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THE HYACINTH CONTROL SOCIETY, Incorporated

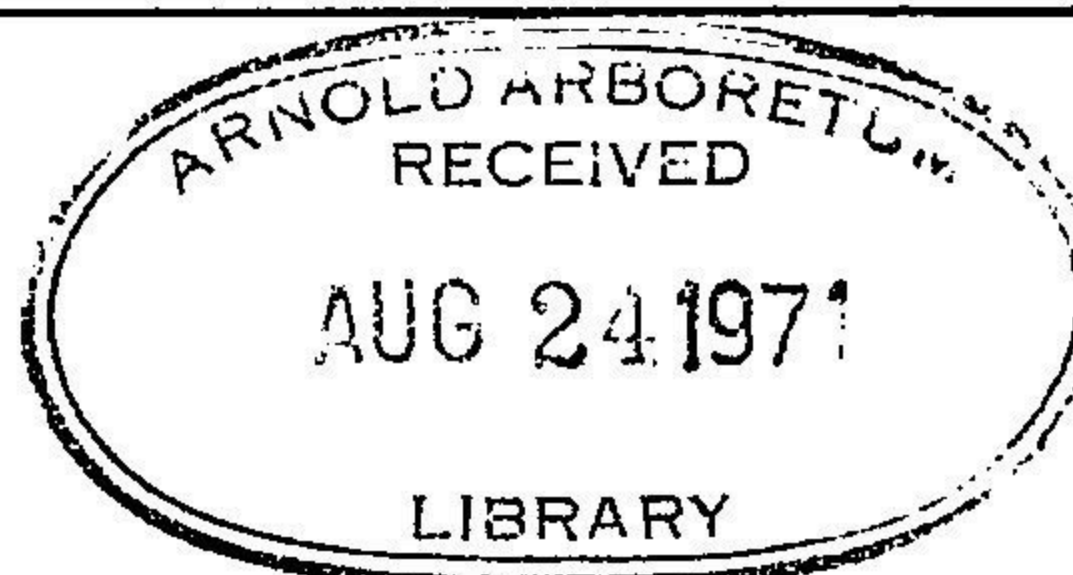
Dedicated to the Control of Noxious Aquatic Weeds

BOX 508, FLORAL CITY, FLORIDA 32636

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NEWSLETTER No. 16
August 16, 1971



1971 MEETING: For those who could not attend the Eleventh Annual Meeting of the Hyacinth Control Society in Tampa - you really missed a fine get together. Over 30 papers were presented dealing with all phases of aquatic weed control. The theme of the program was "Environmental Management for Mankind" and was well represented with papers on current methods of control, as well as new research ideas pertaining to biological, chemical and mechanical methods. An excellent panel discussion on "Management of Water Hyacinths", which stressed the idea of conversion of aquatic weeds to usable products, closed out the meeting.

FINAL CALL FOR MANUSCRIPTS FOR THE 1972 JOURNAL: If you did not turn in a manuscript of the talk which you presented at the meeting, please send it to the Editor AT ONCE. Manuscripts received after September 15, 1971, will not be considered for publication in the next issue of the Journal. Anyone desiring to submit a manuscript can consult a recent issue of the Journal for instructions, or write directly to the Editor for a copy of instructions. The Journal NEEDS GOOD PAPERS and will consider any paper related to the control of noxious aquatic weeds.

VOLUME 9 OF THE JOURNAL: Volume 9 of the HYACINTH CONTROL JOURNAL was delayed due to technical difficulties and the slowness of some manuscripts in being returned by the authors. It is finally in the mail. Your cooperation in returning reviewed copies and galley proofs of your manuscripts this year will greatly help the Editor in meeting the publication dates for Volume 10.

NEW OFFICERS: The following officers were elected at the Tampa meeting to serve the Society for the coming year:

- President - Mr. Robert J. Gates
- Vice President - Mr. Stanley C. Abramson
- Secretary-Treasurer - Mr. Brandt G. Watson
- Editor - Dr. David L. Sutton
- Director - Mr. Robert P. Blakeley
- Director - Dr. Alva P. Burkhalter
- Director - Mr. Ray A. Spirnock

COMMITTEE ON NAME CHANGE: The question of a possible name change for the Society was again brought up for consideration at the annual meeting in Tampa. John E. Gallagher made a motion that the incoming President appoint a Committee to consider this question. Our new President, Robert J. Gates, has appointed Les Bitting to be the Chairman of that Committee. Other members serving are Ricardo A. Pasco, Clayton L. Phillippy, John E. Gallagher, Andy L. Price, Johnnie Frizzell, Neal R. Spencer, William D. Hogan and Dr. Kerry K. Steward.

