



SOUTHERN Fire Exchange

Uniting Fire Science and Natural Resource Management



FIRE LINES

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Is Precision Hurting Conservation?

The authors of a recent opinion article published in *Trends in Ecology and Evolution* (Hiers et al. 2016) argue that highly specific requirements for natural resource management are hurting the very species that they aim to conserve, while simultaneously constraining the ability of land managers to make local decisions and adapt to changing conditions. The authors suggest that highly precise habitat requirements—such as those originally used to describe suitable Red-cockaded woodpecker habitat—devalue “marginal” habitat, decrease landscape heterogeneity, and limit options for land managers. The authors further argue that by discouraging variability in habitat objectives, precise policies and prescriptions can stifle critical innovation in conservation approaches, which could ultimately reduce the ability of species and ecosystems to persist through changing climatic conditions and disturbance regimes.

“...artificial precision based on insufficient information led to management practices that worked against species conservation.”

Are you interested in further discussion of the implications of precision on southeastern fire management? Join the lead author Kevin Hiers for a related SFE Webinar on July 13, 2017 at 1:00 PM ET entitled “Exorcising Natural Fire Precisionism in Southeastern Fire Management.” Registration information will be posted soon on the [SFE website](#).

Are Oaks Actually Helping Longleaf to Survive?

Deciduous midstory oaks were found to actually facilitate the survival of young longleaf pine (*Pinus palustris*) seedlings in xeric sandhills of the southeastern U.S. New research published in the open-access journal *Ecosphere* (Loudermilk et al. 2016) suggests that the presence of midstory oaks on xeric sandhill sites can significantly improve microsite conditions for young (< 2 year old) longleaf pine seedlings by reducing soil temperature and lowering moisture loss due to evaporation. Where midstory hardwood densities ranged from 43 stems ha.⁻¹ to 1400 stems ha.⁻¹ (17 – 567 stems ac.⁻¹) researchers found that young longleaf pine seedlings had higher survival rates compared to more open canopy sites. While hardwoods are often removed as part of longleaf pine ecosystem restoration, the researchers suggest that deciduous midstory oaks may play critical and largely under-appreciated *facilitative* roles in mitigating moisture stress for young longleaf pine seedlings on xeric sites and even on mesic sites during droughts of varying length. Over longer time-scales, the researchers suggest that understanding and managing for the facilitative roles of native midstory oaks may be important for longleaf pine forest sustainability during droughts, wildfires, and hurricanes.



Photo by David Godwin, SFE Program Coordinator

To learn more and to chat with the researchers who led this study, join us Wednesday, August 23, 2017 for a Southern Fire Exchange Webinar with Dr. Louise Loudermilk from the USFS Southern Research Station. Registration information will be posted soon on the [SFE website](#).

RxScience Launches with Collaborative Burn Event at Tall Timbers

A new [Prescribed Fire Science Consortium](#) (RxScience) of land managers and fire science researchers from around the country are collaborating to focus specifically on prescribed fire science needs. In April, the group gathered at Tall Timbers Research Station and Pebble Hill Plantation in North Florida and South Georgia for a week of research prescribed burns. These collaborative burns allowed managers and researchers to work side by side to test new research equipment, develop new fire and smoke models, and collect data designed to improve our understanding of wildland fire. [Click here to view a video](#) of the burn and an interview with Dr. Eric Rowell, University of Montana, discussing the importance of manager and researcher interactions.

CONTACT INFORMATION

For questions and feedback, email contactus@southernfireexchange.org

Exchange Leads
 Alan Long (Director, PI)
 Joseph O'Brien (Co-PI)
 Kevin Robertson (Co-PI)
 Joe Roise (Co-PI)

Exchange Staff
 Chet Buell (IT Specialist)
 David Godwin (Program Coordinator)
 Carol Kimball (TTRS Librarian)
 Annie Oxarart (Outreach Specialist)

Learn more about our [Partners](#) and the [JFSP Fire Science Exchange Network](#).

