



## Western Forest Resilience: Which Way Forward?

A lecture presented by

**Malcolm North, PhD**



Thurs, Mar 14 2024



2 PM  
Pacific



UC Davis PES 2005  
or [via Zoom](#)

Part of the **2024 FFERAL\* Lecture Series** sponsored by the California Fire Science Consortium

**Abstract:** California is a crucible for the western US's wildfire problem and efforts to mitigate the loss of life, homes, and forest ecosystems. Public land management agencies such as the Forest Service and CALFIRE have set ambitious forest treatment objectives, but are struggling to define what qualifies as a 'treatment' to meet their targets. In this talk, I will suggest a root cause of this ambiguity is a confounding of fire resistance and ecological resilience. In dry, western conifer forests, tree spatial patterns and their role in perpetuating heterogeneity may be a foundation of adaptive resilience. I will summarize several studies that examined this link and its implications for managing western forests. In particular, most forest management's use of competition to develop desired stand conditions may be at odds with how frequent-fire fostered western forest resilience. The current focus on reducing fuel loads may be temporary triage for a more difficult problem being exacerbated by climate change and management practices.



**Bio:** Malcolm North is a Research Forest Ecologist with the U.S. Forest Service Pacific Southwest Research Station, and an Affiliate Professor of Forest Ecology, Department of Plant Sciences at the University of California, Davis. He received his Master of Forest Science at Yale University and his PhD in Forest Ecology from the University of Washington. His published research includes work examining forest restoration and ecosystem response, wildfire, and forest carbon dynamics, available at: <https://northlab.faculty.ucdavis.edu/>

His lab primarily focuses on forest and fire ecology of Sierra Nevada forests.



\* *Forest & Fire Ecology Random Lectures*  
*Free & open to the public.*



**CALIFORNIA  
FIRE SCIENCE  
CONSORTIUM**