



# AQUATIC PLANT NEWS

A newsletter of the Aquatic Plant Management Society, Inc./No. 32 Sept. 1989  
K.A. Langeland, Editor, University of Florida, Center for Aquatic Plants, 7922 NW 71st St., Gainesville, FL 32606

## The President Speaks...

The 29th Annual Meeting of the Aquatic Plant Management Society in Phoenix was without a doubt a very successful one. Registration was a little below the average for previous years, but at the last count approximately 185 individuals had signed up for the meeting.

Mr. Lowell Reese, President of the Arizona Chamber of Commerce, welcomed those attending the meeting, and described the large number of major attractions in and around the Phoenix area. After his talk, it is a wonder anyone attended the meeting. The desert and mountainous areas close to Phoenix provided ample opportunity for members of the society to enjoy some spectacular scenery before and after the meeting.

President Richard Couch talked about the challenges facing the Aquatic Plant Management Society. President Couch challenged the membership to actively accept these challenges, and in doing so helped direct the future of the Society.

The Keynote Address was presented by Dr. David Mitchell, Direc-

tor of the Murray-Darling Freshwater Research Center in Albury, Australia. The Society was fortunate to be able to have Dr. Mitchell attend the meeting and present his views on the management of aquatic weeds.

A record number of foreign scientists attended the 29th annual meeting.

Thanks must go to Randy Stocker, Coordinator of the International Contacts Committee, for his effort in getting the word out on the meeting.

Special thanks goes to Winn Winkyaw and the local arrangements committee of Fred Corbus and Randy Stocker for their hard work and effort

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"Los Tres Cabelleros Magnifico" or The Three Amigos"- Max McGowan, recipient of Honorary Membership is joined in celebration by Honorary Members, Lou (Hydrilla Gorilla) Guerra and John (The Great) Gallagher.

## Texas Aquatic Plant Management Society Established

Joyce Johnson, Texas Parks and Wildlife

A Hydrilla Task Force was formed in Austin in the fall of 1987 as a result of serious hydrilla problems in the nearby area. Representatives from water authorities and other agencies from around the state began attending these informal meetings. It became evident that there were several aquatic plant problems and that sharing information and experiences was at least a start on a solution. Equally obvious to all was that a special, Texas-oriented group should be formed. Information on starting a chapter of the APMS set the group into action. Bylaws were passed and officers elected in February 1989 for the Texas Aquatic Plant Management Society. There are about 30 Texans active in the group. Annual dues are \$10 for active and associate members. The first annual meeting of the TAPMS will be in Austin at the Stouffer Hotel on November 7,

1989. For more information, please contact Henry Neason, 512/782-5229 or Joyce Johnson, 512/389-4858.

### Texas APMS Officers:

President: Henry Neason  
President Elect: Joyce Johnson  
Secretary: Ewing Evans  
Treasurer: Bunny Bennett  
Editor: Nancy McClintock  
Directors: H.E. (Ike) Barrett, Daniel Clain, Rhandy Helton, Malcolm Johnson, Victor Palma.

### 1989 Photo Contest

Ribbons were presented for the first four places in the 1989 APMS Photo Contest. Thanks goes to Terry McNabb for arranging for the judging of the photos. The first place winner of the contest will be displayed with the APMS booth during the coming year.

The winners for the 1989 APMS

Photo Contest were:

#### 1st Place-"Water-lily Flower"

Wendy Andrew  
Aquatic Plant Manager  
Operations Department  
Southwest FL Water Management District  
2379 Broad Street (U.S. 41 South)  
Brooksville, FL 34609-6899

#### 2nd Place-"Developing Leaf of *Potamogeton tricarlinatus*"

Lars Anderson  
USDA Aquatic Weed Lab  
Department of Botany  
University of California  
Davis, CA 95616

#### 3rd Place-"Coming in to Land-Bee's Eye View of a Water Hyacinth"

Alison Fox  
Center for Aquatic Plants  
University of Florida-IFAS  
7922 N.W. 71st St.  
Gainesville, FL 32606

#### 4th Place-"Lily Pad"

Wendy Andrew

at the meeting. The hotel accommodations were superb. The meeting room was adjacent to the registration desk and exhibitor's displays making for easy access to these areas. The tour of the Salt River Project was informative, and the Tuesday night function highly enjoyable.

