## 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 Knowledge Exchange Consortia.

Visit the SFE Resource Center www.southernfireexchange.org







## **BMPs for Community Wildfire Protection Planning**

Many communities are proactively managing their wildfire risk by working with emergency management and land management agencies to develop Community Wildfire Protection Plans (CWPPs). To learn from these communities, scientists from the US Forest Service and from universities across the country conducted case study research in 13 wildland-urban interface communities. A USFS report, Best Management Practices for Creating a Community Wildfire Protection Plan, summarizes the findings around six best management practices (BMPs) that emerged from the case studies: local context, community capacity, networks, framing, scale, and long-term successes.

The December 2012 issue of the *Journal of Forestry* includes an article on this research and focuses on the three BMPs considered to be most important and most challenging for local communities:

- 1. Framing: The perspectives and objectives through which wildfire issues are viewed and the CWPP is framed can impact planning and the people involved. Plans with multiple, flexible frames (e.g., emergency response time, hazard reduction by homeowners) are more easily adapted to meet new conditions, reflect local values and concerns, and engage many diverse people in the process.
- 2. Planning Scale: CWPPs were developed at the neighborhood, town, multiple town, or county level. Scale is highly connected to the CWPP frame and goals, and it is important to choose a scale where participants can make things happen.
- 3. Long-term sustainability: The planning process can affect the long-term success of the CWPP. Case study data suggest three main strategies for implementing and sustaining the CWPP, which include "(1) institutionalizing the CWPP, (2) nesting plans in larger planning efforts, and (3) establishing early success in project implementation."

This research was also the topic of a webinar last fall hosted by the California Fire Science Consortium and presented by Dr. Pamela Jakes, US Forest Service. You can view the archived version of the webinar on the Consortium's website to learn more about the case studies and the BMPs.

For the full JOF article, see Williams, D., Jakes, P., Burns, S., Cheng, A., Nelson, K., Sturtevant, V., Brummel, R., Staychock, E., & Souter, S. (2012). Community wildfire protection planning: The importance of framing, scale, and building sustainable capacity. *Journal of Forestry*, *110*(8), 415-420. This article will soon be available for download on TreeSearch and can be found using the author's name in the search engine.



The Bugaboo Fire, 2007. Photo by US Forest Service.

The case study conducted in the small town of Taylor, Florida provides an example of how the CWPP was connected to the local community context through heavily involving the local church in the process. The Florida case study also provided interesting insights regarding whether a CWPP makes a difference during or after a wildfire: the community attributes their safety during the 2007 Bugaboo Fire to the plan's fire break that encircles the town and provided a staging area for fire crews.

### **Partner Spotlight: Southern Group of State Foresters**

The Southern Group of State Foresters (SGSF) Fire Chiefs meet semiannually to discuss a variety of issues related to wildland fire operations in the 13 southern states, and for updates from federal and other partners (such as SFE). Topics include seasonal weather, state and federal fire issues and plans, SGSF projects such as "One Message, Many Voices" and the Southern Wildfire Risk Assessment, task force and committee reports and actions, Cohesive Strategy implementation, new research and technology highlights, and others. Their primary goal is to facilitate efficient fire management operations on all lands across the



southern region. They are a key partner for SFE as they provide a major link to the state wildland fire agency people and provide helpful advice and feedback to our programs, as well as assistance with some of our collaborative projects. Several of them serve on our Advisory Board and Steering Committee. The Fire Chiefs are an excellent example of the collaboration and cross-agency support that characterize the southern fire management community.

### **Workshop Summary: Monitoring Trends in Burn Severity**

The Monitoring Trends in Burn Severity (MTBS) workshop at the 5<sup>th</sup> International Fire Ecology and Management Congress last December presented a great introduction to a nationwide fire effects mapping program that can benefit southern wildland fire managers and researchers. The MTBS program was established in 2004 as a joint project between the US Forest Service and the US Geological Survey to study and characterize burn severity and environmental effects of wildland fires across the country. Utilizing 30m resolution images from the Landsat satellite archives, the MTBS program has since mapped burn severity for all fires in the western US over 1000 acres and all fires in the eastern US over 500 acres for the period 1984-2010.

Amazingly, all of the products developed in the mapping project are available for free through the MTBS Data Access website. Within the MTBS archive, mapped fires are separated by date, name, state, location, type (prescribed fire, wildfire, wildfire use), size, and administrative unit. Using these parameters allows users to download the data for an individual fire or for all fires within a given area and timeframe. For each fire, satellite derived fire perimeter and thematic maps of burn severity (unburned, low, moderate, high, and increased greenness) are available as shapefiles (.shp) for easy integration into ArcGIS and as .kmz files for rapid visualization in Google Earth.

While the results of this ongoing effort are impressive, there are some notable limitations as MTBS mapping products were largely developed using algorithms and centrally-located mapping specialists. Given this, MTBS program administrators encourage all users of the data to conduct their own ground assessments of burn severity classes and fire perimeters to assess the accuracy of the MTBS data.

## **Gearing Up for the 2013 Fire Behavior and Fuels Conference**

We hope to see many of you at the upcoming IAWF conference in Raleigh, North Carolina from February 18-22. A detailed program of conference presentations is now available so you can start planning your conference activities. Several SFE team members will be making presentations on a variety of topics including prescribed fire effects on wildfire, fire suppression and soil CO<sub>2</sub> efflux rates, and PM2.5 emission factors. In addition, Monday is devoted to professional development and training workshops on topics ranging from smoke and fire behavior models to human dimensions. Register here for one or more of these excellent training opportunities and the rest of the conference. Make sure to stop by the SFE booth in the exhibit hall to say hello and provide feedback, pick up fact sheets, and enter to win a fleece SFE vest.

