

SRM 2024 Symposium – Mon Jan. 29, 1:00 – 5:00 PM - Room: Southern Pacific C

Climate Adaptation Strategies for Conservation of Ranching and Rangelands of the Great Plains and Southwest

Current and predicted climate change trends in the Great Plains and Southwest call for novel approaches to managing rangeland and ranching. Researchers, extension specialists, and educators working on two large USDA NIFA-funded Coordinated Agriculture Projects, The Prairie Project and the Sustainable Southwest Beef CAP will address a set of broadly-shared stakeholder questions about conservation of rangelands in the face of climate change. Speakers from each team will provide paired perspectives on challenges and climate adaptation solutions associated with stakeholder concerns about woody plant encroachment, fire, and grazing in the Great Plains and the Southwest.

1:00- 1:10 Opening remarks – welcome *Jean Steiner and Andres Cibils*

Interactive (Mentimeter): Include your region of interest.

A. Setting the stage

1:10 – 1:25 Climate change in the Great Plains and Southwest: syntheses, trends, and projections
Emile Elias (emile.elias@usda.gov), USDA Southwest Climate Hub and Fifth National Climate Assessment team

1:25 – 1:40 Questions of importance to the conservation of North Central grasslands of the United States in a Changing Climate
Christine Miller Hesed (Christine.Hesed@Colorado.edu), North Central Climate Science Adaptation Center (virtual)

Interactive: What climate trends are of most concern to rangeland management in your region? (List provided to audience) Are there additional questions or indicators that are important in your region? (Open ended)

B. Paired science-informed perspectives from the Great Plains and Southwest

1:40 – 2:10 How will climate change impact woody plant encroachment and how will the effectiveness of current efforts to manage woody encroachment change?
Brandon Bestelmeyer (brandon.bestelmeyer@usda.gov), USDA ARS Jornada Experimental Range and Dirac Twidwell (Dirac.twidwell@unl.edu), University of Nebraska

2:10 – 2:40 How will the effectiveness of current prescribed burn practices be affected by a changing climate, and how will those practices need to be altered to be more effective in a changing climate?
Sam Fuhlendorf (Sam.fuhlendorf@okstate.edu), Oklahoma State University

Interactive: Is woody plant encroachment of concern in your region? (Yes/no) Are there additional management practices that are being used or explored in your region? (Open Ended)

2:40 – 2:55 Break

- 2:55 – 3:25 What grazing management practices can help ranchers successfully adapt to climate change while also supporting healthy rangeland ecosystems? *Laura Goodman(laura.goodman@okstate.edu), Oklahoma State University and Sheri Spiegel(heri.spiegel@usda.gov), USDA ARS Jornada Experimental Range*
- 3:25 – 3:55 How can public understanding of rangelands and their importance increase? *Ben Wu (Xinyuan.wu@ag.tamu.edu), Texas A&M University and Joel Brown (joelbrow@nmsu.edu), USDA Southwest Climate Hub*
- 3:55 – 4:25 How can the accessibility of relevant science and tools be improved? *Morgan Treadwell (Morgan.Treadwell@ag.tamu.edu), Texas A&M University and Andres Cibils (Andres.cibils@usda.gov), USDA Southern Plains Climate Hub*

Interactive: Is the importance of rangelands widely appreciated in your region? (Yes, no.) Is there public support or public concern about particular rangeland management approaches? (Open Ended)

C. Panel Discussion and Wrap Up

- 4:25 – 5:00 Take home messages and proposed solutions – Speaker Panel - *Jean Steiner (jlsteiner@ksu.edu), Kansas State University, moderator.*

Note: interactive input will be used to frame discussion. The moderator will display Mentimeter responses throughout the session during introductions or break time.