The theme of the 1989 annual meeting centered around the management of aquatic weeds in flowing water, and a number of talks presented information on the most advanced technology available today for control of weeds under these conditions. Since there were single sessions, every talk was available to be heard by those attending the meeting.

For the second year, Bill Zattau organized and Chaired the Monday afternoon session dealing with the "Management of Aquatic Weeds in Irrigation Systems". Joe Joyce chaired the Tuesday morning session which featured mainly contributed talks and the student paper contest. Randy Stocker organized and chaired the Tuesday afternoon session. This ses-



APMS Officers for 1989-90 from left; Doug Pullman-Director, Carol Lemb-Director, Bill Rushing-Secretary-Treasurer, Joe Joyce-President Elect, Randy Stocker-Vice President, Richard Couch-Immediate Past President, Bill Haller-Editor, Joe Zolczynski-Director, Bill Zattau-Director, Steve de Kozlowski-Director, not shown Nate Dechoretz-Director.

sion featured invited and contributed papers many of which dealt with aquatic plant problems in the Southwestern portion of the country.

The Wednesday morning session, Chaired by Ken Langeland, featured several invited talks on Aquatic Plant Extension activities around the country. I would especially like to thank Bill, Joe, Randy, and Ken for their effort in organizing these sessions, and for keeping the speakers on time.

One of the highlights of the meeting was Bill Haller's effort in raffling off a book "Waterplants of New South Wales" donated to the Society by Geoff Sainty. I would like to thank Dr. Sainty for donating the book. Thanks go to Bill for raising almost \$500 which will be used for student activities. Money from the raffle was combined with the generous gift from Clark Hudson of Valent Chemical for the development of a student scholarship fund. Also, thanks go to Clark for his special effort in getting the student scholarship fund started.

As many of you know, the Society is evaluating various options to improve the Society's financial posture. One of the last actions by Past President Couch was to appoint Terry McNabb



Five hundred dollars for student activities were raised by Bill Haller's raffle. Grand prize "Water Plants of New South Wales", donated by Geoff Sainty was won by Mario Sanchez, visiting from Columbia, South America. A half-full bottle of cheap booze was won by Jorge Morales, also visiting from Columbia, and some cheap cigars stolen from Lou Guerra were won by Julie Lienhart.

Chairman of an Ad-hoc Financial Committee to evaluate steps which are needed to bring the Society into a better financial situation. We are fortunate that Terry has accepted this assignment, and look forward to the committee's recommendations to be presented at the mid-winter board meeting in Mobile.

The work of the Society is carried out by the committees. The committee appointments for 1989-90 are listed in the Newsletter. I would like to thank those who agreed to serve on these committees, and also those who volunteered. I was impressed by the number of members who signed up for committees at the meeting. In all cases, I placed these volunteers on their requested committees.



"Changing of the Guard", David Sutton, President, presents Presidents Plaque to Richard Couch, Immediate Past President.

# The Aquatic Plant Management Society 1989-90 Committee Assignments

## ARCHIVES:

Don Riemer, Chairman  
210-932-9589  
Joe Joyce, John Gallagher, Bill Rushing

## BYLAWS & RESOLUTIONS:

David Spencer, Chairman  
916-752-6260  
John Inabinet, Nate Dechoretz, Bob Blakely, Kerry Steward.

## EXHIBITS:

Scott Jorgensen, Chairman  
735-4886  
Terry McNabb, Terry Goldsby, Bernalyn McGaughey, William Moore, Paul Myers, David Tarver, Elroy Timmer.

## INTERNATIONAL CONTACTS:

Randy Stocker, Coordinator  
619-339-9565

## LEGISLATIVE:

James Schmidt, Chairman  
800-558-5106  
Leon Bates (Midsouth APMS), David Tarver (Florida APMS), Steve de Kozlowski (SC APMS), Nate Dechoretz (Western APMS), Richard Hinterman (Midwest APMS), Lyn D. Luben (At-Large), Kevin Kertch.

