



# AQUATIC PLANT NEWS

A newsletter of the Aquatic Plant Management Society, Inc./No. 23, Nov. 1986

## 26th Annual Meeting Held in Sarasota

One hundred and eighty two members attended the Twenty-Sixth Annual Meeting of the Aquatic Plant Management Society that was held July 13-16, 1986 at the Hyatt Sarasota (Florida). An excellent program of high-

**Don Reimer organized an excellent Student Paper Contest for the 1986 meeting.**

quality scientific papers was scheduled by President Martin, that covered such diverse subject areas as Monoecious hydrilla biology, allelopathy, growth regulators, triploid grass carp production, and many other topics.

Don Reimer organized an excellent

Student Paper Contest for the 1986 meeting. The quality of all papers was excellent, making it very difficult for the judges to rank contestants. Winners of the 1986 Student Paper Contest were:

- 1st Place — T. A. Tucker, North Carolina State University
- 2nd Place — M. Perez Cruet, University of South Florida
- 3rd Place — P. M. Rocchio, North Texas State University
- 4th Place — P. A. Clifford, North Texas State University

**Congratulations to these students:**

Terry McNabb was very active with the Exhibits Committee this year in organizing exhibitors into an informative exhibits display. Congratulations to Aquamarine, Division of Erectoweld, for winning the Exhibitor's Plaque.

See ya'll next year in Savannah.



"So, where do we go from here?," J.L. Decell during keynote address.

## Board of Directors Elect 1986-87 Officers

1. Officers for 1986-87:  
President — Dean Martin; President Elect — Richard Comes; Immediate Past President — Lars W. J. Anderson; Vice President — Richard Couch; Secretary Treasurer — Bill Rushing; Editor — Bill Haller; Directors — Terry Goldsby, Joe Joyce, Clarke Hudson, Randy Stocker, David Spencer, Scott Painter.

Newly elected officers were Comes and Couch; Hudson was reelected to fill a full term and Spencer was elected director for the first time.

2. The board decided to provide several international organizations who had been in contact with the International Contacts Committee free copies of the newsletter for one year.

3. A questionnaire will be mailed to the general membership and a new directory will be published. Occupations and general interests will be noted for each member answering the questionnaire.

4. The subcommittee on noxious weeds was abolished. Activities of that subcommittee will be handled by the Legislative Committee.

5. Membership drive — \$100 will be awarded to the member signing up the most new members in one year. For sign up of three new members a years dues will be awarded.

6. An operating manual is now

available for officers and committee chairs upon request. Other members may also obtain a copy by contacting the SEC-TREAS. The manual was adopted as STANDING RULES of the Society.



APMS officers, 1986-87: Directors — Randall Stocker, Terry Goldsby, Scott Painter, David Spencer; Secretary-Treasurer — Bill Rushing; Director — Clark Hudson; President-Elect — Richard Comes; Vice President — Richard Couch; Immediate Past President — Lars Anderson; President Dean Martin.

## NEW BOOKS

*Freshwater Vegetation Management* by Dr. E. O. Gangstad.

This book contains general information on control of aquatic vegetation and specific chapters on biological control, fisheries management, and herbicidal, environmental and health effects of specific aquatic herbicides. It is available for \$35 from Thompson Publications, P.O. Box 9335, Fresno, CA 93791.

*Aquatic Plants of Oklahoma* by E. N. Nelson and R. W. Couch.

Professional and lay taxonomist alike will find *Aquatic Plants of Oklahoma* a useful reference. The book provides keys for plant identification and distribution maps for the aquatic plants found in Oklahoma. A variety of photos of the most common plants are included in the book. It is available for \$5 from Dr. Richard Couch, Biology Dept., Oral Roberts University, Tulsa OK 74171. Proceeds from sale of this book go to ORU's honor society, Mu Kappa Chapter of Beta Beta Beta. Make checks payable to Mu Kappa Chapter (Beta Beta Beta).

