## The California Fire Return Interval Departure database: what it is and how to use it

A virtual lecture presented by

## Hugh Safford, PhD



Mon Mar 20, 2023



4 PM Pacific



Register and watch

Part of the **2023 FFERAL\* Lecture Series** sponsored by the California Fire Science Consortium and the Safford Lab at the University of California-Davis

**Abstract:** FRID statistics have been used for decades to help managers and scientists understand the ecological consequences of changing fire frequencies. The Forest Service Region 5 Ecology Program worked with UC-Davis to build a spatial FRID data layer that compiles information about fire return intervals for major vegetation types on the 18 National Forests in California and adjacent land jurisdictions. This data layer includes comparisons between pre-Euroamerican settlement ("pre-EAS") and contemporary fire return intervals (FRIs). The FRID layer may be used for land and resource planning and assessment, as well as other natural resource applications such as fuels treatment planning, postfire restoration project design, management response to fire, assessing the effects of fire and fire regime change on ecosystems, and general ecological understanding of the historic and current occurrence of fire on the California National Forests and neighboring jurisdictions.

In my presentation I will focus on the guts of the FRID data and the departure metrics, describe how to properly use the dataset, discuss some important caveats, outline current updating and improvement work we are doing with the dataset, and describe a current national effort to develop a similar dataset and metrics for the US.



**Bio:** Dr. Hugh Safford is the chief scientist of Vibrant Planet, an environmental public benefits corporation, and a research ecologist at the University of California-Davis. Before joining Vibrant Planet, Safford was Regional Ecologist for the USDA-Forest Service's Region 5 (California, Hawaii, Pacific territories) between 2001 and 2021. He has provided international technical assistance on fire, forest management, and climate change issues since the 1990s. Safford is director of the Sierra Nevada section of the California Fire Science Consortium, and the California Prescribed Fire Monitoring Program (a partnership with Cal Fire). Visit the Safford Lab at UC-Davis at https://safford.faculty.ucdavis.edu/research/.



