NAUFRP Overview

• What is NAUFRP?
  • National Association of University Forest Resource Programs
  • An association that represents 79 universities that have programs
devoted to forests and natural resources.

• Mission
  • To promote long-term investments in university-based education,
research, and engagement programs that advance the health,
productivity and sustainability of our nation’s forest resources for the
well being of all.

Where we are ...
Organizational Structure

**National Officers**
- President
- Past President
- President-Elect
- Secretary/Treasurer

**Regional Chairs**
- North Central
- Northeastern
- Southern
- Western

**National Committee Chairs**
- Policy
- Education
- Research
- Extension
- Diversity
- International

**Executive Committee**
- National Officers
- National Committee Chairs
- Regional Chairs
- 1890's Representative
- At-large Appointees

All Volunteers

---

**NAUFRP Activities and Accomplishments: Policy**

- Partner in alliances, e.g., Forests in the Farm Bill Coalition, Forest Climate Working Group

- Serve as Chair of the Forestry section of APLU's Board of Natural Resources

- **Role in BNR Natural Resources Roadmap**
  - Hal Salwasser was original chair; followed by Tim White
  - NAUFRP Authors, reviewers
  - Sustainability, Water, Climate Change, Agriculture, Energy, Education
NAUFRP Activities and Accomplishments: **Education**


2. Annual Discussions with and Input to SAF
   - Natural Resources and Ecosystem Management program accreditation

3. NAUFRP Participation in Education Meetings
   - UENR: keynote, sessions, workshop, individual presentations
   - Va. Tech Conference on Workforce Diversity in Natural Resources
   - Berkeley Conference, IUFRO World Congress

4. NAUFRP Undergraduate Educational Enhancement Strategy

5. BNR Roadmap, Education Chapter

---

NAUFRP Activities and Accomplishments: **Diversity**

1. **Diversity Summits**
   - NAUFRP sponsored two diversity workshops with many partners:
     Edmonton (2005) & Orlando (2009)

2. **Diversity Sessions**
   - UENR, Va. Tech, Berkeley Conferences

3. **1890 Institutions**
   - 2008 Farm Bill made 1890s eligible for McIntire-Stennis funding
   - NAUFRP is reaching out to engage 1890s

4. Native American-Serving Institutions?
University Education in Natural Resources Conferences

- Began in 1996
- Originated by Terry Sharik and Kim Steiner
- Held on biennial basis
- Focus on teaching and learning
- Other topics such as:
  - Accreditation
  - Recruitment and retention
  - Student diversity

University Education in Natural Resources Conferences

- 1996: Penn State
- 1998: Utah State
- 2000: University of Missouri
- 2002: North Carolina State
- 2004: Northern Arizona University
- 2006: Michigan State
- 2008: Oregon State
- 2010: Virginia Tech
- 2012: Colorado State
- 2014: Mississippi State
- 2016: University of Wisconsin – Stevens Point
Conference on University Education in Natural Resources

This conference explores teaching, learning innovations, and issues facing educators in natural resource fields. The conference blends plenary and breakout sessions devoted to topics that reflect the diverse subject areas, techniques, and perspectives of faculty and administrators across a broad spectrum of innovations and responsibilities.

From the site you can search, browse, and download most conference presentations made at the meeting. Click on the session title of interest to get a listing of each presenter in that session.

http://digitalcommons.usu.edu/cuenr/

3:15 PM  Teaching Natural Resources Courses Online
Debora Colbert, Colorado State University - Fort Collins
Dave Johnson
Brett Bruyere
Legends Room
3:15 PM - 3:30 PM

4:45 PM  Maintaining Field Experiences and Skills with Shrinking Budgets
Elizabeth Arison, University of Missouri - Columbia
Natural Resources Meeting Room
4:45 PM - 5:15 PM

Saturday, March 24th

8:30 AM  Workshop of Developing a Framework for an Undergraduate Degree in Natural Resources Science and Management
Terry Sharp, Utah State University
James Allen
Dean's Conference Room
8:30 AM - 10:00 AM

2:15 PM  Innovations in Education and Research at WCHR
Malinda Latour, Colorado State University - Fort Collins
Natural Resources Room 106
2:15 PM - 3:45 PM
Getting Students to Read and Think: Using Popular Literature in an Introductory Natural Resources Course
Laura E. DeVoit, Western Carolina University
Natural Resources Meeting Room
10:00 AM - 10:30 AM
* Visit Site

High School Science Teachers and Forestry Education: How are they Connected?
Shannon M. Frentner, Virginia Tech
John E. Barrell, Virginia Tech
Resources Meeting Room
10:00 AM - 10:30 AM
* Visit Site

Evaluating Individual Contributions to Team Projects
George R. Hees
Gary Black
Shari Rodriguez
Green and Gold Room
2:30 PM - 3:00 PM
* Visit Site

Repositioning Rangeland Education for a Changing World
Chris Call, Utah State University
Katerie Lascoitchbasheff, University of Idaho
Laura Abbott, New Mexico State University - Main Campus
Karen Heilman, Oklahoma State University - Main Campus
Patricia Johnson, South Dakota State University
Bill George, University of California, Davis
Sue Ann Marshall, Humboldt State University
Ed Kinsella, University of Idaho
Legends Room
2:30 PM - 3:00 PM
* Visit Site

