



# The MidSouth Aquatic Plant Management Society

APRIL 1992

NEWSLETTER

VOLUME 10, NO 1

## BOARD OF DIRECTORS

### OFFICERS

**RANDELL GOODMAN** -- Pres.  
Dept. of Fisheries and Allied  
Aquaculture  
Auburn University, AL 36849

**EARL BURNS** -- Pres.-Elect  
Tennessee Valley Authority  
Office Service Annex 1B  
Muscle Shoals, AL 35660

**JERRY MOSS** --- Sec.-Treas.  
Ala. Dept. of Cons. and Natural Res.  
P.O. Box 305  
Northport, AL 35476

**DOUGLAS POWELL** --- Editor  
Alabama Power  
#8 General Services Complex  
P.O. Box 2641  
Birmingham, AL 35291

**MIKE EUBANKS** --- Past-Pres.  
U. S. Army Corps of Engineers  
P. O. Box 2288  
Mobile, AL 36628

### DIRECTORS

**THOMAS BROADWELL**  
Georgia Power Company  
5131 Maner Road  
Smyrna, GA 30080

**STAN COOK**  
Al. Dept. of Cons. and Natural Res.  
64 North Union Street  
Montgomery AL 36130

**JOE KIGHT**  
U.S. Army Corps of Engineers  
P.O. Box 96  
Chattahoochee, FL 32324

**CARLOS SCARDINA**  
Al. Dept. of Cons. and Natural Res.  
State Parks  
64 North Union Street  
Montgomery, AL 36130

## BUSINESS MEETINGS

The Tenth Annual Meeting of the Midsouth Aquatic Plant Management Society was held October 2-4, 1991 at the Best Western Conference Center, Auburn, Alabama. The following is a synopsis of the Board Meetings, Business Meeting and 1991 Financial Summary.

### FINAL BUSINESS MEETING

Oct. 4, 1991

The meeting was called to order by President Mike Eubanks.

President Eubanks extended his appreciation to the Program Committee and Corporate Sponsors for their assistance and support during the 10th Annual Meeting.

The financial Report (see page 2) was presented by Sec.-Treas. Jerry Moss.

#### Election Results:

President-Elect	Earl Burns
President	Randell Goodman
Secretary-Treasurer	Jerry Moss
Editor	Doug Powell
New Board Members:	1) Joe Kight 2) Stan Cook

Certificates of Appreciation were presented to out-going Board of Director members Fred Harders and Johnny Frizzell.

David Franks recommended that several minor changes in the By-Laws be considered and voted on at the next Annual Meeting.

President Randell Goodman assumed the Presidency and presented out-going President Eubanks with an honorary plaque.

Appreciation was extended to APMS President Randall Stocker for attending the MSAPMS 10th Annual Meeting.

It was decided that the Winter Board Meeting will be held in conjunction with the AFA Annual Meeting at Joe Wheeler State Park, February 26-28, 1992.

### FINAL BOARD OF DIRECTORS MEETING

October 4, 1991

The MSAPMS Board of Directors Meeting was called to order by President Randell Goodman following the Final Business Meeting of the MSAPMS on October 4, 1991 at the Auburn Conference Center.

Stan Cook and Joe Kight were welcomed as new members of the MSAPMS Board of Directors.

Former President Eubanks requested the sec.-treas. to forward a certificate of appreciation to former Director Johnny Frizzell for service on the Board during the past year.

President Goodman expressed his appreciation to APMS President Randall Stocker for his attendance at the 10th Annual Meeting of the MSAPMS and for his support of our organization.

The Board discussed a proposed regulation that would limit or prohibit federal and/or state employees from attending meetings or holding office in non-profit organizations similar to the MSAPMS.

Sec.-Treas. Jerry Moss presented a brief financial summary and was directed by the Board of Directors to purchase an additional Certificate of Deposit in the amount of \$1000.00 for the Scholarship Fund.

