Southern Regional Extension Forestry Report William G. Hubbard, Regional Forester Southern PLN Meeting Nashville, TN August, 2016



**Background:** The Southern Regional Extension Forestry Office was created in 1979 to serve the thirteen 1862 Land Grant Universities (LGU's) and the USDA Forest Service — Southern Region/State & Private Forestry Unit (USDA-FS, SPF). The position of Regional Forester with the SREF office is the result of a federal MOU on forestry education and technology transfer signed by several agencies in 1978. The MOU, the result of federal legislation entitled the Cooperative Forestry Act of 1978 was signed by the USDA Forest Service, Extension Service, Soil Conservation Service (NRCS) and National Associate of State Foresters. The Southern Regional Extension Forestry Office is the only regional Extension Forestry office in the country at this time.

Mission: The mission of the office has expanded over the years to be more comprehensive in serving state Extension and state agency professionals. "The mission of the Southern Regional Extension Forestry office is to serve the southern Land Grant University System and USDA Forest Service through the collaborative development of forestry technologies, tools, products and programs that improve the efficiency, effectiveness, relevance and impact of supporting institutions."

Administration: The Association of Southern Regional Extension Directors (ASRED) currently administers the project jointly through an official MOU with the Deputy Regional Forester of the USDA Forest Service – State & Private Forestry Unit in Atlanta, Georgia. The Extension Director, University of Georgia Cooperative Extension Service at UGA serves as the point of immediate supervision and works with the ASRED Forestry Committee to provide oversight and guidance to the Regional Forester program. The Regional Forester, through grants and contracts has assembled a staff that includes a Business Manager, Communications and Marketing Director, Graphic Designer, and specialists in urban forestry, wildland fire education, forest restoration, climate change, bioenergy, forest health, forest economics, Internet technologies, mobile application development, Geographic Information Systems, (GIS) and a variety of other topical areas and issues. Staff is assisted by several undergraduate students and contractors who provide data input, graphic design and other services.

**Major Programs and Projects:** 2016 updates on the activities and deliverables from several major initiatives and programs are listed below. Several others can be found in the annual report located online at http://sref.info.

## **Climate Variability Science**

**eXtension's Climate Learning Network** – The SREF office has provided leadership on the Climate Learning Network (climatelearning.net) for close to 3 years. This online learning center



connects Cooperative Extension professionals and facilitates in a peer-to-peer learning environment on climate science topics. This project has been co-funded by the Office of the Chief Economist, USDA and the eXtension Foundation. **The Learning Network, released 7 modules in 2016** and includes input from the USDA Climate Hub leadership as well as experts working on climate change within the LGUS. SREF also worked on the national front to assist other Hubs with technology transfer, professional development and information dissemination. Funding in 2016 and 2017 will be utilized to explore the possibility of a certificate program.

**PINEMAP** - SREF staff have worked on the Extension component of a NIFA AFRI CAP program, funded at 20 million dollars for 6 years (inclusive of a No Cost Extension) that includes ~80 researchers from 12 southern LGU's and the federal government. There are over 30 million acres of pine plantation in the Southern United States and changes in climate will affect these forests. The PINEMAP project's goals include development of tools and technologies for professionals to use in climate adaptation and mitigation scenarios surrounding pine plantation management. Over the past four years, the SREF office has provided leadership in the development of Extension materials and tools for professional foresters, landowners, policymakers and youth. Several of the products can be accessed online at <a href="http://www.pinemap.org">http://www.pinemap.org</a>. Additionally, SREF has leveraged resources from this project towards development of the Southern Region Extension Climate Academy. PINEMAP has entered its 6<sup>th</sup> and final year. SREF is also working closely with the developers of the PINEMAP decision support system (DSS). This system "rolled" out in the spring of 2016. SREF is conducting Extension and outreach activities on the use and value of the modeling tool.

*USDA Southeast Regional Climate Hub Partnerships* – SREF continues to work directly with the Southeastern Regional Climate Hub (SERCH) staff to incorporate climate change information, data, and tools into version 2.0 of the Service Forester's Toolkit Mobile Application program that was developed in 2014 and available on Google Play® and the App Store®. The Service Forester's Toolkit App will include numerous other facts, tables and figures that will continue to be helpful to state and county Extension professionals.

