



Invasive Species Management Training Program

Southeastern Community College in Whiteville, North Carolina, is pleased to announce the launch of a new curriculum program - the **Invasive Species Management Training Program**, in 2008. The new curriculum will be a new second year focus of the **SCC Environmental Science Technology Program**. The program, *the first of its kind ever developed*, is a unique college level program for training of invasive species management technicians.

The ISMT program, which is being developed in partnership with U.S. Federal Invasive Species Prevention Specialist, **Dr. Randy Westbrook**, will include five online courses (seven weeks in length) and a semester long hands-on Student Co-op (internship), under the supervision of a cooperating agency or organization. The courses include:

- IVS 110** - Introduction to Invasive Species (Internet Course) – (3 Credit Hours)
- IVS 210** - Invasive Species Management Strategies (Internet Course) – (3 Hours)
- IVS 220** - Invasive Species Management Programs (Internet Course) - (3 Hours)
- IVS 230** - Invasive Plant Survey Methods (Internet Course and Field Studies) – (3 Hours)
- IVS 240** - Invasive Plant Control Methods (Internet Course and Field Studies) - (3 Hours)
- IVS 250** - Invasive Species Management Co-op (Internship) – (3 Hours)

The new curriculum provides an alternative second year track for resident students who are enrolled in the **SCC Environmental Science Technology Program**. A **Certificate of Invasive Species Management** will be offered to distance learning students who wish to complete only the six IVS courses in support of their work related professional development programs.

For additional information about the program, contact Dr. Westbrook directly at 910-642-7141 (X291);
E-mail: rwestbrooks@sccnc.edu.

South Carolina Aquatic Plant Management Society Newsletter

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APMS Comes to South Carolina

The 48th Annual Meeting of the Aquatic Plant Management Society will be held July 13-16, 2008 at the [Mills House Hotel](#) in Charleston, South Carolina. Charleston South Carolina has been ranked in the top five U.S. destinations for the past fourteen years. Visit America's first museum, tour a charming plantation, explore historic forts and relax with a trip to the beach or enjoy a rewarding round of golf at a championship course. The Mills House is a luxurious, full-service, antebellum hotel originally opened in 1853 and is on the Gold List of the World's Best Hotel's by Conde Nast and named Best Historic Hotel by Frommers. Our hotel is conveniently located near the Market place, the Charleston SC aquarium, the Dock Street Theater, the Charleston Waterfront Park, and a wide variety of restaurants. For more information visit: <http://www.charlestonevb.com>.

This will be an extraordinary meeting! So mark your calendar to attend and get a look at Charleston's natural beauty and active local scene.



Photo: <http://www.funbeaches.com/charleston-05/charleston10.jpg>



Photo: <http://www.dnr.sc.gov/water/envaff/aquatic/phragmites.html>

In addition to the meeting, immediately following this years meeting APMS is organizing a student tour, in cooperation with the South Carolina chapter of APMS, to observe regional weed management issues. Observations of phragmites, alligatorweed, and hydrilla management projects are possible, as well as a potential stop at a research lab. The tour is tentatively scheduled from Wednesday afternoon (July 16th) to Thursday afternoon (July 17th), and is dependent on total participation. Please contact Tyler Koschnick (information below) if you are interested in participating in the tour.

For more information, please contact:
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Meeting Registration Information

Registration Categories

	Early by June 12	On-site after June 12
Delegate Registration	\$225.00	\$275.00
Student Paper Competition Registration	\$0.00	\$0.00
Student Regular Registration (non-competing)	\$50.00	\$50.00
Guest Registration (spouse, partner, child over 12 years-of-age)	\$100.00	\$125.00

Delegate and Student Registration includes:

- All Technical Sessions
- President's Reception
- Refreshment Breaks
- Poster Reception
- Banquet

Guest Registration (spouse, partner, child over 12 years of age) includes:

- President's Reception
- Refreshment Breaks
- Guest Tour
- Poster Reception
- Banquet

Non-registered guests may purchase individual tickets for the following special events:

	Early by June 12	On-site after June 12
President's Reception	\$25.00	\$30.00
Guest Tour	\$25.00	\$30.00
Poster Reception	\$25.00	\$30.00
Banquet	\$40.00	\$50.00

Registration Form

Save money and help us in planning for meeting functions by printing and submitting the [Meeting Registration Form](http://www.apms.org/2008/registration.pdf) (PDF file - <http://www.apms.org/2008/registration.pdf>) prior to June 12, 2008. This is an interactive form, allowing you to fill out the form on your computer, and then print it.

