



SOUTHERN Fire Exchange

Uniting Fire Science and Natural Resource Management



FIRE LINES

A Joint Newsletter of the Southern Fire Exchange and the
Southeastern Section of the Association for Fire Ecology

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Learn more about our [Partners](#) and
the [JFSP Fire Science Exchange
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Visit the SFE Resource Center
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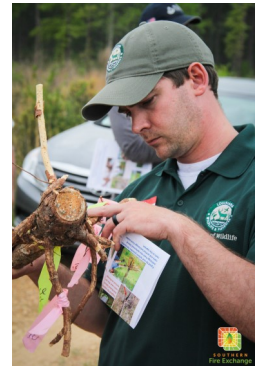


A View into the Field: Recap of Recent Learning Events

This spring, the SFE has been working with several partners to host or present at great field events where managers, landowners, and researchers have come together to discuss fire science.

Fire, Fuels, and Longleaf Pine Management

This workshop and field tour took place in the Kisatchie National Forest and the Palustris Experimental Forest, Louisiana. The day included discussions of strategies for minimizing negative fire impacts on longleaf pine seedlings, opportunities for converting existing loblolly pine stands to longleaf, and new research on the impacts of containerized planting methods on pine root morphology. Presenters discussed research that has demonstrated that the timing and season of prescribed fire early in the life of a newly established longleaf pine stand can be critical for achieving competition control while minimizing fire-induced near-term reductions on tree height and volume. Based on several studies, research forester Dave Haywood recommends burning in May, rather than in March or July, in young longleaf pine plantations. The US Forest Service covered this event in a [recent issue of *Compass Live*](#). To see more photos from the day, [click here](#).



Restoring Sandhill Ecosystems

At Ordway-Swisher Biological Station (OSBS) near Melrose, Florida, participants learned about recent research designed to improve the results of returning prescribed fire to long-unburned sandhill ecosystems. One highlight from the workshop was work by Dr. Morgan Varner (US Forest Service) and Dr. Jesse Kreye (Virginia Tech) on the effects and underlying mechanisms behind duff-fire induced pine mortality. Their research has shown that duff smoldering around the bases of pines can persist for hours after the surrounding vegetation has cooled, leading to prolonged upper-horizon soil heating and subsequent fine root mortality and tree death. [Click here](#) to read a feature story on this event by University of Florida, IFAS Research News. To see more photos, [click here](#).



Fire Science in the Ouachitas

The SFE joined the [Oak Woodlands and Forests Fire Consortium](#) for a field tour in the Ouachita National Forest in Arkansas to share fire science about a pine-bluestem restoration project. Participants and managers explored and learned about the science and management surrounding the 150,000 acre Ouachita National Forest shortleaf pine-bluestem ecosystem restoration project. Restoration primarily through the use of frequent prescribed fire and selective timber harvesting has improved habitat for endangered red cockaded woodpeckers, increased understory plant diversity, improved habitat for a suite of game and non-game wildlife species, and maintained a sustainable supply of timber for regional markets. [Click here](#) for a related research brief from the Oak Woodlands and Forests Fire Consortium. [Cont'd on page 3](#)

JFSP Funded Projects for 2016

The Joint Fire Science Program (JFSP) recently announced grant recipients for research projects for fiscal year 2016. Congratulations to the awardees! To see a full list of funded projects, [click here](#). We are excited about the following projects that will be taking place in the Southeast on a range of topics from regional air quality to factors that affect managers' decisions. Click on the titles to visit the JFSP website and see an overview of the project.

- [Application of Daysmoke & PB-P Models in Phase I of the Fire and Smoke Model Evaluation Experiment](#)
- [Determining Public Influences on Managers' Decisions Regarding Prescribed Fire in Longleaf Pine Ecosystems](#)
- [Integrating Social and Ecological Resilience Into Forest Management Planning](#)
- [Modeling Fire-Induced Tree Mortality for Eastern Hardwood Forests](#)
- [Mortality Reconsidered: Testing and Extending Models of Fire-Induced Tree Mortality across the US](#)
- [Southern Integrated Prescribed Fire Information System for Air Quality and Health Impacts](#)

Recently Archived SFE Webinars

We've enjoyed very interesting webinars on fire history, historical fire regimes, wildfire policy, and more in the past couple of months. Thanks to our great speakers and participants. If you missed the live webinar, you can always view the recorded version at your convenience.



