



AQUATIC PLANT NEWS

A newsletter of the Aquatic Plant Management Society, Inc./No. 30 Feb. 1989
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Scottsdale and Phoenix Welcome APMS

The 29th annual meeting of the Aquatic Plant Management Society will be held July 16-19, 1989 at the Hyatt Regency Scottsdale, Scottsdale, Arizona. Scottsdale is a short drive from downtown Phoenix. Phoenix is the 10th largest city in the nation with an estimated population of 1.9 million in the metropolitan area.

Phoenix is located in the heart of the scenic Sonoran Desert known for the mysterious and majestic Saguaro Cactus and other desert flora. The Saguaro Cactus grows to a height of 40 feet and lives for hundreds of years. The desert flora will be a real contrast to the aquatic plants the members of our society are accustomed to working with. The Superstition Mountains are located to the east of Phoenix, and encircling the metropolitan area is a group of mountains known as the Phoenix Mountain Preserve.

The American Indians, for almost 25,000 years, were the exclusive inhabitants of Arizona. The earliest inhabitants to Phoenix were the Hohokam Indians, who thrived in the valley until about 1400 A.D. after which they vanished.



Because of economic conditions that match its superb climatic conditions, the Valley of the Sun is headquarters to several major American corporations including Ramada Inns Inc., the Greyhound Corp. and U-Haul, and is regional headquarters to hundreds more (photo by Bob Rink, compliments of Valley of the Sun Convention and Visitors Bureau).

Phoenix originated in 1860 as a small settlement on the banks of the Salt River. One of the early settlers gave Phoenix its name, suggesting that a great city would someday arise from the ancient Hohokam ruins like the legendary Phoenix Bird. In mythology, the Phoenix was immortal,

rising from its ashes every 500 years. Phoenix has lived true to this prediction, but in the process has not forgotten its heritage. As you travel through the city it is quite evident that Southwestern architecture and Indian cultural influences are interwoven with the modern-day city. **continued on 2**

Program Plans for 1989 Annual Meeting

Members of The Aquatic Plant Management Society and its Chapters and all others interested in aquatic plant biology, ecology, and management are encouraged to attend and participate in the 1989 Annual Meeting. This Newsletter highlights the 1989 Annual Meeting, and is being sent to all chapter members so they will be informed of the special events planned for the meeting. Those who cannot present a paper are invited to attend and become active in the Society.

Our welcome to the Phoenix area will be presented by Mr. Lowell Reese who is president of the Arizona Chamber of Commerce.

The Keynote Address this year will be presented by Dr. David S. Mitchell who is director of The Murray-Darling Freshwater Research Centre in Albury, Australia. Dr. Mitchell has an extensive background and knowledge of aquatic plant management. We are fortunate to have him address the Society. Dr. Mitchell has published a number of scientific and popular articles on aquatic plant management. Of special interest, Dr. Mitchell was the first to note the explosive growth of a small, floating plant (which he eventually identified as a new species, *Salvinia molesta* D.S. Mitchell) destined to become a major weed problem in many areas of the world.

In addition to regular contributed papers dealing with all aspects of aquatic plant management to be presented throughout the meeting, Bill Zattau is organizing an operational session for Monday afternoon.

The Tuesday afternoon session, Chaired by Randy Stocker, will feature several speakers dealing with management of aquatic weeds in flowing water - one of the most difficult areas in which to manage aquatic plants. Also, this session will feature an overview of the Salt River Project.

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The local arrangement committee composed of Winn Winkshaw, Fred Corbus, and Randy Stocker is organizing a tour of several canals in the Salt River Project which will follow the Tuesday afternoon session. Examples of herbicidal and biological management programs will be shown. Then for Tuesday evening, Winn is arranging for dinner and other social activities to be held in conjunction with our annual awards night. The local arrangement committee has prepared a suggested list of unique and exciting activities which you may want to consider before or after the meeting. Please note their list in another section of the Newsletter.

