



Letter from the President

By: John Rodgers, President SCAPMS

SCAPMS: Message from Your President



As we emerge from the cocoon of winter, there are some signs that some of the water resources that we manage will soon be under duress from invasive vascular aquatic plants such as crested floating heart and hydrilla as well as planktonic and benthic algae such as *Microcystis* and *Lyngbya*. Some benthic algal mats have already started to grow to problematic densities and submerged vascular plants have begun to produce new shoots from the crown. We will soon be busy responding to requests for assistance and developing or updating proposals and management plans prior to initiating field activities. However, this year will likely be somewhat different as we operate under the new State or National Pollutant Discharge Elimination System (NPDES) permits for pesticides applied in or near water resources. SCAPMS has expended considerable efforts to keep you informed and be actively engaged as the SC, NC and GA Permits were developed.

Implementation of the Permits is scheduled for April, 2011, unless there is a judicial or regulatory delay. So what should we be doing?

In my view, if the Permits go forward in their current forms, they will not be onerous for you or your business (perhaps unnecessary and irritating, but not debilitating). If you are using pesticides (i.e. algaecides or herbicides) for management of invasive plant species in water resources, you will likely want to apply for a "Permit" (or file a Notice of Intent [NOI] to be covered under the State General Permit). This will likely take a few minutes of your time on line and 100 of your dollars. You will need to designate where you are likely to treat and some other pertinent information. You will need to keep the usual records of what was applied where, when and why as well as what happened to the target species as well as nontarget species. These records will likely be submitted only if there is a question from a third party. Since the word "likely" was used several times in this paragraph to indicate that we do not yet have the final permit in hand and there are some site specific aspects to be resolved, you will definitely want to read the Permit when it becomes available. Further, you will want to stay tuned to the SCAPMS Newsletter and plan to attend the Annual Meeting to get your questions answered. Likely (there's that word again), the bumps in the road of Permit implementation will be somewhat leveled by August and some concrete answers and efficient strategies will begin to emerge. So plan to join us in Clemson, SC, in August and we will do our best to provide the latest information and some entertainment in a pleasant setting (and you can get some of your questions answered and share stories with old and new friends). I look forward to seeing you there.

www.scapms.org

Inside this issue....

Letter from the President

Albemarle Sound Area Hydrilla

USC A.C. Moore Herbarium

NPDES Update/SCAPMS call for Papers

APMS Call for Papers

**Phillip M. Fields Scholarship
Announcement**

Hydrilla Threatens Albemarle Sound

By: Rob Emens

Hydrilla Threatens Sensitive Environments in Albemarle Sound Region



Hydrilla is regulated by the federal government and the State of North Carolina. The importation/movement, culture, and sale of this plant are illegal, and for good reason. As far as aquatic pest plants go, hydrilla has historically surpassed the cumulative impacts of all other aquatic weeds in North Carolina combined! This plant is famous for its tendency to spread rampantly and quickly monopolize aquatic habitats. Though hydrilla has been growing in open waters within NC since the early 1980's infestations have been generally limited to ponds and reservoirs located in the Piedmont. This is mostly due to two things; 1) the regulatory statute and related public awareness campaigns that help

to minimize the "human vector" and, 2) the fairly aggressive management activities lead by the NC Division of Water Resources and specific project cooperators, such as local governments and public utilities. Quick responses to new outbreaks and the long-term management provided by the introduction of triploid grass carp have slowed the spread of hydrilla across the state, or at least until now.

Starting this past decade environmental managers began to face a daunting challenge: how to control hydrilla in flowing systems. In 2005 hydrilla was identified growing in the Eno River, a tributary to the Neuse River. Grass carp were not considered to be an option because there would be no economically feasible way to retain them in the infested section(s) of the river. Herbicides were ruled out because of the potential injury to native submersed plants which could ultimately impact species of special concern that inhabit the area. Physical removal did not seem feasible due to the extent of colonization, and the difficulty in removing the subterranean turions. So, for five years now there has been no management effort as hydrilla continues to infest the Eno River downstream at the rate of ~1 mile each year. The Eno River flows into Falls Lake and it seemed inevitable that hydrilla would begin showing up in Falls Lake. In 2009 hydrilla was observed growing in the flowing water of the Neuse just below the Falls Lake dam.

Another major setback in the management of hydrilla is unfolding as I write this. Last year I visited four sites along the Chowan River that were infested with hydrilla. All four sites are small coves along the same shoreline and located within a few miles of each other. The Chowan River is approximately 2 miles wide here and travels another 10 miles downstream. In this area it is difficult to determine where the river ends and the Sound begins. Each of those sites was effectively treated this year with herbicide but now hydrilla is infesting various shorelines of the Albemarle Sound. This marks the first time that hydrilla has been observed growing in North Carolina's estuarine habitat. I have already witnessed native submersed aquatic vegetation being severely shaded out in a mile-long stretch of shoreline in Batchelor Bay (western shoreline of the Albemarle Sound).