Early registration accepted if form and payment received by June 12, 2008.

Cancellation/Refund Policy

Registration fees are fully refundable prior to June 30, 2008, less a \$25.00 processing and handling fee. No refund of any fees will be issued if cancellation of participation is received after June 30, 2008. Notice of cancellation must be received by APMS via mail, fax, or e-mail. **Phone cancellations will not be accepted.**

Hotel and Travel Information

The Mills House Hotel

115 Meeting St.
Charleston, SC 29401

Special Guest Room Rates
\$155.00 single or double occupancy



Reservations

To make your hotel reservation, call The Mills House Hotel directly at 843-577-2400 or 800-874-9600 between the hours of 9:00 a.m. and 4:00 p.m. and ask to speak with Mary or Latoya. You must make your reservation on or before June 12, 2008, and be sure to mention that you are part of the Aquatic Plant Management Society. Our special APMS guest room rate is \$155.00 for single and double occupancy per night plus applicable tax, currently 12.5%. The Mills House Hotel requires that all reservations be guaranteed with a major credit card or a deposit. The credit card will be charged if the reservation is cancelled within 48 hours prior to arrival. The deposit will be refunded if the reservation is canceled at least 48 hours prior to arrival date. Check in time is 3:00 p.m. and checkout time is 11:00 a.m. Note: A limited number of government rate rooms are available. To obtain a room at this rate, contact Sherry Whitaker at 601-634-2990 or Sherry.L.Whitaker@usace.army.mil to put your name on the list. She will handle all reservations made at the government rate.

Parking:

Daily Self Parking Fee: \$19.00

Valet Parking Available: \$19.00

County operated garage adjacent to the hotel self parking \$19.00 per night

There is a 6 feet 7 inch vehicle height limitation in all garages.



Driving Directions

From I-26, take Exit 221B, the Meeting Street Exit. Continue down Meeting Street for 2 miles. We are situated at the corner of Meeting and Queen Streets.

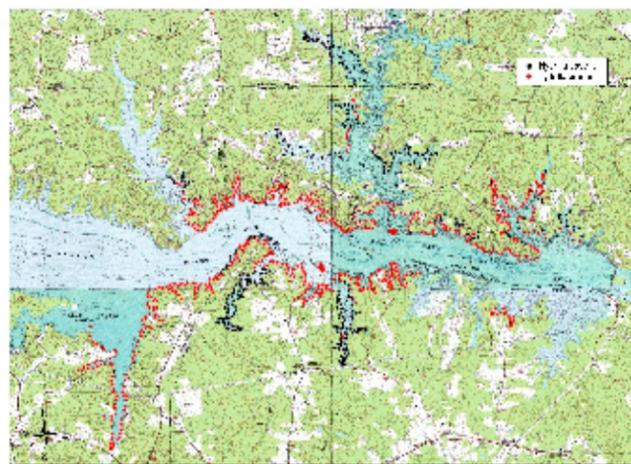




Assessing the Potential of Creating Management-Quality Invasive Plant Maps of Lake Gaston with Data Generated by Volunteer Scouts

Numerous Lake Gaston residents have expressed an interest in actively contributing to lake environmental efforts. Using a *University Extension, Engagement, and Economic Development* Grant from NCSU, a project was developed to evaluate the feasibility of creating management-quality vegetation maps using these volunteers. If successful, this effort may serve as a model for invasive plant management on other aquatic and terrestrial sites. In Lake Gaston, private contractors are hired to generate vegetation maps each fall, at a cost of \$30,000 to \$40,000. The accuracy of these maps could be increased or the cost of production decreased by utilizing trained volunteers.

Volunteers were trained in the identification of seven aquatic plant species, (including hydrilla) and the use of the handheld GPS units. Fourteen volunteers worked alone or in groups of two to scout weeds during the months of October and November. Scouts sampled in areas of their own choosing, and used their own boats (both motor boats and kayaks). Volunteers recorded GPS coordinates using a computer program written by lake resident Patrick Dempsey (Band XI International). Volunteers measured water clarity and depth, as well as presence or absence of hydrilla and 6 other aquatic weeds.