Ken Langeland, Chair of the Wednesday morning session, is arranging for several talks on Extension Programs in aquatic plant management. We hope this session will be of benefit to those involved in trying to determine some of the best ways to inform the public, aquatic plant managers, and others of new technology and methods to manage problem aquatic plants.

Information has been received from several individuals from Mexico, Egypt, and other countries indicating their desire to present talks at the meeting. Hopefully these individuals can obtain the necessary funding to attend the meeting, and we look forward to expanding the international aspect of APMS.

Terry McNabb did an excellent job last year in arranging the display area for our Sustaining Members and other Corporations seeking to advertise their products at the meeting. He has graciously agreed to continue in this capacity, and we are looking forward to a first-class display of products available for the management of aquatic plants.

A number of excellent photographs were submitted to the first APMS photo contest held last year and we plan to continue with a contest again this year. In response to several requests, the rules of the photo contest have been expanded which we hope will allow for greater participation in this contest. Those of you who like to take pictures are encouraged to submit your prize-winning photos. Currently we are thinking of using the winning photos in the APMS display. Anyone having other suggestions for use of the winning photos need to direct their comments to Dave Sutton.

We invite your active participation in the 1989 meeting of the Aquatic Plant Management Society July 16 to 19. The Program Chairman, Dave Sutton, is working hard to provide for an interesting and informative program. Comments and suggestions on ways to improve the program and meeting need to be directed to Dave Sutton.

See you at the meeting!!!!

Phoenix is a major tourist area in the Southwest with over 7 million visitors each year. The city and surrounding area offer a large variety of unique and interesting recreational activities such as tennis, golf, horseback riding, hiking in forested and desert environments, hot air balloons, and saloons. A visit to The Desert Botanical Garden will provide a definite contrast to our members who are used to working with aquatic plants. The Phoenix Zoo holds over 1200 different animals.

The Grand Canyon, one of the great natural wonders of the world, is a 5-hour drive from Phoenix. Montezuma Castle and Well, an impressive ancient Indian cliff dwelling more than six centuries old, is a 3-hour drive from the city. A number of other interesting areas such as the Apache Trail, Mogollon Rim, and the Sedona/Oak Creek Canyon are a short drive from Phoenix.

If you are planning to spend a few



The Sonoran Desert surrounding Phoenix exemplifies the city's wide open style and southwestern flair (photo compliments of the Sun Convention and Visitors Bureau.)

days before or after the meeting in the Phoenix area, you may want to write for a free copy of "Phoenix, Scottsdale & Valley of the Sun Convention & Visitors Bureau, 505 North Second Street, Suite 300, Phoenix, Arizona 85004.

Special Discount Air Fare Offered by United Airlines for Travel to Phoenix

When you are making your travel plans to attend the 1989 APMS meeting, you will want to consider using United Airlines to travel to and from the meeting. United Airlines will offer you either (1) a 5% discount off any United or United Express published fare in effect when tickets are purchased subject to all applicable restrictions, or (2) a 40% discount off applicable United or United Express unrestricted coach fares in effect when tickets are purchased from their company. Tickets must be purchased by

calling 1-800-521-4041 (calls answered from 8 AM to 11 PM Eastern time) and identifying yourself with meeting ID Number 9039L. In order to qualify for the discount, all travel must be commenced and completed during the dates of July 14 to 21, 1989. You can make your own reservations or have a travel agent make them for you. If you use a travel agent, then you must provide them with the toll-free number and the meeting ID number. If you have questions, call Dave Sutton at (305) 475-8990.