The spread of hydrilla into the Coastal Plain is a potentially serious threat to the ecology of the Albemarle Sound and pristine freshwater lakes in the area such as Lake Phelps, Lake Mattamuskeet, and the other Pocosin lakes.



Dr. John Nelson at the A.C. Moore Herbarium

The University of South Carolina Herbarium is an important part of the College of Arts and Sciences at USC (Columbia Campus). Founded in 1907 by Dr. Andrew Charles Moore, the original collection of dried, pressed plant specimens is now part of an ever growing collection. Total holdings are just over 106,000 specimens, making the current collection the largest of its kind in the state of South Carolina. Researchers and visitors will find a diverse collection of vascular and nonvascular plant material primarily from the Southeastern United States and more specifically from South Carolina--although our holdings include material from Japan, central Europe, and the South Pacific. Our herbarium web site features an on-line plant Atlas, including maps and images, of all the plant species known for South Carolina. For convenience, the holdings of the collection are easily searchable from the web site. Among the dried specimens are historic collections of South

Carolina plants from the Civil War era, part of the H. W. Ravenel Collection of Converse College. As a public resource, the Herbarium is an outstanding modern reference collection for identifying local species, including weeds that have been recently introduced into our state, as well as uncommon or threatened species. Now over 100 years old, the University of South Carolina Herbarium continues to be an indispensable resource for botanical knowledge, through teaching, research and public service.

The collections of the USC Herbarium serve as an important research tool for scientists around the world. Often material may be loaned to partner institutions for review. This sort of exchange program improves the quality of the collection by ensuring that all specimens are correctly identified by botanical specialists. Additionally, requesting institutions benefit by having the use of a more comprehensive data set. Researchers may find it more advantageous to visit the herbarium if a particularly high number of specimens must be consulted. For preliminary research, the online search feature provides a widely accessible, condensed set of specimen information.

The public is invited to take advantage of the Herbarium's free plant identification service. Unknown or otherwise interesting plants (including weeds, houseplants, garden ornamentals, trees, shrubs aquatic plants, etc.) may be sent to us directly through the mail. A leafy branch with flowers and/or fruits is best for identification, as much as can go into a baggy without being too crowded. Add a damp paper towel to the contents, and poke one or two small holes in the baggy. Mail it to us at:

PLANTMAN
USC Herbarium
Department of Biological Sciences
University of South Carolina
Columbia SC 29208

Or, send an image (jpg format) via email to the Curator, John Nelson, at nelson@sc.edu, or to Plantman himself, at plantman@herbarium.org. Plant samples may also be brought by the Herbarium, in Coker Life Sciences Building, Room 208, at 715 Sumter Street, in Columbia. Call first to let someone know you are coming, or just leave them by the door, with a note. Details on preparing specimens may be found at our website, www.herbarium.org. For other information, call 803-777-8196.



NPDES Update

Dear Stakeholders,

Today, the U.S. Environmental Protection Agency (EPA) is requesting an extension to allow more time for pesticide operators to obtain permits for pesticide discharges into U.S. waters. EPA is requesting that the deadline be extended from April 9, 2011 to October 31, 2011. The public statement is below:

EPA Requests Extension on Clean Water Act Permit Requirement for Pesticide Discharges

Today, the U.S. Environmental Protection Agency (EPA) is requesting an extension to allow more time for pesticide operators to obtain permits for pesticide discharges into U.S. waters. EPA is requesting that the deadline be extended from April 9, 2011 to October 31, 2011. During the period while the court is considering the extension request, permits for pesticide applications will not be required under the Clean Water Act.

EPA is developing a pesticide general permit in response to the 6th Circuit Court's 2009 decision, which found that discharges from pesticides into U.S. waters were pollutants, and, therefore, will require a permit under the Clean Water Act as of April 9, 2011. The final permit will reduce discharges of pesticides to aquatic ecosystems, thus helping to protect the nation's waters and public health.

The extension request is important to allow sufficient time for EPA to engage in Endangered Species Act consultation and complete the development of an electronic database to streamline requests for coverage under the Agency's general permit. It also allows time for authorized states to finish developing their state permits and for permitting authorities to provide additional outreach to stakeholders on pesticide permit requirements.

EPA's general permit will be available to cover pesticide discharges to waters of the U.S. in MA, NH, NM, ID, OK, AK, DC, most U.S. territories and Indian country lands, and many federal facilities.