Browse the contents of Conference on University Education in Natural Resources
2012 Biennial Conference on University Education in Natural Resources
Klamath College of Natural Resources, Fort Klamath, CO, March 22nd-24th, 2012
2012 Biennial Conference on University Education in Natural Resources
March 29-31, 2012, Virginia Tech, Blacksburg, VA
2010 Biennial Conference on University Education in Natural Resources
Teaching and Learning in Natural Resources, March 13-15, 2008, Oregon State University, Corvallis
2008 Biennial Conference on University Education in Natural Resources
Teaching Practices, Educational Issues, and the Scholarship of Teaching, March 14-17, 2004, Northern Illinois University, Peoria
2008 Biennial Conference on University Education in Natural Resources
March 14-17, 2002, North Carolina State University, Raleigh

Reader from: Scott, Washington, United States

Teaching Critical Thinking in Statistics for Natural Resource Education
Lisa M. Garcia
North American Summit
on Forestry and Forest Science Education

Clark Kerr Campus
UC Berkeley
May 7-9, 2014

http://ucanr.edu/berkeleysummit

8 Working Sessions

1. Curricula – Relation between Forestry, Natural Resource Management, and Environmental Science/Studies

2. Distance Learning and New Educational Models

3. Professional Masters Programs

4. Role of Professional Accreditation

5. Employment Trends

6. Forest Science in Research Universities

7. International Forestry Education

8. Diversifying Student Demographics
Diversifying Student Demographics

1961

2006

FAES Undergraduate Enrollment in NR & Conservation Disciplines at NAUFRP Institutions in 2012. Categorized by Ethnicity (total enrollment)

Legend:
- NR enrolled
- NR & other
- Liberal arts
- Other
- Other unspecified

Source: Terry Sharik, Michigan Tech
Diversifying Student Demographics

Findings
- Female enrollment is 18% in undergraduate forestry programs
  - 50% in interdisciplinary programs
  - 44% in wildlife
- Only engineering has lower proportion of women in workforce
- Minorities make up <10% of professional workforce and only 14% of student enrollment
  - Up from less than 1% in 1973
- Asians have the highest relative increase, but blacks and Hispanics the highest absolute increases

Source: Terry Sharik, Michigan Tech

http://ucanr.edu/berkeleysummit
Diversifying Student Demographics

Recommendations

- **Change the culture** in forestry programs that "scares away" women and minorities
- More targeted **marketing**
- Use social media, e.g., Facebook page on "Women in Forestry"
- Partner with **minority-serving institutions**
- Select **mentors** to effectively interact with minority students
- Increase **K-12 outreach**

Diversity Logic Modeling Workshops

National Association of University Forest Resources Programs Diversity Committee
Report to ACOP on Innovative Teaching Awards

- Of the nine awards given, six resulted in oral or poster presentations at NACTA. Those at NACTA provided many positive comments regarding the effect of receiving these awards, including:
  - This has been extremely helpful as it is the first award/grant I’ve received on the teaching side of my work and one of the first overall for anything. I’ve just started my career and this will make a big difference for me.
  - This allowed us to build off a previous Higher Education Challenge Grant we’d received. We had done a small test pilot under an HEC grant but we needed more data to be able to go back and apply for additional funding. This award gave us enough funding to gather that additional data.
  - It has helped build bridges between my department and ag education and shown me how to work collaboratively on projects like this. I will definitely be reaching out to the ag ed folks from now on when working on scholarship of learning projects.
- All of the junior faculty reported how great it was to work with more senior faculty and learn from them. Several felt that the mentoring opportunity alone was worth it.
- At least three had submitted for HEC grants based on their Innovative Teaching Awards projects.

Reducing Health Disparities Amongst Minority Populations Through Use of Health and Nutrition Education S. Ahuja, Lincoln University and P. Shankar, Georgia Southern University

As I had outlined in my award request letter last year, my goal with this teaching award was to educate minority children on the benefits of healthy eating and teach them principles of nutrition, such that we can reduce obesity and other related health disorders in this population. In order to achieve the abovementioned goals, I teamed up with our department youth coordinator Mr. Adrian Hendricks and as of last week we successfully implemented our goals and offered nutrition education to over 100 minority children. Our program was very successful and received great amount of positive feedback.

Implementing Inquiry-Driven Assessments of Microbial Diversity in Undergraduate Laboratory Courses, T. Bergholz and J. Haggart, North Dakota State University, S. Petermann and E. Lutgen, Minnesota State Community and Technical College

We have 12 students participating in the semester-long course at NDSU (MICR 352L), where they have learned about microbiomes, have designed an experiment to determine how a particular manipulation of a soil sample (such as increased moisture, or reduced pH), will impact the diversity of microbes in that soil microbiome. Students have used 2 different DNA extraction methods and PCR towards their experimental goals so far. As some of their experiments have not worked as planned, they have also had to do some troubleshooting to improve their technique, which has been a great learning experience.

