

### **Symposium Title:**

What has SageSTEP learned about sagebrush ecosystem recovery after 10+ years of post-treatment monitoring?

### **Session summary:**

In 2006, the Sagebrush Steppe Treatment Evaluation Project (SageSTEP) began studying fuels treatments at 21 experimental sites in sagebrush-bunchgrass communities from central Washington to southwest Utah. Woodland conifers were encroaching at some sites; others were moderately invaded by cheatgrass. The study sites have been continuously monitored since implementing treatments that included mowing, burning, mastication, and herbicide application. This symposium shares some of what's been learned after at least 10 years post-treatment. Researchers will present findings from conifer-encroached and cheatgrass-invaded sites, focusing on: effects of treatments on herbaceous plants, ground surface properties, and hydrologic and erosion processes in woodlands; and on fire behavior and Wyoming big sagebrush in shrub/grass systems, with discussion of ecological costs and benefits of treatments in those systems. A moderated discussion session will follow the presentations.

### **Speakers (in bold), talk titles, and schedule**

- **Mark Brunson**, Introduction to the symposium (10 minutes)
- **Lisa Ellsworth**, Fuel reduction treatments alter expected fire behavior in the sagebrush steppe (20 minutes)
- **Jeanne Chambers**, Sagebrush recovery patterns after fuel treatments: Effects of disturbance type and community interactions (20 minutes)
- **Beth Newingham**, Decade-long responses of sagebrush plant communities to conifer removal across a regional-scale experiment (20 minutes)
- **Jason Williams**, Advancements in understanding long-term effects of pinyon and juniper removal on vegetation, ground surface conditions, and hydrologic and erosion processes in sagebrush steppe. (20 minutes)
- Moderated discussion (30 minutes). Participants: Lisa Ellsworth, Jeanne Chambers, Beth Newingham, Jason Williams, Dave Pyke, Bruce Roundy.

### **Complete author lists**

Ellsworth LM, Newingham BA, Shaff SE, Williams CJ, Strand EK, Reeves M, Pyke DA, Schupp EW, Chambers JC. Fuel reduction treatments alter expected fire behavior in the sagebrush steppe.

Chambers JC, Urza AK, Board D, Miller, R.F., Pyke DA, Roundy BA, Schupp, EW, and Tausch, RJ. Sagebrush Recovery Patterns after Fuel Treatments: Effects of Disturbance Type and Community Interactions

Newingham, BA, Freund SM, Chambers JC, Urza AK, Roundy BA, Cushman JH. Decade-long responses of sagebrush plant communities to conifer removal across a regional-scale experiment.

Williams CJ, Pierson FB, Kormos PR, Al-Hamdan OZ, Johnson JC, Nouwakpo SK, Polyakov VO. Advancements in understanding long-term effects of pinyon and juniper removal on vegetation, ground surface conditions, and hydrologic and erosion processes in sagebrush steppe.