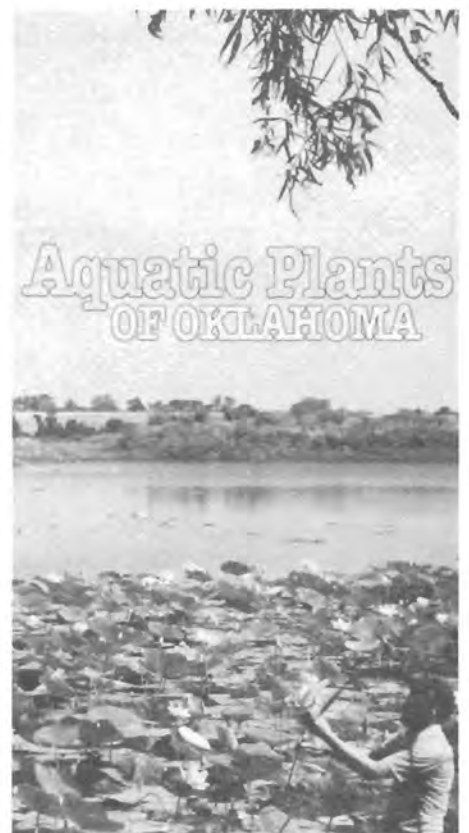


## Scenes From APMS Annual Meeting

**Top:** 1986 Annual Meeting participants from South Florida, west and midwest enjoy ribs, beans and dogs; and swap weed stories.

**Middle:** Discussing triploid grass carp production and efficacy over refreshments.

**At left:** "If we could incorporate endothall and fluridone into catfish chow and feed it to grass carp . . ."



# APMS Reviews 2,4-D Aquatic Registration

By John Gallagher

**A**t the Vancouver, B.C. A.P.M.S. Annual Meeting, I presented a brief update on the status of the 2,4-D Aquatic registrations. At that time, we indicated that our contacts at EPA had informed us that "Dr. John Moore, Assistant Administrator, Office of Pesticide and Toxic Substances, has put all label registrations that increase the exposure to 2,4-D on permanent hold," awaiting the completion of the Industry Phenoxy Task Force chronic toxicity studies due to be submitted in 1987. As of this writing, nothing has changed. EPA will begin the 2,4-D registration review at that time.

2,4-dichlorophenoxy acetic acid (2,4-D) continues to be the primary herbicide of use for the control of certain aquatic weeds. The combination of efficacy and relatively low cost per acre makes 2,4-D the choice herbicide for the control of water hyacinth (*Eichornia crassipes*) and Eurasian water milfoil (*Myriophyllum spicatum*), two major weed problems of lakes and streams. Their continued registration is essential if these two weed problems are to be contained.

The history of aquatic weed control in many ways relates to the development of 2,4-D as a weed killer. The two federal agencies, now the prime movers in the efforts to get 2,4-D fully labeled for aquatic use, did much of the early exploratory work in weed control. In the western irrigation districts, the Bureau of Reclamation established the value of 2,4-D for cattail (*Typha* spp.) and many other broadleaf species of drainage ditch and ditchbanks. At the same time in the late 1940's, the U.S. Corp of Engineers contracted with the Boyce Thompson Institute to investigate the use of 2,4-D for the control of water hyacinth, leading to actual aerial applications in Louisiana in 1948-49. 2,4-D and aquatic weed control go hand-in-hand as part of the history of aquatic weed control.

## The Chronology of 2,4-D

To put things in perspective, let me refer to a paper presented at the 1970 North Central Weed Control Conference by C. S. Williams of The Dow Chemical Company (1). Williams set out a chronology of events through November of 1970, the time that those of us involved in aquatic weed control were beginning to be affected by the rising concern over the environment. Certain key decisions were made that impacted all uses of 2,4-D including aquatic use. I have selected several dates, from

Williams' chronology of events, that relate to the current registration "permanent hold position."

### April 3, 1966

USDA announcement to abolish no residue status. Industry must comply by obtaining tolerances for residues in all treated foods and feed products and by-products by December 31, 1970.

### August 23, 1966

The Industry Task Force on Phenoxy Herbicide Tolerance was formed to handle 2,4-D, 2,4,5-T, MCPA, and silvex.

### January 31, 1969

Use of 2,4-D, 2,4,5-T and silvex on aquatic sites extended to January 1, 1970.