Pre- and Post-APMS Meeting Recreational Suggestions

Winn Winkshaw, Fred Corbus, and Randy Stocker, your local arrangement committee, are suggesting you may want to take advantage of some of the many unique recreational activities offered by Phoenix and the surrounding area. However, they have noted these are suggested pre- and post-meeting activities. We hope the meeting will be more exciting than these but it will be difficult to compete with some of them. However, as you plan your trip you may want to include sufficient time for:

- Hot air balloon rides,
- Western and gourmet cookouts in the desert,
- Mexican fiestas,
- Desert jeep rides in the beautiful Sonoran Desert,
- Panning for gold in the Superstition Mountains,
- A tour of the Desert Botanical Garden,
- Desert wilderness horseback rides,
- A tour of the Wrigley Mansion,
- A tour of Frank Lloyd Wright's Architectural School,
- Wild west show and rodeo - Rawhide,
- River raft trips,
- Sunset riverboat excursions on Canyon and Saguaro Lakes,
- A visit to an Indian Reservation,
- Tournament play on 80 challenging golf courses and a thousand tennis courts,
- A tour of Sedona and Red Rock Country (day trip), and
- A shopping trip to Mexico (day trip).

Submit Papers for 1989 Annual Meeting

You are invited to submit a title and an abstract for a paper to be presented at the 1989 annual meeting of The Aquatic Plant Management Society, Inc., to be held July 16 to 19, 1989 at the Hyatt Regency Scottsdale, Scottsdale, Arizona.

Please type the title, authors, organization, and address exactly the way they are to appear on the program. The paper submission form has been changed slightly from last year to aid the Program Chairman in program preparation, so follow it closely. Also, complete the abstract, as it will be used to help organize the program. All the abstracts will be printed for use by those attending the meeting.

Requests for more than 15 minutes to present a paper, or for specialized projection equipment, need to be directed to the Program Chairman, and will be considered on the merits of the individual request.

DEADLINE:
ABSTRACTS AND TITLES MUST BE IN
THE HANDS OF THE PROGRAM

CHAIRMAN BY APRIL 30TH. THIS SCHEDULING WILL PERMIT MAILING OF THE PRINTED PROGRAM TO MEMBERS PRIOR TO THE MEETING.

Student Paper Contest - 1989

Each year since 1975 the Aquatic Plant Management Society has conducted a student paper contest in conjunction with its annual meeting. The winter of that first contest, held 15 years ago in San Antonio, was Mr. Ernest S. Del Fosse, then a student at the University of Florida. Since that time, winners have come from a number of colleges and universities throughout the country, and one winner, Ms. Robin Anderson, represented McGill University in Montreal, Canada.

The objectives of the contest are (1) to encourage student participation in the Society affairs, (2) to provide students with the opportunity to gain experience in preparing and presenting scientific papers, and (3) to recognize outstanding achievements by student members of the Society.

Last year in New Orleans we had one of our biggest and best contests to date with 11 students, 2 more than for the 1987 meeting in Savannah. As usual the competition was keen and the final scores were extremely close. We are looking for an even larger number of students this year.

Graduate and advanced undergraduate students who have had the opportunity to conduct independent research are encouraged to present their findings in the 1989 contest. Papers presented in the student paper contest should be the results of the student's original research and should contain information not previously presented at an APMS meeting. The meeting registration fee will be waived for all students presenting a paper at the meeting.

Anyone with questions concerning the student paper contest needs to contact Steve Klaine, Department of Biology, Memphis State University, Memphis, Tennessee 38152. Steve's telephone number is (901) 678-2955 or (901) 678-2959.

Paper Submission Form for 1989 APMS Meeting
DEADLINE FOR SUBMISSION IS APRIL 30, 1989
(Please Detach and Return)

Title: _____

Author(s): _____

(If more than one author, denote which one will present talk)

Organization: _____

Address: _____

Telephone: _____

Regular Paper: _____ Student Paper: _____

Projection equipment Needed:

35mm slide projector: _____

Overhead: _____

Special (list items needed): _____

Abstract (75 words or less): _____

Please send this form to:

David L. Sutton

Research and Education Center

University of Florida - IFAS

3205 College Ave.

Fort Lauderdale, FL 33314

Phone: (305) 475-8990

Honorary Member Nomination Biography

Max McGowen received his BS degree in zoology and MS degree in Biology from Indiana State University in 1937 and 1938, respectively. He was an instructor at Indiana State from 1938-1942. From 1942 to 1946 he was in the Navy and worked in the area of tropical diseases.