We have 9 students that will be participating in the 4 week-long module at MState (part of the general microbiology lab), which they will begin on March 27th. For this experience, students will use molecular techniques to identify individual microbes from a soil sample. The same soil samples are being used for the class at NDSU and at MState, and at the end of the semester, students from both classes will meet
and discuss their findings, as well as explain to each other their experimental design and the techniques that they used.

*Applied Interdisciplinary Product Development for Sophomore Students M. Condasky, B. Halteman, A. Weeks, D. Darby, J. Sharp and A. Coffee Clemson University, Clemson, SC*

Presented at NACTA as oral presentation.

This research compared the industry readiness, product development skill level, and overall knowledge gains of students taking the Applied Interdisciplinary Product Development (AIPD) course to those who did not take the course (control group). The interdisciplinary team of food science, human nutrition, and packaging science students at Clemson University applied knowledge from their respective backgrounds in a hands-on setting to create a healthy food product for children, complete with retail packaging. A Subject Knowledge Assessment (SKA) was used to collect data regarding knowledge gained through the AIPD course, and was administered pre- and post-course. Mean difference values (MDV) for each subject area were analyzed using a Paired Sample Satterthwaite t-test ($\alpha=0.05$). SKA results indicated that the MDV were significantly different ($\alpha=0.05$) between the treatment and comparison groups in the overall score and in every subject score area except packaging science. Data from an exit questionnaire was used for evaluation of attitudes pertaining to product development knowledge and skills, department engagement, pedagogy, and industry readiness. The difference between the treatment and comparison groups was analyzed using a two-sided Wilcoxon rank-sum t-test ($\alpha=0.05$). Mean scores between the treatment and comparison groups were significantly different ($\alpha=0.05$) in seven of the nine statements pertaining to product development knowledge and skills, and statements pertaining to pedagogy and engagement. The project was considered a successful intervention for sophomores in the Food, Nutrition and Packaging Science department at Clemson University. A pilot study with a southeastern land grant university is being conducted to test the feasibility of online dissemination of class materials.

*Native Plant: What Does it Mean and Why does it Matter? Ann Marie VanDerZanden*, and Christopher J. Currey Iowa State University Chad T. Miller Kansas State University*

Presented at NACTA as a posters.

The term native plant is a popular buzzword in the nursery and landscape industry. Many growers use the term to develop niche markets for their products and many consumers link native plants to sustainable landscapes. However, —native— is often defined in a number of ways and associated with a range of perceptions. A joint project between a plant propagation course at Kansas State University and a containerized plant production course at Iowa State University introduced students to native plants and explored the role of native plants in built landscapes and horticulture crop production. Several species of native plants were used as the model crops in both the propagation and production courses. Students completed a five-question self-assessment on their understanding of native plants at the beginning of the course and at the end of the course. Students also completed a 10-question pre- and post-quiz on native plant definitions, terminology, and use. Results showed gains in student self-efficacy.
relative to defining, native plants by the end of the course. Further, post-quiz scores increased compared to pre-quiz scores supporting student-learning gains.

**Integrating Containerized Native Perennial Plants into Greenhouse Crop Production Curricula**  
Christopher J. Currey and Ann Marie VanDerZanden Iowa State University Chad T. Miller Kansas State University

Greenhouse crop production courses traditionally focus on the production of ornamental crops, including containerized annual and perennial bedding plants and potted flowering plants. While the majority of greenhouse production is centered on the production of ornamental crops, there are other non-ornamental crops that are becoming important for greenhouse producers, such as greenhouse food crops and containerized native plants. In response to increasing interest, some greenhouse curricula are being changed to include a focus on food crop production. However, the production of containerized native plants is virtually absent from greenhouse crop production curricula. Our objectives were to quantify student interest in and knowledge of containerized native plant production in an undergraduate greenhouse crop production course. Students completed a pre- and post-course self-assessment on their understanding and interest in containerized native plant production and containerized plant production research. Students also completed a 10-question quiz on the production of containerized native plants. In the laboratory portion of the course, each student conducted an experiment with two native prairie herbaceous perennial species each grown in nine different substrates employing a factorial combination with substrate pH (three levels) and controlled release fertilizer concentration (three levels) as factors. When the results of the self-assessment and quiz are taken together, the student interest in and knowledge of containerized native plant production increased over the semester. Integrating greenhouse crop production course content focused on containerized native perennial plant can increase student’s understanding of an emerging class of greenhouse crops.

