

# Southern Regional Extension Forestry Update

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Cooperative Extension Service – Southern Region  
Fort Worth, TX  
August 19, 2014





# Southern Regional Extension Forestry



**Mission:** To serve the southern Land Grant University System by collaborative development of forestry technologies and programs that improve the efficiency, effectiveness and relevance of supporting institutions.



# Staff

- Bill Hubbard, Regional Forester
- Adrian Crabtree, Business Manager (through April 2014)
- Leslie Boby, Extension Associate – Climate Variability & Bioenergy
- Sarah Workman, Extension Associate - Urban Forestry & Wildland Fire
- Darryl Outlaw, IT Manager
- Daniel Drummond, IT Professional
- Steven Weaver, IT Professional and Extension Associate, GIS and Mapping
- Holly Campbell, Graduate Student – Ecosystem Restoration
- Dina Zinon, Graphic Designer (Student Worker)
- Megan Robertson, Graphic Designer (Student Worker)
- Shafkat Khan, PhD Student, Climate Change Extension





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[What We Do](#)

[Who We Are](#)

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## NEWSLETTERS FROM OUR PARTNERS

[Southern Regional Extension Forestry](#)

[Webinar Portal for Forestry and Natural Resources – Webinar Alerts](#)

[University of Kentucky Woodlands E-News](#)

[EFETAC Forest ThreatNet](#)

[InterfaceSouth](#)

[InterfaceSouth Changing Roles](#)

[PINEMAP](#)

[Southern Fire Exchange](#)

[Forest & Wood Certification E-News](#)

[SAF Career Center](#)

# Critical Forestry & Natural Resource Issues in the Southern Region



- Biomass, biofuels & bioenergy
- Forest health
- Climate variability
- Economic and social importance
- Fragmentation and parcelization
- Water quality & quantity
- Wildfire
- Forest restoration



SREF works collaboratively with state and federal agencies, universities and the private sector to accomplish:

Research  
Technology  
Transfer

Professional  
Development

Applied  
Research

Information  
Technology &  
Mobile Technology  
Deployment

Improved  
Information  
Dissemination



Research  
Technology  
Transfer

# Multi-Year Federal Grant Programs

- USDA NIFA Projects
- Offer an opportunity for Extension to work more closely with Research and Teaching
- \$20 million, 52 scientists @ 13 universities



Bioenergy solutions  
from our farms and  
forests



PINEMAP – Climate  
change solutions for  
southern forests

Research  
Technology  
Transfer



# PINEMAP

Pine Integrated Network: Education, Mitigation and Adaptation Project

*Overall Goals of PINEMAP  
Create tools to enable southern  
forest landowners:*

- to adapt their forest management approaches under changing climate scenarios
- to more efficiently utilize nitrogen and other fertilizer inputs
- to harness pine forest productivity to mitigate atmospheric CO<sub>2</sub>.



[www.PINEMAP.org](http://www.PINEMAP.org)  
[www.facebook.com/Pinemap](https://www.facebook.com/Pinemap)

# Climate Variability Stakeholders



# Forester Survey on Climate Science and Variability

1. What climate and weather anomalies have Southern foresters witnessed?
2. How knowledgeable do they feel and how confident are they about climate variability concepts?
3. To what degree are they concerned about climate variability?
4. How open are they to new information, tools and technologies with regard to forest resiliency?
5. What types of educational programs are they interested in?

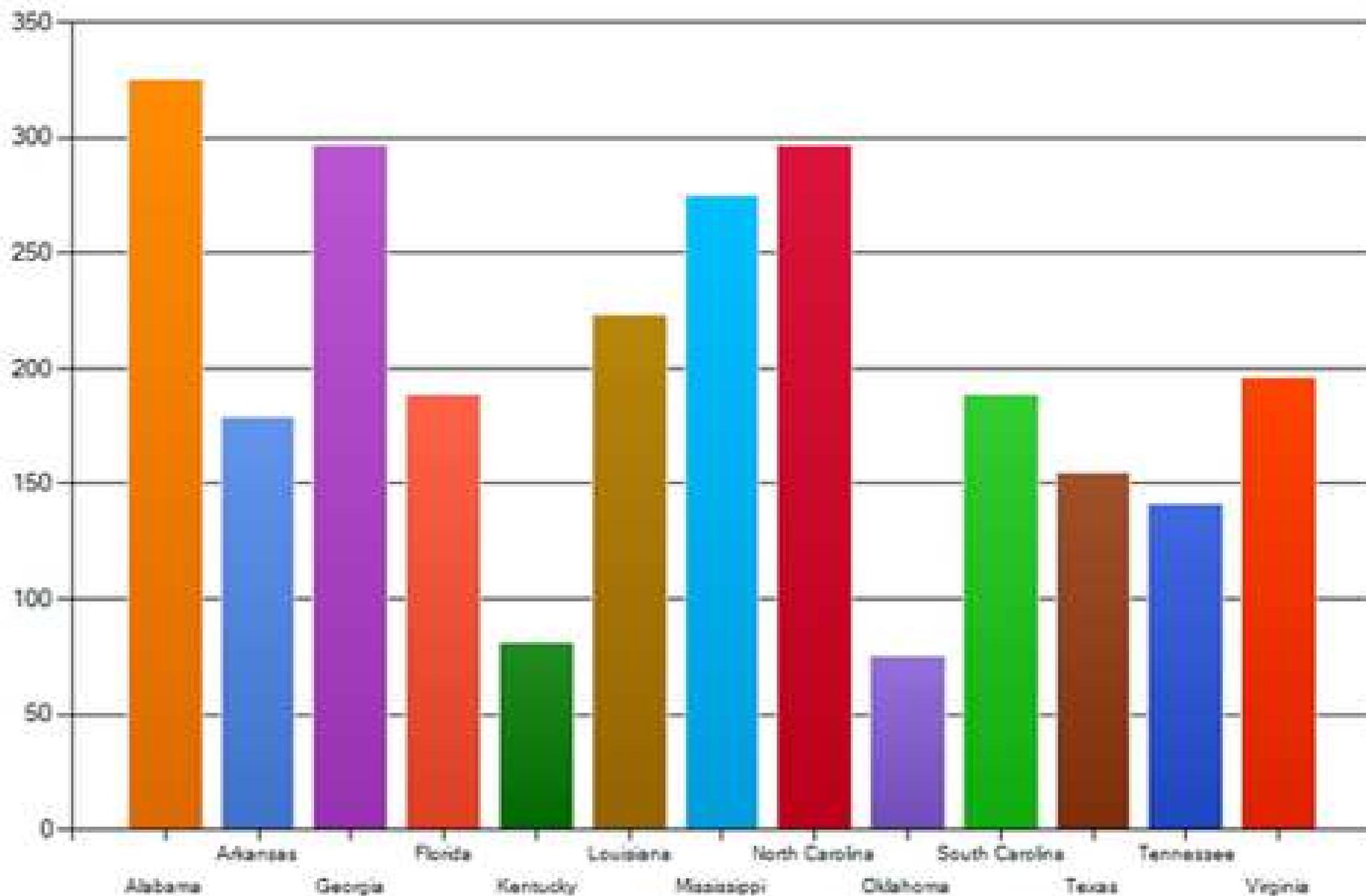


# Survey Details

- Online survey sent to 6,700 foresters across the South (13 states including PINEMAP region)
- 1,782 responses (27% Response Rate)



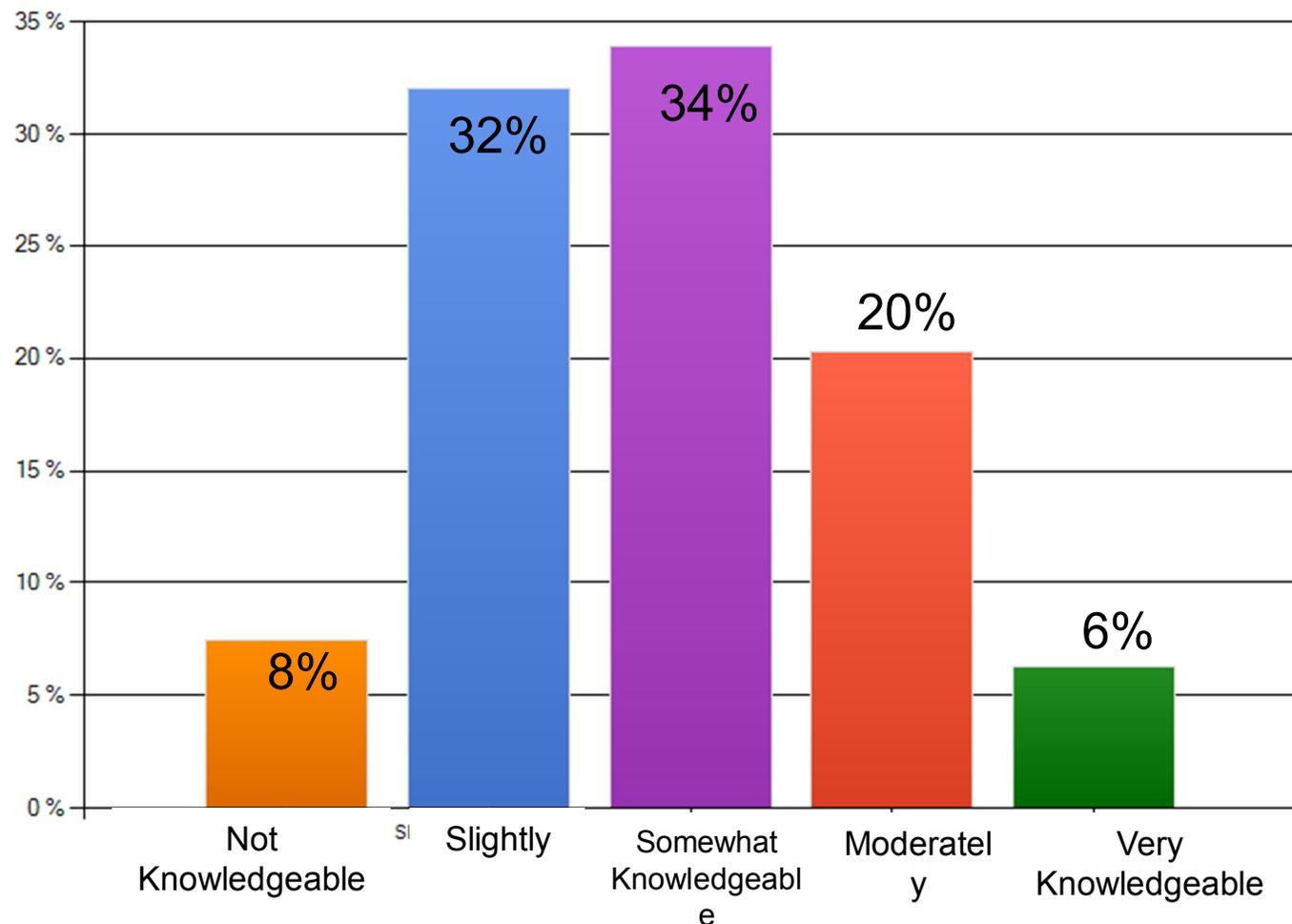
In which states do you perform forest management services? Please check all that apply.



