Climate Learning Network – CLN resources, collaboration, and Climate Literacy Certification

Daniel Geller, PhD, College of Engineering, University of Georgia
William Hubbard, PhD, Southern Regional Extension Forestry
Keeping you connected to an enlightened forest community.
Graphic Design
- Branding
- Copyediting & Print Formatting
- Website Design

Photography

Social Media
CLIMATE CHANGE ATTITUDES OF SOUTHERN FORESTRY PROFESSIONALS

“IN MY LIFETIME, I HAVE NOTICED A CHANGE IN THE CLIMATE.”
LEVEL OF AGREEMENT

45% STRONGLY AGREE
28% NEITHER AGREE NOR DISAGREE
27% DISAGREE OR STRONGLY DISAGREE

WHAT IS CAUSING CLIMATE CHANGE?

- 21% NATURALLY CAUSED
- 12% HUMAN/NATURAL FORCES EQUALLY
- 14% CAUSED BY HUMANS
- 14% CLIMATE CHANGE IS OCCURRING BUT UNSURE OF CAUSE
- 28% INADEQUATE EVIDENCE TO DETERMINE ONE WAY OR ANOTHER
- 5% UNSURE THAT CC IS OCCURRING
- 6% CC IS NOT OCCURRING

CLIMATE CHANGE IS OCCURRING
UNSURE/NOT ENOUGH EVIDENCE
CLIMATE CHANGE IS NOT OCCURRING
How interested are you in learning more about forest management strategies that promote forest health and resiliency?

- Not or slightly interested: 37%
- Somewhat interested: 31%
- Moderately or very interested: 32%

Interest in learning more about climate science and climate change:

- Not or slightly interested: 28%
- Somewhat interested: 43%
- Moderately or very interested: 28%
eXtension history

• All Land Grant Universities contributed to foundation
• provided information directly to the ground when an agent wasn’t necessarily available
• Community of Practice (COP) = main unit of delivery
The NEW eXtension Strategy

Introducing the NEW eXtension

Using an online constellation of people, resources and tools, eXtension supports the Cooperative Extension System nationwide. The NEW eXtension provides Extension professionals—educators, agents, faculty and specialists—with resources that focus on:

- Increasing Extension professionals’ effectiveness in addressing issues of importance to the nation
- Fostering creativity and innovation in developing solutions and methods of work
- Advancing the visible and measurable impact of their work for the public good
• The NEW eXtension
  – New CEO, Christine Geith (Michigan State University)
  – Focus on
    • Training Extension Professionals
    • Issues
    • Innovation
    • Impact
  – Voluntary Participation
• i-Three Issue Corps
  – 2015 Focus Issues: **Climate Literacy** and Food Systems
  – **Corps**: 200 Extension professionals focusing on innovative projects to make short-term, measurable impact on climate.
  – Corps will inform future eXtension tools and services to expand to **2000**
i-Three issue Corps

ISSUE RESPONSE
Enable CES professionals to develop, implement and assess solutions to their current and emerging micro and macro issues

INNOVATION LAB
Discover, incubate, assess and foster adoption of new ways of working for CES professionals

IMPACT
Economic, Environmental, Social, Public Value

National Cooperative Extension Presence
AFRI

Coordinated Agricultural Projects

GREAT PLAINS GRAZING
CATTLE, CLIMATE, CULTURE & CHANGE

USEFUL TO USABLE

SUSTAINABLE CORN.ORG
CROPS, CLIMATE, CULTURE AND CHANGE

REACCH
Regional Approaches to Climate Change

PINEMAP

USDA NIFA
Building the Network
Building the Network
Building the Network
Building the Network
United States Department of Agriculture
CLIMATE HUBS