- ⇒ [How Cattle, Logging, Fire, and Climate Shaped the Mississippi Piney Woods](#)
Grant Harley, University of Southern Mississippi
**Learn about research that reconstructs historical fire regimes of southern Mississippi longleaf pine forests and management recommendations for burning to mimic historical landscape patterns.
- ⇒ [Fire's Long Legacy](#)
Stephen Pyne, Arizona State University
**Get a new perspective on historical and contemporary relationships between fire and humanity.
- ⇒ [U.S. Wildfire Policy as Socio-Ecological Problem](#)
Toddi Steelman, University of Saskatchewan
**Consider how a socio-ecological understanding of wildfire in the U.S. can help match ecological changes with appropriate wildfire policies.
- ⇒ [LANDFIRE Biophysical Settings Review - Why You Should Care](#)
Jim Smith, The Nature Conservancy
**Get a brief primer on Biophysical Settings (Bps) and learn how you get become involved in assisting with updating the Bps.
- ⇒ [Particulate Matter Emission Factors in Southeastern US Pine-Grasslands](#)
Kevin Robertson, Tall Timbers Research Station
**Learn about recent research on emission factor estimates and other smoke science measurements and experiments in Southeast.

Pre-Conference Fire Workshop at ANREP

We've been working with many partners to plan a pre-conference fire workshop for Extension professionals at the [ANREP-NACDEP Joint Conference](#) in Burlington, VT (Association of Natural Resource Extension Professionals – National Association of Community Development Extension Professionals). The purpose of this workshop is to introduce Extension professionals nationwide to several fire programs and available resources—including the Cohesive Strategy, the JFSP Fire Science Exchange Network, and the fire extension Communities of Practice. The workshop is scheduled for Sunday June 26th from 2:00-4:00pm. [Click here](#) for a workshop description (see page 2) and [click here](#) for conference information. Do you know an Extension agent or specialist who may be going to ANREP? Please pass this information along!

UPCOMING EVENTS

Visit the [SFE Calendar](#) to learn more about upcoming events. To add an event to our calendar, [email us](#) the event information.

Webinars

[Development of a Micro-UAV for Prescribed Fire Ignition](#) **Info will be posted soon**
July 13, 2016; 1PM ET

[Finding the Best Science Available on Fire Ecology and Fire Regimes in Eastern Ecosystems](#)
July 27, 2016; 1 PM ET

Workshops and Trainings

[Longleaf Pine Forest Restoration and Management Workshop](#) **Sold out**
June 2, 2016; 8:30am to 3:30pm ET
Thomasville, GA

[Hazardous Fuels Workshop](#)
June 2, 2016
Perkinston, MS

[Smoke Modeling Workshop for Wildland Fire](#)
June 13-15, 2016
Troy, NC

[Fire and Extension Workshop / CoP Meeting at ANREP Annual Conference](#)
June 26, 2016; 2pm to 4pm ET

[Prescribed Fire for Wildlife](#)
October 25-28, 2016
Tallahassee, FL

Conferences

[Conference of Private Forest Landowners](#)
May 31-June 3, 2016
Orlando, FL

[2016 Association of Consulting Foresters National Conference](#)
Look for JFSP/SFE booth in the exhibit hall
June 11-14, 2016
Mobile, AL

[11th Biennial Longleaf Conference](#)
November 1-4, 2016
Savannah, GA

[Society of American Foresters National Convention](#)
November 2-6, 2016
Madison, WI

[IAWF 2nd International Smoke Symposium](#)
November 14-17, 2016
Long Beach, CA

A View into the Field...cont'd from page 1

Use Prescribed Fire Safely and Effectively

At a workshop organized by the [Florida Forest Stewardship Program](#), landowners and local natural resource professionals learned about using fire in forest management and the proper planning necessary for a successful prescribed burn. The workshop culminated with an on-site live prescribed fire in an annually burned longleaf pine flatwoods near Gainesville, Florida. Participants were able to observe first-hand the implications of various ignition methods on fire behavior. For more photos from the event, [click here](#).



