

Session: Ecology and Conservation of Amphibians and Reptiles

Type of Paper: Oral presentation

Paper Title: **The Impact of Wildfire and Changing Seasonal Climate Variables on Terrestrial Amphibians and Reptiles in Northern California: Patterns in Community Composition**

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Abstract

A series of large wildfires swept through northern California in October 2017, burning over 245,000 acres. The Tubbs Fire, which grew to become the most destructive wildfire in the history of California, burned large swaths of protected lands in the Mayacamas Mountains and elsewhere. In 2015, we established amphibian and reptile sampling plots at the Pepperwood Preserve in the Mayacamas Mountains within what became the footprint of the Tubbs Fire as well as at the Fairfield Osborn Preserve on Sonoma Mountain. These sampling plots were placed at and near four ephemeral ponds in three habitat types: grassland, forest canopy edge, and forest. To investigate the effects of wildfire and other environmental variables on the amphibian and reptile communities of these areas, we compared two years of data on herpetofauna community composition from immediately before the fire with data we collected immediately after the fire.