# Knowledge & Confidence: Climate/Climate Science

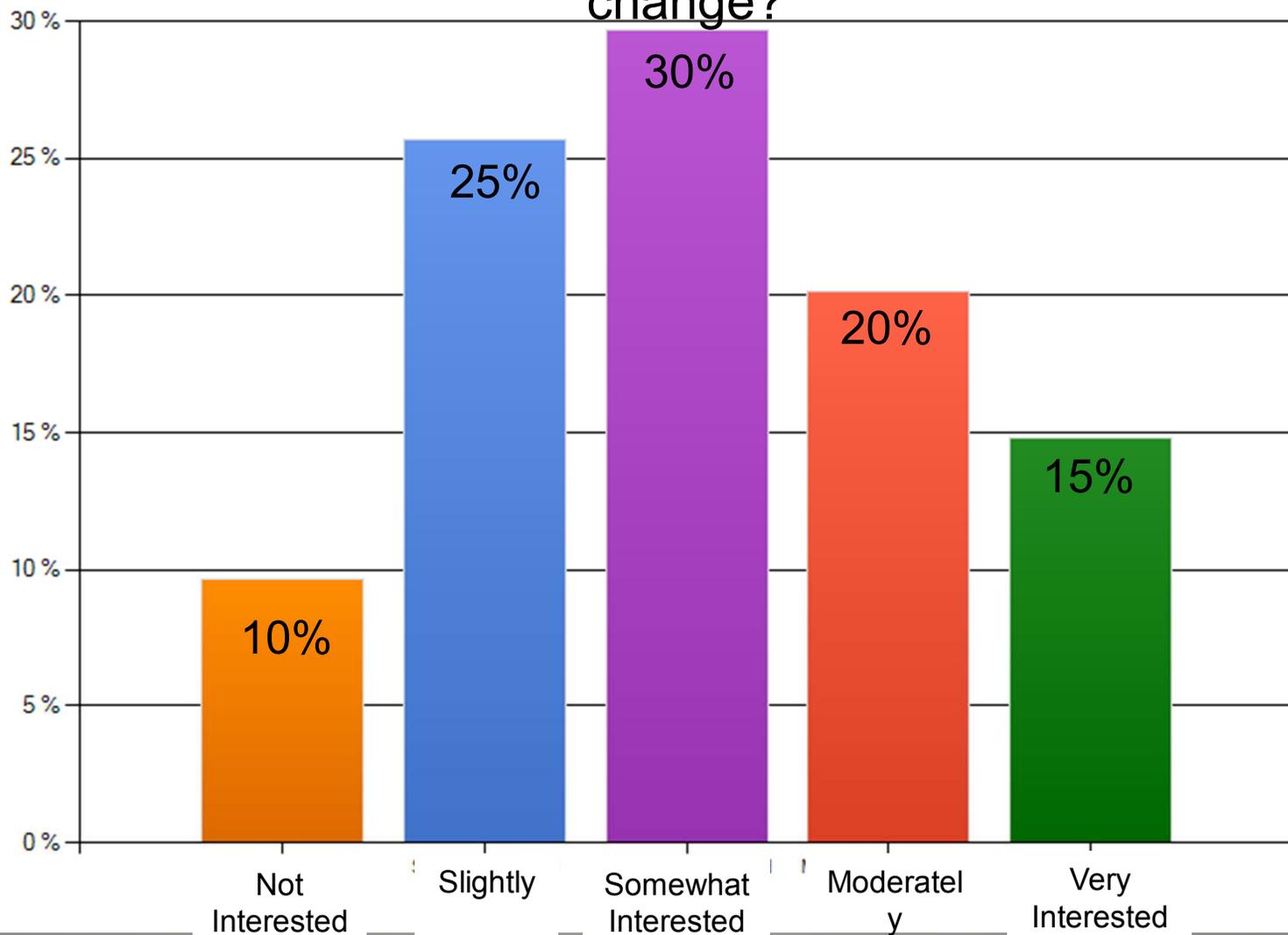
- 25% of foresters have had clients ask them about change in climate or extreme weather. Of those 25%,
- about 57% feel confident answering their questions, while about 20% are not confident and about 23% are unsure

How knowledgeable do you feel about the science behind climate and climate change?



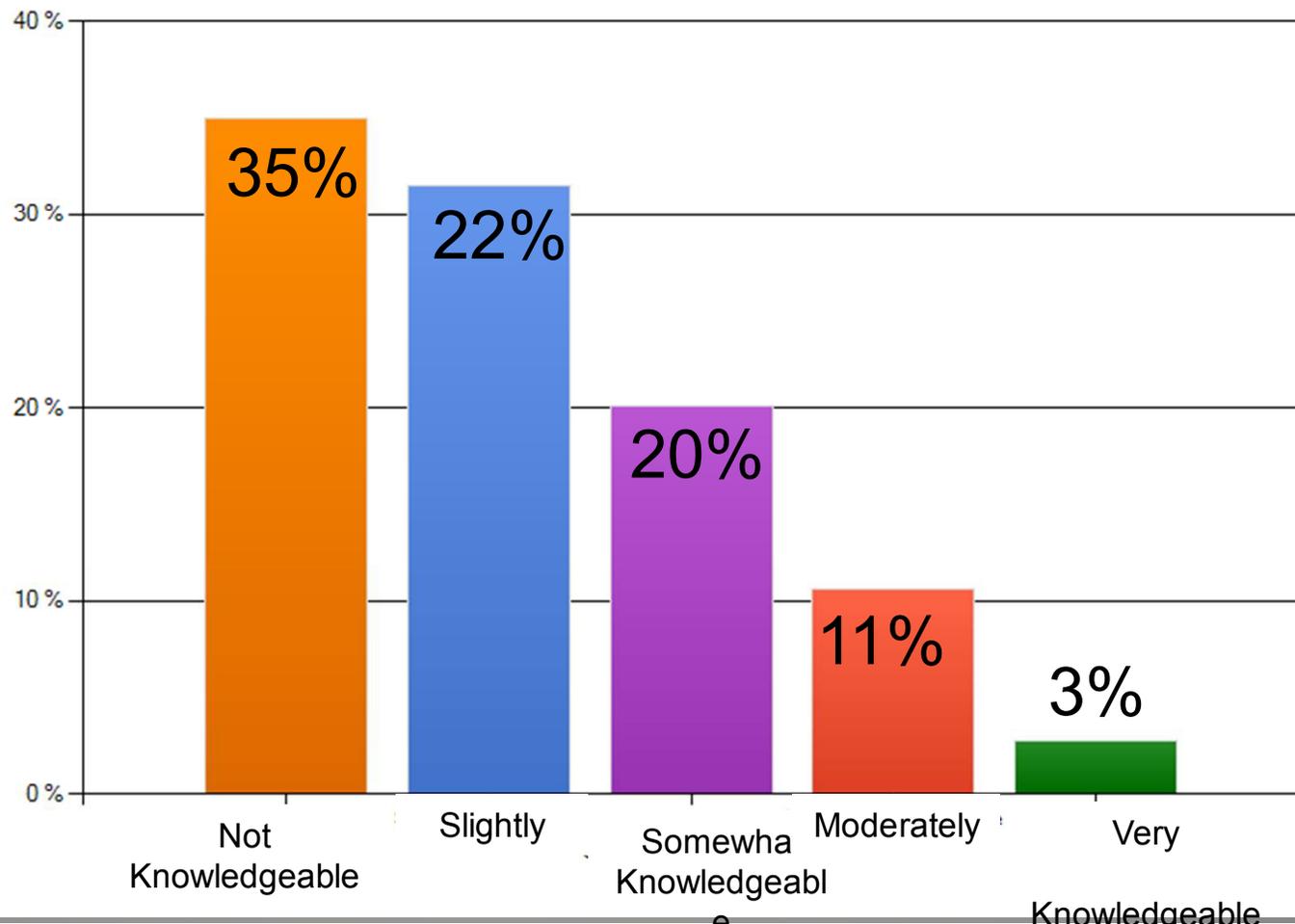
# Interest in Education: Climate Science and Climate Change

How interested are you in learning more about climate science and change?



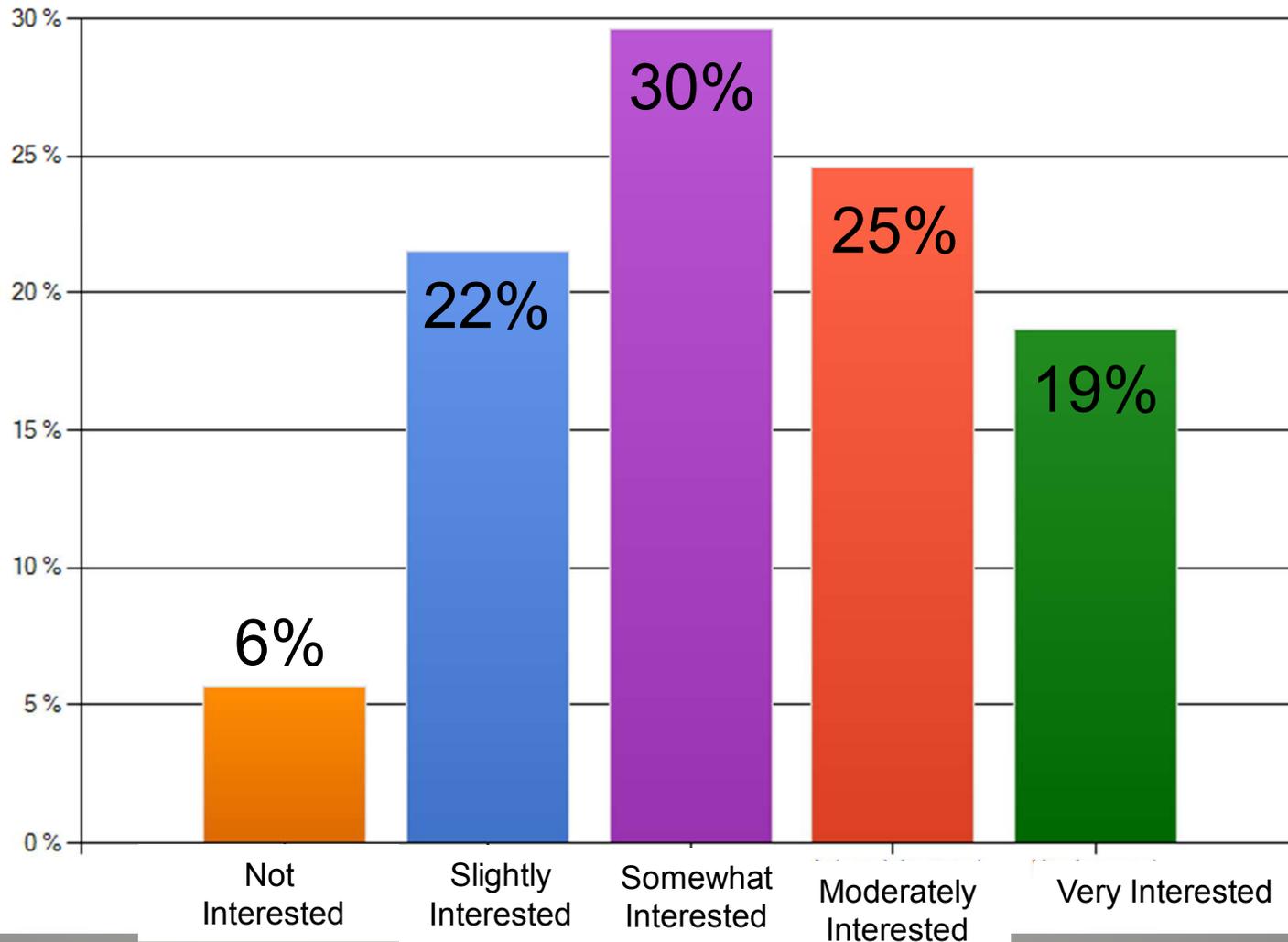
# Knowledge and Confidence: Forest Resiliency

