



EXPLORER



US FOREST SERVICE, ROCKY MOUNTAIN RESEARCH STATION

MAY 4, 2009

Deborah and Kas Dumroese Honored by U of I

Research Soil Scientist **Deborah Dumroese** and Research Plant Physiologist **Kas Dumroese**, Moscow, have received the Bridge Builder Award from the University of Idaho's College of Natural Resources (CNR).



U of I Dean William McLaughlin, Kas, Deborah, and Associate Dean Mike Whiteman.

The award honors an individual faculty or staff person or group employed with an organization or unit with which CNR collaborates. The individual or group must be external to CNR and contribute to substantial and lasting connections to people, units, programs, or departments within CNR.

Kas and Deborah were noted for their numerous contributions to seedling and forest productivity research, for serving on CNR graduate committees and building relationships with faculty, and for their willingness to work with the college, which has resulted in additional funding for research projects and graduate student research assistantships.

Deborah works closely with the Inland Empire Forest Tree Nutrition Cooperative and Kas works with the Center for Forest Nursery and Seedling Research.

Admin Implementation Update

Due to a conflict, the scheduled negotiations with the Partnership Council on April 29 were postponed until Wednesday, May 6. Updates from this meeting will be announced in an upcoming *Explorer*.

Bentz Invited to Converse with the Chief

Research Entomologist **Barbara Bentz**, Logan, and Chris Fettig (Research Entomologist, Pacific Southwest Research Station) were invited to have a video conference "Conversation with the Chief" on climate change and bark beetles in western US forests, on April 9. Dr. Carlos Rodriguez-Franco, Director of Forest Management Sciences, WO, also joined the conference. "We discussed how climate change is influencing recent bark beetle outbreaks across western North America, and associated Forest Service research aimed at understanding and predicting the impacts. We also covered potential forest management options and strategies to be used in a changing climate," said Barbara.

RMRS Wilderness Workshop

Representatives from all seven RMRS Science Programs gathered at Lubrecht Forest, near Missoula, last week to discuss ways to strengthen RMRS' leadership in wilderness science. The workshop, which was co-organized and hosted by the Aldo Leopold Wilderness Research Institute (ALWRI) and the University of Montana, included NFS managers, NGO representatives and university faculty. Three full days of energetic discussions explored ways that the diverse research portfolio of RMRS scientists can more effectively contribute to the overwhelming need to better understand and communicate the



RMRS Wilderness Workshop participants (not picture are Linda Joyce, Michael Schwartz, and John Squires).

role of these most protected lands in sustaining the larger landscapes in which they are situated. "There was wide agreement that ecosystem services (water, wildlife, vegetation, recreation, scenery, etc.) provided by wilderness and similarly protected lands are critical to the ecological and societal fabrics of the region and that these services are increasingly threatened," said ALWRI Director **Dave Parsons**. In addition to the important research conducted by ALWRI scientists on topics such as recreation impacts and management, relationships between the public and public lands, the role

of fire in and adjacent to wilderness, amphibian declines, and protocols for monitoring wilderness character, tremendous opportunities were identified for increasing the relevance and application of research conducted by scientists throughout RMRS in areas such as water, wildlife, fish, forest ecology, invasive species, pathogens, and various aspects of landscape and habitat connectivity.

The workshop focused on opportunities to increase the wilderness relevance of ongoing work by scientists throughout the Station, as well as brainstorming opportunities for new collaborations and cross disciplinary research. Participants were fully engaged and enthusiastic about the new ideas for research that were identified as well as opportunities for applying these to important regional and national issues.

RMRS Well-represented at Ornithological Meeting

RMRS researchers participated in the 79th meeting of the Cooper Ornithological Society, held April 17 and 18 in Tucson, Arizona. **Karen Bagne** and **Deborah Finch** of the Albuquerque Lab organized a symposium on "Climate Change: Consequences for Birds". It included talks on general climate change effects by Deborah, Karen, **Megan Friggens**, Albuquerque, and Lori Hargrove (UC Riverside); riparian birds in the Southwest by **Max Smith**, Albuquerque, Deborah, and Jeff Kelly (U of Oklahoma); and developing a tool to assess species' vulnerability by Karen, Deborah, and Megan. Additional talks from universities, USGS, and nonprofit organizations touched on issues related to physiology, conservation planning, and phenology.

Vicki Saab from our Bozeman Lab was in charge of the scientific program and also presented a poster on fire effects on birds in dry coniferous forests that synthesized research by scientists at RMRS, PNW, PSW, and USFS Northern Region. **Yvette Ortega**, Missoula, organized a symposium on "Biological Invasions: Consequences for Native Birds in a Changing World". Yvette and **Dean Pearson**, Missoula, gave a presentation on exotic species impacts. A full list of abstracts is available at <http://www.birdmeetings.org/cos2009/files/cos2009-abstracts.pdf>.

