

REGAINING LOST GROUND

# ECOLOGICAL RESTORATION

FALL 2002

NEWS

## National Firestorm Draws Attention to Forest Health Crisis

With four western states reporting their largest wildfires in history over the summer and President Bush, in his Healthy Forests Initiative, asking Congress to streamline rules in order to expedite thinning projects, the national spotlight often shines on the Ecological Restoration Institute for clarity.

In the last few months, ERI Director Wally Covington and ecological restoration principles have been featured in national publications and programs including *The New York Times*, *Science and Technology*, *Science Magazine*, *the Denver Post*, *The Arizona Republic*, CNN and CNBC News. In addition, Covington has appeared before congressional committees.

"The wildfires that swept across the Intermountain West this summer are without precedent in the evolutionary history of western forests. The number of acres burned is close to twice the 10-year average. In the coming years, these firestorms are likely to become the norm, not the exception. We are paying a heavy price for past neglect and mismanagement of our incomparable national forests," he says.

In a September speech at the University of Idaho, Forest Service Chief Dale Bosworth told his audience that we have a serious forest health problem and we aren't doing enough about it. "We have some 73 million acres of national forest land at risk from wildland fires that could compromise human safety and ecosystem integrity."

Bosworth says we've created conditions where trees have grown much faster than fire, harvest and mortality have combined to remove them. "Just to give you some idea of what that means, in the Southwest—in Arizona and New Mexico—net annual growth is enough to cover a football field one mile high with solid wood. Recent removals have only been about 10 percent of this."

see "Firestorm"



## "To Be Connected To The Forest is To Be Healthy"



Annemarie Romero

Seeing the look on people's faces when they are excited about forest restoration is what Annemarie Romero says is her reward for her work as an undergraduate research assistant at the Ecological Restoration Institute.


Romero's career goal is to be in outdoor recreation and work with people. Part of her major is

outdoor education. She says she'd really like to be a river guide, but her strongest interest is to focus on a specific group of people—those with disabilities, young children or the elderly—those who might require a little more attention.

She has some insight into the needs of those populations. Since the age of 16, Romero has used a wheelchair. She says she views the world differently than she did before. "I see more on a level with different kinds of people. I'm more accepting of differences and don't just pass them over."

Much of what she does for the ERI involves dendrochronology, dating past events through the study of tree ring growth, and measuring the woody debris that's accumulated on the forest floor. When working in the field, Romero relies on help from her ERI coworkers. A fellow NAU Parks and Recreation student, Don Normandin, came up with the idea of a rickshaw to help move her around in the forest.

"I'm pretty independent on flat terrain, but when I need help, the people in the ERI like Chris McGlone, Dave Huffman, Pete Fulé, Lang Suby and really everyone have all been really supportive." She also counts Jane Mulrooney at NAU's Disabled Student Services and her parents in her strong support system.

Romero says she enjoys working for the ERI because of the respect it has earned both on and off campus. Her involvement also makes her feel she's doing something important. "It's about saving the forest and saving human lives along with it because people need the woods in a spiritual way. To be connected to the forest is to be healthy." 





## ***Trekkers Learn About Changes to the Ponderosa Pine Forest***

When American Frontiers trekkers stopped in Flagstaff, they were introduced to the diverse landscape of northern Arizona and learned about how public and private landowners are working together to protect natural and cultural resources that cross land boundaries.

The trek involved two teams, one starting from Mexico, the other from Canada, that would traverse public lands by such means as foot, horse and ATV, and meet in Salt Lake City on September 27 to celebrate National Public Lands Day.

"What we had hoped to do along the way was educate the American people as to what we have, to the issues surrounding our public lands and to let them know that we've got a third of our country right here for us to enjoy," said trekker Jan Nessel, a journalist from Durango, Colo.

The group discussed the degraded health of the ponderosa pine forest and visited restoration plots on the Coconino National Forest. Forest Supervisor Jim Golden talked about the need to thin some 80 million acres in the West and the devastation of unnatural crown fires.

Ecological Restoration Institute program liaison Doc Smith led the group on a field trip to demonstrate the overcrowded conditions that represent much of the ponderosa pine forest.

"Historically, this forest had 18 to 50 trees per acre in the Southwest. The grass component and the understory made up 70 percent of the area; the trees made up some 30 percent. Today we have up to 2,000 trees per acre."

see "Trekkers"

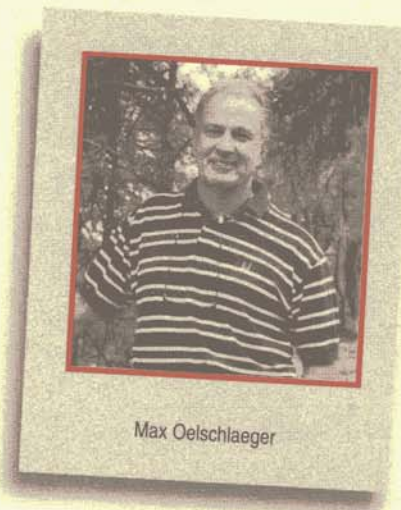
- ◀ Kids of all ages helped the ERI's Doc Smith use an increment borer to extract a sample of a ponderosa pine during the 2002 Flagstaff Festival of Science Mount Elden Fire Hike.