How knowledgeable are you about forest resiliency strategies, options and concepts (including risk assessment, “climate-smart” best management practices, etc.?)



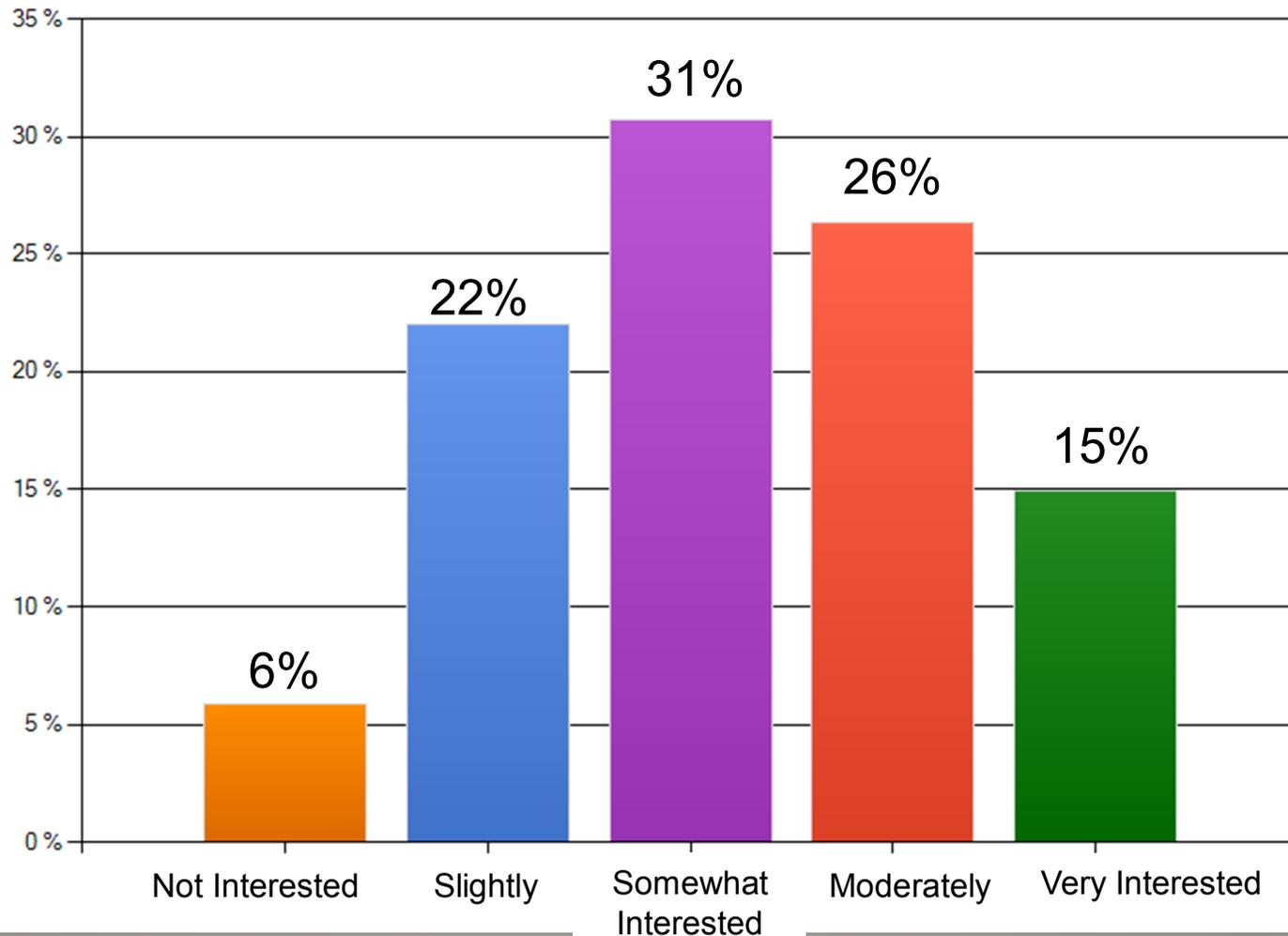
# Interest in Education: Forest Resiliency

How interested are you in learning more about forest management strategies that promote forest health and resiliency?



# Openness to New Information, Tools & Technologies: Weather

How interested are you in learning more about weather (science, forecasts, tools and technologies)?

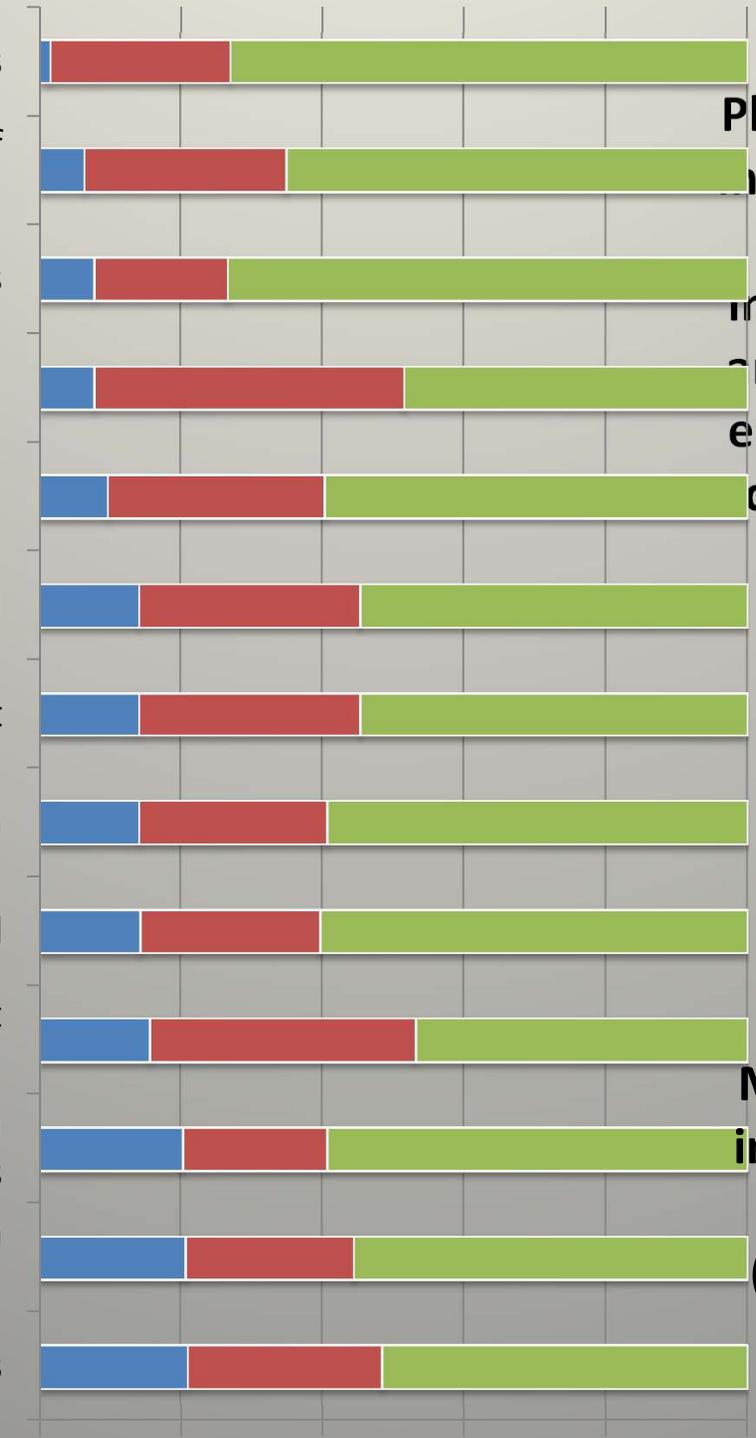


# PINEMAP Extension Delivery-

- Survey sent to more than 100 extension forestry specialists and associates
- Basic questions
  - What do you want to know more about?
  - What are you most concerned about?
  - What is the best way to deliver that information?



