller, Jr., A. S. Chipley, Herbert J. Friedman, William Dryden, Thomas O. Fultz, Edwin L. Seabrook, and Donald E. Seaman who upon first being duly sworn upon oath say that they are the incorporators and subscribers to the foregoing articles of incorporation and that it is the intent in good faith by the subscribers to carry out the provisions and objects set forth herein, that they acknowledge the execution of said document as such subscribers.

/s/ T. W. Miller, Jr., Fort Myers, Florida
/s/ A. S. Chipley, Bokeelia, Florida
/s/ Herbert J. Friedman, Tampa, Florida
/s/ William Dryden, Fort Myers, Florida
/s/ Edwin L. Seabrook, West Palm Beach, Florida
/s/ Thomas O. Fultz, Bartow, Florida
/s/ D. E. Seaman, Fort Lauderdale, Florida

Sworn to and subscribed before me at Useppa
Island, Florida, this 19th day of July, 1961.

/s/ LAURA E. SKINNER,
Notary Public

NOTARY SEAL

My commission Expires July 19, 1964

HONORARY MEMBERS

DR. F. L. TIMMONS
Tucson, Arizona
MR. WILLIAM E. WUNDERLICH
New Orleans, Louisiana

COMMERCIAL SUSTAINING

APPLIED BIOCHEMISTS, INC.
Mequon, Wisconsin
AQUAMARINE CORPORATION
Waukesha, Wisconsin
DR. B. WAYNE ARTHUR
Greensboro, No. Carolina
ASGROW FLORIDA COMPANY
Plant City, Florida
MR. PAUL C. BREWER, JR.
Hialeah, Florida
HAROLD F. BROWN, INC.
Ft. Pierce, Florida
MR. PAUL L. DEETS
Mount Dora, Florida
ELANCO PRODUCTS COMPANY
Indianapolis, Indiana
RICHARD W. FIELDS
Chicago, Illinois
MR. JOHN E. GALLAGHER
Ambler, Pennsylvania
JOYCE ENVIR. CONSULTANTS, INC.
Casselberry, Florida.
KERR-McGEE CHEMICAL CORP.
Jacksonville, Florida
LANTANA BOATYARD, INC.
Lantana, Florida
MINNESOTA WANNER COMPANY
Minneapolis Minnesota
MONSANTO AGRICULT. PROD. CO.
Naples, Florida
NALCO CHEMICAL COMPANY
Oak Brook, Illinois
PENNWALT CORPORATION
Prattville, Alabama
RHODIA, INC. AGRICULTURAL DIV.
Atlanta, Georgia
SANDOZ, INC.
San Diego, California
SOUTHERN MILL CREEK PRODUCTS
Tampa, Florida
MR. GEORGE SUCIU
Montreal, Quebec, Canada
THE 3M COMPANY
Pompano Beach, Florida
VELSICOL CHEMICAL CORPORATION
Chicago, Illinois
ZOECON CORP., Equip. & SUP.
Orlando, Florida

NOTES

NOTES

LADIES PROGRAM

SUNDAY, JULY 9, 1978

6:30 P.M. - 7:30 P.M. - Reception
Plantation Room

MONDAY, JULY 10, 1978

9:00 A.M. 'til 4:00 P.M.

Explore the Oldest City in the United States -

Buses will take you to St. Augustine, where you will participate in a fully escorted walking tour of resorted areas - sponsored by Historical Properties. A Luncheon at the Leitner Museum is included.

TUESDAY, JULY 11, 1978

9:00 A.M. - 4:00 P.M.

Ladies Hospitality - Georgia Room

6:30 P.M. Reception - Plantation Room

7:45 P.M. Annual Banquet - Ballroom