## Oelschlaeger Brings Ideas of Community, Culture and Environment to the ERI

For Max Oelschlaeger, his role as director of NAU's Program in Community, Culture and Environment and his ties with the Ecological Restoration Institute have resulted in a triple intersection, meeting up nicely with his personal values.

Oelschlaeger worked as a philosophy professor at the University of North Texas for years. There, in the Dallas/Fort Worth area—a place he describes as six million people crowded into four counties—Oelschlaeger was writing about wildlands and open spaces. It was there that he wrote what he considers his most important work, *The Idea of Wilderness*, a book published by Yale University Press.



"The great irony of the position I had in Texas was that most of the real work was on urban issues. My heart was with the rivers, the forests and the canyons. The place where I was did not animate or motivate me."

In 1998, Oelschlaeger was not looking for a new job, but two of his graduate students approached him with a job description from Flagstaff that seemed to be a perfect fit.

"Community, culture and environment are often separated from each other. Part of the thinking of this new program at NAU is what's good for a community should also be good for the place that the community is, and that culture does not have to be high-brow like the opera or art, but could also involve ranching, logging and forestry," he says.

Within a couple of months of coming to NAU, Oelschlaeger was introduced to ERI Director Wally Covington. "It was like Tar Baby meeting up with Brer Rabbit. It's been a very beneficial, rewarding, intellectually stimulating partnership in many ways.

"We've walked around the forest, talked about the future, discussed transforming the way land management is practiced and conceptualized. We share a belief that the governing ways of thinking—human beings' association with the land—are flawed. We've learned a lot from these mistakes and believe there's a new way to approach the interface of culture and nature."

see "Community, Culture and Environment"

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### ECOLOGICAL RESTORATION NEWS Regaining Lost Ground

is a newsletter from NAU's Ecological Restoration Institute. The intent of this publication is to share information, discoveries and successes in the work being done to restore the southwestern forests.





## Firestorm continued

Bosworth, Covington and others continue to stress the need for ecological restoration on a large scale, meaning 100,000- to 1,000,000-acre blocks. "We once thought we had more time, but it's clear we don't. We need to move forward with large-scale, restoration-based fuel reduction and learn as we go," says Covington. "The key elements are to preserve old-growth trees, thin out the younger trees to densities which emulate presettlement conditions, and reintroduce natural low intensity surface fires."

Covington's message to Congress is consistent: make treatments to reduce fire threat and restore the ecological integrity of forests the single biggest priority of forest management policy and the land management agencies working in the Intermountain West. 🌲

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## Trekkers continued

Smith showed the group an area that had been thinned and burned in Fort Valley. Since the restoration treatment, researchers have documented an increase in numbers of the diverse plants and animals.

"The big thing to me is that fire is an integral part of the ecosystem. We've stopped that process and we have to change our practices," said trekker Richard Tyrrell, a New York businessman.



At Gus Pearson Natural Area, American Frontiers trekkers compared open ponderosa pine conditions with dense thickets.

The American Frontiers journey was sponsored by a combination of public and private partners including the Departments of Interior and Agriculture, National Geographic Society, the Bureau of Land Management, Forest Service and Bureau of Reclamation. 🌲

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## Sign Up Now for Southwest Fire Initiative Meeting

Scientists will present findings of two years of research on forest restoration at the Southwest Fire Initiative Meeting in Flagstaff Tuesday, April 29. Topics will range from ecological effects of severe wildfires to ways in which western communities are developing collaborative restoration projects. Natural resource managers and the public are encouraged to attend and interact with researchers. Registration and program information is available on the ERI Web site, [www.eri.nau.edu](http://www.eri.nau.edu). 🌲



## Community, Culture and Environment continued

The Program in Community, Culture and Environment brings together leaders in the university, community, county, government and nongovernment organizations and agencies to discuss problems and issues in a collaborative and cooperative way. "It offers the space for them to reach agreements and engage in activities that may not happen unless they are involved in this program that allows for special things to happen."

Oelschlaeger is working on another book, *Wildfire and Western Forests*, that looks at the ethical and policy dimensions of catastrophic wildfire. "Covington, along with others, is an inspiration for the book. Wally is cutting edge—the new breed of people who look at the complexity of forest ecosystems. He sees today's forests as products of human agency rather than naturally evolved ecosystems. He approaches the problems with the ecosystems with solid scientific insights and a keen appreciation of the human dimensions."

Oelschlaeger is also the Frances B. McAllister Endowed Chair of the Program in Community, Culture and Environment. 🌲

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