## 1991 FINANCIAL SUMMARY

Total Registered	71
Total Paid Dues	75
New Members	6

### INCOME

(46) Fish Fry Tickets @ \$12.00	\$ 564.00
( 2) advanced Dues Paid (1992)	20.00
Income from Registration	355.00
Income from 1991 Membership	795.00
Cash on Hand	250.00
Corporate Donations and Extra Raffle	
Ticket Sales (Scholarship Fund)	<u>368.00</u>
<b>TOTAL</b>	<b>\$ 2,352.00</b>

### EXPENSES

Membership Cards	\$ 43.87
Annual Meeting Supplies	112.72
Honorary Membership Plaque	50.00
President's Plaque	71.18
Registration Supplies	37.33
Honorarium Gift to A.U. Assistants	100.00
Best Student Paper Award	25.00
Groceries for Fish Fry	277.00
Friday Morning Break	250.11
Projector Rental (Auburn Motor Lodge)	<u>31.80</u>
<b>TOTAL</b>	<b>\$ 999.01</b>

Editor Doug Powell encouraged members to provide him with any noteworthy news items for the newsletter and reported on his efforts to complete work on the new MSAPMS Brochure. Board members were given a deadline of Nov. 15 1991 to provide him with revisions and/or comments on the brochure.

Editor Powell indicated that he would handle ordering new stationery and envelopes for MSAPMS.

President Goodman directed that a Scholarship Committee (chaired by Dr. David Bayne) be established to set up guidelines for the distribution of scholarship funds to qualified students.

Board members held a short discussion on the tax exempt application that is being handled through the legal section of Alabama Power Co.

Program Committee Chairman Earl Burns asked the Board for their recommendations concerning a meeting site for the 11th MSAPMS Annual Meeting. Joe Wheeler State Park was tentatively selected for the 1992 meeting. (Editor's note: Guntersville State Park was the site chosen for the 1992 meeting.)

President Goodman adjourned the Final Board Meeting.

## WINTER BOARD MEETING

Joe Wheeler State Park Feb. 26, 1992

President Randell Goodman called the 1992 Winter Board Meeting to order. In attendance were: Directors Thomas Broadwell, Stan Cook and Joe Kight; Officers Randell Goodman, Earl Burns, Jerry Moss and Doug Powell; and Member Scott Lankford.

Secretary-Treasurer Moss presented a Financial Report and reviewed the Minutes from the 1991 Annual Meeting held in Auburn.

The Board of Directors accepted the Financial Report and Minutes after a short discussion.

Motion was approved by the Board to contact various agency representatives advising them about the MSAPMS and benefits of membership. A copy of the new MSAPMS brochure will be included with any correspondence.

Editor Powell presented a committee report on the status of the MSAPMS brochure. The Board reviewed the latest editorial changes and expressed appreciation to Alabama Power Company for financial support associated with designing and printing the brochure.

Editor Powell distributed new MSAPMS stationery and letterhead to various Officers and Board Members.

Scott Lankford presented a report concerning recent legal procedures required for tax exempt status for the MSAPMS.

A series of documents were presented to the Board which amended the Articles of Incorporation and required signatures of various Officers and Directors so the 1986 Internal Revenue Code could be met.

Scott Lankford reviewed regulations regarding limitations of scholarship benefits for the MSAPMS.

Program Chairman Burns discussed proposed sites for the 1992 Annual Meeting. Proposed locations included Gulf Shores and Guntersville State Park. Possible meeting dates were discussed by the Board. Chairman Burns indicated a final decision would be published in the upcoming newsletter.

Nomination Committee Representative Broadwell presented a slate of nominations to be voted on at the 1992 Annual Meeting. The following candidates were submitted for consideration:

President-Elect:	Fred Harders.
Secretary-Treasurer:	Frank Ellis.
Editor:	Mike Maceina.
Directors (2 elected):	M.C. McLeod Doug Powell Maurice Simpson.

President Goodman presented a list of official documents that are archived in the Fisheries Department at Auburn University.

President Goodman adjourned the Winter Board Meeting.

## BITS OF MACROPHYTE TRIVIA

**A Warning** ---- Do not burn yourselves out. Be as I am. A reluctant enthusiast and part-time crusader. A half-hearted fanatic. Save the other half of yourselves for pleasure and adventure. .... So get out there, hunt, fish, mess around with your friends, ramble out yonder and explore forests, encounter the griz, climb a mountain, bag the peaks, run the rivers, breathe deep of that yet sweet and elusive air. Sit quietly for a while and contemplate the precious stillness of the lovely, mysterious, and awesome space. Enjoy yourselves. Keep your brain in your head and your head firmly attached to the body, the body active and alive. And I promise you this one sweet victory over our enemies, over those deskbound people with their hearts in safe deposit boxes and their eyes hypnotized by their desk calculators. I promise you this: You will outlive the bastards! ---- Edward Abbey, Writer and Rabble Rouser

## Ammonium Sulfate Increases Efficacy of Glyphosate

A recent study has indicated that the addition of ammonium sulfate ( $(\text{NH}_4)_2\text{SO}_4$ ) will greatly enhance the efficacy of glyphosate (Shilling, D.G., W.T. Haller, T.R. Willard and M.A. Mossler, 1990, *Influence of Surfactants and Additives on Phytotoxicity of Glyphosate to Torpedograss*. J. Aquat. Plant Manage. 28:23-27.)

