



## Future Forests Summit Abstracts & Biographies

### Science Panel

**10:00-10:30 Dan Tinker, PhD, Associate Professor, Department of Botany and Program in Ecology, University of Wyoming, Laramie, WY**

**ABSTRACT:** Forests are always changing. Usually, the changes are imperceptibly slow to human eyes, while other changes are dramatic, such as a wildfire or insect outbreak. We're currently witnessing a profound change in lodgepole pine forests in the Southern and Central Rocky Mountains with the mountain pine beetle epidemic. While this native beetle has been around lodgepole pine forests for millennia, people who live, work, and enjoy these forests have a lot of questions about what the aftermath of the outbreak will mean for future forests. Dr. Dan Tinker has been studying lodgepole pine forests in the Rocky Mountains for decades and will talk about the ecology of lodgepole pine forests and what we know so far about the future of post-beetle forests. Are they more susceptible to damaging wildfires or future mountain pine beetle attacks? Will we even have a forest?

Dan will present on the following:

- Disturbance ecology of lodgepole pine forests in the central Rocky Mountains
- What we know so far about fires in forests impacted by the mountain pine beetle
- What we know so far about climate change and the future of lodgepole pine forests in the central Rocky Mountains
- What we know so far from empirical studies about forest growth after the mountain pine beetle infestations

**10:30-11:00 Claudia Regan, PhD, Regional Vegetation Ecologist, USDA Forest Service Rocky Mountain Region, Golden, Colorado**

**ABSTRACT:** A paradox of forests is that in order for a forest to grow and develop, trees have to die. The large-scale mortality of lodgepole pine caused by the mountain pine beetle infestation doesn't mean that the forest is dead. Quite the opposite, the new forest is already growing and thriving. Dr. Claudia Regan, will discuss what we know so far about what the future forest might look like and how the future forest will affect some important ecosystem services. How will future forest stands and landscapes be different from our lodgepole pine forests before the epidemic? What effects will these differences have on ecosystem functions like wildlife habitat and watersheds? What information do we need to strengthen our predictions about the future forest?

Claudia will present on the following:

- What the future forests might look like after the MPB using models
- What we know so far about how wildlife habitat will change in the future forest
- What we know so far about watershed functioning in the future forest

**11:00-12:00 Tony Cheng, Associate Professor in Forest Policy and Director of the Colorado Forest Restoration Institute at Colorado State University**

Question & answer and facilitated discussion with Tony Cheng about the post-MPB future forest

## **Agency Panel**

### **1:00-2:00 Cal Wettstein, USFS, Incident Commander, Rocky Mountain Region Bark Beetle Incident Management Organization, Medicine Bow/Routt, Arapaho/Roosevelt, and White River National Forests**

ABSTRACT: The current widespread outbreak of this native insect across the lodgepole pine forest type in northern Colorado and Southeast Wyoming is likely within the range of natural variability that has occurred many times throughout millennia. This time, however modern human civilization is embedded in the landscape and that landscape is also crisscrossed with infrastructure that supports commerce, water supplies, and recreation. Initial agency response has been focused on human health and safety—mainly mitigation of falling tree hazards and hazardous fuels conditions. What has been done so far to address the threats to human health and safety? How are treatments prioritized? How much of the 4 million acres will we actually treat? What are the limitations to mitigating hazards?

Cal will present on the following:

- Extent of the infestation—progression and agency response to date
- Potential and practical treatment areas and expected and observed results
- Pursuit of the 3 goals identified in the Western Bark Beetle Strategy
- Limiting factors in pursuing the 3 goals

### **2:00-2:30 Rich Edwards, Colorado State Forest Service, Assistant Staff Forester, Forest Management Division, State Office, Fort Collins, CO.**

ABSTRACT: State and private forests throughout the central and southern Rocky Mountains have been as affected by the current mountain pine beetle epidemic as adjacent federal lands. Due to differing landowner objectives and sometimes proximity to infrastructure and the wildland urban interface, alternative management approaches should be utilized in these areas. One of the major questions that must be answered in relation to treatments is: how should increasingly limited funding be prioritized to achieve the greatest on the ground benefit?