SOCIETY HISTORIAN: Dr. Fred W. zurBurg has accepted the invitation to be the Historian for the Society. Dr. zurBurg's address is 66 Marine Street, St. Augustine, Florida 32084. If any member has any information pertaining to promoting the history of the Society, please contact Dr. zurBurg.

INFOLETTER: Mr. Allan Deutsch, Information Services, International Plant Protection Center, Oregon State University, Corvallis, Oregon 97331, advises all members of the Society that an information letter "INFOLETTER" is available. You can write directly to Mr. Deutsch and be placed on the mailing list. INFOLETTER is issued periodically by the International Plant Protection Center and is an informally structured communication devoted to plant protection. It is available free of charge.

NEW PUBLICATIONS: Another publication by the International Plant Protection Center is "Weed Research Methods Manual" by W. R. Furtick and R. R. Romanowski, Jr. This manual can be obtained at a cost of \$3.00. It is an excellent presentation of new weed control research programs. A step-by-step method for calibrating equipment, conversion tables, herbicide suppliers and other information is included in this manual.

The State of Illinois, Department of Conservation has revised their Fishery Bulletin No. 4 entitled "Aquatic Weeds: Their Identification and Methods of Control". They have done a fine job on this bulletin. It can be obtained by writing to:

Department of Conservation
Division of Fisheries
Springfield, Illinois 62706

It is an excellent bulletin and I hope Florida can come up with one like it.

PERSONNEL CHANGES AT THE FORT LAUDERDALE AQUATIC WEED LAB: Mr. Harold Ornes, who recently obtained his MA degree in Biology from Northeast Missouri State College, has joined the Aquatic Weeds Research Group at Fort Lauderdale. Harold, along with Richard Elliston, who has worked with the weeds group since its inception, will be assisting Dr. Kerry Steward on a new project. This project is designed to investigate the effect of eutrophication on vegetation of the Everglades. One of the main objectives of the study will be to determine the feasibility of recycling waste water in the Everglades by using vegetation to remove the nutrients and other dissolved material from waste water. This study is one of ten in a \$500,000 South Florida Environmental Project, supported by the U.S. Dept. of Interior, National Park Service, and is scheduled to run through June, 1973.

Mr. Bill Haller, who recently completed his requirements for a MS degree in Agronomy at the University of Florida, has recently joined the Aquatic Weed Group at the Agricultural Research Center at Fort Lauderdale. Bill will be conducting research primarily on the physiological responses of aquatic plants to herbicides. After one year he plans to return to the main campus at Gainesville to complete the requirements for his PhD degree.

EPA, CORPS OF ENGINEERS, OR OTHER FEDERAL CONTACTS: Mr. Charles W. Fauroat, Director of Installations and Services, Dept. of the Army, Headquarters, USA Munitions Command, Dover, New Jersey 07801, has expressed interest in helping our Society make contacts with other personnel in federal agencies. In a letter to our President, Bob Gates, Mr. Fauroat stated "I was very much impressed by the

attitude and approach of the entire organization and can only renew my offer to you that if any of our federal contacts (EPA, Corps of Engineers, etc.) can be helpful, please do not hesitate to call upon me." Our Society is very grateful for this offer and looks forward to working with Mr. Fauroat.

AUBURN UNIVERSITY GRANTS: Dr. Donald E. Davis, Alumni Professor, Auburn University has recently had two research grants funded. The titles of the grants are:

1. "Effects of Herbicides on Non-Target Organisms" and
2. "Effects of Arsenic Herbicides on Salt Marsh Ecosystems"

The first grant is funded by EPA and the second one by USDA. Money is included in these projects for one postdoctoral student and for three research assistants. If interested, contact Dr. Davis directly.

EPA CLEARS HERBICIDE FOR USE IN POTABLE WATER: On June 23, 1971, EPA gave the go-ahead for cutrine as an algicide for use in potable water reservoirs; farm, fish and fire ponds; lakes; and fish hatcheries. This is a tremendous boost for the use of herbicides in the aquatic environment since during the past few years much has been written and said about restricting the use of herbicides for the control of noxious aquatic weeds.

NEWS AND INFORMATION NEEDED FOR THE NEWSLETTER: News and information related to the Society or to aquatic weed control in general is needed for the NEWSLETTER. Please send your information to the Editor or to any of the board members for consideration for publication in the NEWSLETTER.

