

Webinar Series: Ecosystem Resilience



The Southwest Climate Adaptation Science Center (SW CASC) and Center for Climate Adaptation Science and Solutions (CCASS) are hosting a series of webinars this May focused on ecosystem resilience; specifically, the impacts of heat on ecosystems, ecosystem transformations after large-scale disturbance events, and the benefits of Native American cultural burning. The information for each webinar is below, and the bios for each speaker can be found on the next page.

Extreme Heat & Ecosystems

May 1, 1-2pm PDT

Register here: <https://bit.ly/2xsVoNz>

Speakers include David Breshears and Robbie Burger, from the University of Arizona. They will give an overview of the types of impacts extreme heat can have on ecosystems and humans, with a focused attention to extreme heatwaves and lethal limits of birds and mammals, and thermoregulatory adaptation of humans.

Ecosystem Transformation After Large-Scale Disturbance

May 5, 1-3pm PDT

May 6, 1-3pm PDT

Registration: Information forthcoming - check swcasc.arizona.edu/webinars

This webinar is a two-day workshop focused on ecosystem transformations after large-scale mortality and disturbance events, as well as under the chronic stress of changing climate. The immediate objective of this event is to explore key uncertainties in the scientific understanding of ecosystem resilience, particularly with regard to providing guidance to the land management community. Don Falk (University of Arizona) will be leading the event.

Native American Cultural Burning

May 12, 1-2pm PDT

Register here: <https://bit.ly/39VRxWz>

The severe impacts of wildfires are becoming ever more apparent. Meanwhile, California Indian tribes have been using fire for centuries to maintain ecosystems. Ron Goode (Tribal Chairman of the North Fork Mono Tribe) and Beth Rose Middleton (University of California, Davis) will share their experiences from recent cultural burns in California, and explain how the traditional Native American practice of burning grasslands and forests improves the resilience of ecosystems.



David Breshears, University of Arizona

David D. Breshears is a Regents Professor of Natural Resources in the School of Natural Resources and the Environment at the University of Arizona, with a joint affiliation with the Department of Ecology and Evolutionary Biology. He studies ecohydrology related to the causes and consequences of vegetation change with a focus on tree mortality and associated forest “die-off” events, emphasizing drylands but extending globally and including “ecoclimate teleconnections”. Breshears applies these results to help address issues tied to land use, pollution, climate change, and ecosystem services.



Robbie Burger, University of Arizona

Robbie Burger is a Postdoctoral Fellow in the Bridging Biodiversity and Conservation Science Program. He is a human macroecologist that uses theory and large datasets to uncover: i) the general rules that scale across the diversity of life, and ii) to use these fundamental rules to address practical issues in global change, biodiversity conservation, human and ecosystem health, and sustainability. His international collaborations with physical, biological, and social scientists and with medicine, public health, engineering, and policy have resulted in more than 30 scientific articles in multidisciplinary journals with wide readership.



Don Falk, University of Arizona

Don Falk is Associate Professor in the University of Arizona School of Natural Resources and the Environment. Don’s research focuses on fire history, fire ecology, and restoration ecology in a changing world. Falk is a AAAS Fellow, and has received the Fulbright Short-Term Scholar award, the Ecological Society of America’s Deevey Award for outstanding graduate work in paleoecology, and awards from his School for both Outstanding Scholarly Contributions and Outstanding Teaching.



Ron W. Goode, Tribal Chairman of the North Fork Mono Tribe

The Honorable Ron W. Goode is a Veteran of the United States Army and a retired Community College Prof. in Ethnic Studies. Ron was inducted in the Clovis Hall of Fame for his work in education and community service in 2002. Mr. Goode has published an ethnobotany book on native plants and resources and in 2017-2018 Ron was the Coordinating Lead Author for the Tribal Indigenous Communities Climate Change Assessment as a new report of the California 4th Climate Change Assessment. Mr. Goode volunteers his time with five collaborative and tribal forums enhancing the ecological environment, watersheds, and cultural resources of the forests, Parks and tribal lands. Ron and his tribal members have been restoring cultural resource sites over the past twenty five years.



Beth Rose Middleton, University of California, Davis

Dr. Beth Rose Middleton (Afro-Caribbean, Eastern European) is Associate Professor and Chair of Native American Studies at UC Davis and a SW CASC investigator. Her research centers on Native environmental policy and Native activism for site protection using conservation tools. Broader research interests include intergenerational trauma and healing, rural environmental justice, Indigenous analysis of climate change, Afro-indigeneity, and qualitative GIS.