**S1065 Multistate Project Meeting**

Miami, FL

February 17, 2017

Present: Ariana Torres, Bridget Behe, Sue Barton, Dewayne Ingram, Charlie Hall, Hayk Khachatryan, Alan Hodges, Ben Campbell, Bill Graves, Alicia Rihn, Robin Brumfield

Present via phone: Craig Nessler

* Meeting was called to order at 9am.
* The agenda was approved and previous meeting minutes were approved with minor modifications.
* Thank you Alan Hodges and Hayk Khachatryan for arranging tours, fishing, and planning the meeting.

**Discussion of ongoing research projects:**

* Craig Nessler discussed legislation related to the number of funding lines for agriculture, the new Farm Bill, and SCRI. Specifically, the number of funding lines for agriculture will be consolidated which should result in more funding. Overall, the state of the agriculture industry is bleak but keeping SCRI strong and funded is a priority.
* An awards subcommittee will be working to put together a packet for the Southern Region Committee annual working group award. Subcommittee members include Bridget Behe, Charlie Hall, Alan Hodges and Marco Palma. Dewayne Ingram is going to contact Eric Young to identify what needs to be included in the packet. The National Nursery Survey publications list should be included:

Peer reviewed papers

* Hodges, A., C. Hall, M. Palma, and H. Khachatryan. 2015. Economic Contributions of the Green Industry in the United States in 2013. *HortTechnology*, 25(6), 805-814.
* Hodges, A., H. Khachatryan, M.A. Palma, and [mapalma@ag.tamu.edu](mailto:mapalma@ag.tamu.edu)C.R. Hall. 2015. Production and Marketing Practices and Trade Flows in the United States *Green Industry* in 2013. *Journal of Environmental Horticulture*, 33(3), 125-136.
* Khachatryan, H., A. Hodges, C. Hall, and M. Palma. 2016. Inter-regional Trade Flows within the U.S. Nursery Industry. *Journal of Environmental Horticulture*, 34(1), 19-29.
* Barton, S.S. and B.K. Behe. 2017. Retail promotion and advertising in the green industry: An overview and exploration of use of digital advertising.  HortTechnology 27(1).

Reports

* Hodges, A., H. Khachatryan, C. Hall, and M. Palma. 2015. “Production and Marketing Practices and Trade Flows in the United States Green Industry, 2013.” *Southern Cooperative Bulletin Series* #420, ISBN: 1-58161-420-9.
* Alan Hodges updated the group on the national nursery survey work. The next survey is scheduled for 2019 to capture 2018 data. The group needs to appoint a sub-committee to develop a HRI grant proposal in May 2018 (~$30,000) and start designing the study. The group discussed on whether to include mail and internet surveys or just have internet surveys in future data collections. The group needs to look at the data to see if there are significant differences between the internet and mail surveys, publish the results, and then revisit the discussion. The group questioned the value of including the landscape portion of the survey. Retail and grower sections are essential, but what about the landscape component? One benefit of using an online survey is the ability to filter respondents to different specific sections (e.g. landscapers to a landscape-related section).
* Bridget Behe, Sue Barton, and Ariana Torres formed a sub-committee to analyze the landscape services results from the current survey.
* Ben Campbell is taking the lead on a labor paper (H2A, H2B) comparing the data longitudinally across different areas. Hayk Khachatryan expressed interest in working on the paper. At the previous meeting, Ben Posadas expressed interest in the labor paper as well.
* Ben Campbell is also taking a lead on an irrigation piece and production method changes piece. Charlie Hall will work with Ben on the irrigation article.
* Charlie Hall will send an invite to Jill Calabro (HRI) for the next S1065 meeting.

