



SOUTHERN Fire Exchange

A JFSP Knowledge Exchange Consortium



FIRE LINES

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

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Partner Spotlight: The Association for Fire Ecology

With its founding roots in California, the **Association for Fire Ecology** (AFE) has been working nationally and internationally since 2000 to improve “the knowledge and use of fire in land management through science and education.” Among other activities, AFE is well-known for organizing annual regional and tri-annual international fire ecology conferences, publishing the online journal, *Fire Ecology*, and creating a Wildland Fire Certification Program for fire professionals and educational programs. Regional and student AFE sections are established and run by AFE members. The AFE and the JFSP Knowledge Exchange Consortia share common beliefs that the best available fire science should inform land management decisions and fire practices. For this reason, many consortia leaders are AFE members and leaders, and many partnerships and collaborations among these groups exist.



In the southern region, members from the Southeastern Section of the Association for Fire Ecology have been partners with the SFE since our inception. The Southeast section has partnered to jointly produce *Fire Lines* since early 2011, and the UF Chapter of the Student section (SAFE) has provided exposure to consortium products and events. SFE works closely with AFE to identify opportunities for collaborative activities via upcoming regional and national conferences, shares AFE information with our audiences, and publicizes JFSP opportunities for students in the region (GRIN and TREE grants).

Fire Congress Right around the Corner: Follow on SFE Twitter

By David R. Godwin, University of Florida

The Association for Fire Ecology **5th International Fire Ecology and Management Congress** is coming up December 3-7, 2012. Held in Portland, Oregon this weeklong event will bring together scientists, managers, and students from across the country and globe to discuss the latest research from a wide variety of topics related to wildland fire science, fire ecology, and human dimensions. The conference will kick-off with assorted training workshops on Monday and will conclude with a plenary session on Friday that includes presentations by Stephen Pyne, Matt Rollins, Tom Harbour, and Tom Nichols.



Many of our own Southern Fire Exchange members and staff will be in attendance, making presentations, and helping out with the conference, along with representatives from other JFSP Knowledge Exchange Consortia. For the latest headlines, relevant research results, and live updates from the conference follow our Twitter stream **@SEFireScience** or search Twitter using the hashtag **#firecon12**. We hope to see you there!

CONFERENCE ATTENDEES: DON'T MISS THIS SPECIAL SESSION!

**“The JFSP Knowledge Exchange Consortia: Bridging the Chasm between Management and Science”
Tuesday, December 4, 11 AM to 5:05 PM, Room B111, Moderators Vita Wright and Molly Hunter**

CONTACT INFORMATION

For general questions and to provide feedback, email sfe@ifas.ufl.edu.

Consortium Leads

Leda Kobziar (PI)
 Alan Long (Director, Co-PI)
 Annie Hermansen-Baez (Co-PI)
 Kevin Robertson (Co-PI)
 Joe Roise (Co-PI)

Consortium Staff

Carol Armstrong (TTRS Librarian)
 Chet Buell (IT Specialist)
 John Diaz (Research Assistant)
 David Godwin (Social Media)
 Annie Oxarart (Tech Transfer)
 Justin Shedd (GIS Specialist)

Learn more about our **Partners** and the **JFSP Knowledge Exchange Consortia**.

Visit the SFE Resource Center
www.southernfireexchange.org



SAFE Spreading the Fire Message

By Alexandria Whann, University of Florida

The Association for Fire Ecology’s student partner, SAFE (Student Association for Fire Ecology) has an active chapter at the University of Florida. In early November, the **UF SAFE chapter** took part in the 2nd Annual FireFest event hosted by Paynes Prairie State Park near Gainesville, Florida. UF SAFE joined other organizations like The Nature Conservancy and Florida Fish and Wildlife Conservation Commission to educate and engage the community about the role of prescribed fire and fire ecology in our daily lives. *continued on page 2*

SAFE Spreading the Fire Message *continued from page 1*

Staff and volunteers of Paynes Prairie State Park offered an ecologically educational hay ride to a recently prescribed burned area, and Smokey Bear activities entertained children and adults alike. UF SAFE Vice President Marc Krider and Secretary/Treasurer Alexandria Whann ran the SAFE table and offered free access to publications from the University of Florida, the Southern Fire Exchange, and the Association for Fire Ecology.