Learning Networks Annual Meeting

SFE staff David Godwin and Alan Long participated in the annual meeting for the Fire Learning Network and Fire Adapted Communities Learning Network in Jacksonville, FL. The meeting included a field tour, which is nicely described in a blog post on the [FAC Learning Network website](#). More photos are available on the [SFE Flickr page](#).



Fire Ecology Database News

Thanks to everyone who took the time to provide feedback on the recent survey for the E.V. Komarek Fire Ecology Database! Tall Timbers Research Station (TTRS) and the Southern Fire Exchange hope to improve the database over the next few months using your input. Some respondents reported that they simply forget to use the database, so we'll be starting a segment in *FireLines* with database news, reminders, and tips. The Southern Fire Exchange will also host a webinar later this year to help improve awareness of the database and how to best use the search functions. [Click here](#) for a short summary of the survey results.

We are happy to share that the E.V. Komarek Fire Ecology Database and SFE Librarian Specialist Carol Kimball supported efforts to fight the Fort McMurray and northern Alberta wildfires by providing access to recent wildland fire science literature.

The database is regularly updated with new fire science citations, making it an up-to-date resource for locating books, government documents, conference proceedings, journal, magazine, and newspaper articles. For example, the database was updated in April 2016 with 520 new fire science citations.

Not familiar with the Fire Ecology Database? [Check it out here](#)—enter your search terms and locate citations for fire science you need. It is important to point out that the Database and TTRS do not provide online access to most of the publications that are in copyright protected journals, but they do provide links to many others that are openly available through various sources.

SOUTHEASTERN REGION COHESIVE WILDLAND FIRE STRATEGY UPDATE

By Gary C. Wood, Southeastern Regional Coordinator Cohesive Wildland Fire Strategy

Most of the Southeast experienced an increase in wildfire activity in the late spring, with major fires occurring simultaneously across several states. Many of these fires threatened or consumed homes and structures and posed risks to community infrastructure. One of the main priorities of the Cohesive Wildland Fire Strategy is to reduce risks to communities and to lessen the impact of wildfires upon them. In some cases, residents do not think they are at risk of being affected by wildfires in the Southeast and that wildfire is only a problem in other areas of the United States. However, the Southeast has more ignitions annually than any other region, and three of the top five states for acreage and homes in the wildland-urban interface are in the Southeast. Often, our best opportunity for outreach and education related to wildfire risk is immediately after the smoke clears. In addition, communities with higher risk levels are good places to start outreach efforts. Managers and residents can utilize SouthWRAP (Southern Wildfire Risk Assessment Program, www.southernwildfirerisk.com) to identify areas at risk for wildfire, and there are several programs that can help communities prepare for and become more resilient to damage when wildfires do occur. Encouraging communities and residents to initiate activities such as Community Wildfire Protection Plans; Firewise Communities/USA Program; Ready, Set, Go Program; and Fire Adapted Communities will greatly increase public knowledge and provide a structured process for addressing wildfire hazards in the Southeast. In the near future, a revised [Southeast Regional Cohesive Strategy](#) website will support outreach and education efforts by providing useful information to the public and professionals for implementing the Southeast Regional Action Plan. The website is being redesigned to provide resources and information to encourage behavioral changes related to wildfire risk reduction, so that residents can become part of the solution and take ownership in mitigating risk in their communities and to their homes.

NEWS AND REMINDERS

ONLINE BURN REQUEST SYSTEM IN FLORIDA

Florida Certified Burners: In an effort to improve efficiency, the Florida Forest Service now has a web-based open burn authorization system called **WebOBA**, which allows you to go online and place a request for a burn authorization.

NEW DRIPTORCH DIGEST

A new issue of **Driptorch Digest**, the SERPPAS Prescribed Fire Work Group's monthly newsletter, is now available.

MASTICATION PROS AND CONS

Read an informative and interesting blog post by Lenya Quinn-Davidson on the **Fire Adapted Communities website** which discusses management implications that have emerged from recent mastication research.

