



Leaves OF *Change*



A bulletin of the Centers for Urban and Interface Forestry | Southern Research Station | USDA Forest Service

Issue 6, January 2010

In this Issue

- 1 *Introduction: Social Dimensions of Wildfire Risk*
- 1 *Research: Wildfire Risk and Social Vulnerability*
- 2 *Partnership Highlight: Bill Hubbard*
- 2 *Recommended Resource: Fire in the South 2*
- 2 *Training and Outreach Activities*
- 4 *Upcoming Events*

Contact

InterfaceSouth

Annie Hermansen-Báez,
IS Center Manager
PO Box 110806
Bldg 164, Mowry Rd.
Gainesville, FL 32611
(352) 376-3271
(352) 376-4536 fax
www.interfacesouth.org

Urban Forestry South

Dudley Hartel,
UFS Center Manager
320 Green Street
Athens, GA 30602
(706) 559-4236
(706) 559-4266 fax
www.urbanforestrysouth.org

Guest contributor: Dawn Brumley

Introduction

Social Dimensions of Wildfire Risk

INFORMATION ABOUT biological and physical aspects of wildfire risk is readily available, and the corresponding hazards of wildfire to human well-being are well understood. Much less is known about the varying social dimensions of wildfire risk. Research studies that investigate both biophysical and social characteristics of communities have been conducted in wildfire prone areas of the southwest, but few studies have examined this association in the southern United States. The combination of biophysical and social risk analysis can provide state and federal forestry agencies, as well as other entities engaged with wildland fire risk, with an added layer of information to help identify and target communities for mitigation programs and information campaigns. This issue of *Leaves of Change* focuses on work that we and our partners are conducting to address the critical need for research and information related to the social dimensions of wildfire risk in the South.

Research

Wildfire Risk and Social Vulnerability

TWO SEEMINGLY unrelated factors characterize the southern United States—wildfire risk and social vulnerability. In recent decades, wildfire risk has increased in the region because of population growth, which in turn has had the effect of expanding the wildland-urban interface (WUI) areas farther into fire prone natural areas. This expansion has resulted in a growing number of communities at greater risk of damage from wildfires.

The 13 states comprising the U.S. Forest Service's southern region consistently have the greatest number of wildfires of any region in the nation. *Fire in the South 2* (highlighted in this bulletin) reported that in 2006, for example, 50 percent of all wildfires reported and 42 percent of all large wildfires (defined as > 100 acres) reported occurred in the South.

There is also a large concentration of poverty in the southern United States, including the Black Belt that spans a region that stretches from Virginia,

through the Carolinas, and into Louisiana and east Texas. Booker T. Washington first gave the region this name based on its abundant black soil, but nowadays the Black Belt also is defined by counties with African American populations at least equal to the national average. The region's poverty is unmistakable as 280 of the 444 of the counties with persistent poverty in the country are located in the South.

A number of recent studies suggest that poor communities or those with lower socio-economic status, which are prevalent in the rural Black Belt and elsewhere across the South, face greater wildfire risk than middle class or affluent communities. One suggested reason for this is that federal mandates for wildland fire mitigation efforts prioritize WUI areas (which tend to be made up of more affluent communities in the South), even though less densely populated Black Belt areas and other socially vulnerable communities containing abundant vegetation may be at

continued on page 3

Partnership Highlight



Bill Hubbard – The Southern Regional Extension Forester

Bill Hubbard is the Southern Regional Extension Forester (SREF), based in Athens, Georgia. Bill facilitates regional education, extension and technology transfer programs among the thirteen 1862 Southern Land-Grant Universities, the USDA Forest Service, state forestry agencies, and others within the southern forestry community.

Bill and the SREF staff have been key partners of the Centers for Urban and Interface Forestry since its inception. Matt Howell leads the development of web-based technology projects; Sarah Ashton is the program coordinator; Candee Golden is the administrative specialist; and Darryl Outlaw and Cole Sherer are Internet technology systems specialists. SREF assists with the development and maintenance of both the InterfaceSouth and Urban Forestry South websites and worked with Center staff and NCSU in the development of the Changing Roles Webinar Series. Bill is also involved with InterfaceSouth's advisory council, the Southern Group of State Forester's Southern Wildland-Urban Interface Council.

Visit the SREF website at www.sref.info

Training and Outreach Activities

Urban Forest Strike Team Trainings

URBAN FORESTRY SOUTH has been working with the Southern Group of State Foresters since 2007 to train and develop Urban Forest Strike Teams (UFST) for urban forest disaster response. Since the initial training, UFSTs have assisted communities following ice storms in Oklahoma (2007), Arkansas (2009), and Kentucky (2009), and after Hurricane Gustav in Baton Rouge, Louisiana (2008).