PHOTOS BY UF SAFE

Research Breakthroughs in Fuels, Fire Behavior, and Mitigation Treatments

In a special issue of *Forest Ecology and Management*, June 2012 (vol. 273), six papers focused on an evaluation of predicted fire behavior, fuel loading, and consumption modeling using a large inventory data set from the 200,000-acre Savannah River Site in South Carolina. The studies were designed to improve or compare the use of software tools, such as the Fuel Characteristic Classification System (FCCS), LANDFIRE, and the Southern Wildfire Risk Assessment (SWRA), for fuel treatment and fire mitigation planning. The authors assessed the potential of fine scale (<250 ac) fuel inventories for estimating broad-scale fire hazard and predicting fuel treatment effectiveness.

Some of the key conclusions from the papers follow:

1. Fine scale fuel inventories, repeated over time, can be used to assess landscape level fire potential and treatment effectiveness. This capability is particularly important because of the rapid development of vegetation and the short term impacts of many fuel treatment and fire mitigation options.
2. The primary drivers of modeled surface fire behavior vary by forest type, age, and fire history; although litter tends to be a primary driver in many forest types, reducing shrub loading results in reduced flame lengths most consistently across forest types.
3. The FCCS can be used for fuels treatment and fire mitigation planning in the southern Atlantic Coastal Plain by allowing users to access hundreds of fuelbeds developed for the southern U.S. or by creating custom fuelbeds from forest inventory data, as was done at the Savannah River site.
4. A comparison of FCCS, LANDFIRE, and SWRA as fuel data sources for predicting landscape scale fire behavior with FlamMap indicated that predicted fire behavior characteristics were reasonably similar for the three data sources, but potentially important differences exist for rate of spread, burn probabilities, and passive crown fire estimates.
5. Modeling results suggest that fuel treatments (e.g., thinning, mastication, prescribed fire, herbicides) reduce reaction intensity, rate of spread, and flame length by over 50%, with equally significant reductions in fuel consumption and emissions. The key to the reductions are using prescribed fire in combination with mechanical and chemical treatments.
6. The FCCS can be used to assess fuel treatment effectiveness by predicting fire behavior for custom fuelbeds that represent specific fuelbed treatment options.

These studies represent a major step forward in quantifying fuel variability and its influence on predicted fire behavior in these southern wildland fuels. Additional research to evaluate actual fire behavior in these fuelbeds will help elucidate the accuracy and precision of modeled fire behavior predictions presented in the research.

UPCOMING EVENTS

Visit the [SFE Calendar](#) and the [JFSP Calendar](#) to learn more about upcoming workshops, trainings, webinars, field trips, demonstrations, and other professional development opportunities. To add an event to our calendar, send the event information to sfe@ifas.ufl.edu.

Webinars

Effects of Prescribed Burns in the Southern Appalachians
November 29, 2012
1:00 to 2:00 pm (EST)
Host: **TNC Fire Learning Network**

Overview of the Facilitated Learning Analysis
January 17, 2013
3:00pm to 4:00pm (EST)
Host: **LLC-IAWF-JFSP**

Conferences

AFE Fire Ecology and Management Congress
December 3-7, 2012
Portland, Oregon

Tallgrass Prairie and Oak Savanna Regional Fire Conference
Jan 29-31, 2013
Dubuque, Iowa

IAWF 4th Fire Behavior and Fuels Management Conference
February 18-22, 2013
Raleigh, North Carolina

Workshops and Trainings

Workshops at AFE Fire Congress
December 3, 2012
Portland, Oregon

Southern Blue Ridge FLN
December 12, 2012
Asheville, North Carolina
Information: Margit Bucher (mbucher@tnc.org) or Beth Buchanan (bbuchanan@fs.fed.us)

Workshops at Fire Behavior and Fuels Conference
February 18, 2013
Raleigh, North Carolina

Prescribed Fire and Indiana Bats
April 16-17, 2013
Robbinsville, North Carolina

REMINDERS AND NEWS

SFE REFUNDING PROPOSAL

We are preparing a proposal to JFSP to continue the SFE another two years. We welcome your short email comments on how you have benefited from the SFE in the last 3 years. Just drop us a line at sfe@ifas.ufl.edu.

