



SOUTHERN Fire Exchange

A JFSP Knowledge Exchange Consortium



FIRE LINES

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Research Highlight: Wildfire Suppression Strategies and Cost

A recent *Journal of Forestry* article describes an analysis of fire size, cost, and duration for over 1,300 large fires between 2006 and 2008. Conventional wisdom suggests that limited suppression and wildfire use are often more cost effective wildfire strategies. However, this study found that the costs for all fire management strategies were similar—mostly due to fire duration and the increase in size associated with limited suppression and wildfire use. Results showed that even though per acre and daily costs decreased as strategies moved from direct suppression to limited suppression, fire duration and size increased. When the longer duration and larger size of these fires were taken into account, the average total costs of fires fought less aggressively were either similar or higher than those fought more aggressively. Even when acreage burned, duration of the fire, and other characteristics were held constant, fires fought with a modified suppression strategy had higher costs.

Authors Krista Gebert and Anne Black caution that while their data suggest similar costs for the different fire management strategies during the fire, cost performance measures for wildfire expenditures must also account for issues such as fewer burned acres today versus continued fuel buildup on unburned acres and higher suppression costs in the future.

For the full article, see Gebert, K. M. and A. E. Black. 2012. Effect of Suppression Strategies on Federal Wildland Fire Expenditures. *Journal of Forestry*, 110 (2): 65-73.



Photo by Albert Kastle

CONTACT INFORMATION

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Learn more about our [Partners](#) and the [JFSP Knowledge Exchange Consortia](#).

Visit the SFE Resource Center
www.southernfireexchange.org



SFE in Seattle! Human Dimensions of Wildland Fire Conference

By John Diaz, North Carolina State University

The International Association of Wildland Fire's 3rd [Human Dimensions of Wildland Fire Conference](#) recently took place in Seattle, Washington. The conference theme—*Shared Responsibility: Research, Management, and Communities*—provided opportunities for researchers and practitioners from around the globe to discuss new research findings and best practices. Several presentations, including ones made by SFE and other JFSP consortia members, emphasized identifying effective communication practices to disseminate fire science and to coordinate emergency management during a wildfire event.

During a special session on the JFSP Regional Knowledge Exchange Consortia, the SFE's John Diaz presented a comprehensive multimedia marketing strategy for the effective dissemination of fire science to general as well as more targeted audiences utilizing an integrated communications and outreach plan. He highlighted the mission of the "One Message, Many Voices" campaign to call for a more comprehensive approach to the dissemination of science. John emphasized the need to increase public knowledge of prescribed burning utilizing the design for behavioral change and the theory of adult learning. He also identified the utility of social media for informing the public about the benefits of prescribed fire. *continued on page 3*

Partner Spotlight: The Nature Conservancy

The **Nature Conservancy** works across the United States and in more than 30 countries worldwide “to conserve the lands and waters on which all life depends.” The non-profit conservation organization has operated since 1951, protecting more than 119 million acres of land and 5,000 miles of river. On these lands, the Conservancy works with partners to

- Use and promote **Integrated Fire Management** as a way to serve the fire-related needs of people and nature,
- **Conduct scientific assessments** to understand the causes and consequences of altered fire behavior,
- **Develop site-based solutions** to maintain and restore habitats that require fire to exist, and
- **Advance laws and policies** that conserve fire’s role in nature.

The Conservancy has conducted burns on more than 1.5 million acres since 1988 and is recognized as a leader in the field of ecological fire management, including prescribed fire. In fact, the Conservancy recently celebrated their **50th anniversary** of prescribed fire use. Working with local, regional, and federal partners, the organization offers training courses, fire training exchanges, and other programs. Nomination forms are now being accepted for one of the Conservancy’s core courses, **Crew Boss Academy**, which will be held October 10-19, 2012 in Shelby, Mississippi. **Conservation Gateway**, the Conservancy’s website for practitioners and scientists, provides planning information, case studies, publications and reports, announcements, and more.

As part of developing site-based solutions, the Conservancy leads collaborative, multi-stakeholder Fire Learning Networks based on a specific landscape. These networks allow federal, state, local, and tribal governments, private landowners, and community members to develop a shared vision of the landscape, overcome challenges, exchange information, and generate on-the-ground results. Learn about the recent projects, accomplishments, and partners for the Fire Learning Networks located in our region: the **Florida-Caribbean Fire & Invasives FLN** and the **Southern Blue Ridge FLN**.

ON-THE-GROUND COLLABORATION

By Zach Prusak, TNC

An example of the on-the-ground collaborative work performed by the Conservancy are the Ecosystem Restoration Teams that are run by the Florida Chapter, funded primarily through grants. These Teams consist of NWCG-qualified fire staff and fire equipment that are utilized by many land management agencies in Florida in order to assist their on-site Burn Bosses and provide the “missing piece” in their fire operations—allowing multiple fires to take place throughout the state on optimal burn days. This allows for more frequent fire to take place within ecosystems that require short intervals between fire events in order to maintain their unique plant and animal diversity. Since 1999, these Teams have helped burn over 600,000 acres on over 200 individual sites in Florida.



Ecosystem Restoration Team members working on a fire with the St. Johns River Water Management District in Florida.

New SFE Fact Sheet Highlights JFSP’s Firescience.gov



A new **SFE fact sheet** in the series, Getting the Most from Online Fire Resources, focuses on the Joint Fire Science Program’s website **Firescience.gov**.

This fact sheet describes key components of the website, which is a free-access wildland fire science information resource providing research summaries and project findings. Thanks to author Angie Reid of Tall Timbers Research Station!