In July 2009, 9 team leaders (trained arborists with disaster response experience) from 6 states and 24 task specialists (arborists trained for UFST evaluations) from 9 states completed training at the Withlacoochee Training Center near Brooksville, Florida. There are now 18 team leaders and 47 task specialists trained for post-storm risk assessment and woody debris estimation in the southern region. In September 2009, the first UFST training in the northeastern U.S. took place in Leominster, Massachusetts, bringing the total number of task specialists in that region to 38.

The UFST Advisory Committee is planning a mid-2010 training that will include additional state agency foresters, municipal foresters, consultants, and GIS specialists. The date and location of this training are still to be determined. For more information visit the UFST website at www.UFST.org

First Changing Roles Webinar Series

INTERFACESOUTH OFFERED the first Changing Roles (CR) Webinar Series in the fall 2009. This four-part series consisted of live, interactive, online educational events that targeted a subset of concepts and skills found in the Changing Roles modules. Collectively, the sessions addressed opportunities and challenges in the WUI related to forest management, land-use policy and planning decision making, and communication skills for working with interface residents and leaders. There were a total of 368 participants representing state and federal agencies, consulting foresters, extension, and universities from the 13 southern states as well as 19 additional states.

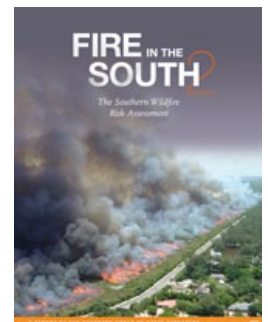
The CR Webinar Series was a collaborative effort between the USFS, the Southern Regional Extension Forestry Office, North Carolina State University's Extension Forest Resources, and Texas A&M AgriLife Extension.

To access the recorded and archived sessions visit <http://www.forestrywebinars.com>. To view a written summary of the webinar sessions visit http://www.interfacesouth.org/products/training/webinar_series_2009/

Recommended Resource

Fire in the South 2: The Southern Wildfire Risk Assessment

This Southern Group of State Foresters (SGSF) report discusses the main findings of the Southern Wildfire Risk Assessment, a comprehensive and uniform wildfire risk assessment for the southern states sponsored by SGSF in collaboration with the USFS and four other federal agencies. The report also explains the objectives of the risk assessment and demonstrates through case studies some of its practical applications. To view this publication visit www.southernwildfirerisk.com/reports/FireInTheSouth2.pdf



Research: Wildfire Risk and Social Vulnerability

continued from page 1

comparable risk of wildfire. Additionally, one national study found that African Americans are less knowledgeable than whites about basic wildland fire information, less supportive of wildland fire use for ecological maintenance, and less trusting of government agencies to manage wildland fire.

State and federal agencies that deal with wildfire mitigation programs and information campaigns have little or no feedback on whether information is distributed to communities with both biophysical and social risks related to wildfire or how this information is received by targeted communities. Given the high proportion of privately owned land in the South (79 percent) and high concentrations of poverty, it would be beneficial for land management agencies to include a consideration of social vulnerability when calculating wildfire risk in the region.

To address this issue, Cassandra Johnson (SRS-4952 natural resource sociologist) led a multidisciplinary team from the U.S. Forest Service and the University of Georgia that looked at the relationship between social vulnerability and wildfire risk. Social vulnerability in this study was defined as an individual's or a group's ability to either mitigate wildfire risk or to recover from wildfire devastation. Social vulnerability was measured by an index that included percent of population that was black, was at poverty level, had less than a high school diploma, rented their homes, and/or lived in mobile homes. Wildfire risk was measured by the Southern Group of State Forester's Wildfire Susceptibility Index (WSI) used in the Southern Wildfire Risk Assessment (SWRA), which indicates the probability of an acre of land burning (information about the WSI and SWRA can be

