



Van der Veer & Goudreault in the Macfarlane Greenhouse Facility. Story & Photo by Victoria Courtland.

Greening the Grade

The Macfarlane Greenhouse Facility gets an A from an independent sustainability certification program.

The Macfarlane Greenhouse Facility at the University of New Hampshire (UNH) has achieved a position within the highest-rated category (A) designated by an independent sustainability certification company. Headquartered in the Netherlands, the Milieu Project Sierteelt (MPS) Group facilitates a greenhouse sustainability certification program that assesses energy, water, and fertilizer use; crop protection methods; and waste management (including CO²) in commercial—and now research and teaching—greenhouses around the globe.

The Macfarlane Greenhouse Facility is one of five facilities operated by the New Hampshire Agricultural Experiment Station (NHAES) in the College of Life Sciences and Agriculture (COLSA) at UNH. Dean of COLSA and Director of NHAES Jon Wraith initiated UNH's involvement with the MPS-ECAS certification program after learning about it from alumnus Doug Cole who owns DS Cole Growers in Loudon—the first MPS-qualified commercial greenhouse in North America.

The Macfarlane Greenhouse Facility is the first research and teaching greenhouse in the world to participate in this international sustainability certification program. Such a partnership strengthens the University's leadership role, setting the benchmark for responsible operations in agriculture and food research and teaching. UNH's participation in MPS-ECAS's certification program provides the greenhouse staff with immediate access to knowledge, innovation, and advice on quality assurance, the environment, and social issues in horticultural production. With this certification, the Macfarlane Greenhouse can proudly display the MPS logo, and the details of its sustainable practices will be available to growers and associations via MPS's central database.

MPS records and analyzes a comprehensive list of information to categorize a participating greenhouse along a continuum with a letter grade of A, B, or C. While A is considered the most environmentally friendly, there is a range within each letter grade, leaving room for improvement even at the most advanced facility. This past September, Goudreault welcomed MPS-ECAS auditor Arthij van der Veer and, during the initial audit, gave him a tour of the operation. Accustomed to reviewing commercial facilities, van der Veer and MPS had adjusted their evaluation to accommodate the University's research and teaching greenhouse. "Coming from the Netherlands where most universities have horticultural programs, I was pleasantly surprised by the practical influence of the Macfarlane Greenhouse," said van der Veer. "This is a very good program that has already implemented a lot of sustainability practices." Van der Veer commended Goudreault on the greenhouse's cleanliness, organization, and recycling practices in addition to recognizing its value in providing students with a venue for hands-on experience with industry-relevant research.

Wraith acknowledges the key efforts of Macfarlane Greenhouse Facility Manager David Goudreault and Greenhouse Technician Jonathan Ebba, NHAES Faculty Fellow Anita Klein, grower Doug Cole, the UNH Facilities and Energy offices, and many others for their data gathering assistance that contributed to the audit's positive outcome. "We had been keeping records for our own use of a portion of the multiple metrics used by MPS, and expanded these efforts to achieve the full suite of those when we decided to enroll," says Wraith. "Arthij and others have been very accommodating in taking on what is for them an atypical greenhouse operation. Now we have a clearer understanding of what more we can do to increase and solidify our score."

Upon reviewing the informative results of the audit, Goudreault has made plans to work with his staff to further increase the sustainability of the greenhouse through modifications to its energy usage. "Given the age and structure of our facility, we have limited choices in what we can do to improve our energy consumption," said Goudreault of the 25,000 square foot greenhouse facility built in the 1940's. In addition to improvements such as switching from fluorescent fixtures to LED lighting, Goudreault will collaborate with Professor of Horticultural Technology Rene Gingras to implement a rainwater catchment system that uses gutters to transport water into a submerged tank. "We need to address all concerns about water quality," says Goudreault about the student-centered project that takes into account the importance of filtering and monitoring water for pH, alkalinity, and impact on plant growth. Wraith noted that having achieved an MPS qualification has amplified excitement about the responsible practices within the facility, and the resolve to do even better.