***2,4-dichlorophenoxy acetic acid (2,4-D) continues to be the primary herbicide for the control of certain aquatic weeds. The efficacy and relatively low cost per acre makes 2,4-D the choice herbicide.***

### November 24, 1970

Crop residue work was completed. Milk analysis completed. Meat analysis underway. Completed data will be submitted as amendment to petitions prior to December 31, 1970.

With the above as general background, let us now look at the specific activities that pertain to aquatic use of 2,4-D.

### November, 1974

A task force group made up of federal, state, and industry personnel met with those EPA product managers directly involved with the aquatic use of 2,4-D. At that meeting, TVA was designated as the lead agency to establish use patterns for the dimethylamine salt of 2,4-D (DMA) in the control of water milfoil, and the USCOE was to do the same for water hyacinth. Label terminology was agreed upon to clarify agency and applicator responsibility and type of waters that were treatable. The following text appeared on approved water hyacinth control labels: "To be applied by federal, state or local public agency personnel trained in aquatic weed control, or by licensed commercial applicators under contract

to the above agencies. For use in ponds, lakes, reservoirs, marshes, bayous, drainage ditches, canals, rivers, and streams that are quiescent or slow moving." Earlier that year to resolve a long-standing fish residue ambiguity associated with the data package in the EPA files, the USDA Fish and Wildlife Service Fish Pesticide Research Laboratory at Columbia, Missouri, was committed to a complete elimination and degradation study of 2,4-D in fish and water. These activities led to registration of the DMA at the following ratios of application: for water hyacinth control — up to one gallon/A of a four lb./gallon product, and for water milfoil — up to ten gallon/A of a four lb./gallon product specifically for use in TVA waters.

### September 1978

FIFRA as amended permitted the use of 2,4-D for the control of weed species not listed on the label provided the aquatic site was specified on the label, and the amount did not exceed maximum dosage level specified on the label.

### November 1979

The ever-increasing activities of environmental pressure groups utilizing all legal methods available to stop aquatic applications forced the primary 2,4-D users to meet again with EPA to request an Experimental Use Permit to collect data on residues from two formulations of 2,4-D. The dimethylamine salt (DMA) and the butoxyethanol ester (BEE)

### July 10, 1980

The Bureau of Reclamation and the U.S. Corp of Engineers were issued Experimental Use Permits and temporary tolerances to permit the use of the dimethylamine salt of 2,4-D (WEEDAR 64) and the butoxyethanol ester of 2,4-D (Aqua Kleen) for Eurasian water milfoil control at four locations. These temporary tolerances were to expire February 28, 1982.

### April, 1983

The USCOE and the Bureau of Reclamation submitted a petition for the expansion of aquatic uses of 2,4-D to include the control of Eurasian water milfoil in areas outside the TVA programs.

### Where Are We Now?

In March of 1985, EPA refused to approve the petition for the expansion of

*continued on page 6*



# Gulf State Park Hosts Midsouth APMS Meeting

The fifth annual meeting of the Mid-South Aquatic Plant Management Society, held September 24-26, 1986, proved memorable for several reasons. The program, planned by President-elect Joe Stephenson, was excellent; the location, Gulf State Park in Gulf Shores, Alabama, was extraordinary; and the weather cooperated. Many topics were discussed from safety to plant pathogens, with the central theme being management of marginal and floating leaf aquatic plants.

As usual the meeting started on Wednesday with an informal afternoon session. First a refresher on identification of marginal and floating leaf aquatics, then a panel discussion of control measures used on these plants. Controls ranged from basic herbicide

***All-you-can-eat shrimp, oysters, fish, hushpuppies, and all the trimmings were set against a backdrop of white sand, surf, and good company.***

techniques to a mention of an island where goats were doing an excellent job of controlling water willow. (No stocking rate was given.) Following the panel discussion, attendees toured herbicide test plots on Gulf State Park's Lake Shelby.

The formal session was opened Thursday morning by MidSouth President David Franks. Government and agency reports, as well as research and reports from industry, made up the program. Many members participated, and several invited speakers rounded out the program. Invited speakers included Dr. Richard Couch, Steve deKozlowski, Dr. Ken Langeland, Dan Thayer, Jim Tisdale, and Ben Woods.