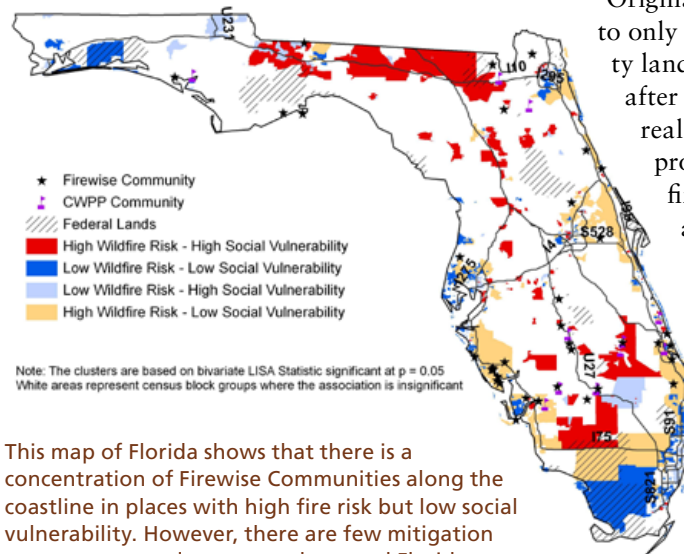
found in *Fire in the South 2*, highlighted in this bulletin).

The goal was to see whether different areas across Alabama, Arkansas, Florida, Georgia, Mississippi, and South Carolina that were identified as being high wildfire risk areas also ranked high in social vulnerability. Areas that ranked high for both wildfire risk and social vulnerability were named "hot spots." Importantly, the team looked at the proximity of wildfire mitigation programs such as Firewise Communities and Community Wildfire Protection Programs to these hot spots.

The team found hot spots in all states, particularly in South Carolina, Florida, Alabama, and to a lesser extent in Georgia, Mississippi, and Arkansas. However, in each state there were a relative lack of mitigation programs in hot spot areas, compared to areas with high wildfire risk but low social vulnerability. Findings suggest that poorer communities in these states with high wildfire risk are at a greater disadvantage than more affluent, high wildfire risk communities because the poorer communities have the added burden of being less able to fend off or withstand a wildfire due to fewer available mitigation programs.

Originally the research team had planned to only deliver the study results to minority landowners in Black Belt counties, but after more careful consideration they realized that the primary audience of project findings was state wildland fire managers. The findings may allow land managers, state and federal forestry agencies, and policy makers to better target mitigation programs.

This study was funded by the Joint Fire Science Program. For more information about this research, contact Cassandra Johnson, 706-559-4270, cjohnson@fs.fed.us.



This map of Florida shows that there is a concentration of Firewise Communities along the coastline in places with high fire risk but low social vulnerability. However, there are few mitigation programs mapped across north-central Florida, an area with many hot spot clusters.

Southern Wildland-Urban Interface Council

InterfaceSouth's advisory council, the Southern Wildland-Urban Interface Council (SWUIC), provides feedback regarding research and technology transfer needs and exemplifies the diversity of InterfaceSouth's partners and program areas. SWUIC is a chartered council of the Southern Group of State Foresters and consists of members from state forestry agencies, the U.S. Forest Service (Research, State and Private, National Forests), universities, cooperative extension, and non-government organizations. In addition to advising on research and information needs, SWUIC also helps identify emerging WUI issues, serves as a liaison to the state forestry agencies for the delivery of technology transfer products, and helps identify and communicate the needs of other stakeholders. This council has been crucial to assuring the relevance of the research conducted and the applicability and delivery of technology transfer products to InterfaceSouth's constituents. For more information visit www.interfacesouth.org/aboutus/council.html.

Centers for Urban and Interface Forestry
 P.O. Box 110806
 Bldg. 164, Mowry Rd.
 Gainesville, FL 32611

Issue 6, January 2010

Upcoming Events

Date	Description	Location	Contact
February 21-23, 2010	32nd Annual Southeastern Recreation Research (SERR) Conference	Greenville, North Carolina	www.serrconference.org
April 11-14, 2010	Emerging Issues along Urban-Rural Interfaces 3	Atlanta, Georgia	www.emergingissues.interfacesouth.org
April 26-29, 2010	2nd Human Dimensions of Wildland Fire Conference	San Antonio, Texas	www.iawfonline.org/texas2010/

In the Next Issue

In our next issue we will focus on outdoor recreation issues in the South.



This issue can be found online at: www.interfacesouth.org/swuinet/files/LeavesofChangeIssue6.pdf

*Note: InterfaceSouth and Urban Forestry South are the technology transfer centers of the USFS Southern Research Station work unit, SRS-4952: *Integrating Human and Natural Systems in Urban and Urbanizing Environments* (www.humanandnaturalsystems.org) and are collectively called the Centers for Urban and Interface Forestry. InterfaceSouth focuses on wildland-urban interface issues while Urban Forestry South focuses on urban forestry issues.