**State Reports:**

* Hayk Khachatryan discussed his National Horticulture Foundation (previously National Foliage Foundation) grant which is a 2-year project looking at garden center consumer behavior. Data was collected at the TPIE tradeshow to understand tradeshow attendees’ visual attention to booth design elements. The next step will be B2C data. The group recommended contacting Cheryl Boyer about social media use by garden center consumers. Hayk’s new lab was named ‘Consumer Behavior & Insights Lab’ (CBI). Hayk has also hired a new post-doc (Xuan Wei) to work on his SCRI grant on pollinator insects. The SCRI grant will include: 1. An economic feasibility analysis (inputs / insecticides), 2. Grower adoption of alternative pest management/production methods / factors affecting adoption, and 3. Consumer demand analysis including the main determinants of demand.
* Charlie Hall has completed his major service for America In Bloom and has shifted his efforts to the Seed Your Future program board. They are conducting focus groups with kids, parents, teachers, and guidance counselors to formulate marketing efforts to educate students about opportunities in horticulture. He is also on the National Initiative in Horticulture’s Economics Committee which may be a funding opportunity for the group. Charlie, Dewayne Ingram, and Bridget Behe are part of the marketing and economics objective for an SCRI water project. Additionally, Dewayne Ingram and Charlie are working on carbon footprint and economic models (project ending in 2019). Also, Charlie is working with Marco Palma and Louis Ribera at Texas A&M for rose rosette disease (based on the RosBREED project outline) through 2019. He is also helping Gerald S. Berger who is developing an inventory of all models of economic benefits, eco-system services benefits, and psychological benefits of plants with the idea of developing a comprehensive model.
* Sue Barton mentioned that a graduate of Temple contacted Doug Talimi about a way to quantify specific plants in terms of their level of ecosystem services benefits. They had looked at another sustainability index from a native plant group (Boman’s Hill Plant Steward Index) but it didn’t work well with planned landscapes. He wants to create a new plant-based index that landscape architects can use. She helped with writing an ASHS newsletter so he has his idea published. She mentioned that very few professionals that are qualified to do sustainable landscaping (bio retention basins, proper design from landscape perspective, etc.) and that there is a huge market that is being underserved which may be an opportunity for Seed Your Future participants.
* Dewayne Ingram will set up a call regarding the regional project award committee with Eric Young. Dewayne received 2 more years of funding from the KY Horticulture Counsel for on-farm demonstrations and to assist growers in transitioning from tobacco to other products. The grant also helps fun 3 research centers and Tim Woods who conducts economic analysis/market research and education on fruits and vegetables. Dewayne received funding for an expansion on the carbon footprint study using Itree which allows green industry stakeholders to provide more value to their customers. Charlie Hall is also collaborating on the project and they are assessing the carbon footprint of holly and boxwood from different regions in the U.S. Results are published in HortScience. They are also working on a paper for greenhouse production with 4.5” begonias and are expecting 1-2 publications. Dewayne, Josh, and Charlie are using GIS in an SCRI grant assessing water footprint with blue (recycled) water, gray (dilution pollution) water, and green (previously irrigated) water. Dewayne has been having success using YouTube videos in disseminating results and relevant information to the industry and recommends it to the group.
* Sue Barton updated on her papers from last time – they have all been accepted to HortTechnology. Sue and a few extension agents are assessing the use of technology (social media) as a platform for extension education. Sue has a paper with Emily on Master Gardener online training where they conducted a follow-up survey using the consumer satisfaction index on Delaware Master Gardeners to measure retention rate and satisfaction. Also, the University of Delaware has started a new NBLA program that they are very excited about.
* Bridget Behe is working on an SCRI water project with Melina Knuth. She is also has finished a study built on Jennifer Dennis’ plant guarantee work and has assessed the structural break points. Bridget is collecting data on RFID use and privacy perceptions by agriculture/non-ag employees and consumers. She has started working with Ph.D. communications students looking at hedonic versus utilitarian plants. Preliminary analysis shows that the price point for plants is higher for hedonic v. utilitarian settings and that priming strongly impacts price point. Bridget and Marco Palma are part of the marketing and economics for an SCRI proposal for biocontrols submitted by Ohio State.
* Ariana Torres has a joint appointment in horticulture and agricultural economics. She is currently wrapping up papers from her Ph.D. project and using her Ph.D. data set (an OREI funded project) to address questions related to what drives fruit/vegetable farmers to become USDA Organic Certified. Additionally, she is addressing why some farmers keep farming organically but are no longer certified (cost, size, market already established, etc.) She is conducting need assessments of the Indiana extension educators to determine their perceptions of marketing challenges and opportunities among specialty crop growers. She wants to identify differences between growers, certified growers, farm size, etc. Ariana received a seed grant to collect farmer’s market prices. She is planning on creating enterprise budgets to encourage farmers to start record keeping. She has a couple grants collaborating with partners in agriculture, biological engineers, and food sciences to assess the potential of solar driers in Tajikistan in apricot orchards. Ariana also wants to make extension series more approachable to Hispanic employees by publishing videos and programs in Spanish. Her idea is to have the information available online so employees can access it without needing to be present at conference educational sessions.
* Robin Brumfield is currently working on the second year of an EEU grant where they are training women farmers. She has collaborators in Germany, Malta, and Spain and they are meeting in Barcelona in April to launch the curriculum. Robin is involved with a New Jersey water project and they are looking for growers to be their ‘test’ subjects that they can collect water use data from. She also received a small farm grant to analyze the potential of 10 ultra-niche products and develop budgets for.
* Alicia Rihn is working with Hayk on his Nation Horticulture Foundation grant. She also helped apply for a HRI grant on small space gardening. The grant was not funded but received positive feedback. She is helping wrap up papers from an FDACS funded grant.
* Bill Graves is working with graduate education, rare plants, and sustainable production. Sixty percent of his appointment is administration and he has 5 graduate students. He is investigating new modes of educating graduate students, how they are trained, and how faculty can train them better. Bill is also working on rare plant taxa studies (e.g. western leatherwood) with plants that have ornamental potential. He is collaborating on a sustainable production research project assessing bioplastic horticulture containers, granular biopolymer fertilizers, and biopolymer horticultural systems. Some of the biocontainers are currently on trial and release N, P and K as they decompose which reduces fertilizer requirements. Additionally, they help reduce root circling. Bill has a side project where he is documenting historical trees on college campuses across the U.S. - http://www.htc.hort.iastate.edu/.
* Ben Campbell is using farm value data from the UGA Center of Business and Ag Development to assess the effects of the recession, drought, and recovery. Ben and Paul Thomas are looking at a 1998 publication on starting a greenhouse operation and incorporating shrinkage and how it affects profitability. Ben has a lavender grant to investigate production in GA and consumers’ valuation of GA grown lavender. He also has data on consumer perceptions of implementing a pesticide ban in Connecticut. Specifically, he wants to look at the relationship between sport field quality, pesticide use/ban, and injuries on sport fields. Ben, Hayk Khachatryan and Alicia Rihn had a paper accepted in IFAMA which addressed the geographical definitions of local foods and plants. Ben, Hayk and Alicia also have a proceedings paper and presentation at SAEA which identified barriers to pollinator friendly plants, what customers are buying, and which pollinators they are trying to benefit. Ben has a GMO project investigating how customers react to and value GMO/non-GMO plants and seeds. Should GMO be labeled on plants, turf, etc.? Ben has a producer regulation paper in the Northeast where green industry firms discuss how they feel about different regulations. He is comparing greenhouse, nursery and mass merchandisers and how expectations vary between the different outlets. He is also working on labeling marketing components on various plants and taxation burdens in agriculture. Ben, Hayk, Chengyan and Alicia had 2 chapters published in an organic marketing book which is available on Amazon.
* Sue Barton mentioned ‘Poison Spring’ by McKay Jenkins as a book Ben might find helpful with the GMO research. The book targets GMOs but found nothing was wrong with GMOs, however, GMOs leads to a type of agriculture that can be harmful.
* Alan Hodges is continuing his work on economic impact analysis. He and Hayk are working on a FNGLA funded study assessing Florida’s green industry including capital investment in nurseries (building/structures, information technology), landscape (vehicle, etc.), retailers (building/technology), and wholesalers / allied firms (vehicles, equipment, etc.). He also created a marina industry economic impact calculator which is online. He has models for 9 regions across the U.S. and will be doing similar projects with other industries.