JOB OPENING: PRESCRIBED FIRE EXTENSION ASSISTANT

NCSU is accepting applications for an [extension and outreach position](#) to implement the Comprehensive Strategy for Prescribed Fire to Restore Longleaf Pine in the Southeast.

SMOKE SCIENCE PLAN: THE PATH FORWARD

This new [JFSP Fire Science Digest](#) presents a detailed path forward, and a focused, integrated research agenda that is responsive to the needs of land resource managers and air quality regulators.

SAVE THE DATE! WILDLAND FIRE IN THE APPALACHIANS

October 8-10, 2013

Roanoke, Virginia

More information and a call for papers will be posted soon on www.cafms.org and fireecology.org.

FALL ISSUE OF TWO MORE CHAINS

This issue of the [Lessons Learned Center newsletter](#) takes a deeper look into why firefighters keep getting injured and killed in driving and flying accidents.

FIRE IN WETLANDS RESOURCES

Did you miss the SFE webinar in early October? You can view the [archived version](#) on the FRAMES website. Find out more about the topics discussed by Dr. Watts during the webinar in the fact sheet, [Cypress Mortality Following Wildfires](#), and in a new research synthesis, [Smoldering Combustion in Organic Soils](#).

FIRE LINES CONTRIBUTIONS

Send your fire-related news, field stories, or photos to Annie Oxarart (oxarart@ufl.edu) to be included in future issues of *Fire Lines*.

Five Reasons to Attend the International Association of Wildland Fire, Fire Behavior and Fuels Conference

Raleigh, North Carolina, February 18-22, 2013

1. Workshops

You can choose from [eighteen workshops](#) on Monday, February 18. Workshop topics range from NWCG's RX-310 (Introduction to Fire Effects) to basic use of BehavePlus and smoke models for prescribed fire planning to new, highly technical smoke dispersion models.

2. Fire Art Exhibit and Competition

SFE team member Dr. Joe Roise is helping to organize a great conference event—*Expressions of the Beauty and Danger of Fire*. Artists are invited to enter any form of art (e.g., textile, painting, wearable, photos, ceramics, collage, poetry, sculpture, carving) for display and take part in the competition. Check the [conference website](#) for details coming soon.

3. Presenter Line-up

[Excellent speakers](#) are scheduled for keynote and plenary presentations, and the concurrent sessions will be filled with many choices to meet your fire science information needs! Make sure to check the conference website for the [program](#), which will be available soon.

4. Field Trips

To get you out of the convention center, two [field trips](#) are being offered. A full day field trip is scheduled for Friday, February 22 to the [Marine Corps Base at Camp Lejeune](#). The agenda is packed with great speakers and topics. You can also go on a 2-hour field trip that is being offered at four different times to the [North Carolina State University College of Textiles, T-PACC](#) to examine the equipment and methodology involved in the development and testing of PPE.

5. It's in Our Backyard!

This is a rare opportunity, close to home for the southern fire community, to combine professional development training and a top notch international conference on topics and issues directly related to your job. SFE members will be making presentations on cutting edge research results in southeastern ecosystems, and will share the results of the SFE survey on prescribed burning and wildfire distributed last fall.

Don't forget: [Early registration](#) ends on January 18, 2013.

If you can't be in Raleigh, consider attending virtually. The conference will be streamed live and participants can view presentations and participate in discussion at a considerably lower cost than being in Raleigh. All presentations will also be available, on demand, for viewing at a later date, for those who register for the [virtual conference](#).

Cohesive Strategy Update

Stay up-to-date about southeastern activities related to the Cohesive Strategy by reading the monthly updates from the [Southeastern Regional Strategy Committee](#). Each month's update also features a southern success story.

- * [November Update](#)
- * [Success Story: Merritt Island National Wildlife Refuge Hazardous Fuels Treatment Program](#)
- * [October Update](#)
- * [Success Story: Arbor Day Foundation Restoration Planting](#)

SFE Handouts Available!

We can provide free copies of our fact sheets for your next workshop or training! You can see a full line-up of our available [factsheets on the SFE website](#). We also have a [new SFE brochure](#) that you can use to help spread the word about the SFE mission and activities. If you are interested in ordering copies of fact sheets or the brochure, please contact Annie at oxarart@ufl.edu.



Wishing you a joyous holiday season!
~The SFE Team