## LOCAL ARRANGEMENTS:

Joseph Zolczynski, Chairman  
205-626-5153  
Mike Eubaks, Joe Stephenson, Johnny Frizzel, Howard Westerdahl, Don Doggett.

## MEMBERSHIP:

Mike Stewart, Chairman  
601-634-2606

Steve de Kozlowski, Michael Mahler, Fred Nibling, Randy Stocker, Don Reimer, James Schmidt, Joe Stephenson, Joe Zolczynski, Joyce Johnson.

## NECROLOGY:

Max McCowen, Chairman  
317-845-0993, 813-775-6008  
Carole Lembi, Fred Nibling, Dan Thayer, David Webb.

## NOMINATING:

Richard Couch, Chairman  
918-495-6940, 446-1148  
Steve de Kozlowski, Leon Bates, Eddie Knight, Dick Comes.

## PAST PRESIDENTS ADVISORY:

Richard Couch, Chairman  
918-495-6940  
All past presidents.

## PLACEMENT:

John Rodgers, Chairman  
Al Burkhalter, Kurt Getsinger, Steve Klaine, David Tarver.

## PROGRAM:

Joe Joyce, Chairman  
904-392-9613

## PUBLICATIONS:

Bill Haller, Editor and Chairman  
904-392-9613 office  
904-378-9931 home  
Richard Couch, Associate Editor  
Ken Langeland, Newsletter Editor  
Dan Thayer, Stratford Kay, Dave Spencer, Bill Zattau, John Cassani.

## PUBLICITY:

Doug Pullman, Chairman  
313-735-7910  
Program Chairman, Joe Joyce

Local Arrangements Chairman, Joe Zolczynski  
Ed Theriot.

## REGIONAL CHAPTERS:

Steve de Kozlowski, Chairman  
803-737-0800  
Bill Moore (Florida APMS), Cindy Aulbach-Smith (SC APMS), Howard Krosch (Midwest APMS), Raymond Cooper (Midsouth APMS), Tom McNabb (Western APMS), Henry Neason (Texas APMS).

## SITE SELECTION:

Bill Zattau, Chairman  
904-791-2218  
Vice President Randy Stocker  
Secretary/Treasurer Bill Rushing  
John Cassani, Dan Thayer, Vernon Vandiver.

## STUDENT AFFAIRS:

Kurt Getsinger, Chairman  
601-634-2498  
Steve Klaine, Don Riemer, Stratford Kay, Carole Lembi, Ken Langeland.

## CAST REPRESENTATIVE:

Joe Joyce, 1988-91  
904-392-9613

## WSSA REPRESENTATIVE:

Lars Anderson, 1988-91  
916-752-6260

## NALMS REPRESENTATIVE:

John Barko, 1989-90  
601-634-8110

I am looking forward to serving as the President of APMS for this next year. I invite each member to become more active in the Society. The Society can be only as strong as the participation of its members.

I urge you to start making arrangements to attend the 1990 meeting scheduled for July 15-18 to be held at the Radisson Admiral Semmes in Mobile, Alabama. From all reports this is one meeting you will want to attend, and kick yourself if you don't. Initial indications from Joe Zolczynski, Chairman of the local arrangements committee, is that we can look forward to a first class meeting complete with Southern hospitality.

And finally, I welcome any suggestions or comments which you may have concerning the Aquatic Plant Management Society. Please write or call [telephone(904) 475-8990] if you have any items which you would like discussed at the January Board meeting scheduled for Sunday January 29, 1990.

Best wishes for the coming year.  
/DLS



Kurt Getsinger presents student contest winner awards to Bao L. Tsai for his paper titled "The Absorbtion and Translocation of Glyphosate in Waterhyacinth" and Philip A. Clifford for his paper titled, "Modeling Exposure Route, Tissue Concentrations and Effects of 2,4-D on *Eichhornia crassipes*."