UNIVERSITY OF IDAHO'S STUDENT TRIP TO FLORIDA

The Nature Conservancy's Disney Wilderness Preserve in Florida recently hosted a group of 10 students from University of Idaho. The students learned about fire ecology and practiced how to safely conduct prescribed fires. Read more on the **TNC website**.

WILDFIRE ARTICLES

Compass Live, the US Forest Service, Southern Research Station's online science magazine posted three interesting articles on wildfire topics in April.

- **The Benefits of Forecasting Human-Ignited Wildfires**
- **The Future of Fire in the South**
- **Wildfire Suppression in 1916**

FIRE LEARNING TRAIL

Check out The Fire Learning Trail—an interpretive trail in Pisgah National Forest near the Linville Gorge Wilderness Area that includes educational signs and an audio tour to introduce visitors to the role of fire in this area. You can listen to the audio portions on the **Consortium of Appalachian Fire Managers and Scientists' website**.



The Southern Fire Exchange is funded through the Joint Fire Science Program, in agreement with the United States Forest Service, Southern Research Station. This institution is an equal opportunity provider.

Congratulations Jim Brenner

Jim Brenner, Florida Forest Service, was presented with the "Excellence in Wildland Fire Management" award at the International Association of Wildland Fire 2016 Fire and Fuels Conference in Portland, OR.

The Management Award recognizes "an individual who has made lasting contributions in program management and inspired others through their creativity, innovation, leadership, application, guidance, and communication in response to challenging and controversial wildland fire management issues." With his numerous contributions to the fire community, including drafting the Florida Prescribed Fire Act, development of a model Certified Burner Program in Florida, and leading countless training sessions, Jim is more than deserving of this award. Many congratulations! To read more about Jim's accomplishments, [click here](#).

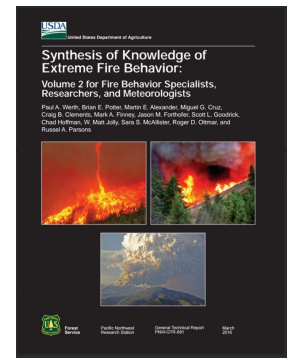


Fuels Treatment Planning

An article in the latest issue of *Fire Ecology* focuses on the Interagency Fuels Treatment Decision Support System (IFTDSS), which integrates several fire and fuels software applications into one web-based program. IFTDSS is designed for fire, fuels, and resource managers who are responsible for planning fuels treatment. The paper provides planners with a summary of how they "can use IFTDSS to identify areas of high hazard and risk, evaluate the potential burning risk and hazard level for valued resources (values at risk) within the area of interest, and simulate the effectiveness of fuels treatments in reducing the potential harm to values at risk." [Click here](#) to read the full article.

Now Available: Volume 2 of Extreme Fire Behavior Synthesis

A new synthesis that connects how weather, fuel, and topographic factors contribute to development of extreme fire behavior is now available. The report summarizes existing science, addresses how that science is currently presented to the fire management community, and provides suggestions for new research areas that can improve firefighter protection. [Click here](#) to access a PDF of the report.



Do You Know about Rhabdo?

Rhabdomyolysis or "rhabdo" is a serious medical condition that all wildland fire professionals should know about so they can recognize the symptoms in the field. Rhabdo is when muscle fibers break down as a result of exercise that is strenuous or different from one's normal routine. Early detection and treatment of the illness can prevent long-term damage and severe health consequences. For this reason, the Wildland Fire Lessons Learned Center is helping wildland fire and medical professionals become aware of and recognize the symptoms for this illness. Check out the **Rhabdomyolysis Awareness and Education** webpage on the Lessons Learned website. You will find an excellent summary with details about the symptoms and a handout to take to medical professionals if you suspect you or a co-worker may have rhabdo. Take a few minutes to check out this information and pass it on to your co-workers.

2015 SFE Annual Report

2015 was a productive year for the Southern Fire Exchange! We developed new partnerships, planned and conducted many events, and successfully completed a three year refunding proposal. As our audiences and partners expanded, so have our opportunities to reach fire and natural resource managers in the Southeast. In addition, we welcomed new members to our Advisory Board and Leadership Team, with the goal of improving programming and leveraging local connections across the region. Read our **2015 Annual Report** to find out what we've been up to!