At the annual business meeting, two minor changes in the by-laws were approved by the membership and new officers were elected. By-laws changes included lengthening the possible number of terms the Secretary-Treasurer may serve and changing purchasing procedures of the MidSouth Chapter. New officers elected at this meeting were: President, Joe Stephenson; President-elect, Leon Bates; and Editor, Scott Lankford. David Webb was re-elected as secretary-treasurer. New members of the Board of Directors are Bill Zattau and Raymond Cooper. Directors who will be continuing terms are Wendy Seesock and Fred Nazary.

Research and weed management discussions can only account for a portion



*MidSouth APMS Annual Meeting participants observed herbicide demonstration plots on marginal aquatic, and ditchbank weeds. Photo by Leon Bates.*

of a well-rounded chapter meeting. Much more, such as hospitality, camaraderie, and good food are necessary to complete the MidSouth meeting. Our banquet proved to be one of the high points of the meeting. Banquet in this case is not an appropriate term since it was actually a seafood buffet at, of course, a seaside open-air pavilion. All-you-can-eat shrimp, oysters, fish, hushpuppies, and all the trimmings set against a backdrop of white sand,

surf, and good company.

The MidSouth meeting closed at mid-day Friday so members could easily travel home that day. Good-byes were said, and many attendees headed home. Many, but not all, because a short walk around Gulf Shores during the weekend would find MidSouth members at seaside shops or in the surf. No doubt savoring knowledge and friendships gained at the fifth annual meeting.

## FAPMWG Identifies Need for Survey

The Federal Aquatic Plant Management Working Group (FAPMWG) of The Interagency Research Coordinating Council, met on July 15th in conjunction with the Aquatic Plant Management Society's (APMS) annual meeting. Two topics were discussed that are of national interest. One was the continuing need for a periodic National Survey of problematic aquatic plants, and the other was the need for better regulation of the sale and transportation of noxious aquatic plants. Both of these items have been discussed at previous FAPMWG meetings, but with the exception of the National Survey, no action was ever taken.

Several years ago, the National Survey effort was pursued to the point that a planning document was produced, and funding was requested from the EPA, who declined to support the effort. It was agreed at this meeting to review this document, and pursue funding sources within the Federal Sector.

The USDA is responsible for the enforcement of the Noxious Weed Act of

1974 for regulation of interstate transport of noxious weeds. To date the lack of funding/staffing has resulted in a lack of enforcement. It was generally agreed that some degree of regulation of sale/transport is necessary for aquatic plants, whether it is through the Noxious Weed Act or not. The FAPMWG agreed to form a committee to produce a report that would summarize the regulatory mandates, status, and the problems of enforcement, at the federal level, and for each state now engaged in some activity of aquatic plant management. It was agreed that for the initial step of compiling information, that the APMS Chapters would be contacted for assistance. The objective is to produce a report that summarizes the regulatory capabilities, problems and needs by November 1986. This report (or a subsequent version) would then be used as the "selling document" for developing a system of regulating the sale/transport of problem aquatic plants.

— J. L. Decell



"Is it inverting." Santee-Cooper demonstrates their inverting system.

## Virginia Proposes Hydrilla Planting to Increase Water Clarity

The Virginia Commission of Game and Inland Fisheries has proposed that planting hydrilla in Back Bay will serve to increase water clarity and thereby allow re-establishment of native submersed aquatic vascular plants that have disappeared in recent years. This speculation is based on observed increases of water clarity in Potomac River hydrilla communities. Since native plants have been interspersed in newly established hydrilla, it is speculated that stabilization and increased water clarity allow other species to become established from seed.

Hydrilla enclosed in wire mesh boxes has been planted in ponds in proximity to Back Bay. In a letter to Lynn R. Muchmore, Assistant Secretary for Natural Resources for the North Carolina, Department of Natural Resources and Community Development, the Commission explained that, "If the hydrilla survives the salinity shock where it is planted and thrives, we may conclude that hydrilla should be planted widely in Back Bay."