Visit the SFE Resource Center www.southernfireexchange.org



JFSP Budget in a Hot Spot

The nationwide Fire Science Exchange Network, including the Southern Fire Exchange, is severely threatened by proposed cuts to the federally funded Joint Fire Science Program (JFSP). Through an annual competitive grant program and the Fire Science Exchange Network, the JFSP has been a leading driver of applied fire science research, tool development, and science delivery since 1999. With an annual budget (\$13 million) that represents less than the cost of many Type I Incidents (West Mims Fire \$45 million and counting), JFSP is a major nationwide program dedicated to identifying, creating, and delivering use-inspired wildland fire science to solve on-the-ground fire management problems. The Southern Fire Exchange and the other members of the Fire Science Exchange Network operate off of three year grants from the JFSP. The JFSP is funded jointly by the US Forest Service (USFS) and the Department of the Interior (DOI). In the President's FY18 proposed federal budget released at the end of May, the JFSP would receive only \$3 million from the DOI and no funds from the USFS. The impacts of this proposed 77% funding cut could be disastrous for the Fire Science Exchange Network and could delay or forego numerous fire science research projects across the country. If you value the Southern Fire Exchange, the Fire Science Exchange Network, and the research funded by the JFSP, we encourage you to be proactive in voicing your

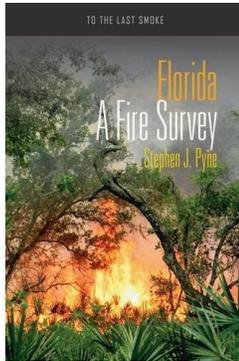
concerns with your Congressional representatives and other appropriate organizations or programs.



FIRESCIENCE.GOV
Research Supporting Sound Decisions

A New Perspective on Fire Management: Florida: A Fire Survey by Stephen J Pyne

Review by Alan Long, SFE Administrative Director
Several years ago, highly acclaimed author Stephen Pyne began a new series of short books on fire in key regions around the country, titled *To the Last Smoke*. His first book in the series, released last year, focuses on Florida. If you are asking yourself, "Why start with Florida?" you will know exactly why by the time you finish reading. In a style unique to his writing, Pyne mixes history, fire management practices and programs, policies, personal stories of key individuals, and his own scintillating insights to distill a must-read for anyone interested in why Florida, and more generally the Southeast, are at the forefront of wildland fire.



Pyne traveled from one end of the state to the other, interviewing fire and natural resource managers, collecting stories and documents, and piecing together the rich and intriguing story of the evolution of fire in Florida's settlement, development, and current programs. From Eglin Air Force Base at the west end of Florida to Tall Timbers Research Station and Tallahassee to Merritt Island National Wildlife Refuge on the Space Coast to the Everglades at the South end, and many points between, Pyne constructs a fascinating, in-depth evaluation of the evolution of today's fire culture and management in the state, and its leadership in the national wildland fire community.

After living in Florida for 30 years, I thought I knew a little about the history and ecology of fire in the state. *Florida: A Fire Survey* took me far beyond my woefully inadequate understanding and instilled a much richer appreciation for the men and women across Florida who have helped weave the fire tapestry in the region today. The book is available from the University of Arizona Press (<http://www.uapress.arizona.edu/Books/bid2595.htm>). In addition to the book, you have the opportunity to hear Pyne as one of the Plenary Speakers at the 7th International Fire Ecology and Management Congress in Orlando the last week in November this year (<http://afefirecongress.org>). In addition to posters and oral presentations, the Congress will feature a variety of workshops, training opportunities, field trips and fire circles (aka round table discussions). Mark your calendar now! There is still room for additional training workshops and fire circles if you have a topic to share with other fire managers in the region. Contact Alan Long (ajl2@ufl.edu) for more information.

UPCOMING EVENTS

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

PFC Meetings

Alabama PFC Annual Meeting

September 6, 2017
Canton, AL

North Carolina PFC Annual Meeting

September 6-7, 2017
Asheville, NC

Kentucky PFC Annual Meeting

September 11-13, 2017
Greenville, KY

Georgia PFC Annual Meeting

September 28, 2017
Tifton, GA

South Florida Interagency Fire Management Council

October 24, 2017
West Palm Beach, FL

Louisiana PFC Annual Meeting

October 26, 2017
Alexandria, LA

Webinars

Wildland Fire Smoke and Roadway Visibility Series

- June 15, 1pm EDT: Superfog
- June 22, 1pm EDT: Weather Information and Tools
- June 29, 1pm EDT: PB – Piedmont, Superfog Potential, and Estimated Smoldering Potential

Integrating Natural Hazard Mitigation Plans and Community Wildfire Protection Plans