**Integrating Native Perennial Plant Concepts into Plant Propagation Curricula**  
Chad T. Miller Kansas State University Christopher J. Currey and Ann Marie VanDerZanden Iowa State University

There has been increasing interest in using native plants in restoration and built landscapes. However, compared to many, more common commercial horticulture crops, there is a limited body of research and literature related to native plant propagation and production, leading to a limited number of native species available for use in plantings. A native prairie plants concept was integrated into an undergraduate plant propagation course at Kansas State University to begin to address this interest. One of the project objectives was to quantify students’ interest and knowledge of native plants and native plant propagation through the course. Pre- and post-course self-assessments were given to the students to evaluate their interest and understanding in native plants and propagating different species. In addition, as a part of the course laboratory, students worked in groups and conducted a seed germination experiment using two native prairie herbaceous perennial species. Each group determined their respective stratification and/or scarification treatments and will collect germination data. In the pre-self-assessment survey, 98% (n=39) indicated that they agreed or strongly agreed that they were interested in learning about native plants and that native plants are important for built landscapes.
Seventy percent of the respondents (n=28) agreed or strongly agreed that that they could successfully define native plant while, 30% (n=12) disagreed or strongly disagreed that they could successfully define native plant. A majority of the class, 70% (n=28) disagreed or strongly disagreed with the statement that —the general public understands what constitutes a native plant. ||

*Using YouTube to Foster Asynchronous Interaction in an Online Introductory Nutrition Course M.K. Fialkowski, W.J. Gibson, J.C. Banna, M. Stewart, G. Lin and R. Novotny University of Hawai‘i at Mānoa R. Leon Guerrero University of Guam*

**Presented at NACTA as oral presentation.**

Introduction: Online courses offer a flexible and adaptive delivery mode for nutrition education. Interaction is a key component of fostering learning, and use of social networking has been shown to improve the learning experience by enabling interaction. There is limited research on the use of YouTube to foster interaction in the online introductory nutrition course (OINC). The objective of this study was to examine the use of YouTube to foster asynchronous interaction among students enrolled in an OINC. Scope of Study: The OINC offered through the University of Hawai‘i at Mānoa was asynchronously delivered in fall 2014, and students (n=71) completed weekly modules independently. To foster interaction, students were required to upload a 2 to 5-minute video on a cultural food to the course YouTube channel. Components included image, preparation, cultural significance, and nutritional information. Students posted constructive comments (5 minimum) on their peers’ videos and voted for the top 3. Students completed a survey on their experience upon submission. Results: A majority of students (65) posted their video, with 54 of those videos having at least one comment (mean = 5). Mean number of views was 37 (range 7 – 271). About half (35) had at least one vote (range 0 - 15). Students indicated that it was fun, promoted creativity, fostered interaction through sharing and commenting, but was also technologically challenging. Conclusions: YouTube’s sharing and commenting feature made it a useful tool for asynchronous interaction. However, modes of use need to be explored to address technological challenges. (Funding: APLU Innovation in Teaching Award and USDA 2011-68001- 30335)

*Global Learning in Agriculture: A Multilevel Collaboration for Internationalization of Curriculum Daniel D. Foster and Melanie Miller Foster* The Pennsylvania State University Kirby Barrick and Andrew Thoron University of Florida

**Presented at NACTA as Oral Presentation.** A global learning in agriculture symposium was conducted in November 2014 with support in part from the APLU Academic Programs Section Innovative Teaching Award Funding. Two core values guided the conference: (1) Purposeful, meaningful global learning can occur on and off campus and (2) Coordination from all levels of agricultural education is needed to ensure maximum student growth on the global competency continuum. Conference included a total of eight instructional hours. There were 56 registered attendees from 10 states representing 17 institutions of learning. Each participant had opportunity to participate in pre-conference programming —Best Practices for Planning Global Experiences in Agriculture||, and conference programming —Bringing the World to Your Classroom: Frameworks for Globalizing Your Curriculum|| which included the completing of the intercultural development inventory (an individual assessment) prior to arrival and interpretation
of results during the conference. Sessions included expert speakers, panels, and roundtable peer review of educational materials. Each conference participant left with one of six different global learning texts and resources. Conference evaluation indicated that all (100%) agreed or strongly agreed with the statement — My overall conference experience was beneficial to my professional growth. In addition, a large majority (88%) agreed or strongly agreed with the statement: — I feel confident in facilitating global learning in my professional setting. Social Media interaction was encouraged and can be viewed on twitter with the hashtag #GLAG14. Future plans include offering an online global learning conference in odd numbered years and a face to face conference in even numbered years.

**Using Case Study Reusable Learning Objects (RLOs) to Facilitate Critical Thinking in Food, Agriculture, and Natural Resources**

T. Grady Roberts*, Nicole L.P. Stedman, Amy Harder, Becky Raulerson and Berthude Albert University of Florida

Presented at NACTA as poster.

Critical thinking is an important skill necessary for the success of college students and future agricultural professionals. However, professors often struggle implementing activities that challenge students to think critically. This study implemented multiple contextually rich, multimedia case studies in the form of Case Study Reusable Learning Objects (RLOs) into an agricultural issues course at the University of Florida. The Case Study RLOs focused on food security issues in the nation of Trinidad and Tobago. Students participated in a focus group at the end of the semester to explore how usage of these RLOs impacted their learning. This research provides a summary of the most common critical thinking themes found in the students’ responses. Three main themes emerged from the group: critical reflections, future learning, and pedagogical suggestions. In critical reflections students analyzed what they learned in the RLOs and made comparisons to how it fit within their existing knowledge base. In future learning students identified the deficiencies in what they knew and proposed a variety of activities to enhance their learning, especially within a global context. In pedagogical suggestions students offered ideas on how to implement Case Study RLOs in other classes. This research contributes to the ongoing study of developing critical thinking skills through innovative courses and activities. Results also indicate that Case Study RLOs can be a tool used to provide students opportunities to think critically.

