

Fall 2023 Ecological Transformation Workshop

GOALS

The goals of this workshop series are to 1) identify areas of transformation due to wildfire and grass invasion and 2) evaluate management practices that enhance carbon storage, native biodiversity, and improve resilience, including tradeoffs among priorities.



Workshop 1 out of 3



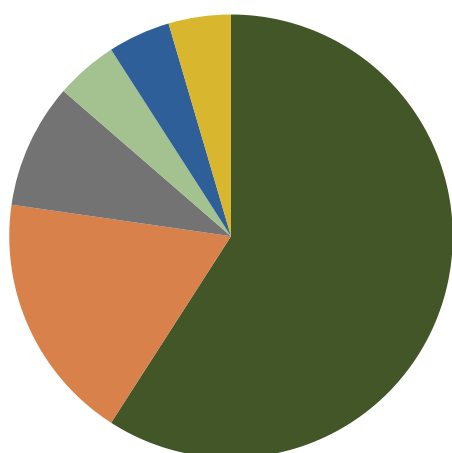
December 7th, 2023



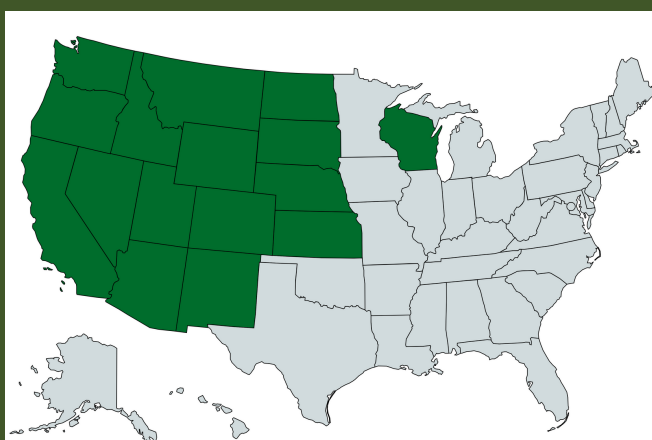
30 Participants

PRIMARY ROLES

- Researcher
- Student
- Mitigation Coordinator
- Community Organizer
- Program Manager
- Field Technician



AREAS OF STUDY



- 1 participant's area of study extended into Canada

3 TALKS

Introduction to Ecological Transformation (Wynne Moss, USGS) - [Wynne's slides here](#)

Drivers and Well Known Examples of Transformation (Emily Fusco, University of Washington - Climate Impacts Group/NW RISCC)

Workflow for Monitoring Transformation (Nayani Ilangakoon, Earth Lab - University of Colorado Boulder) - [Nayani's slides here](#)

BREAKOUT SESSION RESULTS

19

Examples of ecological transformation identified



Many examples of grass invasion and fire



Identified key questions

Key takeaways:

- The interaction of grass invasion and fire was the most common example
- Managers working at different scales need different information
- Many systems are displaying a high degree of resilience in the face of wildfire and invasions

Examples of identified transformations:

- Increased fire and drought in sagebrush ecosystems promotes the spread of invasive grasses
- Conifer forests are now dominated by deciduous trees, shrubs, or grasses due to high-severity wildfire

Future questions to address:

- How do we identify and maintain refugia of native species?
- How do the effects of cheatgrass invasion differ in shrublands vs. grasslands?

Research from the NC RISCC will address:

- The consequences of transformations caused by invasive species
- How invasive species and wildfire management can change carbon storage