Max joined Eli Lilly as a research associate in 1946. He served as Senior Parasitologist and Department Head from 1947 to 1965. From 1965 to 1971 he was head of Parasitology and Chemotherapy for Eli Lilly International in England. From 1971 until 1983 he was a Research Scientist in Plant Sciences for Eli Lilly in Greenfield, Indiana. During this time he was responsible for aquatic herbicide screening. He was responsible for determining aquatic herbicidal activity of fluridone. From 1983 until his retirement in 1985 he was a Research Scientist in Environmental Biology at Greenfield.

Max is a member of Alpha Phi Omega fraternity and the Fraternal Order of Masons.



Max McGowen, long time APMS member and President in 1985, has been nominated to receive Honorary Membership at the 1989 Annual Meeting.

Max has been an active member of the Aquatic Plant Management Society since 1971 and has served on various committees. He served on the Board of Directors and as President in 1985.

Attention Aquatic Shutterbugs

Plan now to enter the 1989 APMS Photo Contest. The rules have been changed slightly from last year in response to suggestions by several contestants. Hopefully these changes will provide for a little more flexibility for those wanting to enter the contest. Get out your cameras, flashes, filters, telephotos, and let others see your artistic impressions of aquatic plants.

Rules for Entry of Photographs in the 1989 APMS Photo Contest

1. Contest is open only to members of the Aquatic Plant Management Society (APMS).
2. Photographs containing subject matter related to aquatic plants will be considered for entry into the contest.
3. Each contestant may enter up to any number of prints, but can win only one prize.
4. Prizes will be awarded for 1st, 2nd, 3rd, and 4th places.
5. Photographs can be either color or black and white prints. There is no size restriction on the prints to be entered; however, prints of 8 by 10 inches appear to be a good size for viewing. Prints should be mounted. Vertical or horizontal format will be considered. No 35 mm slides will be accepted.
6. Information to be included on the back of each print shall be the following:
 - a. Title of print (can be included on front of mounted prints).
 - b. Name and address, or business card of contestant.
 - c. Negative or slide from which the photograph was made.
 - d. Optional information may include camera used, film, and camera settings.
 - e. If the photograph contains recognizable people, then a model release form must accompany the print.
7. APMS retains the right to keep any or all photographs. Any photographs retained by APMS become the property of APMS for their exclusive uses. Photographs not retained by APMS will be returned to the contestant.
8. Entries must be submitted in person to the registration table prior to noon of the first full day (July 17) of the meeting.
9. Contestants must attend the meeting to win.
10. Entries will be judged on:
 - a. Subject matter,
 - b. Composition, and
 - c. Technical merit.

New Resident in Minnesota

Many of us in the Southeast assumed that all of our northern neighbors were blessed with Eurasian watermilfoil. Therefore, it came as a surprise to learn that it is a relatively new introduction to Minnesota lakes. Actually the plant, which was introduced into the country in 1942 and has been reported in 37 states, had not been found in Minnesota until October of 1987. It has now been found in 7 locations in the "Land of 10,000 Lakes". The largest of these are Lake Minnetonka in West Minneapolis and White Bear Lake near Saint Paul.

According to Tom Reese, Vice Chairman of the Lake Minnetonka Conservation District, property values around the lake, which are worth \$1 billion could decline by as much as \$75 million as a result of the weed infestation and the resulting decrease in tax

revenue could be more than \$2 million (as reported in Star Tribune, December 26, 1988). The Lake Minnetonka Conservation District is attempting to raise \$.5 million to purchase three aquatic plant harvesters, transportation barges, conveyors, and other equipment to manage the weeds.

According to Howard Krosch, Minnesota Department of Natural Resources, extensive surveys will be conducted in White Bear Lake this summer and herbicides will be used to eliminate the population if this appears to be feasible.