**Elections:** Unanimous election

Chair – Hayk Khachatryan

Secretary/Vice Chair – Ariana Torres

\*Thank you to Hayk and Alicia as secretary.

**Next Location:**

Ashville, NC – summer 8/17 - 8/18

San Diego, CA – winter February 2/15 – 2/16 (Hayk reach out to Mickey)

**Attendee affiliations and research areas:**

* Alan Hodges, Extension Scientist, Food and Resource Economics Department. Research interests – regional economic impact analysis, market survey research, agribusiness management, and biomass energy resource development.
* Alicia Rihn, Data Management Analyst, Food and Resource Economics Department and Mid-Florida Research and Education Center. Research interests – consumer behavior, marketing research, and consumer marketing.
* Ariana Torres, Assistant Professor, Department of Horticulture and Landscape Architecture and Department of Agricultural Economics, Purdue University. Research interests – farmer behavior, business development, and marketing research.
* Ben Campbell, Assistant Professor and Extension Economist, Agricultural and Applied Economics, University of Georgia. Research interests – consumer behavior, consumer marketing, ornamental horticulture, and agribusiness.
* Bill Graves, Department of Horticulture, Iowa State University, Professor and Associate Dean of the Graduate College. Main research interests are biopolymers & bio-composites in horticultural production, in addition to the ecology, physiology, propagation, and genetics of rare plants.
* Bridget Behe, Professor, Department of Horticulture, Michigan State University. Research interests – consumer behavior/marketing, eye tracking in consumer research
* Charlie Hall, Professor and Ellison Chair, Dept. of Horticultural Sciences, Texas A&M University. Research areas – financial analysis/benchmarking, horticultural economics, strategic management and marketing.
* Dewayne Ingram, Professor, Department of Horticulture, University of Kentucky. Research interests – sustainable nursery production systems (carbon footprint lifecycle assessment in nursery crops).
* Hayk Khachatryan, Assistant Professor, Food and Resource Economics Department and Mid-Florida Research and Education Center. Research interests – behavioral/experimental economics, consumer marketing.
* Robin Brumfield, Professor, Dept. of Agricultural, Food & Resource Economics, Rutgers University. Research areas – Farm management, greenhouse cost accounting.
* Sue Barton, Associate Professor and Extension Scientist, Plant and Soil Sciences Dept., University of Delaware. Research areas – Sustainable landscapes, roadside vegetation management, water quality and ecosystem services, BMPs.