

The changing roles professional development program

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Abstract

As populations and urbanization expand in the Southern United States, human influences on forests and other natural areas are increasing. As a result, natural resource professionals are faced with complex challenges, such as managing smaller forest parcels for multiple benefits, and wildfire prevention and management in the wildland-urban interface (areas where urban development and vegetation intermingle), but often do not possess the skills or tools to meet these new challenges. The Changing Roles Professional Development Program, developed by the U.S. Forest Service-InterfaceSouth, the University of Florida, and the Southern Group of State Foresters, provides state and federal natural resource agencies and other organizations in the southern United States and nationwide a set of resources to address these new challenges.

A team of agencies and authors from across the southern United States developed Changing Roles for federal and state agency in-service training workshops. The program consists of four modules: (1) wildland-urban interface issues and connections, (2) managing interface forests, (3) land-use planning and policy, and (4) communicating with interface residents and leaders.

Each module includes a trainer's guide, exercises, fact sheets, and presentations. Additional resources include case studies, a resource list, a DVD, the Changing Roles listserv and quarterly e-bulletin, evaluation questions, and an online webinar series. The resources can be modified and used in a variety of combinations to create a two-hour, two-day, or two-week training program, and anything in between.

Key words: training workshop, education, small scale forestry, management
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1 INTRODUCTION

The South is one of the fastest growing regions in the United States, with an estimated population increase of 1.5 million people each year and 65 of the top 100 fastest growing counties in the nation. The southern U.S. also consistently has the highest number of wildfires per year of any region in the United States. Some of those fires are quite large, as in the case of the 1998 Florida wildfires. These wildfires brought the challenges of working and living in the wildland-urban interface (WUI) to the forefront for the U.S. Forest Service (FS) and other natural resource agencies across the southern U.S. Shortly after these fires, the FS Chief conducted a review of the South and identified the WUI as an area on which to focus research and information efforts.

In response, the Forest Service conducted an assessment of the wildland-urban interface in the South. This assessment, titled *Human Influences on Forest Ecosystems: the Southern Wildland-Urban Interface Assessment* (Macie and Hermansen 2002), demonstrated that a range of professionals—from urban planners to natural resource managers—need access to new information, technology, training, and skills that will help them meet the challenges of working and living in the interface. The assessment also served as the foundation for the establishment of InterfaceSouth (formally known as the Southern Center for WUI Research and Information) in 2002 in Gainesville, Florida.

InterfaceSouth and its sister center, Urban Forestry South, are collectively known as the Centers for Urban and Interface Forestry, the technology transfer component of the Southern Research Station research work unit (SRS-4952) “Integrating Human and Natural Systems in Urban and Urbanizing Environments” (www.humanandnaturalsystems.org). InterfaceSouth focuses on a range of issues related to the urbanization of southern forests, including fire, climate change, ecosystem goods and services, natural disasters and more.

InterfaceSouth’s main technology transfer objectives are to: (1) develop a variety of products based on information from unit research and partners, such as publications (newsletters, fact sheets, general technical reports) and web-based technologies (websites, webinars, decision support systems, videos, on-line trainings); (2) deliver and exchange information and products through a variety of methods (websites, electronic listserves, e-newsletters, social media technologies, and conferences); (3) provide technical assistance and support related to urban and interface forestry issues to communities; and (4) provide natural resource professional development training opportunities (in-person workshops, distance continuing education webinars, and on-line courses).

2 ADDRESSING PROFESSIONAL DEVELOPMENT NEEDS: CHANGING ROLES

InterfaceSouth, the University of Florida, and the Southern Group of State Foresters developed the Changing Roles Professional Development Program to address the training needs identified in the Southern Wildland-Urban Interface Assessment. The focus groups that were conducted as a part of the assessment revealed that natural resource professionals felt unprepared to tackle the complex challenges associated with managing resources in a rapidly changing landscape (Monroe, Bowers, and Hermansen 2003).

The target audience for this program is natural resource professionals in the southern United States, including professionals from state forestry agencies, cooperative extension, other state and federal agencies, and non-governmental organizations.

Changing Roles consists of four modules, each of which includes a trainer's guide, exercises, fact sheets, and presentations. The modules are extremely flexible and can be modified and used in a variety of combinations to create training programs of variable lengths to address the training needs of each agency/organization. The four module topics are:

1. Wildland-urban interface issues and connections—This module introduces participants to key wildland-urban interface issues and how they are interconnected and gives reasons why natural resource agencies should focus on interface issues.
2. Managing interface forests—This module provides tools and knowledge for effectively managing fragmented forests in the WUI and includes information about characteristics of interface landowners; practicing silviculture at the interface; small-scale harvesting systems; managing for wildlife, fire, and visual and recreational amenities; enterprise opportunities for landowners; and forest cooperatives.
3. Land-use planning and policy — This module explains land-use decision-making tools, the role of natural resource professionals in the decision-making and land-use planning process, and how natural resource professionals can get involved.
4. Communicating with interface residents and leaders—This module discusses key tips for effective communication with WUI residents and community leaders, beginning with the need to understand the audience, strategies for effectively sharing information and planning programs, and working to resolve conflict and support changes in behavior.