# **Bioenergy and Biomass Systems**

**Southeastern Integrated Biomass Supply Systems (SE-IBSS)** – SREF is assisting with regional leadership in the development of Extension materials for professionals interested in learning more about both agriculture (switchgrass) and woody biomass (short rotation woody crops and pine) opportunities. This project, now in its 6<sup>th</sup> year, has involved research, Extension and teaching on all aspects of the biomass to bioenergy production system. This included research and Extension on growth, management, harvest, storage and transportation of crops, feedstock conversion, and bioenergy marketing and policy aspects. This project was funded at 15 million dollars for 5 years and involved 4 land grant universities. A majority of the Extension materials and tools can be found online at <a href="http://www.se-ibss.org">http://www.se-ibss.org</a>. SREF coordinated the review and publishing of a number of peer-reviewed fact sheets on bioenergy and biomass.

## **Urban & Community Forestry**

Urban Forestry & Energy Conservation eXtension site (UFEC) - Over a dozen, short, high definition videos highlighting how urban forestry management practices can enhance energy conservation were developed in 2015-2016. Videos are featured on the current eXtension site and will be available on You Tube. SREF partnered with Virginia Tech and provided monetary resources to their professionals to assist with the development of the videos and enhance the site. The original site. funded in 2012 is located http://www.extension.org/trees\_for\_energy\_conservation and contains articles, FAQ's and other resources for the professional and homeowner interested in urban trees for energy conservation.

#### Wildland Fire

National Cohesive Wildland Fire Management Strategy: Southern Region, Communication & Extension Activities (CFS)- SREF works closely with several federal agencies to improve upon the implementation of the National Cohesive Strategy (CFS) in the Southern Region. In 2016, SREF developed several more educational products and undertook activities in support of the Strategy including utilizing the social network analysis of the southern fire community to begin planning a conference for early adopters and innovators, updating the the projects www.southernwildfire.net website, creation of 20+ new fact sheets highlighting Southeastern wildfire success stories, co-development of CFS southern region value cards, and several other outreach products. SREF staff attended regional meetings in 2015-2016 to improve communications and programming in support of CFS.

#### **Forestland Restoration**

Shortleaf Pine Restoration Initiative (SPI) – SREF coordinates with numerous federal, state, and private partners, including state Extension, to promote the new Shortleaf Pine Initiative (SPI), through marketing, educational products, and other support. Many of the products and other support can be found at the Shortleaf Pine Initiative website SREF created: <a href="https://www.shortleafpine.net">www.shortleafpine.net</a>. For the website, SREF developed several more shortleaf fact sheets; gathered nursery, cost-share, and regional expert contact lists; created an online site suitability mapping tool; set up a regional events listing and calendar; wrote the Initiative overview and history; and researched and compiled other relevant sites and links. SREF is also currently developing an extensive, shortleaf literature library; a network of featured demonstration sites; archived video presentations; and additional fact sheets for the website. SREF staff have assisted in editing and adding relevant information to the Regional Shortleaf Restoration Plan; assisted in planning the 3<sup>rd</sup> Biennial Shortleaf Pine Conference; have developed a social media plan for the Initiative on Facebook and Twitter; and have attended numerous regional shortleaf pine-focused workshops to present information on the SPI and network with relevant contacts, showcase SREF products related to the SPI, and to record relevant lectures for the creation of



educational video presentations to be housed on the SPI website and YouTube. SREF was recognized by Initiative Leadership for all of their work to date on the effort.

### **Economic Impact of Forestry**

Economic Importance of Forestry in the South Initiative — The SREF office lead effort along with Mississippi State Extension forestry to develop tools, methods and products for use by state forest economic and marketing specialists. The SREF staff worked with Mississippi State University Extension Forester James Henderson to develop regional fact sheets on the economic importance of forestry in the South. The SREF office also organized a summit in the spring of 2015 that brought together more than 30 experts in forest economics and IMPLAN modeling from across the southern region, to develop a "standard" methodology for states to be able to develop comparable state-level fact sheets with IMPLAN data. A survey of southern forest economists was launched in September, 2015 and the results have lead to several presentations and a peer reviewed journal article in the Journal of Forestry. Forestryimpacts.net was launched in the Spring of 2016 to highlight regional and state efforts to better highlight the importance of forestry in the South.

#### **Forest Health**

Regional Forest Health Initiative — SREF is partnering with the USDA Forest Service — Forest Health unit in Atlanta and has hired a regional Extension forest health specialist to construct a regional training and education program aimed at Extension and state forestry agency professionals at the county, state, and regional levels. This effort aims to ameliorate misinformation and lack of information on several important forest health issues (including invasive species) in the Southeast. The Extension forest health specialist has developed a webinar series is investigating online, print, and face-to-face opportunities to improve the fundamental and working knowledge of on-the-ground educators and technology transfer specialists. To date, the forest health specialist has hosted several webinars, developed regionally peer reviewed fact sheets, and scheduled and led several face-to-face workshops.