June 23, 1pm EDT

Exorcising Natural Fire: Precisionism in Southeastern Fire Management

July 12, 1pm EDT

**Save the Date; registration coming soon*

The Path Back: Oaks Facilitating Longleaf Pine Seedling Success on Xeric Sites

August 23, 1pm EDT

**Save the Date; registration coming soon*

Key SFE Team Member Takes on New Role with the Association for Fire Ecology

Since SFE began in 2010, University of Florida team member Annie Oxarart has been the irreplaceable link in our team that always kept programs moving forward with her thoughtful leadership, impeccable organizational skills, exceptional writing, positive spirit and 125% dedication to science delivery. She has likely communicated with many of you at different times over the years to answer your questions and encourage your participation in SFE. She has faithfully and skillfully produced this *Fire Lines* newsletter every two months and her evaluation expertise has helped us to critically analyze our programs and continually strive for improvement. We're now proud to share that Annie is the new full time Administrative Director for the Association for Fire Ecology, a position that comes with major responsibilities for the AFE Fire Congress coming up in November. Annie – we will miss you!! But we know you are going to do amazing things in your new role as you continue to serve the fire management community and we look forward to seeing you in Orlando.



Annie Oxarart, SFE Outreach Specialist, with Alan Long, SFE Administrative Director, in 2015

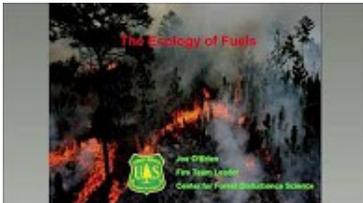
Recent SFE Webinars Available on YouTube

If you missed any of our recent webinars, you can catch up by watching the archived versions at your convenience. Thanks to our presenters and to everyone who was able to join us!



An Assessment of Temperature and RH from a Variety of Weather Meters

Chuck McHugh with the USFS Rocky Mountain Research Station presented the results of an innovative study comparing measurements of temperature and relative humidity using Kestrel® meters versus measurements using a sling psychrometer.



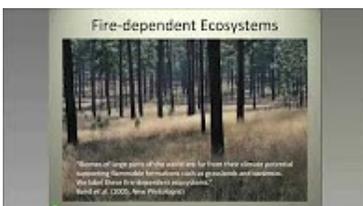
The Ecology of Fuels

Dr. Joe O'Brien with the USFS Southern Research Station discussed examples from southeastern U.S. fire ecology to highlight the complex relationships linking forest structure, natural fuels, and wildland fire.



Historical Fire and the Species that Coevolved with it in the South

Dr. Cecil Frost, Landscape Fire Ecologist, shared detailed maps of pre-colonial fire frequency for sites in the southeastern U.S. and discussed opportunities for regional fire management strategies now and in the future.



How Important is it to Mimic Natural Fire Regimes in the SE Coastal Plain

Dr. Reed Noss, University of Central Florida, discussed natural fire regimes for the southeastern Coastal Plain and how current management practices may or may not mimic important aspects of those fire regimes.



Next Generation Fire Modeling for Advanced Wildland Fire Training

James Furman, U.S. Forest Service Liaison to the Air Force Wildland Fire Center, and Brett Williams, Eglin Air Force Base Wildland Fire Center, introduced FIRETEC and discussed the model simulations, which were designed by fire managers to answer important fire behavior questions and challenge assumptions.

UPCOMING EVENTS CONT'D

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

Trainings

S-131 Firefighter Type 1 Training

June 13, 8am to 5pm EDT
Gainesville, FL

Longleaf Academy: Herbicides & Longleaf

June 13-15, 2017
Tuskegee, AL

S-215 Fire Operations in the Wildland/Urban Interface

June 14-15, 8am to 5pm EDT
Gainesville, FL

Basic Wildland Firefighter Training, S-130/190

August 15-18, 2017

Gainesville/Melrose, FL

Prescribed Burn Certification Class

August 1-4, 2016

Auburn, AL

Workshops and Conferences

Fire and Forest Management

September 29, 2017

Tullahoma, TN

Natural Areas Conference

October 10-12, 2017

Fort Collins, CO

4th Biennial Shortleaf Pine Conference

October 3-5, 2017

Galloway, NJ

Sustaining Oak Forests in the 21st Century through Science-based Management

October 24-26, 2017

Knoxville, TN

Society of American Foresters National Convention

November 15-19, 2017

Albuquerque, NM

2017 AFE International Fire Congress

November 28-December 2, 2017

Orlando, FL

NEWS AND REMINDERS

TESTING FIRE SHELTERS

Learn about North Carolina State University's research to improve fire shelters and their recent field tests in this short article, complete with a video and photos.