- Managing forest insects and diseases
- Planting genotypes that are tolerant of drought, insects, and/or disease
- Controlling Undesirable Plant species
- Sanitation cuts that remove infected trees to reduce disease losses
- Adjusting Harvest Schedules
- Guidance on Selective Removal
- Density Management
- Species and/or genotype selection
- Breeding for enhanced yield
- Vegetation management to offset drought impacts
- Breeding for pest resistance and for a wider tolerance to a range of stresses
- Assessment of future productivity on forest land being considered for...
- Seedlot trials for Improved Genetics



**Please rate the importance of incorporating new knowledge on the following potential impacts of climate variability and climate change into your educational and professional development programming activities.**

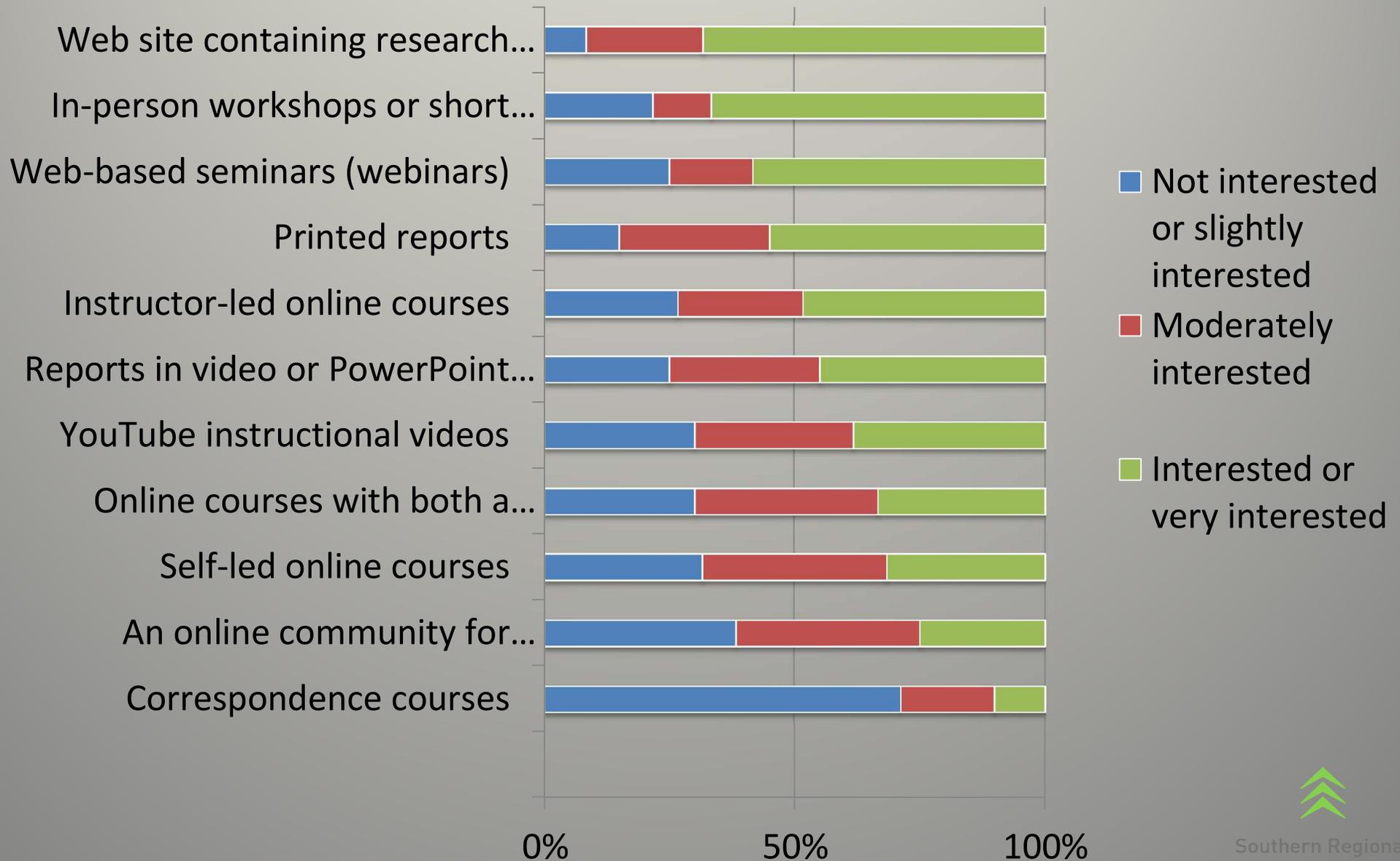
■ Not or of little importance  
■ Moderately Important  
■ Important or Very Important

**Not as interested in Carbon Markets, fertilization, climate in growth and yield models or means of assessing CC risks (for forestry sales, economic impacts, etc.)**



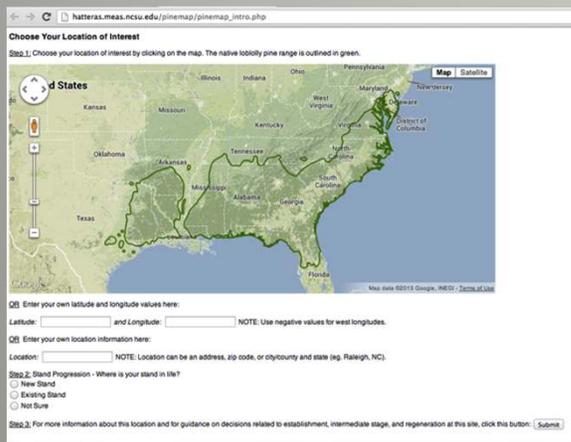
0% 20% 40% 60% 80% 100%

# Interest in these educational activities to receive research results

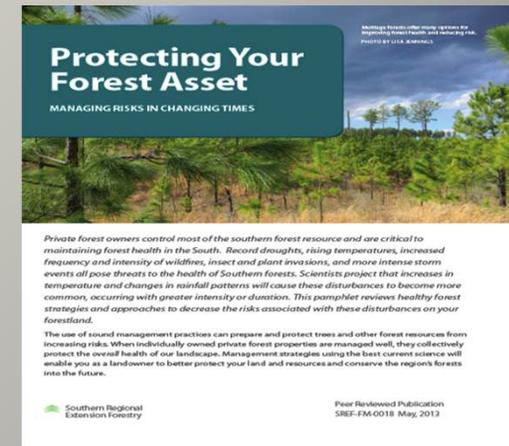




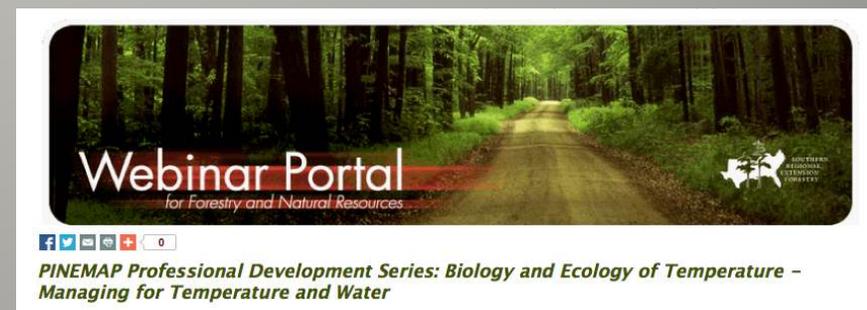
Regional publications  
for use at state and local level



Decision Support System  
(DSS) for professionals agents  
and foresters



PINEMAP Webinar Series  
(forest resiliency)



PINEMAP Professional Development Series: *Biology and Ecology of Temperature - Managing for Temperature and Water*

Workshops and Training Sessions

- 1890's Professional Development Course
- S. Region Extension Climate Academy
- Western Gulf Meetings





- What is SE-IBSS?
- eXtension activities
- Professional development
  - Online courses on switchgrass production
  - Online course on woody bioenergy production
  - New Conversion Partner – Kior (Columbus, MS)
  - Webinars

eXtension  
America's Research-based Learning Network™

Home Resource Areas About Support Us Recent

## Wood Energy

The Resource Transportation of Roundwood Bundling

### Comparisons of In-Woods Densification Options in the Western Gulf

eXtension's team of wood energy experts walk you through the various processing activities to forward woody biomass feed stocks to centralized processing stations...>Read More

eXtension  
America's Research-based Learning Network™

Home Resource Areas About Support Us Recent

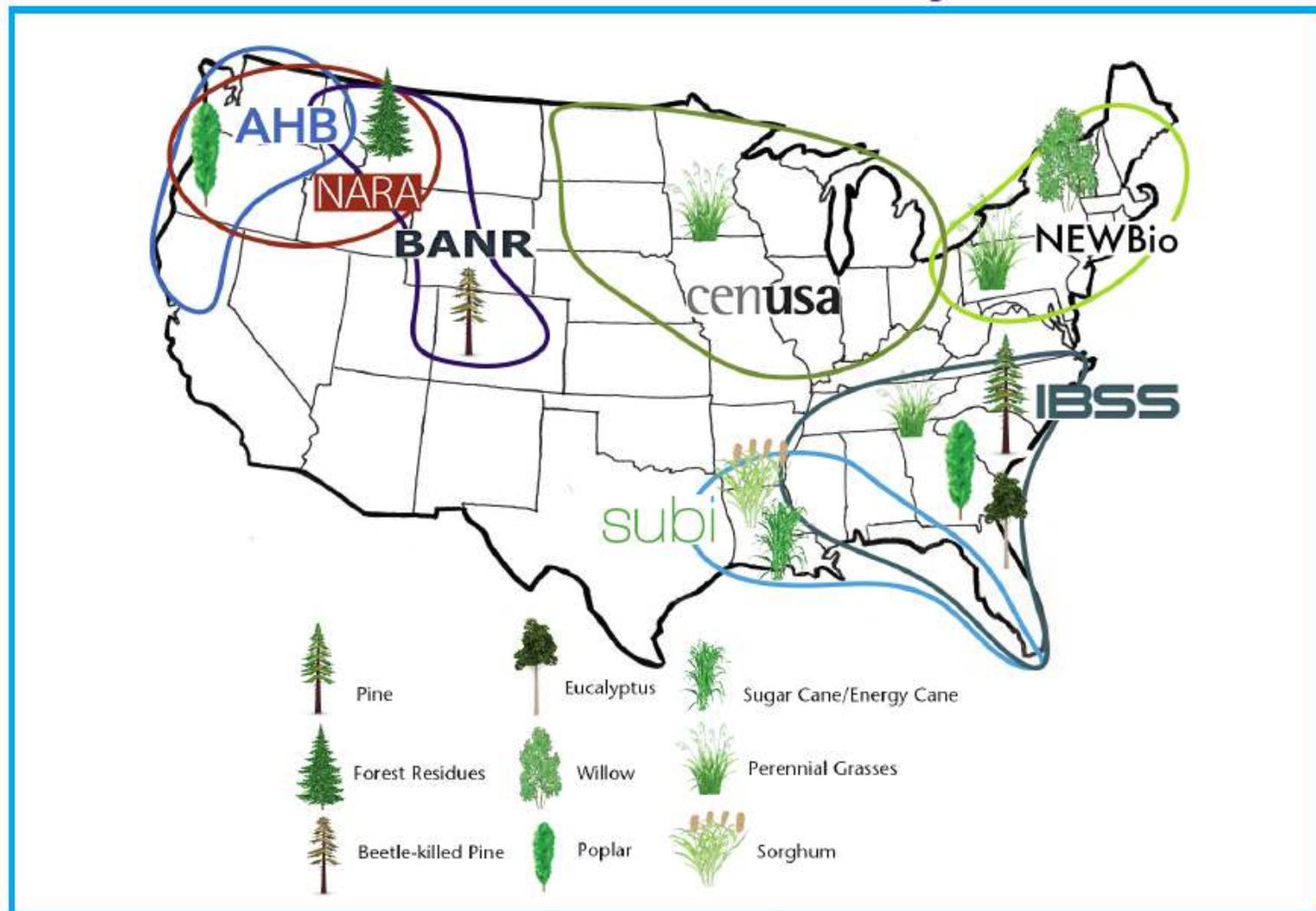
## Farm Energy

### Feedstocks for Biofuel Production

Interested in feedstock crops for biofuel energy production, but don't know where to start? Learn about harvesting energy from sugar, starch, fiber, residues...>Read More

# SE-IBSS is one of 7 NIFA Bioenergy Projects

## AFRI Biofuel Feedstocks and Project Locations



# MISSION AND GOALS

1

## Breaking Barriers

Demonstrate real world solutions to barriers limiting deployment of advanced biofuels in the southeastern U.S.