The Minnesota DNR is also distributing a public information bulletin on Eurasian watermilfoil. It is hoped that educating the public of problems associated with the weed and how to identify it will prevent or at least slow its spread into other Minnesota lakes.

It Ain't Gettin Any Cheaper

The average cost to get a new pesticide product to market is \$80 million over a 7 to 9 year period, compared to about \$40 million in the early 1980's. The increased costs are due mainly to regulatory requirements and the demand for new, safe and effective products, and outmoded research and testing technologies. (Farm Chemicals, January 1989)

Proposed Changes to Bylaws

Article XVII of the Societies Bylaws requires that notice of proposed amendments be given to the Secretary/Treasurer and transmitted by him to the membership 30 days prior to the Annual Meeting. The following three amendments to the bylaws were approved by the Board of Directors at the mid-winter annual Board Meeting. These amendments have been given to the Secretary/Treasurer and are herein presented to the membership:

The first change would add language to Article IV which would establish a mechanism for removing persons who failed to perform the duties of office. The new text is underlined.

ARTICLE IV TERM OF OFFICE

All officers except the President, President Elect, and Secretary-Treasurer shall be elected for one year or until their 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. Beginning with the annual meeting in 1981, the Secretary-Treasurer shall be elected for a three-year term beginning at the close of the annual meeting in 1982 and extending to the close of the annual meeting in 1985. Subsequently, the Secretary-Treasurer will be elected every three years beginning in 1984, shall take office for one year after election and shall serve a three-year term of office. The purpose of election one year prior to assuming office is to permit the newly elected Secretary-Treasurer that period to understudy the requirements and duties of the office under the direction of the incumbent. No officers except the Secretary-Treasurer and/or the Editor shall succeed himself/herself. Officers elected at any annual meeting shall begin their duties on the close of the meeting at which they were elected. Nominees for President Elect 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. Any officer or director of the Society who fails to fulfill the duties of the office without valid reasons, may be removed from office by a two-thirds vote of the Board of Directors.

The vacant office shall be filled as described in ARTICLE X, Section C.

The second amendment would change the way that honorary members are selected. This amendment would do the following:

- 1.) Alleviate the need of making the nominees known in advance of the annual meeting thereby avoiding a rather anti-climactic award ceremony.
- 2.) Avoid the unlikely yet potentially embarrassing chance of a nominee not being accepted by a vote of the membership.
- 3.) Allow the Society to further utilize the experience and expertise of its Past Presidents.

The existing version of Section C is presented first and the proposed version with the new wording underlined is presented next.

Old Version:

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 Bylaws 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.

Proposed Version:

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 insure that

they meet selection criteria. Eligible nominees will be presented to the Board of Directors and the Past Presidents Advisory Committee by the Bylaws and Resolutions Committee. Honorary membership shall be approved by a majority vote of the Past Presidents Advisory Committee and conferred by a majority vote of the Board of Directors.

This final change would adjust the duties of the Past Presidents Advisory Committee listed in Article XII, Section 8. It is only required if the amendment on selecting honorary members is adopted. The new language is underlined.

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, and to approve the granting of honorary membership.

For additional information contact David Spencer, Bylaws and Resolutions Committee Chair (916/752-6260)

Nominations

The following slate of officers will be nominated by the Nominating Committee at the Annual Meeting to be held July 16-19, 1989.

President-Elect

Joe Joyce

Vice-President

Randy Stocker

Board of Directors - (3 yr term)

Bill Zattau

Board of Directors - (3 yr term)

Nate Dechoretz

Editor

Bill Haller

R.D. Comes, Nominating Committee Chair

Two Honored at SCAPMS Annual Meeting

The South Carolina Aquatic Plant Management Society held its Tenth Annual Meeting on August 18, 1988. The meeting was held at Santee Cooper's Somerset Point Recreational Facility in Moncks Corner, with Santee Cooper graciously acting as co-sponsor and host. The SCAPMS Member of the Year Award, presented annually to an individual who has made significant contributions to the Society and to aquatic plant management activities in general was presented to Cindy Aulback Smith. The highest honor the SCAPMS can bestow on an individual is that of Honorary Member. Howard B. Roach, one of the founding fathers of

SCAPMS, received the Societies highest honor in 1988. Howard thus became the first member of SCAPMS to be so honored.

