

REGAINING LOST GROUND

ECOLOGICAL RESTORATION

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NEWS

At Risk Community Leads West in Action Against Wildfire

The buzz of chainsaws and the crashing of trees are the sounds of fire season in the picturesque Village of Ruidoso, N.M. At 7,000 feet in the Sacramento Mountains, narrow, winding roads lead to rustic homes nestled among thick clumps of pines and oaks. Canyons are steep, breezes are dry and foresters are nervous.

Each summer, thousands come to that mountain town to escape the high temperatures of the surrounding desert, but the folks who live there are feeling a different kind of heat. Ruidoso has been identified as the number one community at risk for wildfire in the state. Smokey Bear District Ranger Buck Sanchez says the village is rated number two in all the West.

Mistletoe infestation, unprecedented bark beetle invasions, an overcrowded forest from a century of fire suppression and years of drought add up to an unhealthy forest on the brink of total collapse said Charlie Denton, Ecological Restoration Institute program coordinator.

Just a few years ago, the cutting of trees was prohibited in Ruidoso. Today, all around the community, branches and logs are piled up waiting to be picked up by village workers as the community leads the West with ordinances calling for mandatory thinning on private property.

In late May, smoke from the Peppin Fire swirled above the town in the Capitan Mountains, reminding residents there's more work to be done. "There's nothing like having a little smoke in the air to get people motivated," said Village of Ruidoso Forester Rick Delaco.

Sanchez, Denton and Delaco are all part of a group that meets regularly now in Ruidoso for the sole purpose of reducing the risk of wildfire in their community. Thora Padilla of the neighboring Mescalero Apache Tribe participates because she says fire knows no boundaries. "We're trying to do treatments throughout the mountain area so we can all benefit." 

(See related story inside, "Mountain Homeowners")



Life and Learning Sprout from Arizona's Largest Forest Fire



Barb Strom

Describing the nearly half-million acre burn area of the 2002 Rodeo-Chediski fire today is like the proverbial blind men describing the different parts of the elephant. ERI research assistants Barb Strom and Amanda Kuenzi say it just depends where you are on that huge piece of land.

“Some areas still look like a moonscape with black-stick trees,” said Kuenzi. “Others have a beautiful understory

of wildflowers and shrubs. It’s truly a mosaic out there.”

The forestry graduate students are working with Pete Fulé, ERI associate director of research, to determine how the area is recovering. Strom is studying the trees; Kuenzi is focusing on the understory vegetation such as herbaceous plants, native and exotic species.

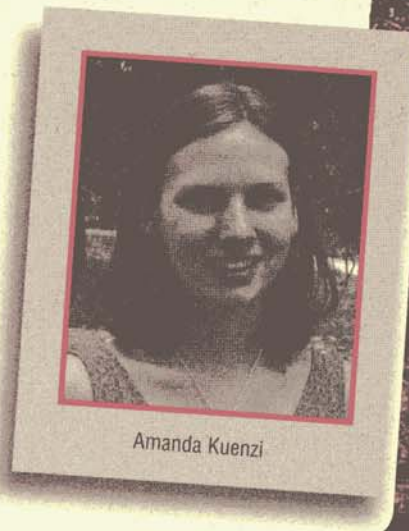
From their campsite, a “green island” in the burn area known as Limestone Ridge on the Fort Apache Indian Reservation, they say they can feel the power of the fire as giant swathes of land are severely burned and other places appear to have been spared.

“It looks like the fire jumped over some areas but what it probably did was lie down and burn as a light surface fire,” said Strom. “These areas seem to correlate with the locations where recent prescribed burns were conducted.”

Strom is also noticing that areas that were thinned and burned between 1991 and 2001 tend to have much less damage. “There’s lower erosion and the trees are healthier.”

Meantime, Kuenzi says the native plants are thriving. This is surprising, she says, because the area’s been managed heavily and exotic species tend to take over highly disturbed areas.

The researchers say the Rodeo-Chediski fire area offers vast opportunities as an enormous research plot for determining what pre-fire treatments are most effective for post-fire forest recovery.