Rich will present on the following:

- Current forest types in Colorado and the CBBC region
- What has been and will be treated on state and private forest lands
- How will subsequent areas be identified and prioritized for future treatments

### **2:30-3:00 Tony Cheng & Sloan Shoemaker, Chair of the CBBC Vision Work Group and Executive Director, Wilderness Workshop, Carbondale, CO**

ABSTRACT: Based on what we know so far about the post-beetle future forest, what more information is needed to make sound decisions? Given the trajectory of forest development, will the future forest continue to look and function in a way that meets people's expectations, values, and uses? In 2012, the Colorado Bark Beetle Cooperative will explore these questions in greater depth.

## **Speaker Biographical Sketches**

**Dr. Dan Tinker** is a Forest and Fire Ecologist and an Associate Professor in the Department of Botany and Program in Ecology at the University of Wyoming. Dr. Tinker's research and educational interests are in forest and ecosystem ecology, particularly with respect to natural disturbance regimes and their effects on ecological processes, including the effects of post-disturbance spatial heterogeneity in large, forested ecosystems, such as the Greater Yellowstone Area. He and his colleagues have recently completed a three-year project funded by the Joint Fire Science Program investigating the reciprocal interactions between wildfire and bark beetles and how they impact landscape structure and wildfire risk.

**Claudia Regan** is the Regional Vegetation Ecologist with the U.S. Forest Service, Rocky Mountain Region. As the Regional Ecologist, Claudia's role with the Forest Service is to deliver science products and tools to resource specialists and managers and to serve as a technical expert on issues related to vegetation ecology topics in the region. Currently, Claudia is engaged in developing tools and approaches for evaluating wildlife habitat in subalpine forests, developing strategies and approaches for implementing ecosystem restoration, and assessing the vulnerability of ecosystem components and species to stressors such as natural disturbances and climatic influences. Claudia holds a BS and MS in Forest Sciences from Southern Illinois University and a PhD in Ecology from Colorado State University.

**Tony Cheng** is an Associate Professor in forest policy and Director of the Colorado Forest Restoration Institute at Colorado State University. Tony's primary research interests are in forest governance, policy and administration, with a focus on collaborative approaches attempting to sustain resilient forest conditions and forest-reliant communities. In his capacity of director of CFRI, Tony oversees programs that develop, synthesize, and deliver current scientific and experiential evidence on forest ecology and management to land managers, stakeholders, and communities to assist in achieving forest restoration and wildfire hazard reduction goals. Tony has a PhD in Forestry from Oregon State University, a MS in Forestry from the University of Minnesota, and a BA in Political Science from Whitman College in Walla Walla, WA.

**Cal Wettstein** is the United States Forest Service (USFS) Incident Commander for the Rocky Mountain Region Bark Beetle Incident Management Organization in the Medicine Bow/Routt, Arapaho/Roosevelt, and White River National Forests. He has a BS in Forestry from Rutgers, MS from Northern Arizona University. Cal has worked for the USFS for 36 years in California, Massachusetts, Arizona, Alaska, Oregon, and Colorado with experience in timber, recreation, lands, and fire management; forest planning, and administration.

**Rich Edwards** is an Assistant Staff Forester with the State Office of the Colorado State Forest Service, Forest Management Division. Rich manages the Good Neighbor Program with the BLM and the US Forest Service, Denver Water lands programs, logger education, forest roads and BMPs for water quality, and works with several collaborative groups (including the Colorado Bark Beetle Cooperative) in various capacities. Rich obtained a BS in Forest Management from Northern Arizona University, an MF in Forest Engineering from Oregon State University, and has over 22 years in private forest industry experience in Arizona, Colorado, and New Mexico.