



News & Views

for New Hampshire's Green Industry

May 2007

Landscaping at the Water's Edge

The meaning of "landscaping at the water's edge" may have taken on new connotations after the April nor'easter! Severe storms such as that point out very clearly the importance of doing everything possible to keep soil in its place. Erosion and runoff from yards and landscapes contribute sediment, nutrients and contaminants that end up in lakes, ponds, rivers and estuaries and can threaten the ecology, attractiveness, and safety of those water bodies. Even those of us who don't have shoreland property are part of the watershed and our actions impact water quality somewhere nearby.

A new book called **Landscaping at the Water's Edge: an Ecological Approach**, should serve as a practical guide to assessing and managing runoff on shoreland properties. Written by a team of Cooperative Extension specialists and educators for landowners and landscapers, the book covers the fundamentals of water movement and soil characteristics then goes into strategies and techniques for addressing runoff concerns.



The concepts in the book are well-supported by many photos and illustrations in full color. A chapter on landscape design is included for those beginning new construction or renovating existing sites. Vegetative buffers are heavily emphasized and the appendix includes a complete plant list, by height category, of recommended

plants for functional but attractive shoreline, lowland transition, and upland plantings.

Nearly fifty conservation commission and/or lakes association representatives and green industry members participated in a two-day training class in March. Their critique of the program was overwhelmingly positive, and we intend to repeat the class in the fall or next spring. We have many requests for presenting shorter versions of the topic to lakes associations and similar type groups. A group of volunteers has been trained to provide a 50-minute powerpoint presentation for these audiences.

Meanwhile, if you work on shoreland properties or in other areas where runoff is a problem, you can order a copy of the book for \$20 from UNHCE Publications, Nesmith Hall, 131 Main Street, Durham NH 03824. Make checks payable to UNH Cooperative Extension. Call the publications office at 862-2346 if you have any questions, or email them at ce.pubs@unh.edu.

New Interactive CD on Lawn Care Available

Interested in getting a greener, healthier lawn and having fun learning how? UNH Cooperative Extension Educator Sadie Puglisi and WWW & Media specialist Faye Cragin have teamed up to produce Integrated Pest Management for Turfgrass, an interactive CD and website about caring for grass in home lawns, as well as in municipal and commercial landscapes such as athletic fields, cemeteries, golf courses and office parks.

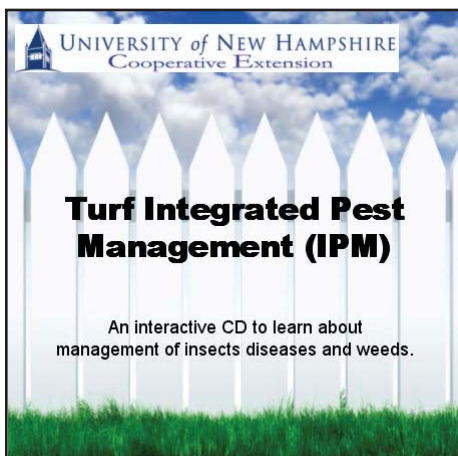
"I wanted to create an alternative to flat fact sheets for teaching people about managing pests in lawns," says Puglisi. "I wanted them to go beyond simply buying and applying lawn-care products - to understand why they need a product and how the product is going to work."

Armed with that understanding, they can move on to ask another question: Do I really need this or that product?"

The CD and website offer information on the basics of integrated pest management, how grass grows, identifying and managing turf diseases, scouting for grubs, an herbicide glossary, and interactive decision tools about herbicide use. Quizzes at the end of each section will test your knowledge.

"The information is easy to follow and helpful to anyone who wants to know how to have healthy grass," says Puglisi. "Come have a look for yourself."

The website is available to everyone at <http://extension.unh.edu/agric/turf/turfipm.htm>. For those who do not have high speed internet access, the CD comes ready with Macromedia Flash that can download onto your computer in just seconds. Garden centers can offer CD's to their customers by pre-purchasing them from UNHCE or having the order form available for customers to fill out. Bookmarks are available with the website address on them by calling Sadie or Mary at 225-5505.



To order CDs, send \$5 for each, checks made payable to UNH Cooperative Extension to UNHCE Publications Center, 131 Main Street, Nesmith Hall, Durham, NH, 03824

Administrative Changes at UNH, from Top to Bottom!