Amanda Kuenzi





Mountain Homeowners Encourage Neighbors to Thin

Sharon Stewart remembers watching the flames of the 2002 Kokopelli Fire roar down the highway. The 900-acre fire raged through a canyon of upscale mountain homes, burning some to the ground and singeing hopes that nearby Ruidoso, N.M., would remain unscathed. Today, charred tree trunks stand as grim reminders of what can happen when you live in the woods.


“It’s quite scary to have your primary home in the woods and if a wildfire goes through, it will just wipe us out,” she said.

Stewart is one of a growing force in the Ruidoso area encouraging her neighbors to thin their property. “For many people, their mountain home is not their primary home and they don’t feel the need to clean up their lot. But when you’ve got their heavily wooded lot next to our clean lots, it still puts us at risk.”


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It is a challenge to train people to understand what a forest should look like compared to what it looks like now.

In the Ruidoso area, many residents are participating in a cost-share program through the state to help pay for the expense of removing thickets of trees. Some treatments are designed to mimic the structure of the forest before European settlers came in.

“We like these cuts because they leave big trees in clumps, open the canopy so the treetops aren’t touching and allow sunlight to reach the ground,” said Charlie Denton, ERI program coordinator. Before long, as Denton points out, grasses, wildflowers and shrubs return to the forest that had become a monoculture of dark, sickly pines. And, the fire danger is significantly reduced.

But as Stewart can attest, not everybody likes the “new” look of the forest. Bill Duemling of the state’s forestry division says people come to Ruidoso because of the trees. “It is a challenge to train people to understand what a forest should look like compared to what it looks like now.” 

Two years after Arizona's largest wildfire burned in the ponderosa pine forest of the White Mountains, ERI student researchers are studying the health of the trees and the understory plants such as these *Wyethia arizonica*, also known as mule's ears



Notes from the Field



Chuck Bullington

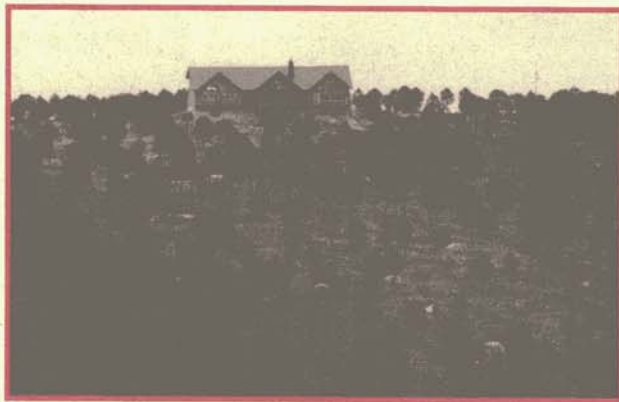
research staff and graduate students. Next, if there are enough years of data to prove or disprove a research question we are trying to answer, then our research staff, grad students, faculty and sometimes undergraduate research assistants write up the data into a report or journal article. Traditionally, this was where research ended, in publications—not at the ERI!

Here is where the ERI Outreach Practitioners pick up the data and complete our ultimate goal of getting the results of our efforts into the hands of today's practitioners. Charlie Denton, John Bedell, Dennis Lund and Doc Smith synthesize our hard-earned data (now embedded in reports and articles), present it to practitioners in workshops, discuss the principles on field trips and finally demonstrate how ecosystem restoration can be done.

The team is the final and crucial link to getting our research applied on the ground. Without this team's many hours of travel, presenting information and walking around the forests of the Southwest, our research would primarily be used for faculty promotion and graduate degree completion—not bad goals, but for the ERI and for ecosystem restoration, that's not enough! Thanks to the ERI Outreach team we can grind our "ivory tower" research into the "salt of the earth" for practitioners.

Chuck Bullington is a program coordinator for the ERI. 🌲

The ERI Outreach Team travels all over the Southwest to help mountain communities plan restoration projects. In Ruidoso, N.M., the idea of thinning on individual properties, like the one pictured here, is catching fire.