Additional resources include case studies, a resource list, evaluation questions, and the Changing Roles listserv and quarterly e-bulletin. The resource list includes publications, videos, potential guest speakers and field trips, and other materials that trainers can use to enhance their programs.

In addition, the U.S. Fish and Wildlife Service produced a video, *When Nature is at Your Doorstep*, to introduce training participants to WUI issues from Module 1 and can be used as an outreach tool for resource professionals working with interface residents and local leaders.

The interactive exercises provide a variety of activities including icebreakers, discussion questions, and worksheets that help training participants further explore and apply what they have learned. The exercises can be modified to suit the group size, a number of learning formats are provided, and there are exercises for various group sizes, time allowances, and objectives.

Fact sheets outline important points, strategies, and information about various topics related to each module. They are typically two to four pages and are useful as handouts for training participants. Fact sheets can be used with a wide range of audiences and trainers can use them for additional background material in preparation for trainings.

The case studies provide examples of interface issues, challenges, and success stories from across the southern United States. Case studies help participants imagine a new way of solving problems. Given the frustration with wildland-urban interface issues, these success stories from across the region have been an important part of training programs. Discussion questions are included to facilitate deeper understanding and encourage dialogue.

After the completion of a workshop, trainers can submit and send an evaluation form to InterfaceSouth so that we can continually improve the program. There are also a number of evaluation questions that can be used before and after the training to measure concepts learned by participants as a result of the program. Suggested questions are also provided for a follow-up survey that agencies may wish to conduct several months after the training activity.

All of the program resources are available in the Changing Roles section of the InterfaceSouth website (www.interfacesouth.org/changingroles), as well as new materials including example agendas, planning guides, handouts, PowerPoint presentations, field trip ideas and new exercises. Adaptable files of the exercise handouts and worksheet are available on the website and trainers can customize the exercises to meet their training objectives. A Changing Roles listserv currently has over 300 subscribers, through which a

quarterly e-bulletin, called the “*Changing Roles Update*”, is distributed. The Update includes a special feature, trainer spotlight, highlighted Changing Roles activities, and recent website additions.

3 THE PHILOSOPHY

Many of the *Changing Roles* materials incorporate communication and behavior-change techniques. Not only are we aiming to change the behaviors of the participants to work more effectively in the interface, but we are also potentially changing the behaviors of trainers and agencies. The following guidelines were used to develop each module:

- Trainers need accurate and current information supported by documentation. We provide fact sheets with citations, background information in the trainer guides, and an additional reference. They may not be familiar with wildland-urban interface issues.
- Trainers need a variety of tools to give them options for presenting information. Presentations, fact sheets, and background information are provided.
- Trainers need to be able to adapt and revise materials to meet their audiences’ needs. Most of the activities or concepts can be used in any order; many are adaptable so that examples and issues can be revised as need be. Handouts for exercises are provided in MS Word[®] files to make it easier for trainers to create their own versions. The website encourages trainers to share their adaptations with others and provides some examples.
- Participants have a variety of learning styles. Exercises incorporate the Experiential Learning Cycle and suggest a number of styles of interaction for learners.
- Participants learn from each other. Case studies and exercises provide discussion questions to help trainers engage participants in meaningful conversation.
- New skills are learned through practice in comfortable environments. Many of the exercises give participants a chance to try new ways of working in the interface during training workshops.
- Clear directions and icons utilized in the training materials help those trainers who are looking for a cookbook of presentations, materials, and activities that they can use without much preparation.

- Adaptable presentations and materials available on the website make the program flexible for trainers who want to invest more time customizing their trainings to meet local needs.
- Experts reviewed each module for accuracy and applicability across the region. Pilot tests of the materials were performed with students and natural resource professionals who helped improve the directions and the flow of the exercises.

4 THE BENEFITS

Trainers have commented that they believe Changing Roles training can help natural resource management agencies adapt to changes currently underway in urbanizing areas, including changes in landowner perceptions and values and in land-use. In more rural areas, Changing Roles can help prepare professionals to be pro-active as they see development beginning to occur in wildland areas. Changing Roles can also help agencies by encouraging increased collaboration, which is vitally important during times of reduced funding and limited program capacity. Additionally, natural resource professionals can broaden their contribution to a sustainable future for forests, wildlife, and people by addressing the needs of new audiences, such as community leaders and planners.

Changing Roles can be integrated into existing training programs and the training materials are user-friendly, flexible and can be tailored to meet each agency's training needs. Additionally, the knowledge and skills gained can be integrated into current activities and projects. Participants can also earn continuing forestry education credits through the Society of American Foresters.

With forest industry leaving Texas, large tracts of land are being sold and often fragmented. Urban citizens are also moving outside the city limits to where it is more affordable and they can own small tracts of land. As a result ... the forestry profession is quickly changing. Traditional forestry still exists in Texas and yet at the same time there is a need to provide services to this new landowner to ensure that there are healthy forests in the future for Texans. The Changing Roles materials directly address these issues and provide natural resource professional the tools needed to contend with the changing face of forestry. Since training 85 members of our personnel in December, "Changing Roles" has become a common phrase in our agency that means addressing these challenges.