**The Impact of a Multi-institution Case Study Course on Entomology Students’ Argumentation Skills related to Integrated Pest Management Decisions**

Catherine W. Shoulders* and Robert N. Obycki University of Kentucky

Presented at NACTA as oral presentation.

Entomology students’ skills related to pest scenario evaluation and decision making in determining appropriate IPM techniques must be built during educational experiences before graduates attempt to utilize IPM in the workplace. In order to improve Entomology students’ decision making and argumentation skills related to IPM, a multi-institution course using case studies as learning experiences was created. The impact of the course on students’ decision making and argumentation skills related to IPM was assessed through the following objectives: (1) determine the course’s impact on students’ number and quality of arguments when supporting IPM decisions; and (2) describe students’
perceptions regarding the course's influence on their decision making and argumentation skills related to IPM. This course and associated data collection and analysis are currently ongoing and will conclude in April 2015. Open-ended scenarios requiring students to make and support decisions related to IPM practices are being administered before and after the semester-long course. Sadler and Fowler's Argumentation Skills Rubric is being utilized to determine the number and quality of students' arguments related to their decisions. Descriptive statistics will be reported to determine the difference between students' number and quality of arguments before and after the course. A focus group will be conducted at the course's conclusion in order to gather students' perceptions regarding the course's influence on their decision making and argumentation skills related to IPM. Thematic analysis will be used to unearth focus group themes. Recommendations regarding the course's continuation and expansion to other institutions will be made.

Williams – K. Williams, Kansas State University and B. Dunn of Oklahoma State University As of February 20, 2015, Williams and Dunn have accomplished all steps as outlined in their funded Innovative Teaching Awards proposal as possible to this date. The collaborative project is underway in both of our courses [K-State HORT 625 Floral Crops Production and Handling and OSU HORT 5422 Flowering and Fruiting in Horticultural Crops]. Specifically, we have surveyed the literature on cooperative learning assignments; developed the inter-institutional collaborative assignment based on this information, and designed and implemented a pre-project survey to gather our baseline data for assessment of student perception of confidence in knowledge-gain; student opinions about the collaborative learning assignment; and evaluation of higher-order learning associated with flowering physiology.

One set-back regarding our project implementation in comparison to our original proposal is that distance student enrollment in our courses was not high enough to warrant instruction via distance, so that aspect of our project has been talked for now and the collaborative learning project has commenced with our on-campus students. K-State and OSU student teams have been formed. A shared Dropbox folder is in use by the student participants, and they have uploaded refereed journal and extension-based articles from their literature searches to it. Teams have received feedback one time about the quality and quantity of articles that they have contributed to the process. In early March, the first writing deadline for each team's submission to the collaborative writing assignment will arrive.

Two things that have been observed by instructors are 1) how unfamiliar upper-level students are with how to conduct a literature search, and 2) how overwhelmed and unprepared they feel in being able to read, understand, and assess the literature that they acquire. We have added an additional assignment step and check-in with instructor feedback to guide them in a more directed way through the process. We will continue to modify the project as necessary as it progresses. The semester will conclude with completion of the project and student post-project evaluation via our assessment instrument.
BAC Report – John Stier, University of Tennessee, Knoxville

Conference call was held on 23 June 2015. Following items were discussed.

Report on Congressional Budget Actions

#s from last weeks- House meeting not advanced much, token increase ($10 mill) in AFRI. All other lines flat from FY15. Sun grants, alfalfa research and few others zeroed out with expectations they’ll be added back later in process. Some discussion of challenges of funding for 1890 and 1994 institutions.

Did not agree to competitive allocation for capacity funds.

Disappointing but not surprising. ~ same from Senate. Overall, basically holding the line for funding Agencies being forced to live under discretionary caps.

Next step is to get Interior Appropriations bill done before any House markups can be done, thus such House markups late July, Senate in early July.

NIH for first time ever getting $1 billion increase from House and President; Senate proposed $2 billion. This is a “telling” event.

Discussed possibility of additional 1890 school from LA. They would want to do it from a monetary standpoint. Congress knows this. The right school at right time at right stage of process can be added to Farm Bill and creates a precedent.

Discussed both water proposals sent and request for response on status of Crop Protection Pest Mgt $ received and responded to by Sonny.

Over half of institutions requested IDC despite BAC plea to not request IDC, which reduces available program funding.
1890s were added to competition for 3D funding. Trying to get IDC removed so $ can be returned to Crop Protection line.

Renewed focus on Kstate and Oregon State; deans being asked to stop requesting IDC.

