South Carolina Aquatic Plant Management Society Newsletter

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Message From the President

As another annual meeting draws near I would like to thank each and every one of our members and especially our sustaining members for a job well done. It seems as if every year we all grow professionally and learn new "tricks" from each other. The experience and professionalism seems to shine through with each and every job. Most aquatic applicators and managers seem to show a higher degree of communication and patience with the public and with each other than in some of the other fields. I have seen applicators stop working several times during long, hot days to answer questions from concerned homeowners. I have seen applicators share information with their competitors. It is this kind of effort you just don't see every day. In a day and age where common courtesy seems to have disappeared you have brought new life to it!

That level of coordination I spoke about above leads me down this next path. One of the other issues, which will need to be addressed, is a new more appropriate name for our society. For years we have been known as the South Carolina Aquatic Plant Management Society. Due in a large part to several members and their outstanding membership drives, we have record numbers of North Carolinians in the society. Many of our Officers on the Board of Directors, members, and sustaining members are from North Carolina. Most of the work that is done in the two states is similar if not identical. Many of the student papers come from institutes of higher learning in both states. Maybe the society should more appropriately be named the Carolinas Aquatic Plant Management Society.

A regional chapter would expand the possibilities for annual meeting sites to be more diverse and interesting. It should also bring a more focused, regional approach to many of the issues that face us as applicators, managers and keepers of our environment. Coordination between agencies of two different states has sometimes been difficult, to say the least, if not impossible. A Carolinas APMS would be able to present an education and lobbying effort which present unified opinions from state and regional agencies and provide complementary legislation between both states. The Governing Committee has been tasked with looking into a possible name change this year and we'll keep you informed of the progress.

I'll get off of the soapbox now and close by saying, keep up the good work. Thank you for all the friendship and the support you have given both the society and me.

Chris Page

Inside this issue....

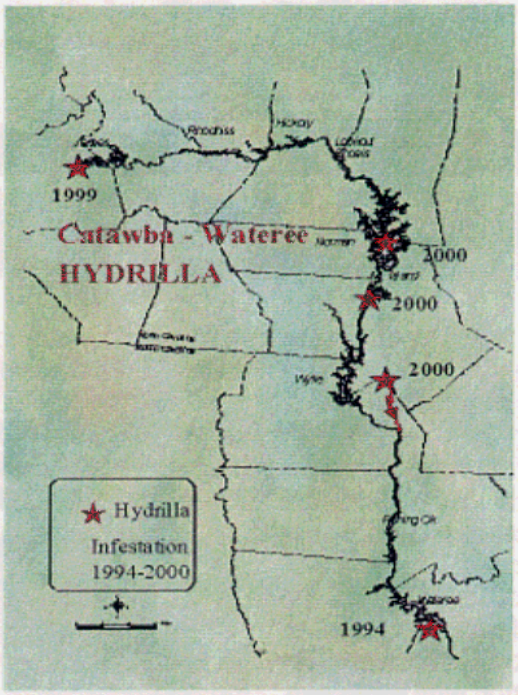
Hydrilla Rapidly Spreading In Catawba River Reservoirs

Ken Manuel, Duke Power Company, Huntersville, NC

The Catawba River drains the west-central portion of North Carolina and the center of South Carolina. Originating near Marion, NC at the foot of the Appalachian Mountains, the river flows east then turns south just west of Statesville, NC. From here it heads south to the Atlantic Ocean at Charleston. The name of the river changes to the Wateree in Camden, SC. As it flows along it picks up more water from the Congaree River, a river formed by the Saluda and Broad Rivers. Joining the Congaree, southeast of Columbia, SC, the merged waters form the headwaters of Lake Marion, thus seeking the Atlantic via the Santee River and the Cooper River.

In 1994, a small five-acre infestation of dioecious hydrilla was discovered in Lake Wateree, a 13,800 acre impoundment at the southern end of Duke Power's Catawba River chain of reservoirs. The plants surrounded a boat launch ramp, a classical boat trailer introduction of an invasive plant. This site was successfully controlled with aquatic herbicides and for five years no further infestations on the Catawba lakes were observed. Unfortunately, the lull has ended and the storm has begun for the Catawba River system.