Several things are happening at UNH which will impact the horticulture program, which is housed within the Department of Plant Biology, part of the College of Agriculture and Life Sciences (COLSA). Starting at the top, the University has announced that Dr. Mark Huddleston

will become the next President of UNH beginning in July 2007. J. Bonnie Newman has been serving as interim president since the departure of former President Ann Weaver Hart in June 2006.

Huddleston will bring to UNH three decades of experience in public and private higher education. He has served on the faculty at the University of New York-Buffalo and the University of Delaware, where he chaired the Department of Political Science and International Relations. He was named dean of the College of Arts and Sciences there in 2001, then became president of Ohio Wesleyan University in Ohio in 2004.

Also on July 1, Thomas Brady will take over as new dean of the College of Life Sciences and Agriculture (COLSA), replacing Bill Trumble. Brady is currently division director of Integrative Organismal Biology at the National Science Foundation and a professor of biology at the University of Texas at El Paso. He previously was a professor of Biology at Hamilton College in Clinton, N.Y., where he also served as chair of the Department of Biological Sciences.

Brady will oversee the implementation of COLSA's recently-adopted strategic plan and will direct the reorganization process that has recently been approved by the Board of Trustees. The plan will reduce the number of departments in COLSA from seven to three, plus the Thompson School. The three new departments, whose final names will be decided upon by the faculty members, are: Molecular, Cellular & Biomedical Sciences; Animal and Plant Systems; and Natural Resources and Sustainable Communities.

Agriculture maintains a focal point within COLSA, with the study and teaching of agriculture distributed across all of the three new departments and the Thompson School. Agriculture will be administered, however, in a single, central location, providing effective use of our resources while offering clear and consistent academic program coordination, according to Interim President Newman.

Faculty and extension specialists are awaiting further direction to see how our programs will be affected and how we fit into these new, larger departments. For example, it is predicted that the Department of Animal and Plant Systems will include the majority of faculty from the current departments of Zoology, Animal Science and Plant Biology, including horticulture.

We also have a new chair of the Department of Plant Biology; the faculty elected Dr. Chris Neefus to serve in

this capacity, replacing Dr. Jim Pollard who was serving on an interim basis. Dr. Neefus is committed to supporting and revitalizing the horticulture curriculum, but of course can only do so if the new Dean and President, as well as the Provost, provide the critical resources needed.

Eustoma Cut Flower Production – 2006 Trial Summary



Last summer we grew thirteen varieties of *Eustoma grandiflorum* (commonly known as lisianthus) as cut flowers in field beds and high tunnels. The purpose was to evaluate the varieties for local growing and marketing, and to compare growth and yield in the field versus in high tunnels.

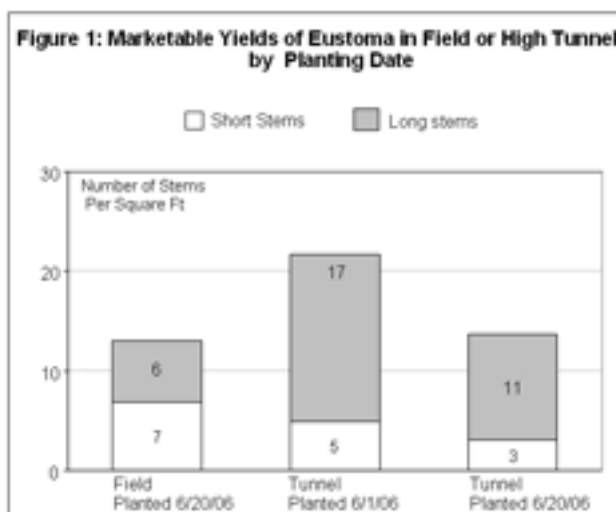
Early to mid-season pink, blue and white or ivory varieties were selected from five available cut flower series of *Eustoma*. The novel blue blush type was also included. I considered ‘Echo Light Blue’ to be the standard against which others were compared, as Echo is certainly the most common variety around.