Use of herbicides containing glyphosate (RODEO and ROUNDUP) have sometimes produced erratic results, particularly when mixed with water having a high total hardness (calcium) content. It appears that glyphosate will combine with available carbonates, thus reducing the amount of glyphosate available to the plant. Various additives have been used in an attempt to alleviate this problem.

The study by Shilling, et al. indicates that the addition of from 1.25 pounds to 12.5 pounds of ammonium sulfate per 100 gallons of water results in positive control. This was observed to be the case at Lake Seminole as a result of the 1991 spraying of torpedograss and giant cutgrass. For most conditions, the addition of from six (6) to eight (8) pounds of ammonium sulfate per 100 gallons of water was found to be an adequate amount.

The proper sequence of mixing is to start with a known amount of water in the tank. Add the proper ratio of ammonium sulfate, which should immediately dissolve, and stir. (It may be prudent to dissolve the sulfate in a bucket of water first as sometimes there are granules present that do not dissolve. These could clog the spray system.) Then add the herbicide and mix thoroughly.

This could, depending on the hardness of water used, enable the applicator to reduce the amount of RODEO or ROUNDUP required by a very substantial amount. It is suggested that experimentation based on local water sources be used to determine just how much the herbicide concentration can be reduced.

Local costs for RODEO approximates \$90.00 per gallon. Local cost for ammonium sulfate is approximately \$6.00 for a 50 pound bag. This product is usually available at farm supply outlets.

Clean, soft water should be used with any herbicide mix, but quite often is not available. The addition of ammonium sulfate is a workable inexpensive option for use in hard water. ----- Joe Kight, Lake Seminole

## Fish Kills Due to Toxic Algae

Now and then fish diagnosticians have reverted to explaining a fish kill by calling it "caused by toxic algae". These fish kills caused by toxic algae are usually not wholly substantiated but based mainly on circumstantial evidence. A new manual published by the U.S. Fish and Wildlife Service, *Resource Publication 177* by Roger L. Herman and Fred P. Meyer, includes a small section on toxic blooms on p. 42 - chap. 5. The following was taken from that material.

"In certain unique situations, a single species of toxic algae may become dominant in the flora. Some blue-green algae and certain dinoflagellates release toxins that kill or inhibit other algae. When competition for nutrients become intense, the level of toxin released climbs. Susceptible species of algae gradually disappear until only the dominant species remains, usually in high abundance. As the algae uses up the available nutrients, the species competes with itself and the level of toxin released continues to rise. Eventually, the water may become toxic to

zooplankton, insects, fish, and sometimes even to animals that drink the water. Red tides, which occur in marine waters because of blooms of the dinoflagellate *Gymnodinium brevis*, are a common example.

Mortalities due to toxic algal blooms are unique in that production of the toxin is strongly related to photosynthetic activity. Kills begin at about 9:00 a.m., continue through the day until 4:00 p.m., and then subside, only to be repeated the following day. Unless some factor intervenes, the phenomenon continues until the algae bloom ends or an oxygen depletion occurs. Often there is a large-scale die-off of the problem alga, sometimes followed by signs of classical oxygen depletion (e.g., low oxygen, low pH, high  $\text{CO}_2$ , dark water color, and sour-cabbage odor). Unless the observer has information about the early phases of the fish kill, the role of the toxic algae may be overlooked. In toxic algal blooms, pH is very high (9.5 to 11.0) at midday, dissolved oxygen is near saturation or above, and water temperatures are above 27 degrees C. A single species of alga is present in large numbers. Species of *Anabaena*, *Aphanizomenon*, *Dinobryon*, *Glenodinium*, *Gleotrichia*, *Gymnodinium*, and *Microcystis* are some that have been reported to cause toxic blooms.

The above information was taken from *Fish Stories* 1991, vol. 2, Alabama Cooperative Extension Service, Auburn University, John W. Jensen and Michael P. Masser.