# **Professional Development**

The Professional Development Webinar Series: The SREF office has provided a webinar portal service for several years servicing the Southern region and beyond with the forestrywebinars.net series. SREF has also hosted the NRCS's online training library at conservationwebinars.net and is now working with the Forest Service to host webinars at sustainableforestswebinars.net. Three other portals include bioenergywebinars.net, climatewebinars.net and urbanforestrywebinars.net to handle related stakeholder groups. These webinar sites are robust, content management style portals with access to live and archived events, certification, marketing tools, green savings and impact calculators, and now social media and ranking/rating tools.

### **State Impacts & Success Stories**

The SREF office strives to work collaboratively with all 13 states in the Southern United States. With an enhanced staff in recent years, the quality and quantity of work with each state has increased exponentially. Today, SREF staff works closely with Extension and state forestry agency in every state in the Southern U.S. A few highlights are listed here with apologies in advance for missing anything in particular:

**Alabama** — SREF works with Alabama CES on several projects including reviewers, members of the Urban Trees & Energy Conservation Advisory Council, and presenters in several urban forestry video shorts (Beau Brodbeck). In addition, Becky Barlow has assisted with review of shortleaf pine initiative fact sheets. Dr. Lowenstein with ACES will also be partnering with SREF on forest health initiatives in the state. Dr. Lori Eckhardt worked with SREF to resolve the Pine Decline controversy. SREF is working on a joint carinata bio-oils project with ACES specialists and agents.

**Arkansas** – The Regional Extension Forester is working with the regional reforestation specialist with the Forest Service to host at least one short leaf pine restoration meeting in Arkansas. This will include involvement from UA Extension. SREF is also working closely with the state Extension Forester to determine the interest and need for collaboration on significant fact sheets of interest. In addition, SREF plans to continue to assist Dr. Walkingstick with marketing any efforts relating to her initiative on Women in the Woods.

**Florida** – SREF staff have worked closely with the University of Florida to develop climate materials for the PINEMAP project, and have edited biomass fact sheets for a regional Woody Biomass Ambassadors Guidebook. SREF developed multiple fact sheets with Dr. Martha Monroe. SREF is working with Dr. Pat Minogue to host and regional a forest vegetation management website. SREF is working on proposals for a Climate Masters program and a Carinata bio-oils biomass project to be submitted to USDA in the fall of 2016.

**Georgia** – The SREF office works closely with the University of Georgia on a variety of projects including providing web support for the National Timber Tax Website and the Georgia Feral Hog website. SREF also works with UGA faculty and staff to develop and deliver materials through the PINEMAP project and a workshop was held in Tifton that brought together professionals in four states (Alabama, Florida, Georgia and South Carolina) to review the results of the PINEMAP project and other climate and weather information and tools. The Regional Forester serves on UGA's Southern Forestry GIS conference planning committee (SoForGIS) and assists with the marketing activities for that conference. SREF worked on several grants with UGA professors including a regional DOE bioenergy grant and an heir's property grant to USDA. The Regional Forester also speaks at the Southern Outlook Conference at the request of the UGA Extension agriculture economist. SREF staff has presented an overview of the Shortleaf Pine Initiative at local professional foresters meetings and presented SREF materials available to County Extension agents at several trainings set up in the state.

**Kentucky** – SREF staff worked with the new Forest Health Center at UK to develop a proposal for funding in the 2016-2017 year. SREF worked with specialists at UK to discuss the importance of urban forestry programming. Holly Campbell will be exploring this issue with faculty at UK. SREF will again assist with a youth tour to a Georgia Tree Farm in 2016.

**Louisiana** - The Regional Forester regularly presents at the annual Ark-La-Tex Forestry Forum and works closely with the regional agents and state staff on programs and projects of mutual interest. The Regional Forester recommended that a National Extension Foresters meeting be held in Southern Louisiana in the fall of 2015 and a successful event was held there with over 100 in attendance. The Regional Forester is also involving the State Extension Forester in a key leadership role in the Southern Forest Economic IMPLAN Impact work SREF works with LSU forest economist and have produced several fact sheets and peer reviewed papers submitted to the Journal of Forestry.

*Mississippi* - The Regional Forester works closely with the Extension Forest economist on the regional forestry impact project. This has resulted in a regional protocol for how forestry IMPLAN data can be used across state lines for more comparative data. SREF staff will also be assisting MS Extension staff in hosting the next biannual Association of Natural Resource Extension Professionals. SREF staff support and assist MSU Extension Foresters with promotion of their materials throughout the Southern United States. In addition, the SREF regularly writes letters of support and reviews dossiers from MSU faculty for promotion.