April 2007 Changing Roles evaluation respondent

5 RECENT EXAMPLES

Two train-the trainer workshops were conducted, the first in February 2006 in Atlanta, GA shortly after the program was developed, and the second in Conroe, TX in April 2009. These workshops introduced the training materials, explained their purpose, and demonstrated ways to use the materials to about 100 total participants. Since these train-the-trainer workshops, resource agencies have used the Changing Roles materials in a variety of ways, such as the following:

- The Kentucky Division of Forestry led three one-day multi-agency Changing Roles trainings in August 2009, with participation by approximately 130 speakers and participants. Trainings were held in three different regions of the state to increase participant accessibility. A multi-agency steering committee planned and designed the workshop to ensure that the training was relevant for all agencies and regions involved.
- The South Carolina Forestry Commission (SCFC) held a half-day workshop in June 2009 with over 40 participants from SCFC and Clemson University extension. In this workshop, exercises and local case studies were used to: introduce, prioritize, and identify solutions to WUI issues affecting forest management in South Carolina; identify the role that foresters can play in addressing WUI challenges; and illustrate the importance of working with residents and community leaders to address land-use policy and planning issues, such as ordinances that affect forest management.
- The Texas Forest Service staff and Stephen F. Austin State University (SFA) faculty worked together to incorporate Changing Roles curriculum into SFA's Summer 2009 Field Station course for undergraduate Forestry students. Students attended field trips, participated in exercises, and heard numerous specialists discuss WUI issues in Texas such as water quality, prescribed fire, small-scale harvesting, and managing endangered and nuisance species.
- The Texas Forest Expo, an annual three day event designed to teach landowners new and innovative ways to protect their families, properties, and communities from wildfire, evolved from a Changing Roles workshop. The Expo aims to teach people how to sustain their forests, trees and natural resources. The event includes vendor and exhibitor booths, classes, and activities for children.

6 NEW METHODS AND TOPICS

Webinars are becoming an increasingly popular mode of teaching and learning in an age of restricted travel and shrinking budgets. Webinars allow participants to learn right from the comfort and convenience of their office. InterfaceSouth offered the first Changing Roles Webinar Series in the fall 2009. This 4-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. A second series is planned for fall 2010 based on recommendations from participants in the first webinar series.

Additionally a new module is under development that will help resource professionals better understand emerging issues in the wildland-urban interface and identify new approaches and tools to address these issues. Some specific topics that will be included in this new module are:

(1) An ecosystem goods and services approach to market-based conservation - This section will examine the ecosystem goods and services that forests provide and the relationships between goods and services, human activities, and human wellbeing. It will also explore how natural resource managers can incorporate ecosystem goods and services into forest planning and management on smaller-parcels of land in urbanizing areas, and how the use of an ecosystem services approach can provide incentive for landowners to sustainably manage and continue to own forest land.

(2) Small-scale forestry -This section will include alternative methods for costing a forestry operation at smaller scales, marketing strategies, examples of value-added processing, sample templates for contracts and business plans, and resources on entrepreneurship.

(3) Climate change -This section will examine how forests can mitigate climate change, identify potential effects of climate change on ecosystems and the goods and services they provide, outline a "Toolbox Approach" to managing for climate change in an urbanizing context, and highlight specific tools and models that can inform management and decision-making

(4) Ecological restoration at multiple scales - Ecological restoration efforts in the wildland-urban interface occur at different scales and include both ecological and social goals. This section will highlight principles for guiding the implementation of restoration projects and approaches and tools applicable for restoration at different scales.

5) *Social Responsibility* - This section will explore environmental justice issues, help resource professionals reflect upon their own values, explore the basis for decision-making, provide guidelines for making ethical decisions on environmental issues, and present the use of partnerships as a tool to encourage pooling of resources and increase representation and visibility in the decision-making process.

7 CONCLUSION

The Changing Roles: WUI Professional Development Program is a highly flexible set of training tools and resources that can be used in programs of one hour or one week, inserted into existing programs or designed to stand alone. Activities and information can be reorganized and designed to focus on interface issues, skill building, or geographic areas. Individual exercises, handouts, and slide presentations can be modified. The more skilled the trainers, the more flexible the program is. Changing Roles is not an established curriculum with preordained lectures and activities for each day. The wildland-urban interface in the southern United States is not so consistent, predictable, and static to support anything other than a flexible, adaptable, resource.

Changing Roles was designed to help resource agencies train their staff and other professionals to address increasingly complex and urgent issues in the wildland-urban interface. The title of the program recognizes that the roles of natural resource professionals are indeed changing as we aim to keep abreast of the rapidly changing landscape.

Changing Roles empowers resource agencies to build their own capacity and to work with others in multi-agency teams in the interface. Changing Roles is a growing and changing program that will, in the coming years, continue to evolve and develop in ways that help natural resource professionals and others face interface issues and challenges.

LITERATURE CITED

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