2

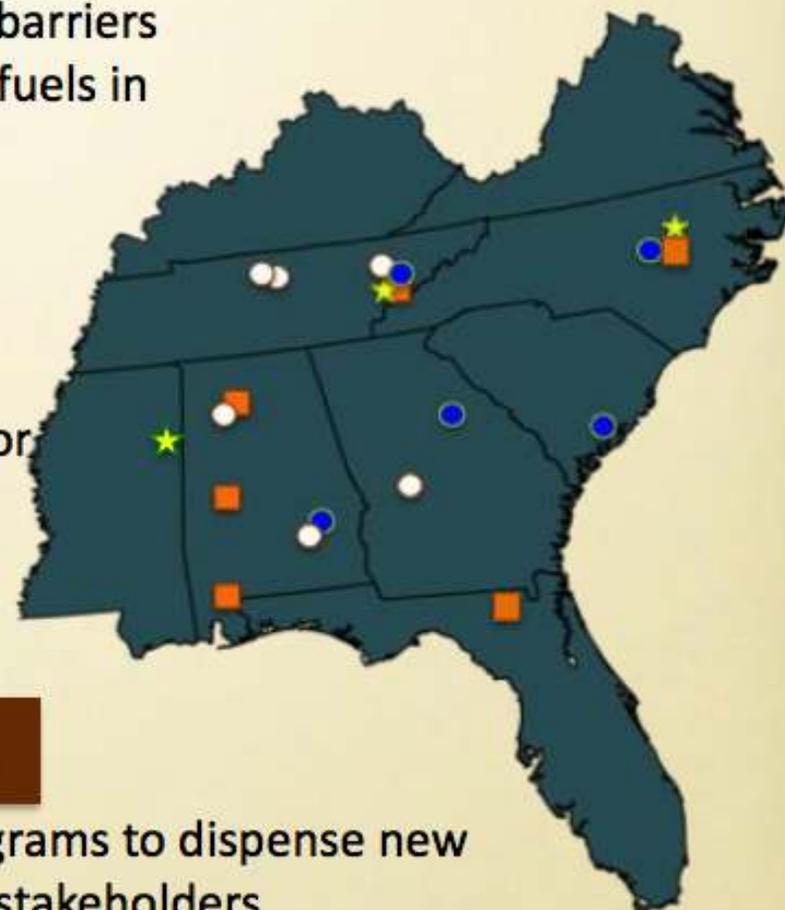
## Advanced Metrics

Create, validate, and use new metrics for improved decision-making for regional biorefinery development

3

## Education & Outreach

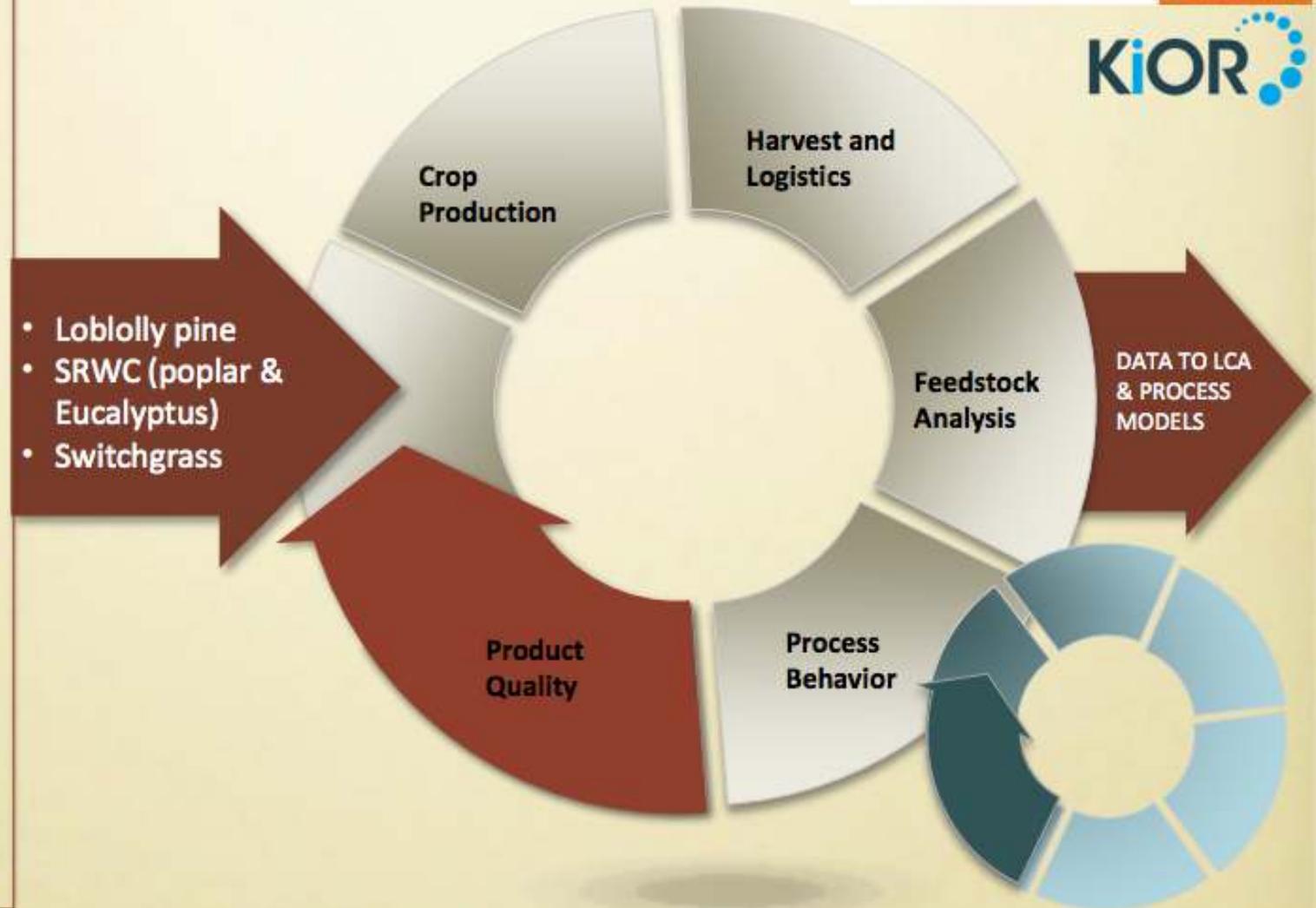
Provide credible and relevant programs to dispense new knowledge for the workforce and stakeholders

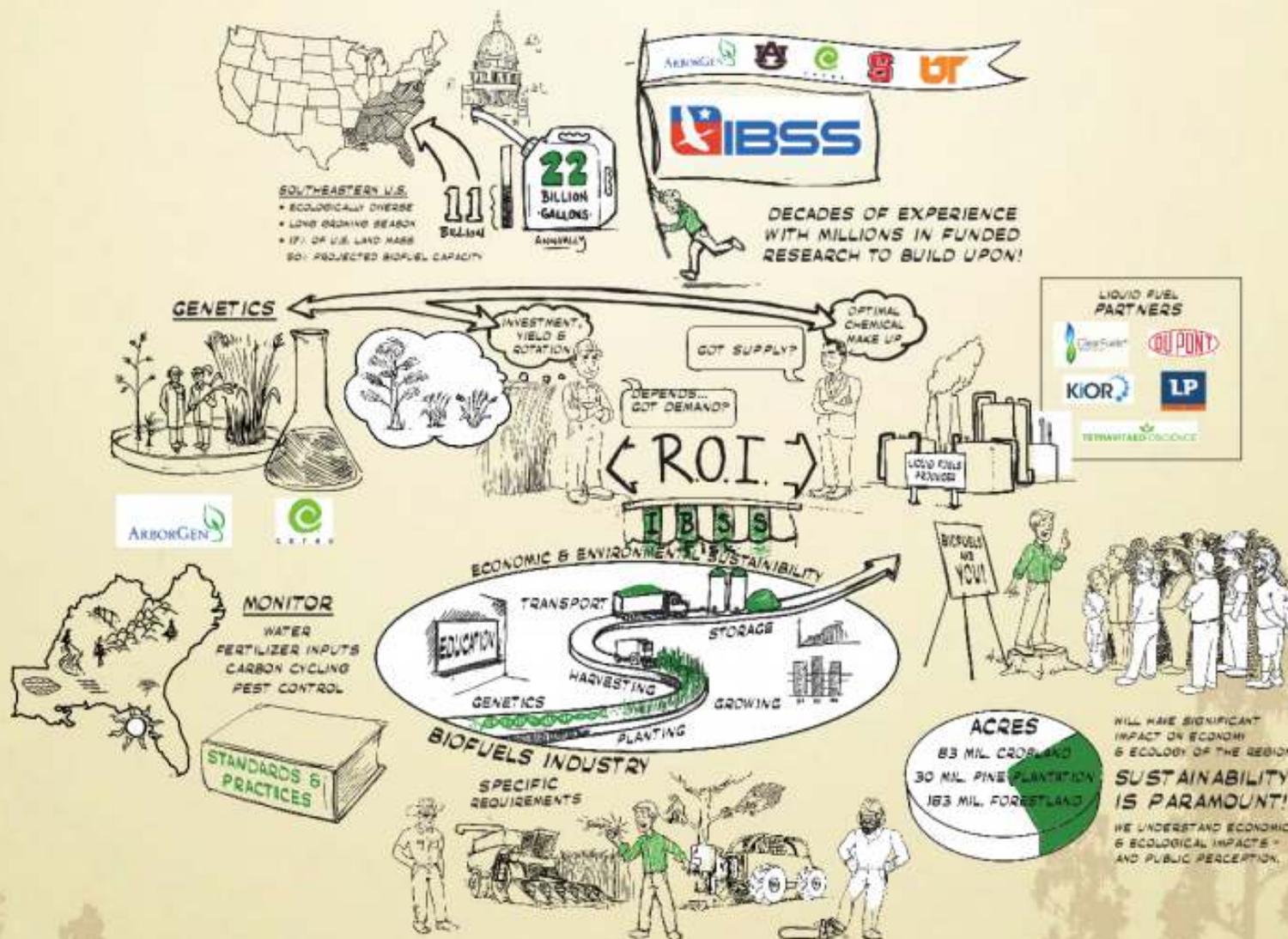


# FEEDSTOCK DEVELOPMENT



- Loblolly pine
- SRWC (poplar & Eucalyptus)
- Switchgrass





# FISCHER-TROPSCH



-  20 tpd biomass gasifier
-  Harvested, preprocessed, and shipped SR biomass
  - Hybrid poplar (20 dry tons)
  - Loblolly pine (60 dry tons)
-  Addressed material handling issues
  - Size reduction approach
  - Moisture content
  - Particle flow
-  Bio-syngas to FT reactor