**North Carolina** — SREF staff work closely with NCSU faculty and staff to develop materials and tools on the PINEMAP project, the Climate, Forests, & Woodlands eXtension CoP, the Climate Learning Network, and the IBSS project. The collaboration between these two groups has resulted in several regional fact sheets and products that can be found online at <a href="http://www.pinemap.org">http://www.pinemap.org</a> and <a href="http://se-ibss.org">http://se-ibss.org</a>. In addition, there are several other regional SREF related projects that are being led by NCSU staff including the Webinar Series Portal. SREF also works with NC Extension Forester, Jennifer Evans, through the Southeast Regional Partnership for Planning and Sustainability (SERPAS) prescribed fire work group, in support of the National Cohesive Wildland Fire Management Strategy.

**Oklahoma** – The state Extension Forester retired in 2014 but the SREF staff work closely with the Oklahoma forestry agency to include them in regional Extension programming. This includes working with them on regional climate change, bioenergy and forest economics work as well as including non-Extension staff on the Shortleaf Pine Initiative and the Cohesive Fire Strategy. Additionally, SREF is also developing a forestry economic importance factsheet for Oklahoma, by leveraging data obtained from IMPLAN analysis conducted for the regional economic project.

**South Carolina** – SREF will be hosting Clemson Extension Foresters this fall in Athens. At this meeting, we will discuss ways to work more closely together. The Regional Forester worked with Dr. Pat Layton at Clemson to write a successful wood products grant and SREF staff is developing a website askwood.com alongside Dr. Layton. The SREF staff include Clemson Extension in as many ways as possible and have visited South Carolina to participate in workshops and meetings. South Carolina is also without a state Extension Forester at this time, but the SREF staff includes the state regional foresters with Clemson in all mailings and correspondence., SREF worked with South Carolina fire managers and foresters on the Cohesive Fire Strategy, and the SREF's marketing team is working closely with Clemson's

communications group to streamline announcements and produce smoother and more cohesive marketing publications with the possibility of further collaboration in the future.

**Tennessee** – The Regional Forester and SREF staff work closely with UT specialists on the Shortleaf Pine Initiative (SPI) and the IBSS project. In particular, the Shortleaf Pine Initiative is based at the University of Tennessee. SREF developed the SPI website, coordinated the production of 17 fact sheets, developed an online site suitability mapping tool, and numerous other educational and marketing materials for SPI. SREF is working closely with UT forestry Extension and others to plan the 3<sup>rd</sup> Biennial Shortleaf Pine Conference.

**Texas** – The Regional Forester and SREF staff are working with the Texas A&M Agrilife Extension Service on PINEMAP and the regional climate change initiative, the webinar series, the National Cohesive Wildland Fire Management Strategy, and several other regional initiatives. Additionally, SREF staff have utilized videos of presentations from Texas Extension service's workshops and co-created webinars and factsheets for regional use.

*Virginia* — The Regional Forester and SREF staff work with Virginia Tech Extension Service and other land grant faculty and staff on the PINEMAP project, the UFEC urban trees and energy conservation project, a new Beginning Farmer and Rancher project on non-timber forest products and several other programs. The Regional Forester and staff work with the regional Extension foresters within the state on several regional and national initiatives as well including the National Forestry 4-H Invitational. SREF staff worked closely with Virginia Tech faculty and agents to develop 23 short urban forestry videos for the UTEC site.

#### Plans for 2016-2017

The SREF office will continue to work collaboratively with state Extension forestry, agriculture and natural resource units on grant writing. Already several proposals are in one or more advanced stages and include several states in each.

In the coming year, the SREF office will continue to offer a variety of services to the Land Grant Universities in the South, the USDA Forest Service and the state forestry agencies in the Southern United States. The SREF office will continue its active engagement with Extension foresters and state agency professionals in every state in the Southern United States. This includes working closely with state Extension foresters, ANR Leaders, Extension Directors and others. As in other years, staff of SREF are more than willing to continue to assist state efforts by traveling to state and county meetings to describe the products, programs and tools that the office is developing in cooperation and collaboration with partners. These visits are also important to gather input and information regarding ways that SREF can better serve individual states and the region. The Regional Forester will investigate opportunities for regional promotion and further development of forestry Extension in the South. Specific plans on the horizon include seeking further opportunities to work to develop a Southern Family Forest Center.