

Southern APS Agenda items
2022 Southern Mini-Land-Grant Meeting
College Station, TX
16-19 May 2022

Tuesday

8:00 – 9:00 am Welcome, overview of week, call for agenda items, introduction to NIFA-APLU climate change initiative

9:00 – 10:00 am S-APS & CARET
Hullaballoo

- 9:00 — **Welcome and Introductions** — Wendy Fink, APS Executive Director
 - Name, state, institution
 - What are you hoping to get out of the Southern Mini Land-grant?

- 9:15 — **APS Advocacy Items** — Wendy Fink
 - FY2022 and FY2023 Asks
 - Women and Minorities in STEM
 - Farm Bill Priorities

- 9:35 — **APS/CARET Dialogue** — All
 - Guiding questions provided

10:00-10:30 am BREAK

10:30 – 12:00 pm Information Sharing
Ross II

- TRE Data Sharing Initiative – see “Attachment 1: Data Sharing Initiative” below
- Campus Updates

12:00-1:30 pm LUNCH – Joint S-APS and ASRED
Hullaballoo

Call to Order/Introductions – Rich Bonanno/John Stier

- Lunch (program will continue after most have finished lunch)

Discussion Topics

- **Internship Opportunities** – Al Wysocki, University of Florida
- **Graduate Extension Assistantships** – Who has them and how are they working? – John Stier, University of Tennessee
- **4-H pipeline into Southern LGUs** – How can we improve it? Rich Bonnano, North Carolina State University
- **Education and Workforce Develop AFRI Update** – as time allows – Chris Geith, Extension Foundation

1:30 – 3:00 pm
Ross II

NIFA-APLU Climate Change initiative – see “Attachment 2: NIFA/APLU Climate Initiative Working Group” below.
What do we want to have happen?

- Types of data to collect
- Reporting structure
- Timeline

3:00-3:30 pm

BREAK

3:30-5:00 pm
Ross II

Updates from NIFA, APLU, and LBA

Thursday

8:00-10:00 am
Ross I

Debrief and reflection from joint sessions -**Leader needed**

10:00-10:30 am

BREAK

10:30-11:30 am
Century IV

S-APS & SAAESD

Attachment 1: Data Sharing Initiative

The TRE group leaders had indicated a desire to explore the idea of sharing data among Southern Land Grant Universities (LGUs).

Briefly review the metrics and definitions relevant to your functional area in the attached proposal to see if any stand out as particularly problematic or if any important ones are missing. Second, request one volunteer to help Eric Young and Keith Belli on a small implementation team to refine this and move it forward.

ACADEMICS

Likely collected by your Office of Institutional Research

- Fall undergraduate enrollment
- Fall graduate enrollment
- Undergraduate 1-year retention rate
- Undergraduate graduation rate (6-year)
- Doctoral mean time-to-degree (years)
- Graduate degrees awarded
- Total recurring teaching budget expenditures

COOPERATIVE EXTENSION

- Number of Cooperative Extension FTEs, by type
- Number of contacts, by type
- Total recurring Cooperative Extension budget expenditures

RESEARCH IN COLLEGE AND EXPERIMENT STATION

Likely collected by your Division of Research

- Number of research FTEs
- Total sponsored research expenditures
- Total recurring research budget expenditures

Attachment 2: NIFA/APLU Climate Initiative Working Group

Briefing for Southern Academic Programs Section
College Station, TX
17 May 2022

Part I: Background and Structure

Leaders: Doug Steele, co-chair, Vice President of Food, Agriculture & Natural Resources of APLU; Kevin Kephart, Deputy Director, Institute of Bioenergy, Climate, and Environment for NIFA. Members: NIFA staff, academic appointments in teaching, research and Extension

Purpose: Develop a climate change summit to develop a roadmap for NIFA/LGU climate change science programs.

Origin: In 2021, Carrie Castille, NIFA director, requested action to coalesce NIFA support for teaching,

research and Extension focused on climate change.

Administrative priorities are:

1 Climate-smart agriculture and forestry (CSAF; including timber & wood products). The purposes being for 1) development of practices that enhance resilience and adaptation to climate change, 2) build soil health, enhance water quality, and improve environmental quality, and 3) develop value propositions for farmers to adopt climate-smart practices. Biobased products and circular economies fit here as well as sequestration.

2. Measure, monitor, and mitigate greenhouse gases to counter climate change. The administration is especially wanting to know how to measure progress.

3. Enhance both food and nutrition security

4. Enhance racial equity and environmental justice.

Timeline:

Summer 2022: Collate information, plan climate summit

September 2022: Climate summit

November/December 2022: Complete White Paper

Part II: Information Gathering

A. Research and Extension- List and description of projects for Climate Smart Agriculture Initiatives

Example: ***University of Tennessee, Department of Animal Science and Biosystems Engineering & Soil Science***

Development of climate-smart livestock production systems State-of-the-art forage-based beef production and commercial-scale broiler facilities will be established to showcase and demonstrate precision livestock farming (PLF) and climate smart agriculture (CSA) practices. Faculty are using genetic tools and precision ag technologies to identify and select for more efficient, environmentally friendly, and robust cattle. Their efforts center on using novel technologies to measure real-time activity, feed and water consumption, weight, and methane emissions on individual animals at the new Hickman Precision Agriculture Technology Unit. The team is using these large datasets in three main ways: 1) Identifying genetic markers and microbes that are associated with methane emissions and feed/water use efficiency; 2) developing predictive models to maximize resource use efficiency; and 3) using precision monitoring technology to understand physiologically stress responses and potential genetic effects. This work will enhance the efficiency of forage utilization, supplemental feeding, health management, and reproductive performance through the application of PLF technologies and CSA production systems.

Principal Investigators: Troy Rowan (Animal Science/Large Animal Clinical Sciences), Phil Myer (Animal Science), Robert Burns (Biosystems Engineering and Soil Science), Hao Gan (Biosystems Engineering and Soil Science), Shawn Hawkins (Biosystems Engineering and Soil Science), and the UTIA Precision Livestock Farming Team (UT Precision Livestock Farming, plf.tennessee.edu), Middle Tennessee UT AgResearch and Education Center

C. Possible types of teaching information related to climate change

There is interest in workforce development. This may include students being trained for research scientists as well as general industry.

Should/could we parse graduate student thesis/dissertation by climate-related title? Trends over time?

Degree and non-degree programs? Majors, minors, certificates, badged courses?
-see United Nation Sustainable Development Goals university participation

UN Sustainable Development Goals

UT Site: <https://cge.utk.edu/2020/12/07/ut-engages-un-sustainable-development-goals/>

Signatories to UN SDG

<https://globallyengageduniversities.org/>

LGUs:

Colorado State Univ.

Cornell Univ.

Mississippi State University

Montana State Univ.

New Mexico State Univ.

North Carolina State Univ.

Prairie View A&M Univ.

Purdue Univ.

Rutgers

The Ohio State University

University of California, Davis; University of California, Riverside

University of Minnesota

University of Missouri

University of Tennessee

West Virginia University

Associations include: APLU

Identify gaps that funding would help support?