Plugs were transplanted into 2’- wide beds mulched with black plastic, with a center drip tape running down each. Spacing was six plants per square foot. Many growers don’t realize that *Eustoma* can and should be spaced so closely together. Two layers of flower netting served to keep most of them upright for most of the season.

We grew our seedlings in 200-count plug trays and planted the first tunnel as planned on June 1, 2006. Then it rained...and rained...and rained...the rest of the plugs had to wait until June 20 before we could get back into the field and the second tunnel. The yields were lower in the later planting but still the plants performed exceptionally well. Although they look delicate, *Eustoma* are very tough plants once they’ve outgrown the rosette stage.

Cutting started two weeks earlier in the early-planted tunnel than in the late-planted tunnel or field. Marketable stems were cut from each plot and graded by stem length at least once a week through mid-October. Stem length is a particularly important factor if you are selling to floral distributors or directly to florists, who told us they would pay \$2.50 per stem for good quality long stems. However, if you are selling at your own stand or farmer’s market stem length doesn’t matter so much.

Figure 1 shows the average yield (across all varieties) in the field compared to each tunnel. The number of marketable stems per square foot (SPSF) were equivalent in the field and the tunnel planted at the same time (June 20). However, a much greater proportion of long stems (over 16”) were produced in the tunnel (79% long) than the field (46% long). The early tunnel (planted June 1) produced many more stems: 23 SPSF, with 74% long stems.



Based on these trials, I recommend the following varieties for field production: ‘ABC Rose’, ‘Cinderella Blue’, ‘Echo Champagne’ and ‘Echo Light Blue’, all of which have double flowers. The singles did not perform as well, especially in the field. ‘ABC Rose’ was the only field-grown variety that had over 90% long stems in the field.

For high tunnel production, all of the varieties performed well when planted on time. 'ABC Blue Blush', 'ABC Rose' and 'Echo Champagne' were exceptional for producing above-average yield and over 90% long stems in the early tunnel. 'Cinderella Blue' and 'Cinderella Pink' also had very good yields and 85% long stems. 'Echo Light Blue' was below average for both total stems and stem length. Holding plugs for 3-weeks before planting reduced yields of the single series (Twinkle and Laguna) relatively more than the double series (Echo, ABC and Cinderella).

Next newsletter, we'll share the results from a customer survey done in three locations around the state, including which varieties consumers liked the most and what they were willing to pay!

Conclusions:

1. Holding plugs beyond their optimal stage reduces yields!
2. The advantages of growing in high tunnels include longer stem length and a longer harvest season into the fall. To maximize the advantages, plant in tunnels as early in the spring as possible.
3. New cut flower varieties are more productive and produce longer stems than 'Echo Blue', which is still great as a garden annual.
4. Choose to include double and single varieties in a range of pastel colors. They make great, long-lasting bunches when sold as single varieties or mixed bunches.
5. Overall outstanding varieties include 'ABC Rose', 'Echo Champagne', 'Cinderella Blue', 'Cinderella Pink' and 'ABC Blue Blush'.

Thanks to a grant from the New England Greenhouse Conference, we will be doing more Eustoma trials in 2007. Watch for a twilight meeting in September or contact me anytime at cathy.neal@unh.edu if you'd like to view the trials.



Summer Meetings

June 13: **New England Sports Turf Managers Association** summer field day at Phillips Exeter Academy on June 13 from 9am to 3:30pm. For more info: 777-4436.

June 20: **University of Massachusetts Turf Research Field Day** at the Joseph Troll Turf Research Center in south Deerfield, Mass. For additional information, including attendee/exhibitor registration information visit http://www.umassturf.org/education/annual_events/field_day.html Questions can be emailed to fieldday@umassturf.org

August 2: **Greenhouse Twilight Meeting:** Dasatron maintenance, repairs and assembly. Speaker: Lela Kelly vice President of Dosatron International Inc., Location - D.S. Cole Greenhouses in Loudon, time – TBA. Check for a flier at www.extension.unh.edu/AGRIC/AGNLT.htm in mid July or contact Sadie Puglisi at 225-5505 for more information.

This newsletter is a cooperative effort of the Ornamentals Extension Educators and Specialist at the University of New Hampshire. It is published quarterly. Its purpose is to inform and update industry members on issues and research to the production, use and maintenance of ornamentals and turf in New Hampshire.

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