## EDITORIAL

As professionals we have been taught to keep an open mind, because "tunnel vision can lead one down the primrose path". MOTHER NATURE is not always predictable (remember Murphy's Law concerning MOTHER NATURE?). Since we deal with MOTHER NATURE on a daily basis, we should remain cognizant of this. Point one: Many times we make statements only to find that "it isn't always so". This can sometimes create a credibility problem with the public and individuals who deal with facts or data that doesn't vary (i.e. engineers, accountants and others in related fields). Be careful when presenting findings to such groups. Do not jump to conclusions with limited data. What is so in one instance in our line of work is not always so in another instance.

Now what have I tried to point out? I said to keep an open mind, remember the variations in MOTHER NATURE'S realm, and watch out for credibility in presenting findings. This is all well and good, but what is my purpose for these words of wisdom?

"Now the rest of the story". Let's say that research is conducted under a certain set of conditions, and the results are used to make recommendations under a wide range of similar but slightly different conditions. This is unavoidable in most cases due to financial and time constraints and is an accepted way of doing business. The problem arises when widespread generalizations are made based on data gathered under a certain set of conditions.

Lets expand this example further and say that the research was on the introduction of an aquatic plant into a waterway for enhancement of the largemouth bass fishery. The research demonstrated a significant positive effect on the largemouth bass population. Lets say the aquatic plant was *Hydrilla*. This research was done properly and was valid. The findings were published and eventually found their way into a popular bass fishing publication as an article that read: "*Hydrilla* Improves Fishing". The fishermen who read this and other fishermen who hear about the article become convinced that *Hydrilla* is good for bass fishing in every instance. The fishermen

transplant or promote the transplanting of *Hydrilla* in other lakes and waterways. Why not? Research conducted by qualified individuals demonstrated a definite benefit, and it only makes sense to spread it around to other waterways to improve fishing. This is the problem: Fishermen only get the message that *Hydrilla* is the best thing that ever happened to bass fishing. The down side of exotic plant introductions presented by utilities, water management districts, and other water resource groups often appear as scare tactics to the fishermen.

We should continue to alert and educate the public on the problems of exotic aquatic plants, but we, as aquatic plant managers, should recognize the beneficial aspects of aquatic plants on fisheries, wildlife, and other aquatic organisms. We do not need to have "tunnel vision" nor do the other professionals who often appear in adversarial roles. However, if we do not qualify our findings and resulting statements, we can never hope to achieve public trust and support. The public support of our programs is dependent on their awareness of the problems and solutions. This applies to other groups as well. They also have a responsibility to present a true picture of their findings. Aquatic plant management for fisheries and wildlife benefits must be addressed now. To ignore it is to have "tunnel vision" bordering on terminal blindness. We must join forces with fisheries biologists, wildlife biologists, ecologists, professional fisherman, sportsmen groups, and other environmental groups. If we don't, we'll all lose in the long run. We all need to be "singing out of the same song book". Get my drift?

#### ARCHIVES FOR MSAPMS

Randell Goodman has requested copies of MSAPMS Programs prior to 1986, and minutes of previous Board and Business Meetings. If you have copies, please forward to Randell.

#### 11th ANNUAL MEETING

The 11th annual meeting has been scheduled for Sept. 30 - Oct. 2, 1992 at Guntersville State Park, Alabama. The lodge is located on beautiful Lake Guntersville. Field trips are planned. Further details will be in the next newsletter. Contact Earl Burns at (205)386-3650.

#### FIRST CALL FOR PAPERS

Those interested in presenting a paper at this year's meeting should contact Dr. Earl Burns. Current research, other pertinent information dealing with aquatic plant management, and Industry/Agency updates are requested. Please submit title and brief abstract utilizing form in newsletter. Deadline is August 28, 1992.

#### SOUTH CAROLINA APMS SCHOLARSHIP GRANT

The South Carolina Aquatic Plant Management Society, Inc., a non-profit corporation established for the purpose of promoting the management of noxious aquatic vegetation in South Carolina, is seeking applications for a scholarship grant. The Society intends to award a \$1000 grant to the successful applicant in the Fall of 1992. Grant funds may be used by the recipient to cover costs associated with education and research expenses.