For more information: <http://www.epa.gov/npdes/pesticides>

Allison Wiedeman, Chief
Rural Branch, Water Permits Division
Office of Water
202-564-0901

CALL FOR PAPERS: Howard B. Roach Student Paper Award

The Scholarship Committee is accepting submissions for the Howard B. Roach Student Paper Award. The winner will be announced at the 2011 SCAPMS Annual Meeting in Clemson, SC. Papers covering all aspects of aquatic and wetland plant biology, use, and control will be considered. Student presentations are encouraged with possible cash prizes. If you are interested please submit - Title, author, organization, address and a two or three sentence abstract to the chairman of the Scholarship Committee.

For more information or questions please contact:

Steven J. de Kozlowski
Chairman, Scholarship Committee
SCAPMS
207 Canterfield Rd.
Columbia, SC 29212



2010-11 Board of Directors**Officers:**

President: Dr. John Rogers
Clemson University
Clemson, SC

Vice President: Dr. Rob Richardson
North Carolina State University
Raleigh, NC

Treasurer: Chris Page
S.C. Dept. of Natural Resources
Columbia, SC

Secretary: Dr. Rebecca Haynie
University of Georgia
Athens, Georgia

Editor: Mike Hook
S.C. Dept. of Natural Resources
Columbia, SC

Immediate Past President:

Larry Feller
Syngenta
Smyrna, SC

Directors:

1st Term: Todd Horton
SEPRO
Anderson, SC

1st Term: Jamie Sykes
US Army Corps of Engineers
Elberton, GA

2nd Term: Rob Emens
N.C. Dept. of Environ. & Nat. Resources
Raleigh, NC

2nd Term: Larry McCord
Santee Cooper
Moncks Corner, SC

by: Dr. Rebecca Haynie

The Aquatic Plant Management Society (APMS) is soliciting student papers for the upcoming 51st Annual Meeting of the Aquatic Plant Management Society. The meeting will be held July 24-27, 2011 at the Hyatt Regency Baltimore on the beautiful Inner Harbor in Baltimore, Maryland. Oral and poster presentations of original research on the biology or ecology of aquatic and wetland plants, control methods (biological, chemical, cultural, mechanical) for invasive exotic or nuisance native plant species, and restoration projects involving wetland or aquatic plants are solicited. Seventeen students from 11 universities attended the annual meeting and we want to surpass this number at the 2011 meeting!

The APMS has a strong ethic of student support. The society will provide all student presenters room accommodations (based on double occupancy) and complimentary registration. In addition, 1st, 2nd, and 3rd place prize money will be awarded in separate contests for both oral and poster presentations. This meeting presents an opportunity for students to develop their presentation skills, learn about the field of aquatic plant management, and network with key Government, University, Industry representatives and peers with similar educational and professional interests.

The meeting will conclude with an optional 2-day (July 28, 29) student tour of regional programs related to aquatic plant management. Last year's tour was very successful and was sponsored by the Aquatic Ecosystem Research Foundation (AERF) and Florida APMS.

Please log on to www.apms.org to learn more about the Aquatic Plant Management Society and this year's meeting. Students may register and submit an abstract by following the instructions under the "2011 meeting" link. The submission deadline for Title and Abstract is April 22, 2011.

For more information on the paper/poster contest, student tour or any other student issues, please contact:

Dr. Rebecca Haynie
Warnell School of Forestry and Natural Resources
180 East Green Street
The University of Georgia
Athens, Georgia 30602
hayniers@uga.edu
(843) 991-8069

South Carolina
Aquatic Plant
Management Society

Newsletter

Published three times a year by the
South Carolina Aquatic Plant
Management Society

Editor: Michael Hook

Design/Production: Chris Page

Reproduction permitted if source is cited.

2011 Phillip M. Fields Scholarship

SCAPMSNEWS

6

Mar., 2011

The South Carolina Aquatic Plant Management Society is seeking applications for its annual Phillip M. Fields Scholarship Award. The Society intends to award a \$3,000 scholarship to the successful applicant in the fall of 2011. Scholarship 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. Course work or research in an area related to the biology, ecology or management of aquatic plants in the Southeast is also required.

Applications must be received no later than May 1, 2011 and will be evaluated on the basis of relevant test scores (ACT, SAT, GRE, etc.), college grades, quality and relevance of course work or research, 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 may be requested to present an oral report on research activities at the annual meeting of the Society. Application forms and additional information are available at <http://scapms.org/scapmsscholarship.htm>. Note: All application information is to be submitted electronically. Also, high school grades and transcripts are no longer needed.

For more information or questions please contact:

Steven J. de Kozlowski
Chairman, Scholarship Committee
SCAPMS
207 Canterfield Rd.
Columbia, SC 29212
803-600-7538
sdekoz2@gmail.com

South Carolina
Aquatic Plant
Management Society

Newsletter

C/O Michael Hook
2730 Fish Hatchery Road
West Columbia, SC 29170

Printed on Recycled Paper