SCAPMS Officers for 1988-89 are as follows:

Cindy Aulback Smith, President

Ken Manuel, Vice President

Pat Walker, Secretary/Treasurer

John Inabinet, Editor

Tim Drake, Immed. Past President and Director

Phil Fields, Director

Lance Hammonds, Director

Phil Kirk, Director

Jim Tuten, Director

The Board of Directors has scheduled the Eleventh Annual Meeting for August 9-11, 1989. The meeting will be held at Charlestown Landing in Charleston. The annual Wednesday Night Hospitality Suite will be held at the Charleston Sheraton Hotel. Special room rates of \$55/night (single or double) have been arranged at the Sheraton.

As was the case last year, the Board is planning a number of special events for August 9, the day prior to the formal meeting. Tentative plans call for a golf and/or fishing tournament, proceeds of which will go to the Scholarship Fund.

1988 Corps Aquatic Plant Control Research Program Review

The U.S. Army Corps of Engineers Waterways Experiment Station (WES) held its annual Aquatic Plant Control Research Program Review November 15-17 in West Palm Beach, FL. The meeting is scheduled each year to review current aquatic plant research and operational activities. This year the meeting was hosted by the Corps Jacksonville District. Presentations were given on biological control, chemical control technology development, ecology of submersed aquatic plant species, and computer-aided simulation procedures for aquatic plant management. A special session on Lake Okeechobee was also included. The Research and Development Directorate of Headquarters United States Army Corps of Engineers (HQUSACE) held the FY 1990 Research and Development Program Review at the conclusion of the meeting.

The meeting was attended by 176 individuals including representatives from six Corps' divisions, twelve districts, the WES, and HQUSACE. This was the highest attendance in the history of the Program. The R&D Program Review was attended by 45 Corps representatives.

During the meeting, the WES Biomangement Team manned demonstration aquariums which provided

viewing of biological control agents that the WES and USDA researchers have released in Florida. The WES Simulation Technology Development Team provided computer model demonstrations for hands-on experience with the latest versions of the WES computer-based simulations including INSECT Version 1, HERBICIDE Version 1, HARVEST, and ARMUR STOCK Version 2.

The special session addressed the history, use, and ecology of Lake Okeechobee. Immediately following, attendees participated in a field trip to view portions of the lake. Approximately 120 people took advantage of the opportunity to visit the second largest freshwater lake in the continental United States. Airboat tours provided the adventurous travelers with a taste of the local native and exotic flora and fauna. Airboats and operator/guides from Corps of South Florida Area Office, the Corps Palatka Natural Resource Project Office, and the Florida Department of Natural Resources provided transportation and expert commentary.

The consensus opinion was that another very successful and informative Review was held. Next year's meeting will be hosted by the Nashville District at a location to be determined.



Dean Barber, Florida Department of Natural Resources Bureau of Aquatic Plant Control, explains the problems caused by hydrilla on Lake Okeechobee while acting as a field trip guide during the 1988 WES Aquatic Plant Control Research Review.

Reprinted from U.S. Army Corp of Engineers Information Exchange Bulletin, Vol. 2, No. 4.

Midsouth Meets at Gulf Shores

The Midsouth Aquatic Plant Management Society held its annual meeting in Gulf Shores, Alabama on October 12-14, 1988 at the Gulf State Park Resort. This was one of our larger meetings with approximately 80 attendees. We had thirty-five papers presented that covered research, state and federal updates, industrial and chemical reports, and two student papers.

Hospitality, compliments of Pennwalt, and a seafood buffet on the beach at the State Pavilion, compliments of Valent, were enjoyed by all.

One of the highlights of the meeting was a raffle to raise money for our new scholarship fund.