NEW DRIPTORCH DIGEST

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

FLORIDA FIRE INFORMATION APP

FLBurnTools is a new mobile app to inform the public about drought, wildfire danger and wildfire activity. Prescribed burn practitioners can also use the app to plan and submit authorization requests. The app has the following tools: drought information, interactive fire maps, wildfire information, burning authorization requests, smoke dispersion models, and spot weather forecasts.

SE REGION COHESIVE STRATEGY NEWSLETTER

The Southeast Region Strategy Committee's *May newsletter* highlights progress of the Cohesive Strategy and demonstrations of success across the Southeast.

60 MINUTES

The 60 Minutes report, *Why Fighting Wildfires Often Fails--And What To Do About It*, by Steve Inskeep aired on May 28th and provides a great overview of the challenges of fighting wildfires in the wildland-urban interface and actions residents should take to protect their homes.

DROUGHT AND FIRE

The USDA Natural Resources Conservation Service produced an interesting storymap titled *Drought and Fire* to share information on how landowners in Florida are reducing wildfire risk by using prescribed fire on their property.

SOCKS MATTER

A recent post on the *Wildland Fire Lessons Learned Center blog* describes how over the boot wool socks can protect your legs from drip torch burns. It is a quick, interesting, and helpful read.

APPLY NOW FOR 2017 AFE CERTIFICATION

If you are planning to apply for the Association of Fire Ecology's 2017 *Wildland Fire Professional Certification* or the *Wildland Fire Academic Program Certification*, make sure you get your application in by the July 1 deadline.



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.

AFE Fire Congress: Registration is Open!

FireVision 20/20: A 20 Year Reflection and Look into the Future

November 28 - December 2, 2017 | Orlando, Florida

Registration recently opened for the *7th International Fire Ecology and Management Congress*, which will be held November 28 - December 2, 2017 in Orlando, Florida. This event, hosted by the Association for Fire Ecology in cooperation with the Southern Fire Exchange, will feature a wide variety of presentations, posters, training workshops, field trips, special sessions, attached meetings, and group discussions. A *tentative schedule* is available, along with a list of *plenary presenters*, a great line-up of *Saturday field trips*, and *workshops* that will be offered throughout the week. Register soon to get early bird registration rates!



In addition, there are several opportunities to participate directly in the conference by submitting a proposal to host a workshop or training, lead a small group discussion, be a presenter, or organize an attached meeting. Click on the links below for instructions and submission forms.

- ⇒ [Call for Workshops, Trainings, and Courses \(that do not require pre-requisites or pre-registration\)](#) ~ July 1, 2017 (extended)
- ⇒ [Call for Interactive Fire Circles](#) ~ Deadline August 1, 2017
- ⇒ [Call for Oral & Poster Presentation Abstracts](#) ~ Deadline August 1, 2017 for Oral Presentations and September 15, 2017 for Poster Presentations
- ⇒ [Call for Attached Meetings](#) ~ Deadline September 15, 2017

Coming Soon! June Smoke Webinar Series

Join us this June for a free three part webinar series from the NWCG Smoke Committee, The Nature Conservancy, the Southern Fire Exchange, and the Montgomery County Community College NC Prescribed Fire Training Center. Registration is not required, and you are welcome to participate in all three webinars or watch them individually.

Wildland Fire Smoke and Roadway Visibility: Predict, Prepare and Avert Accidents

Part 1: Superfog

June 15, 1:00 - 3:00 PM ET

Presented by Gary Achtemeier, former Research Meteorologist USFS Southern Research Station – Retired

Part 2: Weather Info and Tools

June 22, 1:00 - 3:00 PM ET

Presented by Gary Curcio, former Fire Environment Branch Head NC Forest Service – Retired

Part 3: PB Piedmont, Superfog, and Smoldering Potential

June 29, 1:00 - 3:00 PM ET

Presented by Matt Fearon, Research Meteorologist, Desert Research Institute

Click here for more information on each webinar and for the links to join.