During 1999, a hydrilla infestation of approximately 200 acres was observed in Lake James, a 6800 acre impoundment, located near the headwaters of the Catawba



River Basin in North Carolina. By September 2000, about 100 acres of hydrilla were found in Lake Norman, the largest reservoir in North Carolina at 32,500 acres, and about 300 acres of hydrilla were observed in little Mountain Island Reservoir, a 3200 acre impoundment located just below Lake Norman.

A casual look at a map of the Carolinas will show hydrilla is now in the middle and at each end of the Catawba River. At this writing, surveys of Lake Norman are underway to determine the extent of the scattered infestations in the lake. There seems to be every indication that some if not most of scattered plant beds were maliciously planted. Most of the plants seem to be the monoecious form although a few dioecious plants have also been observed.

The short term strategy for managing the infestations in the various reservoirs has been to treat each as soon as possible with the herbicide Komeen, with the intent to slow the spread of the plant especially from fragmentation by boat propellers.

The long-term management strategy of the hydrilla population in Mountain Island Reservoir, the main drinking water supply of the Charlotte-Mecklenburg metropolitan area (1.5 million people) is to introduce sterile grass carp this fall. Routine chemical application to the water supply is unacceptable to the various drinking water agencies using raw water from the lake.

Hydrilla now has a firm hold on the Catawba River. The plant will continue to spread by fragmentation and human interaction. Duke Power will continue to work with the various natural resource agencies and other major stakeholders in both North and South Carolina to seek ways to manage this highly invasive aquatic plant species.

Corps Cost-Share Funds Are Back!

The Charleston District Corps of Engineers has informed the Department of Natural Resources that $250,000 in matching funds has been allocated to South Carolina for aquatic weed control and monitoring.

"It couldn't have happened at a better time", says Steve de Kozlowski, Chairman, S.C. Aquatic Plant Management Council. "Just as state funds dried up, the Feds came to the rescue."

U.S. Senator Ernest Hollings was instrumental in securing the funding this year. Although there are no promises for future years, efforts are underway to try to increase appropriations to the Corps of Engineers Aquatic Plant Control Program, which provides funding for aquatic plant research and cost-share funding with the states for control operations in public waters.

The Aquatic Plant Control Program was an integral funding source for the State Aquatic Plant Management Program beginning in 1981. Since then over $7.5 million in federal funding has supported aquatic plant control operations statewide and was a major factor in successfully controlling hydrilla populations in the Santee Cooper Lakes, Lake Murray, and other smaller water bodies.

Charleston District
Corps of Engineers

Are New Permit Requirements in Our Future?

Steven de Kozlowski, SCDNR

Aquatic herbicides, which are designed for use in water, have never been considered a pollutant in the past, but that may change. The United States Ninth Circuit Court of Appeals ruled last month that the application of the aquatic herbicide Magnacide H (acrolein), in irrigation canals in Oregon requires a National Pollutant Discharge Elimination System (NPDES) permit, and that the EPA-approved label under the Federal Insecticide, Fungicide, Rodenticide Act (FIFRA) does not eliminate the obligation to obtain a NPDES permit.

This ruling overturns a lower District Court ruling that recognized the active ingredient in Magnacide H, acrolein, as a "pollutant" because it can be toxic to fish and other wildlife. However, the lower court ruling also stated that a NPDES permit was not needed because the herbicide label, as approved by the EPA under FIFRA, did not require the user to acquire a permit.

On the surface this ruling appears to indicate that NPDES permits may be in the cards for all aquatic herbicides. Maybe, but hopefully not. A closer look at the Oregon case bears out some extenuating circumstances.

For one, Magnacide H is a "restricted use" product. That is, it is much more toxic to fish and other aquatic life, which places it in a different category of herbicides than all the other aquatic products that we use. Hopefully, any federal permit requirements would be limited to restricted use products. Second, Magnacide H is only labeled for use in canals and ditches. It is not labeled for use in lakes, streams, and ponds, and should not be applied to drainage areas where runoff or flooding will contaminate other bodies of water. In fact, the label clearly states "Do not release treated water (from the canal) for 6 days after application into any fish bearing waters or where it will drain into them." In the case in Oregon, the treated canals discharged water into fish bearing streams during the 6-day holding period and on two occasions the discharged treated water caused fish kills. It seems that the applicant in this case was in clear violation of the label and enforcement of the current label would have been sufficient to protect water quality conditions. Third, the herbicide was applied to the canals by a single hose from a truck, which can be clearly defined as a point source discharge. Diffuse areal application of an herbicide to a water body may not be so clearly defined as a point source discharge.