# A DYNAMIC LANDSCAPE



## Business Realities

- 2 out of 4 original partners are no longer in advanced biofuels (TetraVitae and ClearFuels)
- RenTech recently exited biofuels production and closed the Bioenergy Center of Excellence (Commerce City, CO)



## Feedstock Realities

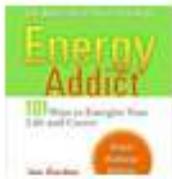
- Fuel producers are drawn to the feedstock – available & affordable
- 30 million acres of pine and process residue is the region's stover
- Switchgrass acreage contracting in absence of market
- Natural gas is a new, cheap source of fuel (green, I'm told)



## IBSS Adjustments

- Increase focus on thermochemical – *pyrolysis and gasification* – as the region's foundation platform
- Reduced emphasis on biochemical pathway and chemical composition
- Introduced preprocessing of pine for clean, consistent feedstock

# ...not without our challenges...



## Green Energy Addict

Growth at reasonable price

[Profile](#) | [Send Message](#) | + [Follow](#) (174)

## Death May Be Knocking On KiOR's Door

Mar. 25, 2014 10:03 AM ET | About: [KIOR](#)

**Disclosure:** I have no positions in any stocks mentioned, and no plans to initiate any positions within the next 72 hours. [\(More...\)](#)

### Summary

- KiOR has until April 1 to score financing or it may file bankruptcy.
- A formal SEC investigation looms.



# Resources Mobile Apps



IveGot1



Leafsnap



Native Plants of North Georgia



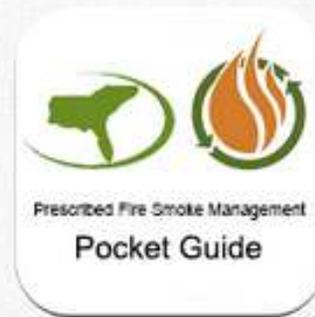
Norwood Sawmills Calculator



Plot Hound



PrecisionEarth



Prescribed Fire Smoke Management Pocket Guide



SoilWeb



Tree Identification



TreeBook



TreeTaggr



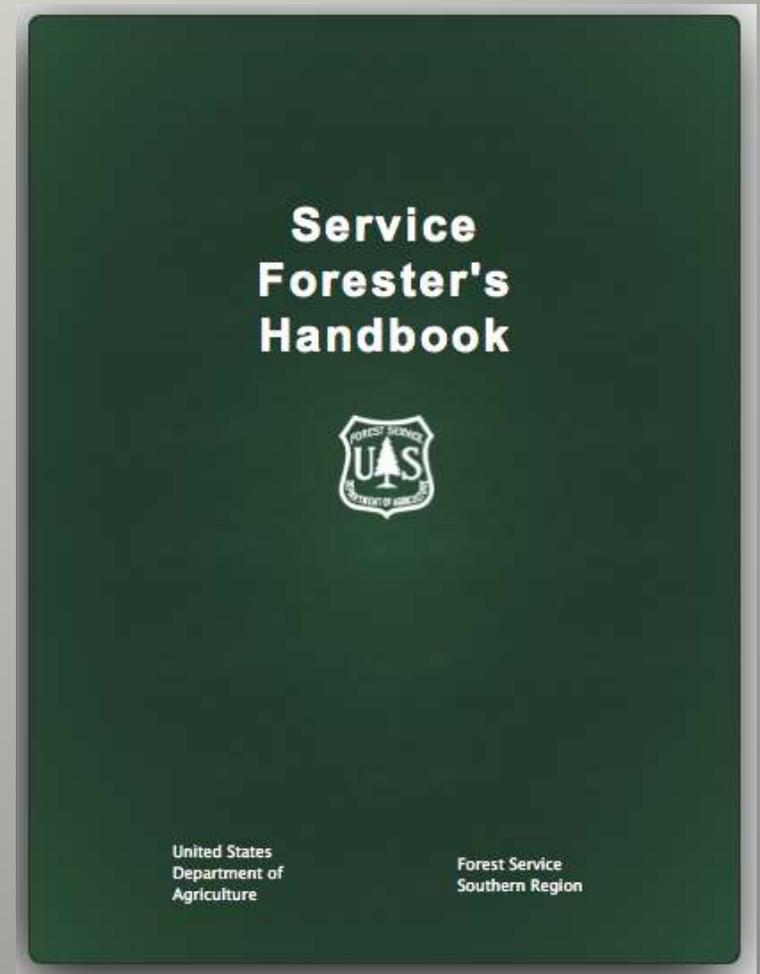
vTree



# Service Forester's Handbook

## Purpose

- To update existing information
- Exclude outdated information
- Develop new sections relevant to today's foresters
- Re-design layout
- Develop a 'App'lication for mobile devices



# Service Forester's Toolbox App

- Includes updated content
- IOS Apple Itunes Version 1.0 released May 2014 (search “forestry kit” on Itunes® Store)
- Android Version 1.0 to be released fall 2014 on Google Play Store

**Service Forester's Toolkit**  
By University of Georgia Extension  
Open iTunes to buy and download apps.

**Description**  
The Service Forester's Toolkit app is based on the United States Forest Service's (USFS) Service Forester's Handbook, a highly sought after tool used by foresters and natural resource professionals working in the field. This convenient pocket guide is a quick-reference for basic forest and land

**What's New in Version 1.0.1**  
Fixed text on Trees per Acre by Spacing.

**Screenshots**

Carrier 3:46 PM  
Carrier 4:03 PM

Back Trees per Acre by Spacing  
5 by 10  
Feet Meters  
Trees per Acre  
83 per Acre  
204 per Hectare

1	2	3
4	5	6
7	8	9
PQRS	TUV	WXYZ

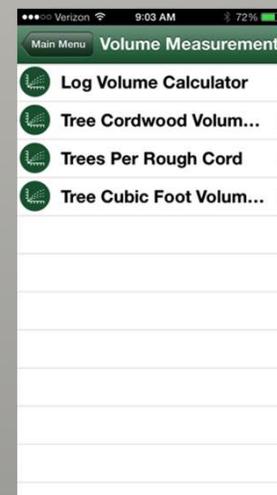
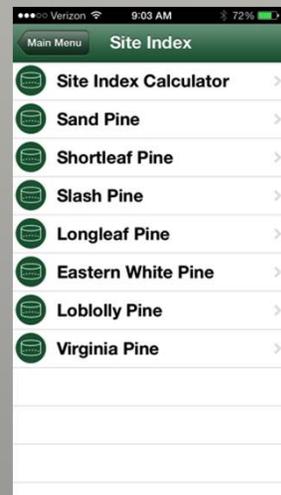
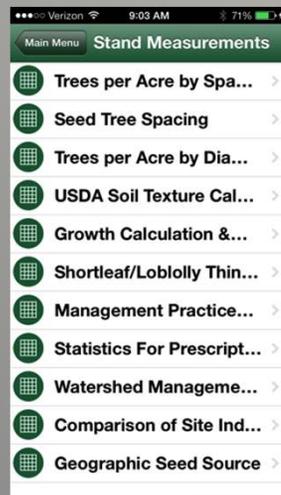
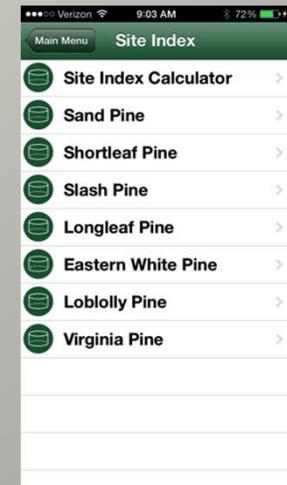
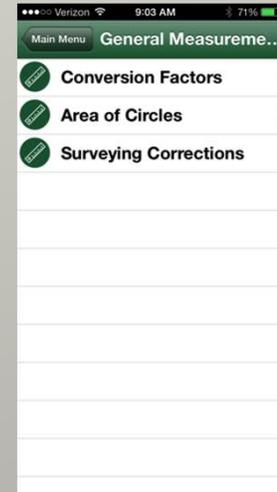
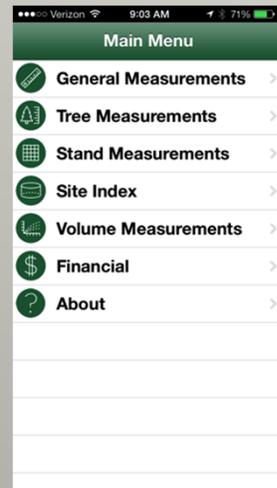
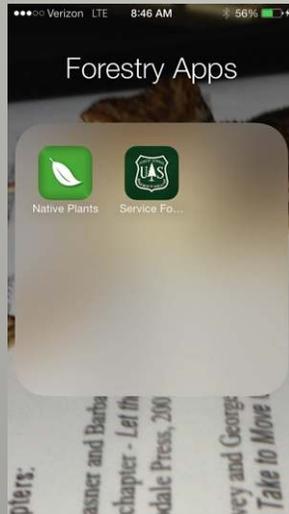
Conifers Eastern White Pine  
Appalachian Mountains of Virginia, Tennessee, North Carolina, and Georgia (Natural)

Total Height (Feet)

SI 60  
SI 70  
SI 80  
SI 90  
SI 100  
SI 110  
SI 120  
SI 130

# Information Technology & Mobile Technology Deployment

# Service Forester's Toolbox App



# Information Technology Highlights

## *Ongoing Updates*

Continued funding from various partners allows us

- to support and enhance vital web-based knowledge bases
- to help support foresters and landowners and
- to help expand forest related products from renewable sources.