## INTERSTATE COMMERCIAL SALE OF FEDERAL NOXIOUS WEEDS IN THE UNITED STATES

R. Westbrooks and R. Eplee, USDA APHIS S&T, Whiteville, North Carolina.

The introduction, establishment and spread of most serious aquatic weeds in the U.S. can be attributed directly to man. As with many terrestrial weeds, most aquatic weeds have certain traits that may make them desirable to some people and other traits that may make them a serious threat in water systems. The intentional spread of such plants without regard for their potential long term effects on the environment and man's use of it has been called the "Johnny Weed Seed Syndrome". Both hydrilla and floating water hyacinth were intentionally introduced and spread in the U.S. in this manner.

Presently, at least five Federal Nox-



*Eichhornia azurea*, a native to South America, is another threat to the waters of the Southeastern United States.



*Hydrilla verticillata* in North New River Canal, Ft. Lauderdale, Fl. Dense growth such as this are serious flood hazards.

Weed Act (FNWA) stipulates that Federal Noxious Weeds cannot be moved Interstate in the U.S. without a permit from APHIS. However, the legislative history of the Act interprets the restrictions on the interstate movement as applying only to movements of FNWs from areas quarantined under Section 5 of the Act. To date, no FNWs have been quarantined under the Federal Noxious Weed Act. Witchweed [*Striga asiatica* (L.) O. Kuntze] in the eastern Carolinas is a Federal Noxious Weed but was quarantined under the Federal Plant Pest Act. Thus, APHIS has not restricted the interstate sale of FNW including aquatic species listed above.

These aquatic weeds have the potential to become serious weeds in some parts of the U.S. if they continue to spread. One small population of *E. azurea* in Palm Beach, Florida, was

ious Weeds are being sold in interstate commerce as pond ornamentals or as vegetables. These include:

1. *Eichhornia azurea* (Swartz) Kunth (rooted water hyacinth); by an aquatic plant dealer in Ohio.
2. *Hydrilla verticillata* (L.F.) Royle; by an aquatic plant dealer in Texas.
3. *Hygrophila polysperma* (T. Anderson) (Miramar weed); by aquatic plant dealers in South Florida to buyers outside the state.
4. *Ipomoea aquatica* T. Forsskal (Chinese water spinach); by Asian-American food stores in several states.
5. *Limnophila sessiliflora* (Vahl) Blume (Ambulia); by aquatic plant dealers in Florida to buyers outside the state.

*Lagarosiphon major* (Ridley) Moss was being offered for sale by an aquatic plant dealer in California but is no longer available.

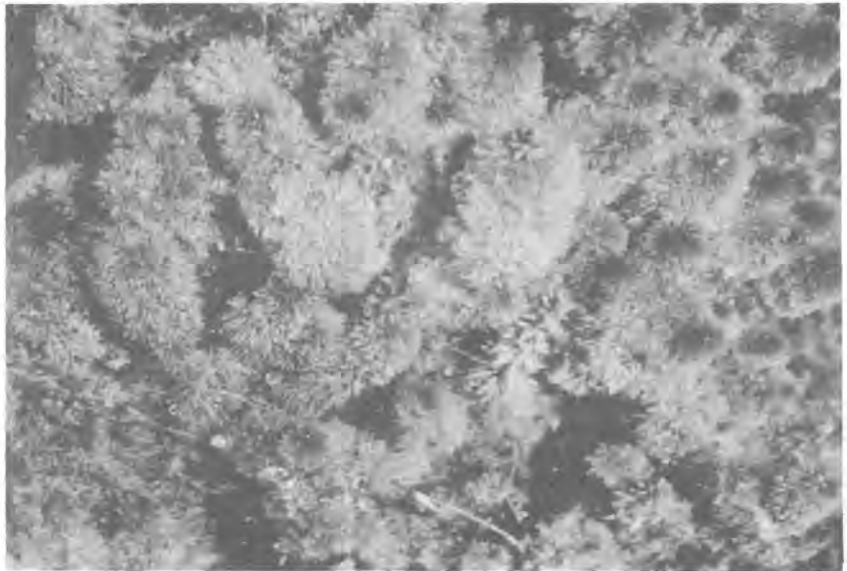
Section 4 of the Federal Noxious



*Hygrophila polysperma* grows to the surface in eight feet deep water in the Felsmere Canal Near Melbourne, Fl. Vegetation breaks loose during high flow and clogs water control structures.