On the other hand, there are statements by the EPA and several interpretations by both the Federal District and Circuit Courts that lean toward the possibility of requiring NPDES permitting for aquatic herbicide applications in public waters. For one, although the EPA administers both FIFRA and the Clean Water Act, it stated in an amicus brief that "EPA approves pesticides under FIFRA with the knowledge that pesticides containing pollutants may be discharged from point sources into the navigable waters only pursuant to a properly issued CWA (NPDES) permit." Also, in 1995, the EPA issued a public notice that a label's failure to include the possible need for a NPDES permit does not relieve a producer or user of such products from the requirements of the Clean Water Act. These statements seem to indicate that if a product violates conditions of the Clean Water Act it should require a permit.

To establish a violation of the Clean Water Act one must show that there is a discharge of a pollutant to navigable waters from a point source. The courts definitions of the underlined words in the previous sentence are critical. The courts have found that the direct application of an herbicide into water qualifies as a "discharge" and although the definition of a "point source" is not clear from the ruling issued by the Circuit Court, it seems reasonable that a discharge from application equipment could easily be interpreted as a "point source" as opposed to diffuse runoff which is "nonpoint source." Both the District and Circuit Courts define a pollutant as any "toxic chemical" and even though all other aquatic herbicides are not "restricted use" products like acrolein, they will likely be defined as toxic since they are designed to kill plants. It seems to be the opinion of the Circuit Court that the definition of "navigable waters" includes all surface waters that receive water from or are tributary to navigable waters of the United States. This includes the canals in Oregon and most other public waterways.

The final interpretation and implementation of this ruling either by higher courts or EPA will likely be a defining moment in the profession of aquatic plant management. When this will be worked out, is unclear. But what is clear is that we are on the brink of what could be a significant change in the way we do business in the Carolinas and across the U.S.

NPDES Permit Program

Facilities which discharge pollutants from point sources (such as discharge pipes) into waters of the United States are required to obtain National Pollutant Discharge Elimination System (NPDES) permits. The NPDES program falls under Section 402 of the Clean Water Act. Typically, wastewater discharges regulated under the NPDES program include industrial wastewater, storm water, and treated effluent from municipal sewage treatment plants, but the recent ruling may expand the definition of "point source" and "pollutant".

FIFRA Licensing

The Federal Insecticide, Fungicide, Rodenticide, Act (FIFRA) provides the overall framework for the federal pesticide program. Under FIFRA, EPA is responsible for registering, or licensing pesticide products for use in the United States. Pesticide registration decisions are based on a detailed assessment of the potential effects of a product on human health and the environment, when used according to label directions. These approved labels have the force of law, and any use which is not in accordance with the label directions and precautions may be subject to civil and/or criminal penalties. FIFRA also requires that EPA reevaluate older pesticides to ensure that they meet more recent safety standards. FIFRA requires EPA and states to establish programs to protect workers, and provide training and certification for applicators as well.

2001 Meeting at the Beach

President Chris Page said "I ain't afraid of no hurricane... bring it on!" as the Board of Directors approved to hold the next annual meeting at Springmaid Beach Resort at Myrtle Beach on August 15-17, 2001.

Springmaid has been the site of two previous Society Annual Meetings in 1995 and 1996, one of which was postponed due to a hurricane threat. "At least we know the Springmaid folks will work with us in rescheduling our meetings, if need be", says Fearless Leader Page, "so why go anywhere else?"

Registration and hotel accommodation information will be provided at a later date. Check the SCAPMS web site for up-to-date meeting information and for more information about Springmaid Beach point your browser to http://leroysprings.com/SpringmaidBeach.html.