- <http://timbertax.org>
- <http://forestproductslocator.org>

The image shows two overlapping website screenshots. The top screenshot is the 'NATIONAL TIMBER TAX WEBSITE' with the tagline 'Tax Management for Timberland Owners'. It features a navigation menu with items like 'Home', 'Federal Income Taxes', 'State Tax Laws', 'Estate Planning', 'Publications', 'Professional Research', 'Tax Workshops', 'Tax Policy', and 'Links'. The bottom screenshot is the 'Primary Forest Products Network' website. It has a navigation bar with 'Home', 'Mill Map', 'Mill List', and 'About Us'. The main content area includes a welcome message, a paragraph about the ForestProductsLocator website, a map of the Southern United States with colored markers, and a paragraph about finding potential buyers for standing timber. Logos for the U.S. Forest Service and the National Timber Tax Website are also visible.



# Projects Current Projects

Current Projects Ongoing Projects



Eastern Forest Threat Assessment Center



eLearn Forestry



eXtension: Trees for Energy Conservation Community of Practice



InterfaceSouth



Longleaf Alliance



The National Cohesive Wildland Fire Management Strategy



## FILTER PROJECTS

- adaptation
- climate change
- conservation
- distance learning
- education
- elearning
- energy
- extension
- forest threats
- forestry
- longleaf
- mitigation
- people
- research
- technology
- urban
- urban forestry
- weather
- wildfire
- wui

CLEAR ALL FILTERS X

# Shortleaf Pine Ecosystem Restoration Initiative

- Online decision support system
- Regional network of experts & educators
- Funding for director out of the University of Tennessee



# National Wildfire Cohesive Strategy

Improving the network  
of service providers

- More and more frequent fires in the Southern US that the West
- Fact sheets, webinars and training to engage Extension



# www.forestsandrangelands.gov

The screenshot shows the homepage of the Forests and Rangelands website. At the top, there is a banner image of a forest with the text "Forests and Rangelands" and "About Forests & Rangelands". Below the banner, there is a navigation menu with "Home: Cohesive Wildfire Management Strategy". The main content area is divided into several sections: a search box, a "Wildland Fire" section with a list of links, a "Forest Management" section with a list of links, a "National Cohesive Wildland Fire Management Strategy" section with a large image and a "Restoring and Maintaining Landscapes,..." headline, a "Cohesive Strategy Topics" section with a list of links, a "Cohesive Strategy News" section with a "Public Service Announcement (PSA) Showcases the Power of Resident Actions to be Fire Adapted" article, and a "Highlights" section with a list of links. On the right side, there is a "Wildfire Community Preparedness Day 2014" logo and a "Regional Strategy Committees" section with a list of links. At the bottom right, there is a "Follow Us" section with social media links for Twitter and Facebook.

**Forests and Rangelands**  
About Forests & Rangelands

[Home: Cohesive Wildfire Management Strategy](#)

**Search**

Forests & Rangelands Home

**Wildland Fire**

- Wildland Fire Leadership Council
- Wildland Fire Executive Council
- Cohesive Strategy** »
- Quadrennial Fire Review (QFR) »
- Wildland Fire Information and Technology (WFIT) »
- Success Stories
- Resources »
- Related Links

**Forest Management**

- Forest Operations Catalog »
- Stewardship Contracting Tools
- Woody Biomass Utilization »

**National Cohesive Wildland Fire Management Strategy**

**Restoring and Maintaining Landscapes,...**

[Read more about the National Cohesive Wildland Fire Management Strategy...](#)

**Cohesive Strategy Topics**

- [Overview](#)
- [Goals & Performance](#)
- [Governance & Engagement](#)
- [Reports Library](#)
- [Partner Perspectives](#)
- [Communicator's Tool Box](#)
- [Contacts](#)

**Cohesive Strategy News**

[Public Service Announcement \(PSA\) Showcases the Power of Resident Actions to be Fire Adapted](#)

Posted March 21, 2014

**Highlights**

- [Draft National Cohesive Wildland Fire Management Strategy and Risk Analysis Phase III Report](#)
- [Reports Library](#)

**Wildfire Community Preparedness Day 2014**

2014 Wildfire Community Preparedness Day, Saturday, May 3, 2014

**Regional Strategy Committees**

- [Northeast](#)
- [Southeast](#)
- [West](#)

**Follow Us**

- [Follow us on Twitter @US\\_Wildfire...](#)
- [Follow the Cohesive Strategy on Facebook...](#)

# New tools and technologies

- eLearn opportunities
- Webinar opportunities



## eLearn Interactive online learning modules for forest management practices

### eLearn: Urban Forestry

eLearn: Urban Forestry is a state-of-the-art online, distance-learning program geared specifically toward beginning urban foresters and those allied professionals working in and around urban and... more

Visit eLearn: Urban Forestry

### Urban Forest Strike Team Modules

Designed to assist state level disaster response teams with responsibilities in the urban forest, these two modules are titled "Disaster Response, Urban Forest Strike Teams, and the First 72 Hours" and... more

Visit Urban Forest Strike Team Modules

### Tree Risk Assessment Level 1: Limited Visual Assessment

The ISA Tree Risk Assessment Qualification (TRAQ) program provides an opportunity for professionals in the arboriculture industry to expand their knowledge through education and training in the... more

Visit Tree Risk Assessment Level 1: Limited Visual Assessment

### Learning the New Tree Risk Assessment Rating System

An interactive guide to identifying targets and points of failure.... more

Visit Learning the New Tree Risk Assessment Rating System

### Longleaf Economics Course

The longleaf forest is noted for its aesthetic beauty and a rich diversity of plants and animals. But longleaf has many unique wood properties and biological characteristics that make it... more

Visit Longleaf Economics Course



# Two platforms – Articulate® and eXtension

Click on a module to start learning...

- 1. BENEFITS AND COSTS OF THE URBAN FOREST**
  - Chapter 1: Costs of the Urban Forest
  - Chapter 2: Benefits of the Urban Forest
- 2. TREE GROWTH AND DEVELOPMENT**
  - Chapter 1: Tree Structure and Function
  - Chapter 2: Tree Physiology
  - Chapter 3: Influences in Urban Environments
- 3. URBAN SOILS**
  - Chapter 1: Soil
  - Chapter 2: Soil Characteristics Important for Tree Growth
  - Chapter 3: Common Soil Problems in Urban Areas
- 4. SITE, TREE SELECTION AND PLANTING**
  - Chapter 1: What are the Site Factors?
  - Chapter 2: Planting Sites
  - Chapter 3: Tree Selection
  - Chapter 4: Planting Guidelines
  - Chapter 5: Establishment
- 5. ARBORICULTURE**
  - Chapter 1: Tree Care in the Urban Setting

*Please visit [efegroup.org](http://efegroup.org) to complete these modules for ISA and SAF credit.*

Welcome! What's your local institution?

- Fort Valley State University
- University of Georgia

Select a different institution

State or Zip **LOCATE**

**Donate to Urban Forestry and Energy Conservation**  
Your donation keeps eXtension growing.  
**GIVE NOW**

**Upcoming Webinars**

- August 20**  
Caregiver Compassion Fatigue
- August 21**  
Homeowners' Preferences for Landscaping Practices: Are Floridians Willing to Pay More for Eco-Friendly Lawn Fertilizers?  
Exploring the Movement to Healthy School Meals Through Farm to School  
Avian anatomy and how to

**New eLearning Program Targets Allied Professionals to Urban Forestry**

As most of us know, healthy urban forests require a strong investment, and not just from the individuals and communities who benefit directly from these forests, but also from the professionals providing the expertise and care to support them. With that in mind, are you a landscape architect, city planner, public works employee, or designer working in urban forest management or arboriculture? Do you wish you knew more about what it takes to select, plant, and maintain trees in urban areas, to ensure their maximum benefit? Well, now you can with **eLearn Urban Forestry**, a state-of-the-art online learning opportunity designed specifically for those working in but not classically trained in urban forestry.

**eLearn Urban Forestry** is accessible online, at your convenience, from the comfort of your desktop, laptop, or Flash-supported mobile device. All content can be accessed for free or inexpensively for continuing education units with Society of American Foresters and the International Society of Arboriculture.





Outline Thumbnails Notes Search

- 1. The Economic Case for Longleaf
- ▼ 2. Early Return on Investment
  - 3. Sources of Early Return on Investment
- 4. Value Stability
- 5. Diversification
- ▶ 6. Low Risk
- ▶ 8. Unrecognized and Other Values
- 10. Summary
- 11. Credits

## Sources of Early Return on Investment



Cost Share

Pine Straw

Silvopasture

### Introduction



Longleaf offers several opportunities for early return on investment. Click on the tabs to the left to explore these opportunities in more detail!





You are here: [Home](#)

## Welcome

The Webinar Portal is a service of the [Southern Regional Extension Forestry Office](#), [North Carolina State University's Extension Forest Resources](#), [Texas AgriLife Extension Service](#), other participating land-grant universities and the [USDA Natural Resources Conservation Service](#).

This portal serves as a launching point for current and archived forestry, conservation, bioenergy and natural resource webinars. Many of the webinars featured on our site provide participants with continuing education credit, free of charge, from professional accrediting organizations such as [SAF](#), [ISA](#), [CCA](#) and others.

We also host information on upcoming webinars and webinars from other organizations that are relevant and current for today's professionals, foresters and landowners.

Be sure to check out our webinar portal for all your webinar needs.

## What is a Webinar and How Do I Use It?

## 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.



### Webinar Categories

#### Bioenergy Webinars (3)

- [Bioenergy \(3\)](#)
- [Biomass \(3\)](#)
- [Energy \(2\)](#)
- [Farm Bill \(1\)](#)
- [Policy \(1\)](#)
- [more...](#)

#### Conservation Webinars (124)

- [FOTG & Planning \(23\)](#)
- [Fish & Wildlife \(23\)](#)
- [Resource Assessment \(20\)](#)
- [Soil Health \(15\)](#)
- [Cropping Systems \(12\)](#)
- [more...](#)

#### Forestry Webinars (135)

- [Wildlife \(19\)](#)
- [Forest Management \(14\)](#)



# Professional Development

# Online Professional Development Opportunities

- Forestrywebinars.net
- Bioenergywebinars.net
- Conservationwebinars.net
- Climatewebinars.net



Detailed statistics and information are kept on each webinar (live & archived)

The screenshot shows the top section of the 'Webinar Portal for Forestry and Natural Resources' website. It features a navigation menu with links for Home, Calendar, Upcoming Webinars, Previous Webinars, FAQ, About Us, Related Sites, and Subscribe. A search bar is located in the top right corner. The main content area includes a 'Welcome' message and a 'What is a' section.

