

NE1035 Annual Meeting

Annual Meeting

Portland, Maine

June 21, 2011

Participants (in alphabetical order):

Edward Ashworth	University of Maine	edward.ashworth@maine.edu
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Stephanie Burnett	University of Maine	sburnett@maine.edu
Martin Gent	Conn. Agric. Exp. Stn.	martin.gent@po.state.ct.us
Robert Hansen	Ohio State University	hansen.2@osu.edu
Murat Kacira (Chair)	University of Arizona	mkacira@cals.arizona.edu
Tom Manning	Rutgers University	manning@njaes.rutgers.edu
Ariel Martin	Rutgers University	arielm@eden.rutgers.edu
Neil Mattson (Secretary)	Cornell University	nsm47@cornell.edu
Richard McAvoy	University of Connecticut	richard.mcavoy@uconn.edu
Jeff McElroy	Backyard Farms	
George Meyer	University of Nebraska	gmeyer1@unl.edu

Minutes:

Prior to the meeting a morning session was held in which members presented station reports.

1:05 PM – Meeting called to order by Chair Kacira

Introductions

Participants introduced themselves.

Update Mailing List and Suggestions on new stations and researchers to join NE-1035

Currently 13 stations are represented in our membership. Discussion on inviting other colleagues to join our group. Murat talked to some individuals as a follow up to last year's meeting. Roberto Lopez may be interested in joining our group. Erik Runkle and John Lea Cox are currently active in NCERA101 so would not be able to commit to being active with our group. Similarly, John Marc van Iersel would like to stay on the email list but is remaining active in NCERA 101 and can't commit to both. Jay Holcomb has retired from Penn State, we should be sure to engage colleague Robert Berghage to maintain PSU representation. Brian Krug from UNH and Jonathan Frantz from USDA-ARS are a couple others we might engage.

Ways to encourage industry participation

McElroy noted that we might make it easier for industry members to find us, such as via the web. We also need to demonstrate the value of our group to industry members, such as the development of a series of educational articles (a topic discussed in more detail later). McAvoy pointed out that the industry folks we want to attend our meeting may not be the end users but rather the developers/suppliers of technology. McAvoy/Both noted that we might use websites of organizations that already exist to disseminate information from our group (NEGC, OFA, etc.)

Ashworth mentioned that whichever site is chosen for the next meeting the organizers should attempt to invite representatives from the industry to attend the meeting and present on the status of the industry there, where it is headed, bottlenecks, challenges, etc.

Meyer noted these efforts would be facilitating by trying to ensure we have folks with an extension component to their job that are active in our group.

Approval of the 2010 Minutes

The motion to approve the minutes came from Burnett and was seconded by Meyer. Motion carried.

Update from Ed Ashworth

Ashworth welcome the group to Maine. He noted we are in the mid-point of the project. He was pleased to see the efforts to collaborate on writing articles. In the greenhouse industry, energy issues are rearing their head again (divergence in high-tech and low-tech approaches). We are in a very uncertain period in terms of funding for higher education - challenging with the push to cut federal funding, lots of states have budget issues. Support for research in Agriculture is not really on anyone's radar screen. Universities are facing the realities of escalating costs, rising student debts, and there is also pressure from the for-profit educational sector. Land grant universities will need to change over coming years. We shouldn't think about this as business as usual – we need to demonstrate our relevance to garner political support. This group can help leverage individual efforts for soft-funding. We can use this multi-state group to create linkages, to be more effective in our own institutions, and to create opportunities for our students. Federal formula funds may face double digit cuts, NIFA is facing cuts.

Both asked how is the outlook for cooperative extension.

Ashworth noted CE had a significant cut in the federal formula fund budget last year. States are variable with their support. It is hard to know what the future of CE will be.

Both pointed out that within extension we are not really having a debate/discussion either internally or externally about we can prepare for impending cuts. We could try to change to prevent the inevitable, or decide ourselves what we should try to keep and what we can let go.