*Ipomoea aquatica* is already widespread in cultivation in Florida and will likely escape to cause problems in the future.



A dense *Limnophila sessiliflora* infestation in a Miami, FL canal.

eliminated by the Florida Department of Natural Resources (FDNR) in June, 1988. FDNR was alerted of its presence by an aquatic plant dealer in South Florida. The plants had been purchased from a mail order aquatic plant dealer in Independence, Ohio.

The present interpretation of the Federal Noxious Weed Act is a handicap in preventing the spread of such species. The Act must be reevaluated and either amended or reinterpreted to provide effective authority against commercial interstate shipment of Federal Noxious Weeds. Until that time, the states must rely on their own regulations for protection against the spread of unwanted aquatic noxious weeds by modern day "Johnny Weeds".

## Preliminary Announcement, Third International Symposium On Off-Flavors in the Aquatic Environment

Los Angeles, California  
March 3-8, 1991 (note date change)  
Los Angeles Airport Hilton Hotel

Off-flavors in drinking water and fish have long been recognized as significant problems. Consumer rejection of drinking water and fish because of aesthetic problems has had significant economic and political impacts throughout the world. Cooperation between researchers in the water and fisheries fields has already resulted in significant advances in mitigating off-flavors in both areas. The first International Symposium on Off-Flavors in the Aquatic Environment was held in

Espoo (Helsinki), Finland, in 1982. The second symposium was held October 12-16, 1987, in Kagoshima, Japan. The Third International Symposium on Off-Flavors in the Aquatic Environment will be held in Los Angeles, California, March 3-8, 1991. For more information contact:

Michael J. McGuire, Chairman  
1991 Conference  
Organizing Committee  
Metropolitan Water District of  
Southern California  
Post Office Box 54153  
Los Angeles, California 90054  
USA

## Rubber Gloves: Who Needs Them?

"Field studies have shown a primary means of applicator exposure to pesticides is skin contamination, primarily on the forearms and hands. The greatest risk of acute exposure comes from handling concentrated formulations."

The simple, but often overlooked practice of wearing rubber gloves during mixing and application can reduce the potential dermal exposure to a pesticide by more than 95%. Couple this with good personal hygiene and other protective steps such as wearing a long sleeve shirt and other protective clothing stated on the product label. Don't take chances with your health." (Georgia Pesticide Digest, Vol. II, No. 6, June 1989).

## Nebraska and Kansas 2,4-D Studies: Are They Really Consistent?

Controversy erupted more than two years ago when the *Journal of the American Medical Association* published a National Institute of Cancer study that claimed to link Kansas farm workers using 2,4-D with a rare form of cancer, non-Hodgkins lymphoma (NHL). In the following months, a number of independent reviews found that the study had overstated its case, that no hard link between 2,4-D and cancer had been found and that further study would be needed before drawing any definite conclusions.

Last summer, that controversy was resurrected by remarks made by the primary author of the Kansas study at an international symposium. In her brief presentation, the researcher presented preliminary data from her case control study of Nebraska farm workers and claimed that these findings supported her earlier research. Spurred on by anti-pesticide advocates, the popular literature demonstrated a predictable rush to judgement following this presentation, carrying dire warnings that a new link between 2,4-D and cancer had been found.

But a closer look at the issue

reveals a different picture. In fact, the data are equivocal and could equally suggest that the risks posed by 2,4-D are considerably *less* than those reported by the Kansas study and may be insignificant. Here's why:

•**Small sample sizes:** Because NHL is a rare disease, both the Kansas and Nebraska findings are based on very small numbers of affected farm workers. In the Kansas study, the strongest evidence of a link between 2,4-D users and NHL came from a group of only seven subjects. In the Nebraska study, the number was so small that the results were not even statistically significant. Drawing major conclusions from such small numbers is extremely difficult and highly prone to misleading results.