A Quiz Bowl will be conducted on Monday evening, February 18 at 6:00 PM. The goal is to provide a spirited competition among students from different schools and allow both the participants and the audience to gain a better knowledge of Wildland Fire Science's finer points. Click here for more information and to register.

Finally, don't forget about the Fire Art Exhibit and Competition. There is still time to complete the entry form to enter your artwork, but do it now—the deadline is January 30.

#### **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

Using LiDAR to Map and Assess Forest Structure

January 25, 2:00pm to 3:00pm (EST) Host: TNC Fire Learning Network

#### **Conferences**

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

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

Wildland Fire in the Appalachians Conference

October 8-10, 2013 Roanoke, Virginia

2013 Backyards and Beyond Wildland Fire Education Conference

November 14-16, 2013 Salt Lake City, Utah Call for Presentations: February 15, 2013

#### **Workshops and Trainings**

Workshops at Fire Behavior and Fuels Conference

February 18, 2013 Raleigh, North Carolina

Ignition Planning and Prescribed Fire Techniques for Wildlife

March 18-21, 2013 West Palm Beach, Florida

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

#### **NEWS AND REMINDERS**

#### **SE COHESIVE STRATEGY**

Contribute before February 1<sup>st</sup> to the new request for priorities for the Southeast Wildland Fire Management Cohesive Strategy.

## SUMMER INTERNSHIPS FOR STUDENTS

Student internship opportunities for summer 2013 were recently announced by our partners at The Nature Conservancy of North Carolina and at Tall Timbers Research Station and Land Conservancy.

## SOUTH CAROLINA PROPERTY AND FIREFIGHTER PROTECTION BILL

The December update from the Southeastern Regional Strategy Committee included a new southern success story that shares how the Property and Firefighter Protection Bill was created and passed by the SC General Assembly in July of 2012.

## ELECTRIC FIRE: FIREFIGHTER SAFETY AROUND POWER LINES

A free 20-minute video is available online that provides information for safety practices for wildland firefighters and prescribed fire practitioners who may be working near electrical power lines.

## NATIONAL PARK SERVICE SEASONAL POSITIONS

The National Park Service is accepting applications for temporary employees to work on a variety of wildland firefighting crews nationwide.

### DEPENDING ON EACH OTHER: A CASE STUDY OF THE HONEY PRAIRIE FIRE

A 5-page article by Terri Jenkins in the September 2012 issue of *Fire Management Today* describes the Honey Prairie Fire in detail and how this event led to key partnerships in the region.

#### **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*.

# Fire Management and the Public: A New Summary of Relevant Research

Over the last 15 years, at least 100 studies have evaluated public perceptions of fire management. A recent US Forest Service report for a JFSP project summarized those studies in a framework of eight questions. Following are key findings for most of the questions:

- \* Members of the public recognize fire's ecological role;
- \* People obtain information about fire from a variety of sources, putting most trust and utility in sources that allow for interactive exchange;
- \* Prescribed fire and mechanical thinning are acceptable fuel reduction practices for more than three-quarters of the public;
- \* Smoke is not a significant barrier to the use of prescribed fire for a majority of the population; improving forest health and/or reducing future fire risk tend to outweigh smoke concerns; however, smoke is a major concern for roughly one-third of households due to health issues;
- \* Homeowners, landowners and the public recognize that responsibility for mitigating fire risk is shared by all landowners;
- \* Members of the public place a priority on human health and safety, which often underlies fire management discussions; and
- \* A broad set of variables influence individual responses to fire management issues.

Results for each question are interesting, and perhaps a bit surprising. The General Conclusions begin with the following quote: "Although the answers to some questions have more evidence than others, overall the findings provide a fairly clear indication that public response to a variety of fire management issues is more positive than is often assumed..."

## **Learning from the 2011 Texas Wildfire Season**

The Texas A&M Forest Service recently published the report, 2011 Wildfires: Common Denominators of Home Destruction, to "share with homeowners, firefighters and local government officials the factors that converged to cause these blazes and the best practices that were utilized to help save lives and property."

Designed as a learning tool, this report takes a detailed look at the unprecedented 2011 fire season and highlights key factors that led to home ignition, including embers



Smoke plum near Bastrop, Texas in 2011. Photo by Jan Amen, Texas Forest Service.

blown by high winds, combustible attachments to homes that were not pre-treated with fire -resistant materials, windows not designed to withstand heat, landscapes with highly combustible vegetation, and homes that caught fire and became fuel for the fire. The report also covers common reasons why homes survived, and most importantly, provides strategies for specific audiences to consider in future planning and risk reduction efforts. Strategies include local risk assessment, Firewise construction and landscaping, advance homeowner preparation, and Community Wildfire Protection Plans.

## **TNC's Collaborative Forest Landscape Restoration Program**

Check out a recent report by The Nature Conservancy that reviews the accomplishments of the Collaborative Forest Landscape Restoration (CFLR) program, which was created in 2009 to promote job stability, reliable wood supply, forest health, and reduced emergency wildfire costs and risks. In this national report, you'll find summaries of exciting projects happening in the Southeast, including the Accelerating Longleaf Pine Restoration project in Florida's Osceola National Forest, the Shortleaf-Bluestem Community project in Arkansas and Oklahoma, and the Longleaf Pine Ecosystem Restoration and Hazardous Fuels Reduction project in Mississippi.