

## **Rangeland Technology and Equipment Council Workshop**

**February 16th, 2020, 1:00 – 5:00 PM in Governors Square 15**

The Rangeland Technology and Equipment Council (RTEC) is an informal organization of land managers, engineers, researchers, academics, and private industry representatives interested in developing new rehabilitation equipment and strategies. The focus of the workshop this year is on the potential use of seed enhancement technologies (SETs) for improving post-fire restoration success in western shrublands. Large expanses of western shrublands are being invaded by exotic-annual weeds that promote wildfires that not only burn within the invaded area but also spread into native shrublands, which allow for the further spread of weeds. The cycle of weed invasion and wildfire can be halted in at-risk areas by successfully seeding desired perennial species after a wildfire. However, our ability to establish a diverse native plant community through seeding is notoriously difficult. SETs have the potential to advance restoration efforts by applying treatments that improve seed delivery and germination, and the tolerance of seedlings to environmental stress. The use of SETs is a standard practice in farming systems where the technology plays a critical role in the production of healthy crops. SETs have had limited use in restoration programs, although an effort is currently underway to develop SETs for rangeland applications. This RTEC session will focus on: 1) SETs that are being developed for rangeland applications, 2) potential market opportunities for treating seed for restoration efforts, and 3) round table discussions between scientists, land managers, and industry on the steps that would need to be taken for the broader adoption of SETs in restoration activities,

## Speakers

1:00	<b>Introductions and Overview of the Program.</b> Mike Pellent (BLM (retired)) and Matthew Madsen (Brigham Young University)
1:10	<b>Rangeland Rehabilitation R&amp;D: Time for New Partnerships and Approaches.</b> Tamzen Stringham (University of Nevada Reno)
1:25	<b>Perspectives from the Northern Great Basin on Challenges to Seed Based Restoration and Seed Technology Solutions.</b> Chad Boyd (USDA Agricultural Research Service) and Owen Baughman (The Nature Conservancy, Oregon)
1:45	<b>Seeding Technology for Rangelands: Past, Present, and Future.</b> Tony Svejcar (Oregon State University)
2:00	<b>Seed Pod Technology for Big Sagebrush: Challenges and Opportunities.</b> Maggie Eshleman and Corinna Riginos (The Nature Conservancy, Wyoming)
2:15	<b>Building Climate Resilience into Sagebrush Habitat with an Innovative Seeding Strategy.</b> Jessie Griffen (The Nature Conservancy, Oregon)
2:30	<b>Recent Advances in Native Seed Enhancement Technologies in Western Australia.</b> Todd Erickson (Kings Park Science and University of Western Australia)
2:45	<b>Use of Flash Flaming Technology to Improve Seed Handling and Delivery of Winterfat Seeds.</b> Mitch Thacker (Brigham Young University)
3:00	<b>Break</b>
3:05	<b>Improving Rangeland Restoration Using Targeted Fungicide Seed Coatings.</b> Benjamin Hoose and Travis Sowards (Brigham Young University)
3:20	<b>Seed Conglomeration: An Innovative Approach to Improving Sagebrush Seed Delivery and Establishment.</b> Rhett Anderson and Ben Hoose (Brigham Young University)
3:35	<b>Making a Breakthrough in Controlling Annual Grass Invaded Landscapes using Novel Seed Coatings Paired with Pre-emergent Herbicides.</b> Chad Camp (Brigham Young University)
3:50	<b>Round Table Discussion on Market Opportunities and Steps to Adopt Seed Enhancement Technologies</b>
4:30-5:00	<b>Select Topic and Agenda for 2021 RTEC Workshop in Boise</b>