Hydrilla, Main Scouting Area, Lake Gaston, Fall, 2007

Data was recorded from over 1,400 distinct sampling points with an investment of approximately 100 man-hours of labor. It is estimated that 67 unique miles of shoreline were scouted or approximately 20% of total lakeshore. In general, the data reflects the observations of the herbicide applicators who applied treatments in the lake. As comfort levels increased, volunteers began to collect additional data over time. For instance, volunteers used word of mouth to promote their endeavor and were soon receiving emails

from acquaintances stating the locations of floating mats of hydrilla. Volunteers would then travel to the location and document these mats. Additional data collected by volunteers included sighting of grass carp, length of hydrilla shoots, known herbicide treated areas, and condition of the plants collected.

Current efforts will be extended through 2008 with additional volunteers expected. Volunteers will be surveyed to determine time investment of each volunteer. The data collected from this research may serve as a complement (to ground-truth) data collected by the independent contractors. Future efforts could include assigning part of the lake to contractors in an effort to reduce scouting costs. It is also expected that the location of hydrilla growth could be tracked using the GPS data and comparing growth from year to year to determine long-term spread or control.

For additional information contact:

bridget_lassiter@ncsu.edu
Research Assistant
North Carolina State University
Department of Crop Science



Florida Aquatic Plant Management Society

32nd Annual Training Conference
October 13-16, 2008
[Hilton Daytona Beach Oceanfront Resort](#)
100 North Atlantic Avenue, Daytona Beach, FL

Come join us in Daytona Beach and earn CEUs in Aquatics, Natural Areas, Right of Way and Core. Don't miss this opportunity to join other Plant Managers and share your ideas and concerns as they relate to all areas of Aquatic Plant Management.

Come see the latest in aquatic plant control technology. See all of the latest products and services from a wide variety of vendors. There will be a resource demonstration on-site.

For additional information contact:
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Debbie Tarvin, Diversified Waterscapes, Inc

Water is so very important to our everyday modern life and recreation. It is amazing that the average American knows so little about it. Water is a solvent; a liquid (between 32° and 212° F.) made up of hydrogen and oxygen molecules. The only "pure" water on earth can be found in the cooling tubes of distilling or desalination devices.

The "villains" that can be found in water are, phosphates, nitrogen, organic material, oils and minute plant life. By learning more about the contaminants water can carry we can better protect our water.

In natural conditions factors exist that protect water by keeping it cooler, by buffering chemical reactions, and by speeding up breakdown of foreign materials that enter the water. Because these natural counterbalances don't exist in concrete or plastic environments, no equilibrium exists to fight contaminants. In lieu of natural counterbalances, we fight back by adding products formulated to slow down the progression of biological contamination. We manipulate pH (acidity and alkalinity) to make sure the additives effectively block contaminants. We run filters and periodically remove visible contaminants from the surface. We attempt to block sunlight to organisms that use sunlight and chlorophyll to grow.

We need to be more cognizant of natural processes and the methods available to combat the negative effects nature can bring to a water feature. Preventative approaches should have a higher daily priority.

Today many people have a heightened degree of sensitivity to the word "chemical". Unfortunately, some customers assume that anything that comes out of a bottle is a "chemical". While that is technically true (water is also a chemical compound) some materials act not as chemical reactants, but as **influencers** of natural reactions.

Dyes block sunlight from algae and aquatic plants, which need sunlight to grow. Clarifiers, another "chemical" are like magnets. They latch onto floating or suspended contaminants (silt, algae, dead organic matter and dust) and make them so heavy they fall to the bottom.

Algae are a nuisance and are probably the most familiar to you. That pea green soup look in your water feature or the slimy, stringy, dark green stuff you see on the rocks and the lake bottom. Algae cannot grow if nutrients aren't present. But, there usually are nutrients present in water. While there are claims that bacteria can control algae it is most commonly used in conjunction with a specially formulated copper product. These copper products are chemicals that are commonly known and are widely misunderstood. Used wisely, and according to directions, a good algae control product will not harm fish or plant life and will serve to act as a "balance" by limiting the growth of algae. The end result is a water habitat that is not choking with algae but has a controlled growth that fish can hide in and feed on.

Neglect is the worst enemy of water features while maintenance is your best ally. Water should be well circulated with excellent aeration. Chemicals can't make up for inadequate aeration and circulation. Skimmer baskets should be emptied daily in order to prevent debris from trees, turf and ornaments from falling into the aquatic environment and creating havoc with the pumps and the overall appearance of your feature.

Proper care of your water feature will bring results that are pleasing to the eye (it will look great), the nose (no unpleasant odor) and the ear (properly maintained pumps will keep those waterfalls and water moving). And don't we all enjoy an aesthetically pleasing aquatic environment?