The Corps of Engineers, Wilmington District and Officials of the State of North Carolina, where \$20,000 was spent for hydrilla management in State Parks alone last year, are very concerned because Back Bay is directly connected to the Currituck Sound in North Carolina. The North Carolina Interagency Council on Aquatic Weeds passed a resolution at its October 8, 1986 meeting urging Virginia officials to meet with them to discuss the proposed hydrilla planting. — K. A. Langeland

## 'Washington Post' article: Fishermen Cherish Hydrilla

In a recent article by Angus Philips in the Washington Post that described bow hunting for carp, Mack Lloyd, a hunter and fisherman of the Potomac River for 30 years, stated that, "Hydrilla is the best thing that ever happened to this river. The water is so clear in these hydrilla beds that on a moonlit night you can throw a penny overboard and see it shining six feet down." The Potomac, for many years has been turbid and barren of submersed macrophytes, that once flourished.

## SCAPMS Holds 1986 Annual Meeting

The South Carolina Aquatic Plant Management Society held its Eighth Annual Meeting at Pine Island near Columbia on August 21 and 22, 1986. The meeting, which was well attended, featured a symposium on aquatic plant management in small ponds, and updates on state management programs, research activities, and control products. A two-year debate on whether to amend the By-Laws to change the Society's name from the "South Carolina" APMS to "Carolinas" APMS was brought to a final vote at the Annual Business Meeting. The membership supported the Board's recommendation to retain the current name and focus of the organization. The membership also voted on the 1986-87 Officers and Directors which are:

*President* — Steven de Kozlowski, S.C. Water Resources Commission.

*Secretary/Treasurer* — Tim Drake, Palmetto Aquatic Plant Management, Inc.

*Editor* Cindy Aulbach-Smith, University of South Carolina.

*Directors* — Harry Gaymon, S.C. Department of Health and Environmental Control; Ken Langeland, Center for Aquatic Weeds — University of Florida; Harold Ornes, University of South Carolina; Glenn Patterson, U.S. Geological Survey; Howard Roach, S.C. Public Service Authority.

The Member of the Year Award went to Danny Johnson for his many years of service to the society as an officer and

his numerous contributions to the progress of aquatic plant management in South Carolina.

During 1986, the society produced four newsletters and issued a membership directory. A scholarship fund was established to help support students conducting aquatic plant management related research in South Carolina. A

### *The Member of the Year Award went to Danny Johnson for his many years of service.*

questionnaire was mailed to all members requesting information about management information needs, participation in the society, and individual involvement with aquatic plant management. Most of the members responded, providing the Board with important information that should help them better meet the needs of our diverse group.

Total membership in the society has remained fairly stable for the past several years and for 1986 total active, student, and sustaining membership was 109.

Goals for this year include improving public education of aquatic plant problems and management techniques, and improving individual and organizational measures that prevent the spread and establishment of nuisance aquatic plants.



"Well, let's see now, there's probably a good way to explain that." — 1986 Florida Aquatic Plant Control Course.

## IFAS Sponsors Aquatic Weed Course

The biannual Aquatic Weed Control Short Course, sponsored by the University of Florida Institute of Food and Agricultural Sciences, and Florida Aquatic Plant Management Society was held June 10-13, 1986 in Gainesville. One hundred thirty-six individuals attended this largest ever Short Course. Two-thirds of those attending were first-

time participants. Florida, North Carolina, South Carolina, Mississippi, Alabama, Georgia and Puerto Rico were represented. This is an event that should be attended at least once by all aquatic weed managers; and Florida extends an invitation to all APMS members to future Short Courses and Advanced Short Courses.



Steve Rutz, Florida Department of Agriculture and Consumer Services explains "container law" during Field Applicator Panel at the 1986 Florida-APMS Annual Meeting.

## FAPMS Celebrates 10th Anniversary

The annual meeting of the FAPMS held in Plant City, October 14-16, marked the 10th anniversary of the Florida Society. The attendance goes on record as the largest ever, as more than 350 people registered for the meeting, packing the conference hall to its capacity. Activities included three full days of papers, awards, a 10-year anniversary banquet, a commemorative coffee mug, and the selection of a recipient for the FAPMS William L. Maier Scholarship award. The Florida APMS Scholarship and Research Foundation awarded Ms. Pamela Botts of the

University of South Florida with this year's scholarship money. The scholarship is awarded to students who are majoring in a field of study directly related to the management of aquatic vegetation for the ecological benefit of aquatic or wetland environments. As a part of the application package, each applicant's views or philosophy on the importance of aquatic plant management to the preservation of Florida's aquatic resources, public health, fish and wildlife habitat, irrigation and flood control systems, and/or agriculture is submitted.

