FIRE LINES

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

July 2011 Volume 1 - Issue 6

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Visit the SFE Resource Center www.southernfireexchange.org







Back Fires Sequester More Carbon than Head Fires

Interesting recent research points out one more way by which back and head fires differ. Charcoal, or black carbon, is the solid charred residue on the outer surfaces of woody fuels that are not completely consumed during combustion. This pyrogenic carbon is fairly resistant to decomposition and may contribute to stable soil carbon pools, albeit in very small amounts. A study in a mesic flatwoods ecosystem in north Florida addressed the question of whether standard prescribed fire ignition patterns affect charcoal production on standard blocks of wood (1.5" x 1.5" x 4"). After exposure to either a heading or backing fire, the char was scraped off the surface of each block and measured. Backing fires resulted in almost four times as much charcoal as heading fires (1.53% vs 0.38% of available biomass). This difference is likely caused by characteristics of backing fires: longer residence times, less oxygen availability at the fuel surface, and lower fire intensities. The numbers are small, but have an interesting implication for slightly more carbon sequestration with back fires than with head fires, IF the charcoal is not reignited and consumed in subsequent burns.



PHOTO BY LEDA KOBZIAR

For more detail, see Carvalho, E., L. Kobziar, and J. Putz. 2011. Fire ignition patterns affect production of charcoal in southern forests. International Journal of Wildland Fire, 20: 474-477.

Climate Change and Wildfire in the South

USDA Forest Service researchers at the Southern Research Station (SRS), Center for Forest Disturbance Science, are gaining new insights into how climate changes may influence future wildfire patterns in the Southeast. A recent article in *Compass*—a quarterly SRS publication—provides an overview of this research, conducted by Scott Goodrick, Yongqiang Liu, and John Stanturf. In short, predicted warming and drying trends are expected to increase fire potential, extend the fire season, and alter fuel loads. Among other management implications, these results suggest the use of prescribed fire to reduce wildfire risk will become even more important as we plan for many changes on the horizon.

Click here to read the full article (Andrew, S. 2011. More fuel for fire? *Compass*, 18: 18-19. USDA Forest Service, Southern Research Station).

Mega-fires Conference

The 1st Forest Ecology and Management Conference will be held in Tallahassee, Florida this fall (November 14-17). *Exploring the Mega-Fire Reality 2011* will communicate international research on topics such as: why the frequency of mega-fires is increasing; why mega-fires require special understanding and approaches; perspectives and lessons learned from around the world; and choices and options before and after mega-fires. An optional field trip to Tall Timbers Research Station will include presentations on fire management history in the Southeast and field visits to well-known research locations. Interested in presenting? It is not too late. Abstracts for posters are still being accepted. Visit www.megafirereality.com for more information. Early bird registration ends September 2.

To learn more about mega-fires, potential causes, and responses, read The Perfect Firestorm—recently published in *Audubon* magazine.

Partner Spotlight: The Prescribed Fire Training Center

The National Interagency Prescribed Fire Training Center (PFTC) trains fire professionals from around the country through trainings, workshops, and courses held year round. Since its establishment in 1998, the PFTC has become the nation's top hands-on training facility, excelling in its mission "to provide opportunities for federal, state, local, and tribal government agencies and other organizations to build skills and knowledge of prescribed fire, with an emphasis on field experience."



PHOTO COURTESY OF PFTC

The US Forest Service, US Fish and Wildlife

Service, US Bureau of Land Management, US National Park Service, US Bureau of Indian Affairs, Florida Forest Service, and The Nature Conservancy make up the interagency partnership. While the PFTC is stationed in Tallahassee, Florida, cooperators throughout the Southeast provide opportunities for participants to burn in different settings, with multiple partners and agencies, for a variety of management objectives. Both in the field and classroom, participants are given ample time to interact one-on-one with experienced prescribed burners who offer their guidance and expertise.

Week-long workshops and 21-day training sessions for FY 2012 have been announced, and applications are due early this fall.

- The Prescribed Fire Workshop for Agency Administrators provides experience for effectively managing the implementation of an integrated fuels management program. This workshop is scheduled for November 13-19, 2011; applications are due September 16.
- The Prescribed Fire Workshop for Resource Specialists provides experience in planning and implementing prescribed fire to meet resource objectives. This workshop is scheduled for December 4-9, 2011; applications are due September 30.
- Five 21-day training sessions will be offered from January to June 2012. Participants will increase their prescribed fire skills and learn how to assume leadership roles in their home unit's fire program. Applications for all sessions are due October 14.

For more information, including training descriptions and applications, visit: www.fws.gov/fire/pftc.

On the Reading List

Conducting Prescribed Fires: A Comprehensive Manual by John Weir, 2009. As a highly experienced prescribed burner in Oklahoma, John Weir wrote this instruction guide to "fill a gap in the fire literature" and to provide "an in-depth explanation of the requirements for conducting prescribed fires." Weir covers topics ranging from law, policy, and public relations to fire prescriptions, ignition methods, and smoke management. The book is written to provide new and up-to-date information for both novice and experienced burners. To read Brian Oswald's review of this book in *Fire Ecology*, click here.

America's Fires: A Historical Context for Policy and Practice by Stephen Pyne, 2010. In this revised edition, Stephen Pyne reviews the historical context of fire use, issues, and policies in the US. Concluding with suggestions and ideas for how we can better live with and manage fire, this book was recommended by Steven Anderson, Forest History Society, as background reading for the recent opportunity to provide regional input to the National Wildland Fire Management Cohesive Strategy. To read a review of this book by Ray Strang in BC Forest Professional, click here.

SFE Mini-grant Application Now Available

Applications for the Southern Fire Exchange mini-grant program are now being accepted! The mini-grant program will support the production of research syntheses, webinars, and fact sheets on high priority topics related to wildland and prescribed fire. Interested applicants can find program details and download the application on the SFE Resource Center, under *About SFE*.

UPCOMING EVENTS

Visit the SFE Calendar to learn more about upcoming workshops, trainings, field trips, demonstrations, and other opportunities. To add an event to our calendar, please send the event information to sfe@ifas.ufl.edu.

SFE Fall Webinar Series

Hosted by the Forestry and Natural Resource Webinar Portal

Using the SFE Resource Center September 28, 12pm to 1pm (EDT)

Using Smoke Prediction Models
October 19, 12pm to 1pm (EDT)

Prescribed Fire and the Public November 16, 12pm to 1pm (EDT)

Interagency Fuel Treatment
Decision Support System
December 14, 12pm to 1pm (EDT)

Prescribed Fire Council Meetings North Carolina PFC Annual Meeting August 16-17, 2011

Wilkesboro, North Carolina

Georgia PFC Annual Meeting September 29, 2011 Tifton, Georgia

South Carolina PFC Annual Meeting September 29, 2011 Florence, SC

Workshops

Smoke Management Workshop

August 24, 2011 Charlottesville, VA

Fuel Management Workshop SFE, UF, and CFEOR September, 2011 (Date TBA) Olustee, Florida

Conferences

2nd Annual Shortleaf Pine Conference

September 20-22, 2011 Huntsville, Alabama

9th Symposium on Fire and Forest Meteorology October 18-20, 2011 Palm Springs, California

38th Annual Natural Areas Conference

November 1-4, 2011 Tallahassee, Florida

Exploring the Mega-fire Reality Conference

November 14-17, 2011 Tallahassee, Florida