•**Reliance on memory to determine exposure:** In both the Kansas and Nebraska studies, how much herbicide a given subject was exposed to was determined entirely by memory, either by the subjects themselves or their next of kin. (How well could you estimate your family's exposure to the cleaning products used around your house over the past decade - both the name of the product and how often you

were exposed? If your memory is wrong, the results of your study will be wrong, too.)

•**Lack of information about specific herbicides:** Much attention was focused on 2,4-D as the link with NHL in the Kansas study. But a closer look shows that 2,4-D cannot be singled out. The critical question which asked about frequency of use dealt with herbicides in general and not with specific types of herbicides. Preliminary data suggest that the Nebraska study suffers from the same flaw.

To maintain perspective, it should be kept in mind that the results of both these studies conflict with work reported from New Zealand, Washington state and Iowa-Minnesota and also with cohort studies of manufacturing employees and applicators - all of which did *not* find a link with cancer. Ongoing work on 2,4-D should help to clarify this situation. In the meantime, its counterproductive to make sweeping claims, as some anti-pesticide advocates have, based on equivocal data.

Source: The Industry Task Force on 2,4-D Research Data. Reprinted from "The Bottom Line"

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# Aquatic Plant Management- What's Happening in Europe

During the last few years the Aquatic Weeds Group (AWG) of the European Weed Research Society (ERWS) has developed a number of initiatives in the aquatic plant management. One important aim is to encourage collaborative research work, involving institutes not just in Europe, but elsewhere in the world. For example early in 1989 we held an informal meeting in the Netherlands to initiate a joint project involving institutes in several European countries. This aim is to develop optimal plant management approaches for use in drainage channels in agricultural areas where farming and land practices are changing (for example due to "SET ASIDE" programmes). Such projects can be funded from European Community services. Other possible funding sources for joint studies include agencies such as NATO. We would be delighted to help researchers in the USA and Canada to locate potential European partner institutes, and funding

sources, for collaborative work on aquatic weeds.

Besides this aspect of AWG's work, we are currently finalizing arrangements for the 8th International Symposium on Aquatic Weeds (13-17 August 1990), Uppsala, Sweden. We expect an attendance of over 100, from at least 20 different countries, including a large contingent from the USA and Canada. Papers and posters presented at the meeting will be published in the Symposium Proceedings.

Our final major current initiative is the preparation of a new book entitled "Aquatic Weeds" (edited by Arnold Pieterse and Kevin Murphy for ERWS), to be published later this year by Oxford University Press. The book includes chapters by an internationally known group of aquatic plants specialists. (Amongst our US authors are Joe Joyce, George Bowes, Lars Anderson and David Sutton). Three main selections are included in the book: Biology/Ecology of Aquatic Plant

Management; and regional problems, on a continent-by-continent basis. Also included is a set of appendices providing a worldwide comprehensive list of aquatic weed species, organisms used in biological control of aquatic plants, and aquatic-use herbicides.

Current coordinating members of AWG are Arnold Pieterse (The Netherlands), Kevin Murphy, Pip Barrett, and Max Wade (Great Britain), Maria Arsenovic (Yugoslavia) and Thomas Hertzman (Sweden). Information about the work of the group, the 1990 Symposium, or membership of ERWS should be sent to me at the address below. We'd like to hear from you!

Dr. Kevin Murphy  
Department of Botany  
University of Glasgow  
Glasgow G12 8QQ  
Scotland, UK

Telephone: (011-44) 41-339 885 x 5083  
Telex: 777070 UNIGLA G

## National Wetlands Newsletter

Wetlands protection is one of the fastest growing areas of the law. Increasingly, wetlands and related land and water regulations affect a wide range of development and planning actions.

A publication of the Environmental Law Institute, the **National Wetlands Newsletter** provides coverage of legislative and regulatory developments. Federal, state, regional and local developments are closely monitored. In addition, this valuable source covers litigation: an "In The Courts" section presents case briefs on significant wetlands and coastal zone cases. Each issue also lists recent professional journal articles on wetlands, floodplains and coastal zone issues; reviews on technical, management and scientific books and reports; and upcoming conferences, symposia and workshops.