**Discussed Sonny's response to CPPM funds. BAC may work thru the Senate to get the funds back that were allocated to IDC.**

Sonny response to water proposal indicated some guiding comments and next steps. Committee tried to collate all funding efforts, no real structure. Water working group identified lack of unified approach as a major item. Working on a draft response to NIFA response to increase water funding. Sonny had verbally indicated it would be difficult to work water into the OMB prioritization process. (Barbara is retiring Friday—Diaz?). May reconstitute a water working subgroup to work on proposals populated by previously involved persons. May want a response to be signed by joint COPs along with a face to face meeting with Sonny.
NARRU Fall Meeting – October 5 – 7, 2015, Holiday Inn Express, Kansas City Airport,

Tentative agenda items:
- USDA NLCGA funded projects - posters and presentations
- Legislative issues panel
- Tours (tentative – Harley Davidson, Bayer Crop Science, Triumph Food, Brewery)

Capacity Building Grants for Non-Land Grant Colleges of Agriculture Program (USDA – NLGCA)
- NLGCA Institutions may use the funds: (a) to successfully compete for funds from Federal grants and other sources to carry out educational, research, and outreach activities that address priority concerns of national, regional, State, and local interest; (b) to disseminate information relating to priority concerns to interested members of the agriculture, renewable resources, and other relevant communities, the public, and any other interested entity; (c) to encourage members of the agriculture, renewable resources, and other relevant communities to participate in priority education, research, and outreach activities by providing matching funding to leverage grant funds; and (d) through: (1) the purchase or other acquisition of equipment and other infrastructure (not including alteration, repair, renovation, or construction of buildings); (2) the professional growth and development of the faculty of the NLGCA Institution; and (3) the development of graduate assistantships. The closing date is Monday, July 20, 2015.
Following approval of minutes and agenda, the following were the key topics and action items discussed:

1. Discussed the CARET Strategic Plan
   a. The importance of measuring performance – was the “ask” made during visit and did the Hill office follow up on the “ask.”
   b. Agreed to make an electronic survey of participants to establish a benchmark.
   c. Will review the Strategic Plan again at the July 2015 meeting

2. Reports:
   a. Received Cornerstone report that focused on budget, highlighting that the BAA was supporting the President’s budget but not supporting making the increases in capacity funding competitive.
   b. Ian Maw’s APLU report highlighted – 1) addition of 11 Canadian and 4 Mexican institutions to APLU membership, 2) creation by BAA and BoHS of the Healthy Foods, Healthy People Steering Committee, 3) infrastructure survey on the state of facilities on 1862 and 1890 campuses 4) APLU has launched a futuring activity and BAA futuring activity is on hold
   c. Alan Grant, AHS liaison to CARET, reported that AHS is providing part of the funding of the global communication and marketing effort and reported on BAA officer changes
   d. Also received reports from CARET Liaisons and from CARET Executive Director,

3. Action Items
   a. Decided to have the Chairman ask Betty Buff of South Carolina to write the history of CARET
   b. Adopted motion to recommend to AHS and BAAPBD the approval of a liaison to the 1890 institutions and to the 1994 institutions instead of one liaison for the two groups
   c. Examine appointing a CARET liaison to the International Committee
   d. Hold a joint meeting with AHS executive committee at July 2015 meeting
   e. Encourage proper, accurate and complete submission of CARET delegate designation forms on a timely basis

4. Next meeting – July 19-20, 2015 in Providence, RI
C Faustman represented ACOP at the PBD meeting from March 30th to April 2nd. A full day of meetings preceded a full day of farm visits. W Fink also attended and represented ACOP interests well. Most of the substantive discussion revolved around items #1, #8 and #9. There was nothing that emerged that would appear to be of significant concern for ACOP (ie requiring action); ACOP will want to be “at the table” for the anticipated futuring effort (#5).

1. Discussion around motion to change BAA by-laws such that current requirement for “2/3 of all eligible members” to change a by-law, to “2/3 of voting members” as the criterion. A special vote will be held for this effort.

2. BAA Succession. Barbara Allen-Diaz will retire and Jay Akridge will complete the remainder of that term through to Nov 2017.

3. BAA Assessments are on track. U Arizona is indicating that they may not pay their regional dues; some concern for how they may look at APLU dues as well. Budget cuts appear to be the basis for the decision.

4. Budget and Advocacy Committee. President’s budget is viewed as positive. Considerable discussion ensued around the need for a unified voice in advocating for funding (ie consolidation of lines). Some folks not thrilled with what they perceive as negative outcomes from the process thus far (e.g., higher ed funds; IPM etc). Also discussed was the recent proposal that some conversion of capacity funds be made to competitive funds.

5. BAA/APLU Futuring Effort. Presidents will need to be involved if a futuring effort is to have credibility/impact. This will focus on all aspects of food to meet challenge of 2050; to be chaired by Randy Woodson. An initial steering committee will chart out how this will move forward with a larger task force. Work product will be a roadmap for how we will meet the grand challenge of food. Audience is higher ed.

6. Antimicrobial Task Force. APLU put this together with expertise from within and outside the LGU system. Anticipated that curricular adjustments will need to be made to animal science nutrition classes to consider alternatives to sub-therapeutic application of antibiotics.