FEATURE ARTICLE: Attached is a special article written by Bob Blackburn for this NEWSLETTER concerning his trip to the Third International Symposium of the Control of Aquatic Weeds in Oxford, England last month. We missed Bob at our meeting in Tampa and regretted there was a conflict in the dates of the meetings. Bob has done a tremendous job in writing the previous NEWSLETTERS and is to be commended for initiating this publication.

David L. Sutton

David L. Sutton
Editor

S P E C I A L F E A T U R E

Report on the Third International Symposium of the Control of Aquatic Weeds
Robert D. Blackburn

The Symposium was divided into 8 sessions covering such subjects as the biology of aquatic plants; biological, chemical and mechanical; toxicity of chemicals to the aquatic environment; algae and control; and regulatory aspects on control procedures. The Proceedings of the Symposium was passed out to the delegates at the time of their arrival. This gave the delegates time to review the papers before presentation at the Symposium. Time was available at the end of each session to have discussions on the papers presented. The authors of the papers were requested to present only a summary of their published papers and any additional information that may be of interest on the subject. This permitted an excellent interchange of discussion at each of the sessions.

The interest of the Symposium was focused primarily on control of aquatic weeds by biological means and the effect of chemical control procedures on the aquatic environment. These two subjects seem to be the principal interest of all workers concerned with research and control of aquatic weeds throughout the world. I presented a paper on our research with the white amur and a paper on our research with the marisa snail.

Papers presented on the white amur (Ctenopharyngodon idella Val.) emphasized the need for more information on its rate of weed consumption as related to temperature, the conversion of aquatic weeds to fish flesh, and the factors necessary for natural spawning. Stock rates of the fish necessary for weed control will probably vary with the water temperatures. The effect of the white amur on the native fish populations is not considered as a problem in most areas of the world. Even in England where sport fishing is important, scientists believe the likelihood of the white amur spawning naturally is remote. The cost of producing fish large enough to use for stocking appears to be a major problem because of the slower growth in the colder climates of the European countries.

Considerable interest was shown in the snail marisa (Marisa cornuarietis) as a biological control for aquatic vegetation. The effect of low temperatures on the survival of the snail and its appetite for rice and watercress would limit its use in many areas of the world. The possibility of breeding a more cold tolerant snail was discussed since the snail can be used for human consumption.

Scientists from Holland expressed considerable interest in diuron, ametryne, atrazine and terbutryn as aquatic herbicides. They have collected considerable information on the residue of these herbicides in soil, water, and fish. Information has also been collected on their effect on plankton, benthos, water quality, and fish toxicity. Diuron and terbutryn are the most promising for aquatic weed control in irrigation ditches. Diuron showed large accumulations in fish and bottom muds. For this reason, greater emphasis is being placed on terbutryn.

One day of the Symposium involved a field demonstration of aquatic weed control methods used in England. This demonstration was conducted by the Association of Drainage Authorities. Various types of mechanical equipment and chemical application equipment were demonstrated. Delegates of the Symposium were also given the opportunity to observe herbicidal treatments that had been applied several weeks prior to the Symposium. The emphasis of the field day was more on mechanical harvesting of aquatic weeds than on chemical control.

Mechanical means are utilized more in operational programs. The various types of weed cutters demonstrated were smaller and more versatile than the equipment that is utilized in the United States. The types of problems that have restricted the use of mechanical harvesters in the United States would also restrict the use of the European equipment.

The aquatic herbicidal clearance schemes for various countries were thoroughly discussed at the Symposium. Most countries follow the pattern that is used in the United States with the exception of England. The English herbicide scheme relies more on the chemical industry to supply all data necessary for clearance. The clearance of paraquat for use in European countries as an aquatic herbicide, while not being cleared for use in the United States, was discussed. Data presented at the Symposium and revealed in discussions showed that paraquat is no more harmful to the aquatic environment than diquat, and it does control a wider range of aquatic weeds.

After the Symposium I had the opportunity to visit various scientists in England and Italy. One afternoon involved a very stimulating discussion with Dr. C. F. Hickling, a world authority on fish culture. His comments and suggestions on the white amur research project were very helpful. The discussions in Rome with the FAO fishery scientists produced valuable data on the white amur.

The trip can be summarized with the word TERRIFIC. Perhaps at next year's meeting, with a little persuasian from you all, I can be coaxed to give a more detailed report on the trip. The information on the white amur, in particular, should be of interest.

Dave Sutton has stated that I can help him with the NEWSLETTER, so you will be hearing from me in the future.



Robert D. Blackburn
Retired Editor