News from Boise

Botanist **Scott Jensen**, Provo, recently highlighted his work with native forbs at the Intermountain Native Plant Summit in Boise, March 24-26, in a presentation titled "Plant Materials Work at the Shrub Sciences Lab". On April 21 he provided an overview of the RMRS Great Basin Native Plant Selection and Increase Project at the BLM Colorado Plateau Native Plant Initiative Program Review and Development meeting in Salt Lake City. The Colorado Plateau Program is a new regional native plant materials program similar to

the RMRS Great Basin Native Plant Selection and Increase Project.

Research Botanist **Nancy Shaw** and Mike Pellant, BLM, Nevada, hosted a tour for Senator Harry Reid staff members Ann Wright and Neysa Call on April 15 that highlighted cheatgrass and other invasives, wildfire, post-fire rehabilitation and climate change issues in the Great Basin.

On April 21 and 22, Nancy presented results of a post-fire native seeding study to the Nevada BLM 2009 Emergency Stabilization and Rehabilitation meeting and field tour in Elko, Nevada.

White Pine Blister Rust Discovered in Eastern Arizona



Research Plant Pathologist **Brian Geils**, Flagstaff, and MaryLou Fairweather, R-3 Plant Pathologist, have reported observing for the first time white pine blister rust infection in southwestern white pine in eastern Arizona (photo). Identified earlier this month by the Bureau of Indian Affairs, infected trees occur along several streams located on the northwestern slopes of the White Mountains. “We expected for many years that the rust was here, had a good idea of the kinds of sites where it might occur, have been observing some such sites for many years, and had planned to visit the discovery area this spring,” said Brian. “We estimate the rust has been there for the past 20 years, but has intensified sufficiently this year to become readily apparent,” he said.

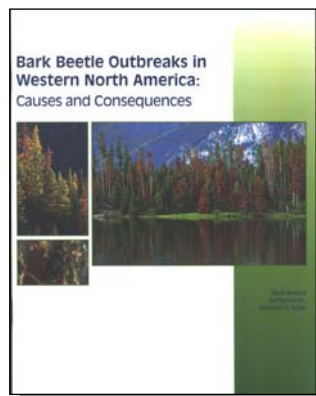
Brian is compiling a series of articles to be published in the international journal *Forest Pathology* as a special issue on white pines, Ribes and blister rust. The series provides a current review and synthesis on the history and biology of the rust, status of and threats to white pines in North America, biology and horticulture of Ribes, genetics, silviculture, and implications of the rust in North America.

“Although we need to continue locating additional infestations and incorporate additional disease considerations into forest management, this is not a pathogen or pest that will quickly explode and kill most of the trees across the landscape, but may become a new persistent disturbance agent in high hazard sites. There is time for deliberate, responsive action from both management and research,” says Brian.

Scientists Present at SAF Meeting

Quantitative Ecologist **Linda Joyce** and Post-doc Ecologist **Mike Battaglia** presented at the recent Colorado-Wyoming Society of American Foresters annual meeting in Mesa, Arizona. Linda covered “Forest, Climate, Climate Change and Adaptation,” and Mike offered “Carbon Cycles in Western Forests.”

Bentz Helps Produce New Beetle Pub



A new publication titled *Bark Beetle Outbreaks in Western North America: Causes and Consequences* examines the ecology and biology of bark beetles, the extent of historical and current outbreaks, and the potential consequences of such widespread infestation on forest ecosystems. The publication is a proceedings from the Bark Beetle Symposium, held November 2005 in Snowbird, Utah. Research Ecologist **Barbara Bentz**, Logan, is the editor and lead co-organizer; along with co-organizer and RMRS retiree Jesse Logan. Other RMRS symposium participants included **Matt Hansen**, **Linda Joyce**, **Jose Negron** and **Jim Vandygriff**.

The publication, funded by the Agency’s Rapid Science Assessment Team, will be of great interest to foresters, park managers, landowners, environmentalists, and anyone who wishes to learn more about the threat that bark beetles pose to the great forests of North America. It is available for purchase online from the University of Utah Press at www.uofupress.com.