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

Wildland Fire Assessment Tool
May 16, 2pm (EDT)

Firewise Communities / USA
July 17, 2pm (EDT)

Conferences

Assoc. of Natural Resource Extension Professionals (ANREP) Conference
May 20-23, 2012
Hendersonville, North Carolina

National Conference of Private Forest Landowners
May 30-June 1, 2012
Ponte Vedra Beach, Florida

National Tree Farmer Convention
June 14-15, 2012
Jacksonville, Florida

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

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

Workshops

Southern Blue Ridge FLN Workshop
May 15-17, 2012
Canton, North Carolina

Wildlife Habitat Considerations in Managed Forests
May 21-23, 2012
Clemson, South Carolina

Trainings

Crew Boss Academy
October 10-19, 2012
Camp Shelby, Mississippi
Nominations due August 15

Rx341 (Burn Plan Preparation)
October 14-18, 2012
Homestead, Florida
Nominations due July 2

Rx301 (Prescribed Fire Implementation)
October 19-21, 2012
Homestead, Florida
Nominations due July 2

REMINDERS

CONSORTIA ASSESSMENT

A national web-based survey is being conducted to evaluate the JFSP knowledge exchange consortia. If you have not yet responded, we encourage you to do so! To access the survey, visit: <http://www.surveymonkey.com/s/36Y9KP6>.

FIRE ECOLOGY GRADUATE POSITIONS AVAILABLE

Two [graduate research assistantships](#) are available in the Department of Forestry at Mississippi State University, starting fall 2012 or spring 2013.

SAFETY IS #1

Read the NIFC [2012 National Fire Season Themes](#).

REFRESHER ON HEAT ILLNESS

Alert yourself and your colleagues on steps to prevent heat illness, how to recognize the signs, and what to do if heat illness occurs: [Heat Illness Basics for Wildland Firefighters](#).

FIRE HISTORY AND CLIMATE CHANGE

Get the new JFSP Synthesis of Knowledge on [Fire History and Climate Change](#) to help answer your questions about how changing climate conditions might influence fire in the future.

CONNECT WITH SFE

Get frequent fire-related updates, links, events, and information by following [SFE on Twitter](#) (@SEFireScience) and finding [SFE on Facebook](#).

FIRE LINES CONTRIBUTIONS

We'd love to include your fire-related news, project or research summaries, field stories, photos, and more in future issues of *Fire Lines*. Please contact Annie Oxarart at oxarart@ufl.edu.

SFE in Seattle! *continued from page 1*

SFE Co-PI, Dr. Toddi Steelman, shared research results from two studies related to effective communication during wildfires. Her first presentation, with co-author Dr. Sarah McCaffrey, shared findings from a survey of nearly 900 residents that identified highly used, useful, and trusted sources of information for the public during five large wildfires in the West. Results showed significant gaps between the sources of information that



residents used during the wildfires and those that they most trusted and found useful. The most useful information sources were interactive, such as talking to the local Forest Service and local fire department personnel. The most trusted sources were "official," such as members of the Incident Management Team, local Forest Service, and local law enforcement. Sources least used and least trustworthy were social media. The second presentation, with co-author Dr. Branda Nowell, explored whether pre-existing relationships lead to better communication effectiveness during the wildfire. Steelman and Nowell found that increasing familiarity before the fire can increase communication effectiveness during the fire.

You can read abstracts for all conference presentations in the [conference program](#). To view the presentations by John Diaz and Dr. Toddi Steelman, [click here](#).

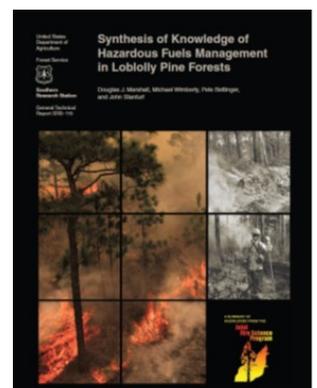
Smoke Management in Prescribed Burning

The past few weeks have been packed with webinars—three of which focused on smoke management or modeling. If you missed these webinars, click on the webinar title below to check out the archived version. On April 17, the Wildland Fire Lessons Learned Center hosted a webinar by Emily Irwin and Josh Hall on "[Preparing and Informing the Public](#)" about smoke and smoke management. The presenters provided an excellent review of how multiple agencies worked together last year in the Southwest to keep the public informed of changing conditions and health hazards. On April 19, the Lake States Fire Science Consortium hosted Gary Curcio, Kari Fleege, and Warren Heilman for a webinar titled "[Making Sense of Wildland Smoke](#)." This was a fast-moving review of smoke tools and products that are available on websites such as the WFDSS Air Quality Portal and NOAA's Fire Weather. Utility of the HYSPLIT smoke trajectory model for fire planning was briefly described and will be covered in more detail in a webinar and training later this year. On May 3, Gary Achtemeier presented "[On the Causes and Movement of Smoke-Induced Fog](#)." This webinar focused on predicting the occurrence and transport of smoke-induced dense fog (superfog), which has been implicated in roadway accidents around the nation. And finally, check out the SFE webinar "[Using Smoke Prediction Models for Prescribed Burning Planning](#)" presented by Daniel Stratton, if you missed it last fall.

Help Improve JFSP Syntheses for Managers

Have you used any of the 20-plus syntheses produced by JFSP in the past 12 years ([see list here](#))? Or are you interested in reading one? Jane Kapler Smith, US Forest Service, is developing author guidelines to improve the usefulness of JFSP syntheses for fire managers, ecologists, planners, and fuels specialists. She invites you to provide feedback about the features of these syntheses that work well and the features that should be improved or avoided. If you're willing to comment on one of these documents—perhaps one that you already use or would like to use—please use this [Response Form](#). Contact Jane using the information below with any questions and to let her know which synthesis you would like to address.

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In particular, your feedback is requested on the [Synthesis of Knowledge of Hazardous Fuels Management in Loblolly Pine Forests](#).