Eligible applicants must be enrolled as full time undergraduate or graduate students in an accredited college or university in the United States. Performance of research related to aquatic plant management in South Carolina is also required. Applications must be received no later

than June 1, 1992 and will be evaluated on the basis of relevant test scores (ACT, SAT, GRE, etc.), high school and/or college grades, quality and relevance of research project, a proposed budget, information obtained from references, and other related considerations. Other factors being equal, preference will be given to applicants enrolled in Southeastern and South Carolina academic institutions. The successful applicant will be requested to present an oral report on the research project at the annual meeting of the Society. Persons interested in applying for the scholarship grant should contact Danny Johnson, S.C. Water Resources Commission, 1201 Main Street, Suite 1100, Columbia, S.C. 29201, or phone (803) 737-0800 for additional information on application procedures.

#### EDUCATIONAL VIDEOTAPE PROGRAMS

##### Aquatic Plant Identification Series

This series of videotapes features more than 100 of the most common or important aquatic and wetland plants in Florida. Plants are described in everyday language so that non-botanists will be able to easily identify them.

**Floating and Floating-Leaved Plants** - 26 min. (IFAS Catalog no. VT-360)

**Emerald Plants (part I)** - 38 min. (IFAS Catalog no. VT-361)

**Emerald Plants (part II)** - 38 min. (IFAS Catalog no. VT-369)

**Submersed Plants (part I)** - 34 min. (IFAS Catalog no. VT-362)

**Submersed Plants (part II)** - 28 min. (IFAS Catalog no. VT-370)

Two more identification programs (**Grasses, Sedges and Rushes, Parts I and II**) are scheduled for release in early 1992, and will be advertised at that time.

**How to order:** These programs are available on VHS, S-VHS and PAL video formats. Please specify video format and IFAS Catalog VT-number. They are available from: IFAS Publications, IFAS Building 664, Gainesville, FL 32611-0001, (904) 392-1764. Each videotape costs \$15.00, plus .90 tax for Florida residents; \$15.00 for non-Florida residents. Make payable to "University of Florida".

#### MSAPMS BULLETIN BOARD

July 12-17, '92 - APMS International Symposium, Marriott Hotel, Daytona Beach, Florida. Contact Center for Aquatic Plants, (904) 392-9613 or Bill Rushing, (202) 272-1841.

August 13-14, '92 - South Carolina APMS, Charleston, S.C. Contact Phil Fields, (803) 737-0800.

October '92 - Minnesota Lake Management Federation, Radisson, Alexandria, MN. Contact Kevin Kretch, (612) 478-9421.

October 27-29, '92 - Florida APMS, Holiday Inn Surfside, Clearwater Beach, FL. Contact Don Doggett, (813) 694-2174.

November 2-7, '92 - North American Lakes Management Society 12th Annual International Symposium on Lake and Reservoir Management, The Clarion, Cincinnati, Ohio. Contact Lorraine Duncan, (904) 462-2554.

November 10, '92 - Texas APMS, Victoria, TX. Contact Joyce Johnson, (512) 389-4858.

# FIRST CALL FOR PAPERS

MidSouth Aquatic Plant Management Society  
11<sup>th</sup> Annual Meeting  
30 September, 1-2 October, 1992  
Guntersville State Park  
Guntersville, Alabama

TITLE: \_\_\_\_\_

AUTHOR(S): \_\_\_\_\_

AFFILIATION: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TELEPHONE: \_\_\_\_\_

ABSTRACT (150 WORDS MAXIMUM): \_\_\_\_\_

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

SUBMIT ABSTRACT TO: Earl Burns  
TVA  
Office Service Annex 1B  
Muscle Shoals, AL 35660

DEADLINE: 28 August, 1992

---

## 1992 DUES

---

- Name: \_\_\_\_\_
- Address: \_\_\_\_\_
- Telephone: \_\_\_\_\_
- Affiliation: \_\_\_\_\_
- Make checks payable to: **MidSouth Aquatic Plant Management Society:**

Full Membership      \$10

Student                \$5

Sustaining            \$50

Amount Enclosed:    \$ \_\_\_\_\_

Remit to:

Jerry Moss

Ala. Dept. of Cons. and Natural Res.

P.O. Box 305

Northport, Al 35476

---

## The MidSouth Aquatic Plant Management Society

---



Please address reply to:  
Douglas Powell - Editor  
Alabama Power Company  
#8 General Services Complex  
P.O. Box 2641  
Birmingham, AL 35291