## 2,4-D, continued from page 3

the use of 2,4-D. This action was based in part on the 1980 report of the FIFRA Scientific Advisory Panel's Special Review of the Data Requirements for 2,4-D (2). The agency concluded that a) the presently available information on the potential health effects of 2,4-D does not support a regulatory action to remove 2,4-D products from the market, b) information from scientifically valid studies does not indicate that continued use of 2,4-D poses an immediate hazard or unreasonable adverse effects when used according to label precautions and directions for use, and c) the agency should act quickly and vigorously to obtain better toxicological information on 2,4-D. This is in progress.

### Where Are We?

Still on hold until the Industry Task Force submits the completed additional chronic studies requested. Tentatively 1987.

### What Can We Do?

Since it is still possible to submit for a special local need section 18 program, data from any work that involves a monitoring study to show levels of 2,4-D and subsequent disappearance after application should be copied to the USCOE for compilation. The purpose of this action is to develop a case history package which would show that operational use in accordance with label directions does not produce residue levels higher than the allowable tolerances.

Finally, for those of use in aquatics, the hope for continued use of herbicide products will be dependent on cooperative efforts of user agencies, federal and state research organizations, and the chemical industry.

### Literature Cited

- (1) Williams, C. S. 1970. The Status of 2,4-D, 2,4,5-T, Silvex and MCPA Herbicides. Proceedings 25th North Central Weed Control Conference. pp. 15-18.
- (2) Fact Sheet. April 1980. U.S. EPA

### Future Meeting Sites of the Aquatic Plant Management Society, Inc.

- 1987 — Hyatt Regency Savannah, Georgia U.S.A. July 12-15
- 1988 — Fairmont Hotel New Orleans, Louisiana U.S.A. July 10-13
- 1989 — Phoenix, Arizona



## Submit Papers for 1987 Annual Meeting

**Y**ou are invited to submit a title and abstract for a paper to be presented at the 1987 annual meeting of The Aquatic Plant Management Society, Inc., to be held July 12-15, 1987, at the Hyatt Regency Savannah, Savannah, Georgia, U.S.A. Type title, authors, organization, and location exactly the way they are to appear on the program. If more than one author is listed, place an asterisk after the name of the author who is to present the paper. Fifteen minutes will be allowed for each presen-

tation. Projection equipment for 35mm slides will be provided. Special requests for additional time or specialized projection equipment should 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 15. This scheduling will permit mailing of the printed program to members by May 15, 1987.

## Graduate Students Invited to Submit Papers

**E**ach year the Aquatic Plant Management Society, Inc., sponsors a graduate student paper contest at its annual meeting. Graduate students in aquatic plant management are encouraged to participate in this program. The Aquatic Plant Management Society will pay lodging expenses and waive the registration fee for all students who participate in the contest. Cash prizes also are awarded to four graduate students who are judged to have presented the best papers. This is a great opportunity for students to present their research results, and to meet and visit with others from around the world with common interests.

## 1986-87 APMS Committee Chairmen

**Bylaws & Resolutions**, Kurt Getsinger, (601) 634-2498.

**Exhibits**, Terry McNabb, (415) 680-0320.

**International Contacts**, Scott Painter, (416) 637-4251.

**Legislative**, Les Sonder, (916) 685-9346.

**Local Arrangements**, Steve de Kozlowski, (803) 737-6550.

**Local Chapters**, Joe Zolczynski, (205) 626-5153.

**Membership**, Ed Theriot, (601) 634-2678.

**Past-Presidents Advisory**, Lars Anderson, (916) 752-6260.

**Program**, Richard Comes, (509) 786-3454.

**Publications**, Bill Haller, Editor (304) 392-9613; Richard Couch, Associate Editor (918) 495-6940; Ken Langeland, Newsletter Editor (904) 392-9613.