The screenshot shows the top section of the 'Webinar Portal for Conservation of Natural Resources' website. It features a navigation menu with links for Home, Calendar, Upcoming Webinars, Previous Webinars, FAQ, About Us, Related Sites, and Subscribe. A search bar is located in the top right corner. The main content area includes a 'Welcome' message and a 'What is a' section.

The screenshot shows the top section of the 'Webinar Portal for Bioenergy' website. It features a navigation menu with links for Home, Calendar, Upcoming Webinars, Previous Webinars, FAQ, About Us, Related Sites, and Subscribe. A search bar is located in the top right corner. The main content area includes a 'Welcome' message and a 'What is a' section.

The screenshot shows the main content area of the 'Webinar Portal for Bioenergy' website. It features a 'Welcome to the Webinar Portal for Bioenergy' section with a detailed description of the portal's purpose and services. The text includes: 'The Webinar Portal is a service of the Southern Regional Extension Forestry Office, North Carolina State University's Extension Forest Resources, Texas AgriLife Extension Service, other participating land-grant universities and the USDA Natural Resources Conservation Service. This portal serves as a launching point for current and archived forestry, conservation, bioenergy and natural resource webinars. Many of the webinars featured on our site provide participants with continuing education credit, free of charge, from professional accrediting organizations such as SAF, ISA, CCA and others. We are pleased to host the 2013 IBSS sponsored educational biofuels webinar series titled "Transitioning from the Bucket to the Barrel". For detailed information on webinar topics and speakers, please visit the series webpage at <http://se-ibss.org/webinars-1>. We also host information on upcoming webinars and webinars from other organizations that are relevant and current for today's professionals, foresters and landowners.'

On the right side, there is a 'Webinar Categories' section with a list of categories and their counts: Bioenergy Webinars (3), Bioenergy (3), Biomass (3), Energy (2), Farm Bill (1), Policy (1), Conservation Webinars (87), Resource Assessment (18), and Soil Health (15).



You are here: [Home](#) → [Previous Webinars](#)

**Previous Webinars** ( 257 items found )

[f](#)
[t](#)
[e](#)
[p](#)
[+](#)
5

**Wetland Reserve Program: Hydrology Management and Nuisance Mammal Prevention**

This webinar will give participants an overview of determining hydrology management objectives, using active and passive water management techniques, and methods to deter nuisance wetland mammal damage on WRP lands.

**Webinar Date:** Aug 8, 2013 2:00 pm  
**Length:** 01:00 hh:mm  
**Credits:** Yes  
**Category:** Conservation Webinars  
**Type:** WMV - Windows Media Player  
**Archived:** Yes [View](#)

**Turning Your Land Into a Sponge**

Cattle production is the largest agricultural activity in Texas and in the Trinity River basin. Drought is a major challenge that faces ranchers and one that is too often unprepared for. Managing the vegetation on the land and setting an appropriate cattle stocking rate are the best ways to protect the productivity and sustainability of your ranch. Leaving sufficient amount ...

**Webinar Date:** Aug 8, 2013 1:00 pm  
**Length:** 01:00 hh:mm  
**Credits:** None  
**Category:** Forestry Webinars  
**Type:** Collaborate  
**Archived:** No

**Prescribed Fire Opportunities for Forestry Consultants**

Consultants servicing clients in NC should participate to gain insight on prescribed fire opportunities. Topics will include income and training opportunities, prescribed fire programs, insurance options, and liability protection.

**Webinar Date:** Aug 8, 2013 10:00 am  
**Length:** 01:00 hh:mm  
**Credits:** Yes  
**Category:** Forestry Webinars  
**Type:** Collaborate  
**Archived:** Yes [View](#)

**Crop Rotations on Diversified Farms**

Webinar Aug 8, 2013 3:00 pm

**Webinar Categories**

- Bioenergy Webinars (3)**
  - Bioenergy (3)
  - Biomass (3)
  - Energy (2)
  - Farm Bill (1)
  - Policy (1)
  - [more...](#)
- Conservation Webinars (124)**
  - FOTG & Planning (23)
  - Fish & Wildlife (23)
  - Resource Assessment (20)
  - Soil Health (15)
  - Cropping Systems (12)
  - [more...](#)
- Forestry Webinars (135)**
  - Wildlife (19)
  - Forest Management (14)



You are here: Home → Webinars → Application of Forestry Best Management Practices for Water Quality Protection



## Application of Forestry Best Management Practices for Water Quality Protection

You can [view](#) this archived webinar at any time.

**Forestry Best Management Practices (BMPs) are techniques and practices used to minimize and prevent water quality problems associated with forest management activities. Typically, sediment is the primary pollutant of focus for forestry BMPs. This webinar provides legislative and policy background for forestry BMPs and applied research findings regarding the effectiveness of BMPs for reducing sediment from a variety of forest operational activities. Forest operational activities that will be discussed include preharvest planning, harvesting, haul roads, skid trails, decks, firelines, stream crossings, and SMZs. This webinar is designed to outline basic BMPs to persons not familiar with the general activities and to provide recent BMP research findings to practicing forestland managers.**



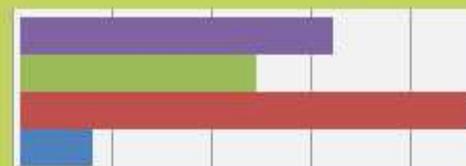
"The webinar project is partially supported by The Renewable Resources Extension Act National Focus Fund Grant no. 2011-46401-31144 from the USDA National Institute of Food and Agriculture."

### Related URLs

- <http://www.forestrywebinars.net/webinars/influence-of-forest-cover-loss-and-land-use-change-on-water-quantity-and-quality>
- <http://www.forestrywebinars.net/webinars/from-the-raindrop-to-the-river-the-basics-of-forest-hydrology-1>

### Green Savings!

Click on the graph below or click [here](#) for a detailed Green Savings analysis of this webinar.



### When:

Aug 6, 2013 2:00 pm US/Eastern

Length: 01:00 (hh:mm) [View](#)

### Author(s)/Presenter(s):

- Dr. Michael Aust, Virginia Tech



## Calculating the "Green" Impact of Online Extension Programs

### Abstract

The environmental and economic benefits achieved by participants in an e-learning event are often overlooked by Extension educators, even though they are easy to calculate based on some basic information often collected from participants. To help make it easier to calculate these benefits, which are referred to as "Green" savings, a "Green" savings model has been developed. This model calculates the sum of savings realized by e-learning participants who do not have to travel to face-to-face events. These savings are based on savings related to e-learning participants' travel, time, and vehicles carbon emissions.

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"Green" savings estimates the various environmental and economic benefits achieved by participating in an e-learning event versus a similar live, face-to-face event by reducing or eliminating the need to operate a motor vehicle. It is a metric that is often overlooked compared to other standard metrics such as demographics, number of participants, satisfaction level, knowledge change, and other more traditional measures when measuring the effectiveness of e-learning events (Allred & Smallidge, 2010; Rich et al., 2011; Stevenson et al., 2011). An example of "Green" savings associated with an e-learning event can be seen in Figure 1. This example comes from the Forestry and Natural Resources Webinars portal (<http://www.forestrywebinars.net>), a service of the Southern Regional Extension Forestry Office, North Carolina State University's Extension Forest Resources, Texas Agrilife Extension Service, and other participating land-grant universities.

Figure 1.

Screen Shot of a Webinar's "Green" Savings Analysis as Found on the Forestry and Natural Resources Webinars Portal (<http://www.forestrywebinars.net>)



### Model Assumptions

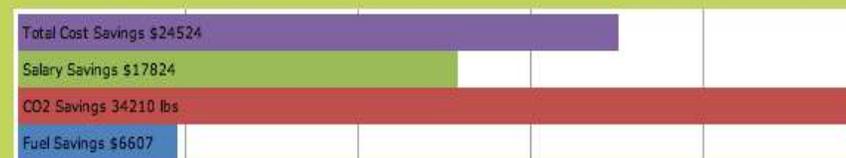
## Application of Forestry Best Management Practices for Water Quality Protection

### Green Savings Analysis!

Utilizing webinars to stay up-to-date and to continue your professional training or for just personal enrichment saves you time 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 **35268** miles of driving to physical locations where similar training would be held, saved **678** hours of travel time, saved **1763** gallons of fuel, and prevented the release of **34210** lbs of CO<sub>2</sub> into the atmosphere. This is a cost savings of approximately **\$24524.00** for the **171** who participated in this webinar. The estimated average cost savings per participant is **\$143.00**.

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



### Detailed Analysis

Webinar: **Application of Forestry Best Management Practices for Water Quality Protection**

Live Date: **2013/08/06 14:00:00 GMT-4**

Number of Participants during Live Webinar Event: **127**

Number of Participants that viewed the Archived Webinar: **44**

Total Participants: **171**

Number of Participants that received Continuing Education Credit: **77**

#### \$\$\$ Savings!

Sum of Salary Savings: **\$17824.00**

Sum of Fuel Savings: **\$6607.00**

Sum of Total Savings: **\$24524.00**

Average \$ Savings per Participant: **\$143.00**

#### CO2 Savings!

Sum of CO2 Savings: **34210 lbs**

Average CO2 Savings per Participant: **200 lbs**

#### Time Savings!

Total Human Hours Saved: **678 hours**

Average Num. of Hours Saved per Participant: **3 hours**

#### Mileage and Fuel Savings!

Total Miles Eliminated: **35268 miles**

Average Miles Eliminated per Participant: **206 miles**

Total Fuel Savings: **1763 gallons**

Average Fuel Savings per Participant: **10 gallons**

### How we Calculate the Savings

To come up with our *Green Savings*, we make certain assumptions and use standard formulas to derive the saving amounts. To find out more about how we calculate these savings, click [here](#).



# Impacts:

- From October 1, 2013 to June 30, 2014, participant use of S&T's conservation webinars at the Training Library includes:
  - 16,600 participant logins
    - o 8,145 participant logins for live webinars
    - o 8,455 participant logins for on-demand webinars
  - 6,803 unique logins viewing an average 2.4 webinars
  - 100% use of on-demand webinars (208/208)
  - 6,278 participants received one or more CEUs for a webinar (and received a participation certificate documenting each CEU type earned)
  - 3,390 participants received NRCS' "conservation planner" CEU type
  - 136 US states/territories and other countries/provinces have participated



# Strategic Directions – 2014 and Beyond

- Forest Economic Summit –  
Spring 2015 Little Rock, AR
- Wrap up climate change and  
bioenergy NIFA projects
- Climate Science Hub  
involvement
- Southern Landowner  
Engagement Strategies Initiative
- National Extension Foresters  
Meeting, Fall, 2015





Questions, Comments?