MAPMS Officers for 1988-89 are:
Raymond Cooper, President
Barry Smith, Vice President
Earl Burns, Secretary/Treasurer
Stan Cook, Editor
A. Leon Bates, Past President
Randall Goodman, Director
Mike Eubanks, Director
Scott Lankford, Director
David Tarver, Director

Midwest Meets Jointly with Fisheries

The Midwest Aquatic Plant Management Society held its 1989 Annual Meeting as a joint venture with the American Fisheries Society, Indiana Chapter during March 12-14. Approximately 130 people enjoyed the marvelous facilities at the Marriot Inn in South Bend Indiana and listened to a diverse program that covered marketing topics to managing aquatic plants with crawfish.

At the board of directors meeting it was decided to conduct a mass mailing of the **Northern Lakes Manager**, to develop three year goals and objectives for the society, to sponsor three aquatic plant management workshops during 1989-90, and plans were begun to celebrate the society's 10th Anniversary at next year's Annual Meeting in Indianapolis.

MAPMS Officers for 1989-90 are as follows:

Howard Krosch, President
Doug Pullman, President Elect
Richard Hinterman, Immed. Past President
Jim Schmidt, Editor
Scott Jorgenson, Director
Julie Lienhardt, Director
Gary Johnson, Director
Greg Cheek, Director

Western APMS Visits Hawaii

Fifty-two WAPMS members and guests, which included APMS President Richard Couch, Kirt Getsinger from WES, and a visitor from Egypt, traveled to Hawaii for the Society's 1989 Annual Meeting. After a day of scientific paper presentations, participants toured a watercress farm—a \$50,000/year business and were guests for a field trip to the Honolulu International Golf and Country Club. But an aquatic plant scientist's work is never done. The group was taken to a pond in the middle of the country club's golf course where they were asked for an identification and control recommendation for an unsightly weed problem. After adequate discussion the plant was identified as coontail and, since triploid grass carp are illegal in Hawaii, the proper herbicide was recommended. After surviving an exciting bus tour with "AL", who's last name no none could pronounce, the Annual Business Meeting was convened where the following Officers were elected for 1989-90:

Tom McNabb, President
Rich Thiery, Vice President
Barbara Mullin, Immed. Past President
Nate Dechoretz, Secretary/Treasurer
Joan Thullen, Director
David Spencer, Director

"Alex West and the Weed Wackers" Appear at FAPMS Annual Meeting

Highlights of the Florida Aquatic Plant Management Society Twelfth Annual Meeting are too numerous to cover adequately but I'll hit the higher (or lower depending on your point of view) points. The meeting was held again in Daytona Beach at the Holiday Inn Surfside. We're getting quite well known around those parts but will still be able to have our 1989 Annual meeting there again on October 16-18, 1989.

The meeting began with a keynote address from Tim Drake who we borrowed from SCAPMS. Tim got us all in the right frame of mind with his "Ham Hock Theory", a down home logical approach to accepting changes and challenges in aquatic plant management in the 80s. As usual, the majority

of the meeting consisted of a diversity of papers covering basic and applied subjects in all areas of aquatic plant management - something for everyone.

A special, informative session was conducted on urban aquatic plant management, a topic of growing interest in Florida's increasingly urban environment. And then just when we thought we had seen everything, "Alex West and the Weed Wackers", a rap group dedicated to immortalizing aquatic weed control through modern folk rap showed up at the banquet. If you ever have the opportunity to see this group DON'T. The meeting ended on a high note with "The World According to Nozzlehead", presented by Orifice P. Nozzlehead who reminded applicators that "Supervisors have

less brain tissue than most people so to protect yourself READ THE LABEL."