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. For more information, visit the ERI Web site at www.eri.nau.edu.


Alumni Corner

Amy Waltz (Forestry Ph.D., '01) has been teaching general biology and conservation biology as an adjunct professor at Pacific University in Forest Grove, Ore. In the summer, she volunteers for The Nature Conservancy at the Cascade Head Preserve on the Oregon coast. Waltz, whose dissertation focused on butterfly response to restoration, says the preserve has an endangered butterfly, the Oregon Silverspot, which she is hoping to catch a glimpse of this summer. She and her husband, Rob, are the proud parents of 2-year-old daughter, Helen.

Adrien Elsenroad (Forestry MS '01) is working as a plant ecologist for The Nature Conservancy in Portland, Ore. Her primary projects include vegetation restoration and monitoring of a large wetland restoration project in the Klamath Basin in southeast Oregon and a grassland preserve in the Columbia Basin in north central Oregon.

Cara Gildar (Forestry MS '02) has recently accepted a position as an ecologist on the San Juan Public Lands in Dolores, Colo. She serves as the fuels reduction treatment specialist and is involved in oil and gas wellpad reclamation. Prior to her new job, Gildar worked as a Forest Service botanist at the Dakota Prairies Grasslands. Her article on plant community variability in ponderosa pine forests and the implications on reference conditions has been published in the *Natural Areas Journal*.

Marta Fischer (Forestry MS '04) is enjoying her job with the Forest Service doing forest surveys throughout the Rocky Mountain region. "Leaving academia doesn't mean I've stopped learning!" she said. "Here's what I've learned in two weeks on the job. One, when I was told I would be 'in travel status 100 percent of the time' they REALLY, REALLY meant it. I will be traveling so much that the government is willing to pay for a hotel and food on the weekend. And two, Utah has moose!"


Have alumni news to share? Please send your news to Robin Long, ERI student services coordinator, at robin.long@nau.edu or call (928) 523-7187. 

ERI's Law and Policy Guru Retires

After a long and successful career in natural resource management and ecological restoration, ERI Associate Director of Law and Policy Hanna Cortner is hitting the road to retirement—a road dotted with travel and consulting.

Cortner came to Flagstaff and the ERI in January 2001 from the School of Renewable Natural Resources at the University of Arizona where she was a professor. On the list of highlights in her career she rates her two assignments in Washington, D.C., among the top ten: one, while working for the Forest Service, the other with the Corps of Engineers.

"What I am most proud of during my time with the ERI is the opportunity to have worked with high quality people in the organization," she said.

This summer, Cortner and her husband, Dick, are visiting the Maritime Provinces in Canada. New England is slated for fall and a trip to Europe in the spring. After that, she plans to do some consulting in the area of fire and forest policy. 



Hanna Cortner



ERI Offers Multiparty Monitoring Assistance

The ERI is offering technical assistance and training to community groups charged with multiparty monitoring aimed at measuring the effectiveness and progress of forest restoration projects.

Through the Collaborative Forest Restoration Program, the Forest Service is providing funding to community groups in New Mexico interested in conducting projects that improve forest health and reduce the threat of catastrophic wildlife.

"We're finding that people don't know how to set up a multiparty team to gather and analyze data that relate specifically to the goals of their project," said ERI Project Coordinator Ann Moote.

The ERI's technical assistance team, which includes staff from the Forest Trust and Four Corners Institute, works with grantees to identify their goals for and fears about the outcomes of a project and then helps them select indicators that, measured over time, will aid the project members in determining whether or not their goals or fears are being realized.

Moote says that since most of the projects involve thinning the forest, many will measure indicators such as the size and density of trees, canopy closure and surface fuels. In addition, those trying to diversify the local economy may measure indicators such as the number of value-added forest products industries in the community.

For more information, contact Moote at 928/523-7254. Multiparty monitoring handbooks are available on the ERI Web site, www.eri.nau.edu/implementation/operational_issues_Monitoring.aspx.

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