7. Healthy Food Systems, Healthy People. More to come but likely to be a major initiative for funding in ’18 or ’19.

8. Lots of discussion around the Water Initiative. At present some lack of communication has resulted in confusion around where the initiative is at. A couple of folks will follow up. A larger discussion occurred with the goal of developing a process document for how to track these initiatives from start to implementation (e.g., this will be needed for Healthy Food Systems, Healthy People initiative).
9. AES/CES/AHS Communications and Marketing Effort. AHS has decided to join with $$.
Report (PBD authorized $55K for this) by KGlobal is on website. It’s impressive looking;
has some interesting points (from 5 focus groups and one national study).
10. Separate liaisons for 1890 and 1994 schools to serve on CARET was approved.
11. Effort being made for Justin Smith Morrill recognition with Congressional gold medal.
13. Infrastructure Survey. Webinars have been undertaken with good participation. All but
two 1862 institutions, all 1890s, 13 of 1994s, and most non-land grants have
contributed to the $100K bill associated with this initiative.
14. Joint COPs Meeting. The main topic will be “communicating with one message” for
advocating for the 3 missions. Will include considerations for external engagement (eg,
with AAU, professional societies et al) with those groups invited. Concern was
expressed re: timeline for planning. W Fink working on getting a list of
organizations/societies to invite.
15. APLU Annual Meeting (11/15 to 11/17; Indianapolis). Potential to build on the issue of
“unified message”. Other plenary session ideas include a session on BAA initiatives;
President’s panel on food; GMOs remain a major issue and LGUs are not taking a
leadership role.
16. Five positions are opening up on the Policy Board of Directors. Nominations need to
come from each of the sections by July 2nd.
17. March 2016 BAAPBD Meeting location. Expect it to be in San Antonio, TX.
18. Section Reports. See submission.
19. BAA History. APLU keeps archives at University of Illinois but hasn’t sent anything along
for 9 years. Concern is to preserve history of the association. I Maw will talk to APLU
President about getting the organization to update its historical materials.

**Future Meetings**
- July 22, 2015: Providence, RI (Joint COPs)
- November 17, 2015: Indianapolis, IN (APLU Annual Meeting)
- March 2016: TBD
ACOP Agenda Brief 2015

LEAD21 Class 11 consists of 84 participants representing 52 institutions from across the United States, which have completed their first session in June 2015. Session II will be held in early October and the final session and graduation will be held in late February in Washington, DC. Class 11 consists of 43 males and 41 females, ranging from 32 to 76 years old (average age of 51 years old). Participants identified themselves in the following race/ethnicity groups: 1 American Indian, 5 Asian/Pacific Islanders, 2 Bi-racial, 15 Black/African American, 2 Hispanic/Latinos, and 59 White/Caucasian. There are 11 participants from the 1890s, 1 participant from the Territories, 1 from the 1994s, 2 from the Non Land-grant Colleges of Agriculture, 2 from Hispanic-Serving Institutions, 2 from USDA/NIFA, and 65 from the 1862s.

Of the 84 participants, 26 have a 50% or greater Academic appointment, 24 have less than a 50% Academic appointment, and 34 have no Academic appointment. Additionally, 35 have a 50% or greater Administrative appointment, 24 have less than a 50% Administrative appointment, and 10 have no Administrative appointment.

The LEAD21 Board of Directors include:

<table>
<thead>
<tr>
<th>Dan Rossi (Chair), ECOP</th>
<th>Beverly Durgan, ECOP</th>
<th>Barbara Petty, Past Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paul Patterson (Program Chair), ACOP</td>
<td>Mark Erbaugh, ICOP</td>
<td>Nick Place, ECOP</td>
</tr>
<tr>
<td>David Benfield, ESCOP</td>
<td>Brian Kowalkowski, 1994</td>
<td>Susan Sumner, ACOP</td>
</tr>
<tr>
<td>Craig Beyrouthy, AHS</td>
<td>Tanner Machado, HSI</td>
<td>Todd Winters, NARRU</td>
</tr>
<tr>
<td>Michel Desbois, USDA/NIFA</td>
<td></td>
<td>Dyremples Marsh, 1890</td>
</tr>
</tbody>
</table>

The current LEAD21 contract is with the University of Georgia College of Agricultural and Environmental Sciences (CAES) and Rochelle Sapp serves as Program Director. The Board is extremely pleased with the management of LEAD21 by the current staff and very appreciative of UGA’s support in the administration of the program. As Program Director, Sapp has maintained continuity among an outstanding group of facilitators and is improving the program’s curriculum. The current contract with the University of Georgia concludes with Class XII (February 2017). The Board is moving to issue an RFP and call for letters of intent in the coming month. A final decision on the next contract should be reached by February 2016.