FAPMS currently has 603 paid members. The paid attendance at the 1988 Annual Meeting was 370. FAPMS Officers for 1988-89 are as follows:

Bill Moore, President
Brian Nelson, President Elect
Greg Jubinsky, Secretary
Vic Ramey, Treasurer
Dan Thayer, Editor
Eddie Knight, Immed. Past President
Eric Cotsenmoyer, Director
Pierre Deschenes, Director
Mike Hulon, Director
Ken Langeland, Director
Larry Maddox, Director
Tom Dick, Director
Mike Dupes, Director
Vernon Vandiver, Director
Mark McKenzie, Director



The endangered West Indian Manatee (Trichechus manatus) - Round paddle-shaped tail, nails on flippers, length up to 13 feet and weight over 3,000 pounds. Found in southeastern United States and Caribbean Sea as far south as Recife, Brazil in salt, fresh, or brackish waters. Principal threats are boat collisions and habitat degradation. Feeds on marine, estuarine, and fresh water vegetation. Photo by Alison Fox.

Endangered Species Update:

A View Given on EPA's New Endangered Species/Pesticide Program

EPA's revised Endangered Species program will emphasize a biological approach to protecting threatened plants and animals. According to Allan Abramson, Director, Program Management and Support Division, OPP, EPA, the revised program's approach will be to "start with the fundamental biological question of what has an adverse impact on the species." Every use for a chemical will be considered when it is tested, with every chemical reviewed on an "cluster approach" for considering pesticide hazards. According to Abramson, "We'll work backward looking at label rates, application methodology, and decay and dispersion rates." If a pesticide does not exceed the biological level of con-

cern, there will be no restrictions placed on it.

Abramson, stated, "We'll use a generic three-sentence approach (to labeling), using the same label on all (pesticide) products." He added that states and counties would continue to be listed on a bulletin, which would contain specific information about pesticide use and endangered species habitat in a particular county or state.

According to Abramson, EPA will issue a notice of advanced rule making on label changes in 1991, and give affected parties a year to come into compliance, with the program going into effect in the 1992 planting season. (Pesticide and Toxic Chemical News, Vol. 17, No. 13)

Adopt A Manatee Application

Please make tax deductible donations payable to:

Save the Manatee Club
500 N. Maitland Ave.
Maitland, FL 32751

I want to adopt: _____

Adopter's Name: _____

Address: _____

City _____ State _____ Zip _____

If this is a gift please print your name and address:

Allow 4-6 weeks for delivery

Please indicate if you DO NOT want the following:

☐ Adoption packet

☐ Newsletters

Enclosed is my check for: (U.S. Exchange)

☐ \$ 15 — Individual

☐ \$ 25 — Family

☐ \$ 50 — Sponsor

☐ \$100 — Guardian

☐ \$500 — Life Member

☐ \$ 10 — School Classes. Please include name of school:

☐ "Adopt-A-Refuge" Program \$ _____

We accept Visa/MasterCard.

Card # _____

Expiration Date: _____

Signature of Card Holder: _____

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 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 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.

Application for Membership

NAME OF APPLICANT _____ SPOUSE'S NAME _____

HOME ADDRESS _____ ZIP CODE _____

CURRENT TITLE, BUSINESS OR INSTITUTION NAME, AND ADDRESS _____

_____ ZIP CODE _____

WORK PHONE _____ HOME PHONE _____

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

- A. ACTIVE MEMBERSHIP\$ 25
- B. STUDENT MEMBERSHIP\$ 5
- C. COMMERCIAL SUSTAINING MEMBERSHIP\$200

Please check the following to indicate desired membership class and for additional information!

<i>Membership Class:</i>	<i>Please Send Information Regarding Regional Affiliates</i>
Active _____	Florida Aquatic Plant Management Society
Student _____	Mid-South Aquatic Plant Management Society
Commercial Sustaining _____	Midwest Aquatic Plant Management Society
Subscription _____	South Carolina Aquatic Plant Management Society
	Western Aquatic Plant Management Society

AMOUNT OF REMITTANCE \$ _____ SIGNATURE OF APPLICANT _____

Send this form to: The Aquatic Plant Management Society, P.O. Box 2695, Washington, DC 20013-2695

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P.O. Box 2695
Washington, DC 20013-2695