SustainableCorn.org
Crops, Climate, Culture and Change

PINEMAP

REACCH
Regional Approaches to Climate Change

GREAT PLAINS GRAZING
Cattle, Climate, Culture & Change

useful to usable

COOPERATIVE EXTENSION

College of Agricultural & Environmental Sciences
University of Georgia

College of Engineering
University of Georgia

Southern Regional Extension Forestry

extension

Farmers
Foresters

Delivery
Delivery

USDA
United States Department of Agriculture

CLIMATE HUBS

SUSTAINABLE CORN.ORG
CROPS, CLIMATE, CULTURE AND CHANGE

PINEMAP

REACCH
Regional Approaches to Climate Change

GREAT PLAINS GRAZING
CATTLE, CLIMATE, CULTURE & CHANGE

useful to usable

COOPERATIVE EXTENSION

Farmers Foresters
CLIMATE, FORESTS, WOODLANDS

CLIMATE, FORESTs, WOODLANDS

E-LEARN

RESOURCES

NEWS

WEBINARS

CONNECT

DISCUSS

JOIN

CONTACT

RESOURCES

E-LEARNING MODULES

WEBINARS
Approach

Products:
• eLearning Modules
• Webinars
• Needs assessments
• Newsletter
• Climate literacy training
NE Pilot Program

• Region and sector specific peer-to-peer discussion groups

climatelearning.net/discuss
Competency Driven Climate Literacy

- **Consensus guided competency identification** using the online design of competencies (DECOMP) system
Competency Driven Climate Literacy

- **Consensus guided competency identification** using the online design of competencies (DECOMP) system
  - 2 Day virtual competency development
  - Consensus driven
  - Panel of experts
### Climate Literate Extension Professional

**Integrate climate vulnerability concepts**
- Apply exposure knowledge
- Apply adaptive capacity knowledge
- Apply sensitivity knowledge
- Recommend actions to reduce exposure
- Recommend actions to increase adaptive capacity

**Integrate climate system concepts into**
- Apply system concepts to extension programming
- Communicate climate system concepts to clients
- The Climate Literate will know the difference between weather and climate

**Demonstrate Human Impact**
- Communicate scientific evidence for human impact to extension clients
- The Climate Literate will know how human activities drive climate change
- The Climate Literate will know how humans respond to climate

**Mitigation**
- Identify actions that provide multiple benefits to ANR systems and society as a whole while reducing heat trapping gases in the atmosphere
- Evaluate potential mitigation actions in the community

**Adaptation**
- Identify adjustments that moderate harm and capture opportunities while providing multiple benefits to ANR systems and society as a whole
- Evaluate potential adaptation opportunities in the community

**Resilient Management**
- Identify adaptations that enhance the resilience of local ANR systems
- Evaluate adaptations that enhance the resilience of local ANR systems
- Recommend adaptations that enhance the resilience of local ANR systems

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### Climate Policy

Identifies the climate policies that apply to their clientele. A climate literate extension professional understands the policies, agency directives, and politics and their effect on climate solutions.

- Recognize barriers and opportunities for extensions clients created by international, national, and state climate change policies.
- Deliver information about climate change barriers and opportunities to extension clients
- Communicate how climate change policies affect ANR systems
- Recognize impact of key decision makers on climate change policy
- The Climate Literate will know how federal, state, and local climate policy effect their clients.
- The Climate Literate will know where to find the federal, state, and local climate policy analysis and interpretation for local ANR systems.
- The Climate Literate will know USDA building blocks for Climate smart ANR (Voluntary and incentive based, focused on multi econ and env benefits, meets producer needs, Cooperative and focused on building partnerships, assess progress and measure success).

**Assessment:** Provides recommendations to clientele based on their interpretation of policies as they represent barriers or opportunities through the lens of climate change.