Report Features Fuels/Wildfire Studies

RMRS research out of our Moscow lab is featured in the *2008 Annual Report: The National Fire Plan in Idaho*, published by the Idaho State Fire Plan Working Group. The report looks at two RMRS studies: 1) Fuels Treatments, Suppression, and their Interaction with Wildfire and its Impacts: The Warm Lake Experience During the Cascade Complex of Wildfires in Central Idaho, 2007, by **Russ Graham, Theresa Jain** and **Mark Loseke**; and 2) Consequences of Wildfire, Wildfire Salvage, and Fuels Treatments on Forest Vegetation, Fuel Dynamics, Insects and Diseases in the Moist and Dry Forests of Idaho, by **Theresa Jain**. The report is available at <http://www.idahofireplan.org/images/2008%20Annual%20Report.pdf>.

New Invasive Species Newsletter Out

The third issue of the Station's *Invasive Species Science Update* newsletter is now available at <http://www.fs.fed.us/rm/invasive-species/docs/newsletters/2009-04-ISSU-No3.pdf>. Research Plant Pathologists **Brian Geils**, Flagstaff, and **Ned Klopfenstein**, Moscow, are the new editors, taking over for former editor Supervisory Ecologist **Jack Butler**, Rapid City.

McSweeney Talks RMRS Research at Earth Day Event

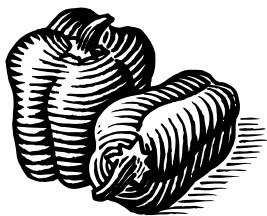
Social Science Analyst **Alice McSweeney**, Albuquerque, represented our Albuquerque lab at the 5th Annual Earth Day Celebration, held recently in Las Vegas, New Mexico.



The program was sponsored by the Pecos/Las Vegas Ranger District and the Tierra y Monte Soil and Water Conservation District, and was geared for elementary school children of San Miguel county and outlying areas. Alice, pictured in western hat, spoke with the students about ranching and farming in northern New Mexico, and covered the variety of subjects studied at the Albuquerque lab. Many of the children come from ranch families and enjoyed sharing their

experiences and family stories at the RMRS booth. "It was such a pleasure to share our work with them," said Alice.

Buy Local – Eat Healthy



We have all heard about our "carbon footprint" but have you heard about your "nitrogen footprint?" By buying local and organic produce and meat you can help reduce both of these "footprints." Local farmer's markets get ramped up during the month of May and you can find everything from fresh produce and flowers to honey and cheese! You can also shop locally for clothing, dried goods and basic necessities. Not only does shopping locally stimulate your local economy, it also provides you with a sense of community and an opportunity to support your friends and neighbors, keep downtowns and communities vital, and keep working small family farms in business. If you have never been to a farmer's market before, please try it at least once this month. Below are a few fun facts for you to think about:

- About ½ of the nitrogen atoms in the body of an average person living in a developed country once passed through a fertilizer plant. (1)
- Farmers' markets enable farmers to keep 80 to 90 cents of each dollar spent by the consumer. (2)
- A typical carrot has to travel 1,838 miles to reach your dinner table. (3)
- Due to the shipping distance for most vegetables in large supermarkets, it can take days to weeks from the time the produce is picked until the time you buy it, and because food starts to change as soon as it's picked, vitamins such as

C, E, and A and thiamine begin to deteriorate and the nutritional content of your food is weakened. (4)

****Stay tuned next week for the results of the RMRS Carbon Saver Contest****

- (1) *Organic Gardening*. Feb-Mar 2009, pg 25.
- (2) Pretty, Jules. "Some Benefits and Drawbacks of Local Food Systems," Briefing Note for TVU/Sustain AgriFood Network, November 2, 2001.
- (3) Pirog, Rich, and Andrew Benjamin. "Checking the Food Odometer: Comparing Food Miles for Local Versus Conventional Produce Sales in Iowa Institutions." Leopold Center for Sustainable Agriculture, July 2003.
- (4) *Farm Fresh: The Health Benefits of Buying Local*.
<http://www.recordonline.com/apps/pbcs.dll/article?AID=/20080723HEALTH/807230315/-1/HEALTH05>.

In Honor of National Police Week



National Police Week is May 10-16, 2009, and Friday, May 15, is National Peace Officer's Memorial Day. The President of the United States has set aside these dates to remember and honor all peace officers who have made the ultimate sacrifice and all those who continue to serve us on a daily basis. One hundred eighty two peace officers were killed in the line of duty in 2008 in the United States.

The United States Congress has passed legislation that allows the U.S. flag to be flown at half staff on May 15, 2009, National Peace Officer's Memorial Day. It is also traditional and appropriate during Police Week to honor slain officers by wearing a one inch black shroud across your badge and by displaying or wearing blue ribbons.

Please take this time to remember our fallen officers who gave their lives serving the public and protecting America's natural resources. Also, please take the time this week to thank our officers and every peace officer that continues to serve and protect you.