SPRINGMAID BEACH

2001 Meeting Calendar

Florida Aquatic Weed Control Short Course
Fort Lauderdale Marriott North
Fort Lauderdale, FL
May 14-18, 2001
Contact: Dr. Vernon Vandiver 954-577-6316
Web site: www.ifas.ufl.edu/~conferweb/aw/

Aquatic Plant Management Society
Marriott City Center
Minneapolis, MN
July 15-18, 2001
Contact: Mike Stewart (601) 634-2606

South Carolina Aquatic Plant Management Society
Springmaid Beach Resort
Myrtle Beach, SC
August 15-17, 2001
Contact: Tommy Bowen 704-875-5422

Florida Aquatic Plant Management Society
Adam's Mark Daytona Beach Resort
Daytona Beach, FL
October 16-18, 2001
Contact: David Farr, 904-424-2920
Dfarr@co.volusia.fl.us

North American Lake Management Society
Monona Terrace
Madison, WI
November 7-9, 2001
Contact: www.nalms.org

WELCOME NEW MEMBERS!

Lane Hite
Heather Crawford
Jessica Cheek
Paul Slovisky
Jay Mollo
Scott Larkin
Elizabeth Berens
Paul Bezmen
Lee Wilson
James Levesque
Greg Cheek
Jason Goins
Jim Burney
Steve Brewer
Norma Magee
Louis White
Jim Lanier

Professional Lake Management

South Carolina Aquatic Plant Management Society Newsletter

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1st Call For Papers

The Program Committee is accepting requests for presentations at the 2002 SCAPMS Annual Meeting. Papers covering all aspects of aquatic plant biology, use, and control will be considered. Student presentations are encouraged with possible cash prizes to be determined later. Those interested should contact the Vice President:

Troy Diel
Santee Cooper
1 Riverwood Drive
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tmdiel@smtp.santeecooper.com
843-572-1701

2001 Aquatic Weed Control Short Course

The annual Aquatic Weed Control Short Course will be held May 14-18, 2001 at the Fort Lauderdale Research and Education Center and Fort Lauderdale Marriott North. Get detailed course information at their web site at www.ifas.ufl.edu/~conferweb/aw/

This is an excellent course for anyone responsible for aquatic weed control, need to identify aquatic and wetland plants, culture aquatic plants, establish and maintain wetland mitigation areas, use biological control techniques, or operate herbicide application equipment.

Earn up the 28 CEUs for Florida, Georgia, North Carolina, and South Carolina applicator licenses.

APMS in Minneapolis in July

The 41st Annual Meeting of the Aquatic Plant Management Society will be held July 15-18, 2001 at the Marriott City Center in beautiful Minneapolis, MN. Meeting registration fees are $150 prior to June 30th and $175 at the door.

This is the one national meeting you don't want to miss. See what's happening on the national and international scene in managing aquatic vegetation. The meeting will be capped with a riverboat dinner cruise on the upper Mississippi.

Details about the meeting are posted at the APMS web site at www.apms.org.

ATTENTION STUDENTS - APMS Student Paper Contest 2001

Since 1975, the Aquatic Plant Management Society has conducted a student paper contest in conjunction with its annual meeting. The objectives of the contest are 1) to encourage student participation in the Society affairs; 2) to provide students with the opportunity to gain experience in preparing and presenting scientific papers; and 3) to recognize outstanding achievements by student members of the Society.

All contest entrants receive free meeting registration, free accommodations (based on double occupancy), book prizes, and certificates. Cash awards are granted to first through fourth place winners.

Graduate and advanced undergraduate students who have had the opportunity to conduct independent research are encouraged to present their findings in the 2001 contest to be held July 15-18 in Minneapolis, MN. Papers presented in the contest should be the results of the student's original research and should contain information not previously presented at an APMS meeting.

Sign up now! Student entrants must submit a title and abstract using the "Call for Papers" form found in the November or March issue of the APMS Newsletter. The meeting registration form should also be submitted. These forms are also available via the APMS website at www.apms.org (click on the "2001 Annual Meeting" section). Only oral presentations will be accepted for the contest. The submission deadline for title and abstract is **April 15, 2001**. If you need forms or have questions concerning the contest, contact:

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