**Rollup:** Is an Extension Professional

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### Communicate climate issues

- Apply best communication practices with extension clients (i.e. ELFLAND, PIE, etc)
- Identify needs, beliefs, and values of client audience
- Establish trusted communication and commonground

### Maintains relevant climate knowledge

- Understand peer reviewed resources for current climate information
- Participate in science-based climate related education events
- Understand current consensus in climate science

### Contribute to shared learning

- Participate in climate-related networks (i.e. CLN, SECC, CFW, etc.)
- Establish purposeful two-way communication with peers, clients, and partners
- Disseminate successful client, partner, and community outcomes

### Is an Extension Professional

- Demonstrates capabilities of extension professionals
- Develops innovation and communication channels to support future ANR success
- Demonstrates respect for diverse values and beliefs
Competency Driven Climate Literacy

• Online Curation
• Curriculum design
• Customized training
• competency-based learning management system
climatewebinars.net

Upcoming Webinars

To learn more about one of these upcoming webinars on the Webinar Portal, click on the title and you’ll be directed to the webinar’s home page where you can read the details of the webinar and find out how and when to register. To see a list of upcoming webinars from our other Webinar Portal partners, select a category from the drop down below.

Select Webinar Category: Climate Science

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<td>03/29/2018</td>
<td>Drought &amp; Climate Galleries</td>
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<td>04/12/2018</td>
<td>Discussing Climate Change with Agriculture and Natural Resources</td>
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Webinar Portal Infographic

Professional Development Webinar Map

Climate Science Webinars
Green Savings!

Click on the graph below or click here for a detailed Green Savings analysis of this webinar.

**Green Savings Analysis!**

Utilizing webinars to stay up-to-date and to continue your professional training or for just personal enrichment saves and saves a little piece of our planet. Our Green Calculator keeps track of the savings for each webinar we offer.

By hosting this webinar through the Webinar Portal, it’s estimated that we have been able to eliminate 4,170 miles of travel, saved 80 hours of travel time, saved 208 gallons of fuel, and the release of 4,045 lbs of CO2 into the atmosphere. This is a cost savings of approximately $4,371 for the 23 participants in this webinar. The estimated average cost savings per participant is $190.

The graph below shows how much ‘green’ has been saved by participants for this webinar to-date!

- Total Cost Savings $4,371
- Salary Savings $2,108
- CO2 Savings 4,045 lbs
- Fuel and Auto Expense Savings $2,252
Webinar Based eLearning Development (WebBED)

- Short time frame for initial 6 modules
- Webinar deliverables
- Adobe Captivate template
- Rapid editing/deployment
Webinar Based eLearning Development (WebBED)
1. Climate Science 101 for Extension Professionals
Dr. Marshall Shepherd (University of Georgia)

2. Communicating Climate Change Impacts & Options to a Disbelieving Audience
Dr. Steve McNulty, US Forest Service
This module provides 1.0 Cat 1 - CF Continuing Forestry Education Credit from SAF

3. A Fair and Balanced Look at Climate Variability, Change & Impacts Across the Southeastern United States
Dr. Steve McNulty, US Forest Service
This module provides 1.0 Cat 1 - CF Continuing Forestry Education Credit from SAF

4. Vulnerability Assessments, What We Did and What We’ve Learned
Dr. Chris Swanston, Northern Institute of Applied Climate Science
This module provides 1.0 Cat 1 - CF Continuing Forestry Education Credit from SAF

5. Agricultural Adaptation Practices
Dr. Mark Risse (University of Georgia), Dr. Brenda Ortiz (Auburn University), and Dr. Clyde Fraisse (University of Florida)
This module provides 0.25 CEUs CM from Certified Crop Advisers (CCA)

6. Stories from the Field
Dr. Laura Lengnick, Cultivating Resilience, LLC, Asheville, NC
This module provides 0.5 CEUs CM from Certified Crop Advisers (CCA)

7. Resilient Pine Management
Mark Megalos, North Carolina State University, and Eric Taylor, Texas A&M University

8. Integrating Climate Science into Programs and Decision Making
William Hohenstein, Director, USDA Climate Change Program Office
Welcome to the Climate Learning Network's Climate Literacy Certification course. You will begin the course by taking the climate literacy certification pre-test to serve as reference to evaluate your progress. Your score on this pre-test will not reflect on your grade for this course. You will then be free to take the modules in any order you desire. You will receive a certificate, badge and associated CEUs for each module that you complete.

When all modules are finished you will be able to take the climate literacy certification exam. You will only need to score 75% or better on this exam to receive certification after completing training.

campus.extension.org
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