Discuss other potential HortTechnology or alternative journal articles originating from sections of NE1035 project

At a meeting the previous afternoon the group discussed a platform for sharing our group's combined knowledge on irrigation systems and water and fertilizer management with industry members. Initially the thought had been to work on a review article for the journal HortTechnology. After some discussion there was consensus to instead write a several article series for one of the greenhouse trade journals. This would allow us to share more specific information on our research projects in a relevant form for the industry. The group prepared an outline of 13 articles and suggested authors. Mattson was tasked with leading this effort, initially contacting trade journals to find interest for the series.

Brief discussion on past and current collaborative efforts under existing NE1035 project

Both: In general we need to do a better job of doing this, the papers are a start, but in terms of real research we need to do more.

Kacira repeated the suggestion that we consider inviting 1035 members to serve as an external member on student thesis committees

Manning noted that it is interesting that the major vegetable greenhouses in the U.S. are importing technologies from a region that is quite different (energy sources, regulations, etc.) from our own (Netherlands) this may be because we don't have a domestic integrated approach dedicated to solving greenhouse problems for our own climate.

Gent pointed out that this committee is important to establish networks to write proposals together even if not all members participate in a given grant proposal.

Meyer has seen collaboration work well when individuals have come together to work on a modeling project, or if there is grant money to test a model, etc.

Kacira noted that Energy/Alternative Energy would be a common problem that our group can address.

McElroy stated that researchers and industry would benefit from the development of a high tech demonstration/research greenhouse to research needs that we have such as Photosynthesis, irrigation, fertilization, and ENERGY. Following a highly integrated approach developments could be made; for example, photosynthesis and how this relates to designing systems, gas exchange (ventilation, condensation, photosynthesis, respiration); address the approach to take when designing and solving things – realizing that energy solutions in Arizona will be different in Maine, but an approach to follow when thinking about things.

Current collaborative activities:

Kacira works with some members on a USDA Higher Education grant – got second round of funds to develop educational materials for greenhouse engineering. 48 different modules on engineering. Modules can be added to existing courses, or selectively chosen to develop a new course

Both noted the ultimate goal is to develop an undergraduate program in horticulture engineering

Mattson and Burnett collaborate to work on outreach (talks and trade journal presentations) on fertilizer management, organic substrates/fertilizers.

New chair, secretary for group

Following the custom of the group Secretary Mattson will rotate to Chair for 2012. Burnett was nominated to serve as the new Secretary. Mattson and Burnett accepted these duties and they were unanimously approved by the group.

Meeting Location for 2012

McAvoy volunteered to spearhead the effort to host the 2012 meeting with a specific site in CT to be determined.

Announcements

Both reported on activity by the NCERA101 group. : at the 2001 meeting the group decided a committee would work on guidelines for reporting environmental parameters first in growth chamber. A condensed leaflet was developed and is available online. A couple years later the group worked on one for tissue culture; now they have a draft document for research in greenhouses (this is more comprehensive than growth chambers/tissue culture). The plan is for the final version to be ready for the 2012 International meeting and covers parameters such as radiation, water, temperature, gasses including water vapor, and nutrient. (Both can email the draft to those interested for review).

Both noted that the American Society of Agricultural and Biological Engineers (ASABE) maintains some standards/practices for the greenhouse industry (heating, cooling, ventilation, layout and permitting, etc.). These are subject to periodic review and is getting close to the time when the review should take place.

It was noted that Lou Albright, Cornell University, has retired as of December 31, this leads very few engineers in the northeast related to plant science/controlled environments. Both will circulate a letter for members to sign advocating for a refill of this position.

Several upcoming conferences were noted:

- Sept. 9-14, 2012 NCERA101 will have an international meeting in Cambridge, UK – will follow more of a symposium format because this is an international meeting.
- Oct 15-18, 2012, Lighting symposium will be in Wageningen, Netherlands (lighting in Horticulture)
- Sept 22-27, GreenSys 2013 will be in Jeju South Korea
- International Symposium on High Tunnel Horticultural Crop Protection, in PA Oct 16-19
- May 15-17 2012 Plasticulture conference in Tel-Aviv
- First International Symposium CFD Application in Agriculture Valencia, Spain July 9-12, 2012
- Hortimodel 2012 Models for Plant Growth Nov. 4-8, 2012, Nanjing China

The meeting was adjourned at 3:45 PM.

Respectfully Submitted,

Neil Mattson, Secretary