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Pat Stephens Williams
Stephen F Austin State University, stephensp@sfasu.edu


Brian Oswald
Arthur Temple College of Forestry and Agriculture, Stephen F. Austin State University, boswald@sfasu.edu

Karen Stafford
Texas Forest Service

Justice Jones
Texas Forest Service

David Kulhavy
Arthur Temple College of Forestry and Agriculture, Stephen F. Austin State University, dkulhavy@sfasu.edu

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THE CHANGING ROLES OF NATURAL RESOURCE PROFESSIONALS: PROVIDING TOOLS TO STUDENTS TO TEACH THE PUBLIC ABOUT FIRE

Pat Stephens Williams
Assistant Professor
Arthur Temple College of Forestry and Agriculture
Stephen F. Austin State University
stephensp@sfasu.edu

Brian P. Oswald
Arthur Temple College of Forestry and Agriculture
Stephen F. Austin State University

Karen Stafford
Wildland Urban Interface Specialist
Texas Forest Service

Justice Jones
Mitigation Prevention Coordinator
Texas Forest Service

David Kulhavy, professor
Arthur Temple College of Forestry and Agriculture
Stephen F. Austin State University

Abstract.—The Arthur Temple College of Forestry and Agriculture (ATCOFA) at Stephen F. Austin State University is taking a proactive stance toward preparing forestry students to work closely with the public on fire planning in wildland-urban interface areas. ATCOFA’s incorporation of the “Changing Roles” curriculum provides lessons on how natural resource managers’ roles are (1) different than they used to be, and (2) ever-evolving. The undergraduate Forestry Field Station summer program at the University’s Piney Woods Conservation Center now emphasizes the importance and challenges of working with the public. The program brings practicing professionals from the Texas Forest Service to describe the real-world challenges they face in communicating and working effectively with the public in their jobs. The goal is that the ATCOFA students, no matter where they are eventually employed, will understand

the importance of taking a proactive role in working with the public on interface-fire planning and will have knowledge and information that makes them more sensitive to the complicated underlying issues in natural resource and wildfire management.

1.0 INTRODUCTION

A rapidly changing landscape of urban development, expanding communities, and people living “off the grid” has increased the potential for wildfires to cause losses of property and life in wildland-urban interface (WUI) areas. While numerous programs to address WUI fire risks have been—and continue to be—developed across the country, each region has a unique combination of ecological, cultural, social and political perspectives and a single “one size fits all” approach will not work everywhere.

2.0 TRAINING NATURAL RESOURCE MANAGERS TO COMMUNICATE WITH THE PUBLIC

It has become increasingly important—and challenging—for natural resource managers to communicate with a diverse public about WUI fire issues and wildfire planning. Two training programs have attempted to address this for current and future natural resource managers. First, discussions with agency leaders and the findings of a U.S. Forest Service report, “Human Influences on Forest Ecosystems: Southern Wildland-Urban Interface Assessment” (Macie and Hermansen 2002) prompted the creation of a new training curriculum, “Changing Roles: WUI Professional Development Program.” The program is a collaborative effort of the Southern Group of State Foresters, the U.S. Forest Service, Interface South, the University of Florida’s School of Forest Resources and Conservation, and the U.S. Fish and Wildlife Service. The goal is to prepare professionals working in WUI communities to be more

engaged with the public and to assist WUI residents in taking responsibility for wildfire mitigation around their homes and communities. The “Changing Roles” curriculum has four modules:

Module 1: Interface Issues and Connections introduces participants to key WUI issues.

Module 2: Managing Interface Forests provides tools and knowledge for effectively managing fragmented forests in the WUI, including management practices appropriate for the interface; equipment and systems for small forests; managing for wildlife, fire, water, and visual and recreational amenities; enterprise opportunities for landowners; and forest cooperatives.

Module 3: Land Use Planning and Policy explains land use decision-making tools and explores how natural resource professionals can get involved in local decision-making and land use planning processes.

Module 4: Communicating with Interface Residents and Leaders discusses key tips for effective communication with WUI residents and community leaders.

Subsequently, the Arthur Temple College of Forestry and Agriculture (ATCOFA) at Stephen F. Austin State University changed its natural resource management curriculum to provide students with public involvement training similar to what the professionals were receiving. It is a long-standing tradition that, at the end of their junior year, ATCOFA forestry students attend a 6-week field station experience at the University’s Piney Woods Conservation Center (PWCC). The program consists of six separate courses: silviculture, forest measurement, surveying, wildlife, harvesting & utilization, and nontimber management. In 2009, the faculty decided that the “Changing Roles” curriculum would be a valuable addition to the nontimber management course. Integrating the curriculum in the summer field experience also provides opportunities for direct observation as the PWCC is Firewise-certified and located adjacent to Powelltown, TX, a small, rural Firewise community on the Sam Rayburn Reservoir (Figs. 1 and 2).

“Changing Roles” lessons were introduced in the summer of 2009 and continued in 2010 as part of a course on the Firewise program (which helps WUI communities plan for and carry out fire hazard mitigation work). Texas Forest Service staff, consultants, and community leaders gave presentations on Changing Roles, Firewise, and Community Cooperation, and faculty directed the students in developing conflict prevention and resolution skills. The Powelltown fire chief also spoke with students about working with communities and described his town’s experience with Firewise (Figs. 3-5).

By integrating the “Changing Roles” curriculum into the classroom and field station experience, ATCOFA provides the opportunity for students to develop the skills needed for public involvement and interaction prior to professional employment. After the course, a few students decided to do an independent study course on the development of Firewise community plans for areas where they lived, providing an indication of the impact of the training. These students, and those that follow, will be tracked after graduation for the first 5 years of their professional careers to assess the impact of the interactive “Changing Roles” lessons—and to see if the students are putting the lessons to work in their professional lives. This will be accomplished via the college’s online alumni survey instrument, where questions will correlate the concepts of “Changing Roles” with perceived preparedness for jobs that require those skills.

3.0 LITERATURE CITED

Macie, E.A.; Hermansen, L.A., eds. 2002. **Human influences on forest ecosystems: the southern wildland-urban interface assessment**. Gen. Tech. Rep. SRS-55. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 159 p.



Figure 1.—Texas Forest Service staff works with students in the field on Firewise forest assessments.



Figure 2.—Community cooperation for Firewise model.



Figure 3.—Karen Stafford, Texas Forest Service, presenting to the students.



Figure 4.—Powelltown Fire Chief talking with students about working with the community.



Figure 5.—Students learning about conflict management and resolution.

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