Applications for Class 12 will open mid-September and are due by November 15, 2015. Dates for Class 12 are scheduled as follows:
- Session I, Minneapolis, MN: June 19th – 24th, 2016
## Goals of the Academic Programs Section of the Board on Agriculture Assembly

<table>
<thead>
<tr>
<th>Goal</th>
<th>Micro Goal</th>
<th>Strategies</th>
<th>Responsible Person(s)</th>
</tr>
</thead>
</table>
| 1. Strengthen overall engagement and diversity of eligible membership. | Bring sixty members to the 2015 winter meeting including representatives from at least one 1994, one 1890, one Canadian, three NLGUs, and three NARRU institutions. | • Develop a clear and focused agenda early  
• Outreach through phone calls, emails, etc.  
• Providing travel funds |                      |
|                                                                      | Double participation at APS meetings including representatives from two 1994, three 1890, and two Canadian institutions in the next four years. | • Develop a clear and focused agenda early. |                      |
|                                                                      | Partner and collaborate with NARRU to have concurrent meetings within the next four years. | • Explore with NARRU the idea of concurrent meetings every other year.  
• Send regionally located APS members to the 2015 NARRU meeting in Kansas City. |                      |
|                                                                      | Create strong relationships and partnerships with key stakeholders spanning higher education, industry, professional societies, policy-makers and others. | •                                                                                    |                      |
## Goals of the Academic Programs Section of the Board on Agriculture Assembly

<table>
<thead>
<tr>
<th>Goal</th>
<th>Micro Goal</th>
<th>Strategies</th>
<th>Responsible Person(s)</th>
</tr>
</thead>
</table>
| 2. Be known for leadership and the clearing house for agricultural higher education. Be the recognized authority for human capacity in agricultural higher education (broadly defined) including best practices, policy, operations and issues. | Drive the national discussion among all stakeholder groups and be viewed as the critical member to any national conversation on agriculture and related sciences education as broadly defined. | • Setup a repository for current “created” items and re-issue to targeted populations as appropriate in 2015.  
• Digital repository of resources and best practices in food, agriculture, and natural resources education (award recipients, articles, etc.).  
• Develop and execute a strategic and comprehensive marketing strategy for all agriculture and related disciplines in an effort to create one unified voice (like “Got Milk”).  
• Reach out to youth leadership groups, industry collectives for pipeline goals, CSAW, STEM Ag & Food Council, Purdue Study, Soft Skills.  
• Document pipeline activities such as internships, co-curricular, curriculum changes. | |
| Support the development of a pipeline of diverse career ready graduates. | • Develop and implement pipeline pathway strategies by 2019.  
- High school to any of the following possibilities: Tech Schools, Community College, BS to MS to PhD  
- Certification brands  
- Graduate certificates | | |
Goals of the
**Academic Programs** Section of the Board on Agriculture Assembly

<table>
<thead>
<tr>
<th>Goal</th>
<th>Micro Goal</th>
<th>Strategies</th>
<th>Responsible Person(s)</th>
</tr>
</thead>
</table>
| 3. Become a leading source for professional development for APS members. | Provide professional development at annual and winter meetings starting in 2015. | - Assess professional development needs of APS members.  
- Form a professional development sub-committee to plan and execute activities. |                       |
|                                                                      | Develop a mature, online community of practice over the next four years.    | - Digital repository of resources and best practices (FSLI projects, articles, leadership ideas, etc.).  
- Develop a linked-in group for APS and share relevant and current issues.  
- Offer online professional development micro-bursts/RSS feeds/webinars, etc.  
- Build human capacity for APS related to digital community and training. |                       |
Goals of the Academic Programs Section of the Board on Agriculture Assembly

<table>
<thead>
<tr>
<th>Goal</th>
<th>Micro Goal</th>
<th>Strategies</th>
<th>Responsible Person(s)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Be known for leadership and the clearing house for agricultural higher education.</td>
<td>Drive the national discussion among all stakeholder groups and be viewed as the critical member to any national conversation on agriculture and related sciences education as broadly defined.</td>
<td>• Setup a repository for current &quot;created&quot; items and re-issue to targeted populations as appropriate in 2015.</td>
<td>I am interpreting this as APS business and meeting details/information and reports.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Digital repository of SOTL resources and best practices in food, agriculture, and natural resources education (award recipients, articles, examples of endowments and grants, etc.).</td>
<td></td>
<td>This is clear and would be a great resource.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Develop and execute a strategic and comprehensive marketing strategy for all agriculture and related disciplines in an effort to create one unified voice (like &quot;Got Milk&quot;).</td>
<td></td>
<td>Suggest we collect several examples of marketing, examples from our institutions and seek advice from our ag comm specialists and/or ACE.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Reach out to youth leadership groups; not sure if this is correct, youth leadership groups would be one of our target recruitment groups?? industry collectives for pipeline goals, CSAW, STEM Ag &amp; Food Council, Purdue Study, Soft Skills—these groups would be future employers.</td>
<td></td>
<td>The USDA 2015-20 Employment outlook data may yield additional information to meet this strategy.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Document pipeline activities such as internships, co-curricular, curriculum changes.</td>
<td></td>
<td>This could be formatted into a template for reporting data from individual institutions.</td>
</tr>
</tbody>
</table>
## Goals of the Academic Programs Section of the Board on Agriculture Assembly

- High school to any of the following possibilities: Tech Schools, Community College, BS to MS to PhD  
- Certification brands  
- Graduate certificates | Develop examples of career pathways and employment examples that show different exit points/opportunities - e.g., high school w/ ag education experience; associate degree, certificate, bachelors, graduate degree |