COLSA offers a wide spectrum of associates, bachelor's, master's, and doctoral degrees in the life sciences, agriculture, and natural resources. NHAES, housed within the college, supports regionally and nationally relevant research and engagement related to sustainable agriculture and forest resources management. Students have access to diverse teaching and research opportunities at our farms, dairies, and greenhouse facilities. COLSA's renowned faculty combine teaching with a passion for research and public service. Their work to understand the nature of biological systems, manage and conserve natural resources, improve agricultural profitability and sustainability, enhance health and nutrition, and foster economic development has earned UNH nationwide recognition as a top-tier land, sea, and space grant university.



NHPGA Board Member, Linda Zukas, attends the Centenary Celebration.

NHPGA Participates in Centenary Celebration

The New Hampshire Plant Growers' Association was represented at the NH Department of Agriculture, Markets & Food Centenary Celebration on October 22nd. Held in Concord on the State House lawn, the celebration included exhibits, demonstrations, and activities involving the state's many commodity and educational groups. A beautiful fall day allowed visitors to tour the outside displays and learn about the history of agriculture in New Hampshire. Speakers on topics concerning the history of agriculture in our state were enjoyed. The Department of Agriculture, Markets & Food created an outstanding visual timeline of events leading to where the industry is today.

The NHPGA display included the trifold featuring information about membership benefits and the NHPGA mission. In keeping with the theme of agricultural history in the state, there were several past issues of *The Plantsman* available for visitors to browse through. Covers of additional past issues were also included. Laminated NHPGA pages from recent *Communicator* issues illustrated recent activities.

This also afforded an opportunity to promote NHPGA's current focus and related activities. Membership packets were available and several were given out over the course of the day. The home page from the updated website was prominently displayed and banner ad information was included as a handout. The Horticultural Endowment and Student Scholarship programs were highlighted as well. The board members who participated felt that the event increased our visibility to those in the legislature as well as the community as a whole.

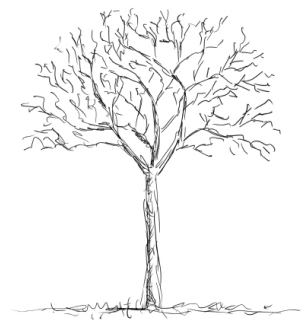
Joint Winter Meeting

NHLA/NHPGA &

UNH Cooperative Extension

Wednesday, January 15th, 2014

Register at http://www.nhfarmbureau.org/jointwinter_meeting_registration.htm



Agenda

8:00-9:30 Registration open/ Flex time for networking, visiting vendors and Table Topics

8:15 - 9:15 Table Topics - back by popular demand! Find a topic of interest to you, whether you're a grower, landscaper, retailer or plant geek....informal, small group discussion allows you to share ideas with your peers and see what's up in the industry. Drop in for a minute or stay for the duration.

9:30-10:45 Keynote Speaker sponsored by UNH Cooperative Extension through a grant from USDA Risk Management Agency

"Positioning for the Future of the Green Industry Marketplace" by Dr. Charlie Hall, Texas A&M University

11:00 - 12:00 Concurrent Sessions

Plant Disease Problems in 2013, and How to Prepare for 2014. Cheryl Smith, UNH Cooperative Extension Plant Health Specialist.

Mulch Issues - Supply, Sources, Practices and Quality Concerns. Bill Fonteno, NCSU.

12:00 - 1:00 Lunch/Visit with Vendors

1:00 Announcements

1:15-2:15 Concurrent Sessions

Greenhouse and Nursery Substrates. Bill Fonteno, NCSU.

Changing the Conversation on Ecological Design. Lisa Cowan, Studioverde.

2:20-3:20 Concurrent Sessions

Health Insurance Options in New Hampshire. NH Dept. of Insurance.

State and Federal Quarantine Pests: Updates, Changes, and Steps You Can Take. Piera Siebert, NH DAMF

Learn More about the NHPGA, visit NHPGA.org