**Publicity**, Doug Pullman (517) 631-2677.

**Student Affairs**, Don Riemer (201) 932-9771.

**C.A.S.T.**, Bill Haller, Representative (904) 392-9613.

**Site Selection**, Don Lee (504) 342-5864.

*Aquatic Plant News* is a publication of the Aquatic Plant Management Society, Inc.

*K.A. Langeland* ..... *Editor*  
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(PLEASE DETACH AND RETURN)

Title \_\_\_\_\_

Author(s) \_\_\_\_\_

Organization \_\_\_\_\_

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Abstract (75 words or less)

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Submit titles to:

R. D. Comes  
USDA/ARS  
P.O. Box 30  
Prosser, WA 99350

Submit student paper titles to:

D. N. Riemer  
Cook College  
Dept. of Soils and Crops  
P.O. Box 231  
New Brunswick, NJ 08903

**DEADLINE FOR SUBMISSION IS APRIL 15, 1987**

# CALENDAR OF EVENTS

## Meetings

- **January 12-14, 1987**  
Southern Weed Science Society  
1987 Annual Meeting — Hyatt Orlando  
Kissimmee, FL
- **January 12-14, 1987**  
Midwinter APMS Board of Directors  
Meeting — Orlando, FL
- **February 3-5, 1987**  
Weed Science Society of America  
1987 Annual meeting — Adams  
Mark Hotel, St. Louis, MO
- **March 10-12, 1987**  
Western APMS  
Red Lion Motor Inn  
Boise, ID
- **March 22-24, 1987**  
Midwest APMS  
Amway Grand Plaza Hotel  
Grand Rapids, MI
- **July 12-15, 1987**  
APMS  
Hyatt Regency  
Savannah, GA
- **October 13-16, 1987**  
Florida APMS  
Holiday Inn  
Daytona Beach, FL
- **Date TBA**  
Canadian APMS  
Midsouth APMS  
South Carolina APMS

## Other Important Dates

- **January 15, 1987**  
Deadline for submission of articles  
for APMS Newsletter #24
- **April 15, 1987**  
Deadline for submission of abstracts  
of papers to be presented at 1987  
APMS Annual Meeting

# APPLICATION FOR MEMBERSHIP

There are three regular classes of membership available upon application made in accordance with the Charter adopted in 1961. These classes are:

- A. Active Membership ..... \$25
- B. Student Membership ..... 5
- C. Commercial Sustaining Membership ..... 200

Name of Applicant \_\_\_\_\_ Spouse's Name \_\_\_\_\_

Home Address \_\_\_\_\_ Zip Code \_\_\_\_\_

Present Title & Employer \_\_\_\_\_

Business Address\* \_\_\_\_\_ Zip Code \_\_\_\_\_

Business Phone \_\_\_\_\_ Home Phone \_\_\_\_\_

Amount of Remittance \$ \_\_\_\_\_ Signature of Applicant \_\_\_\_\_

Membership Type: ACTIVE: \_\_\_\_\_ COMMERCIAL SUSTAINING \_\_\_\_\_

STUDENT: \_\_\_\_\_ SUBSCRIPTION \_\_\_\_\_

Please indicate address to be used by our business office.

## Aquatic Plant Management Society, Inc.

The Aquatic Plant Management Society, Inc., is an international organization of scientists, educators, administrators, and concerned individuals interested in the management and control of aquatic plants. The membership reflects a diverse collection of federal, state and local agencies; researchers, professors, and students from universities and colleges around the world; corporations; commercial applicators; and others dedicated to promoting research and sharing information about aquatic plant management.

Originally called The Hyacinth Control Society, Inc., when founded in 1961, The Aquatic Plant Management Society, Inc., has evolved into a respected source of expertise in the aquatics field. The Society has grown to include several regional or state chapters; and through these affiliates, annual international meetings, newsletters, and the *Journal of Aquatic Plant Management*, members keep abreast of the latest developments in biological, mechanical, chemical, and integrated methods of aquatic plant management and control.

The Aquatic Plant Management Society, Inc.  
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