A one-year subscription to the newsletter includes six issues and costs \$48.00. Back issues are also available. For information, contact the National Wetlands Newsletter, Environmental Law Institute, 1616 P Street, NW, Suite 200, Washington, DC 20036, (202) 328-5150.

## EPA Published Third List of AI's to be Registered

The third of four lists of older pesticide active ingredients to be reregistered by EPA was published July 24. Manufacturers of pesticides on the list have until Oct. 24 to tell EPA whether they will maintain registrations of the pesticides by conducting the required health and safety studies. The list includes 150 pesticide active ingredient cases, with some similar active ingredients grouped together. This list, known as list C, is the third group of active ingredients listed for review by EPA. List A, issued Feb. 22, contained 184 active ingredients that already had undergone the first stage of reregistration when Congress ordered EPA to speed up the program. Unlike other chemicals being reregistered, those on List A do not have strict deadlines for review and must be completed by 1997. List B contained 150 active ingredients not yet re-examined by the agency. The list was published May 25 and manufacturers have until Aug. 25 to respond. (Chemical Regulation Reporter, July 28, 1989)

## 2,4-D Hotline Reinstated

As a service to its customers, The Industry Task Force on 2,4-D Research Data has reinstated its "hotline" for questions on 2,4-D. While questions on company-specific formulations and uses should still be directed to the original supplier, the information line can be valuable for media relations and most broad public issues related to this herbicide.

Dr. Wendell Mullison will man the information line. Dr. Mullison is author of approximately 60 herbicide-related publications. He is a recently-elected fellow of the Weed Science Society of America and a consultant to the herbicide industry with more than 40 years of experience in agrichemical science.

In the U.S., call (800) 345-5109.

In Canada, call (517) 835-2091

## CALENDAR

October 11-13, 1989	Midsouth Aquatic Plant Management Society Annual Meeting; Ramada Inn East Montgomery, Alabama.
October 16-18, 1989	Florida Aquatic Plant Management Society 13th Annual Meeting; Holiday Inn Surfside Daytona Beach, Florida.
November 7, 1989	First Annual Meeting of the Texas Aquatic Plant Management Society; Stouffer Hotel, Austin, Texas.
November 7-11, 1989	North American Lake Management Society; 9th Annual Symposium Stouffer Hotel, Austin, Texas.
November 13-16, 1989	Annual Meeting and Program Review of the U.S. Army Corps of Engineers Aquatic Plant Control Research Program; Holiday Inn Research Park, Huntsville, Alabama.
January 15-17, 1990	Southern Weed Science Society Annual Meeting; Atlanta Hilton and Towers Hotel, Atlanta, Georgia.
February 5-8, 1990	Weed Science Society of America Annual Meeting; Queen Elizabeth Hotel, Montreal, Canada.
March 15-17, 1990	Western Aquatic Plant Management Society Annual Meeting; Nugget, Sparks (Reno), Nevada.
March 16-21, 1990	55th North American Wildlife and Natural Resources Conference, Sheraton Denver Tech Center, Denver, Colorado.
March 18-21, 1990	Midwest Aquatic Plant Management Society 10th Anniversary Meeting; Omni Feberni, Indianapolis, Indiana.
July 15-18, 1990	Aquatic Plant Management Society 30th Annual Meeting; Radisson Admiral Semmes, Mobile, Alabama.
August 13-17, 1990	European Weed Research Society 8th International Symposium on Aquatic Weeds; Swedish Agricultural University, Uppsala, Sweden.
November 6-10, 1990	NALMS 10th Annual International Symposium, Sheraton Tara Hotel, Springfield, Massachusetts.
March 3-8, 1991	Third International Symposium on Off-Flavors in the Aquatic Environment; Los Angeles Airport Hilton Hotel, Los Angeles, California.

# 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.

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## 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 ..... \$ 35
- 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
		_____ Texas 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*

The Aquatic Plant Management Society, Inc.  
P.O. Box 2695  
Washington, DC 20013-2695