## The complex interactions of native insects and diseases of truefirs in the Southern Sierras

A virtual lecture presented by

## **Beverly Bulaon**

USDA Forest Service: Region 5 Forest Health Protection, South Sierra Shared Service Area

Wednesday April 14<sup>th</sup>, 2021 3:30 – 4:30 PM PDT

Part of the

## 2021 FFERAL\* Lecture Series

Sponsored by the California Fire Science Consortium and the US Forest Service Pacific Southwest Region Ecology Program

\*Forest & Fire Ecology Random Lectures, free & open to the public

For more information, registration, or to view the recording of the lecture on a later date, please visit: http://www.cafiresci.org/events-webinars-source/category/feral2021-bulaon



**Abstract:** True firs in California have a complex of pest agents that are often overlooked in their ability to significantly weaken and eventually kill their hosts. Both insects and pathogens work in intricate and sometimes laboring methods to effectively kill whole trees in order to reproduce and survive. Changing climate and current stand conditions have provided more opportunities for these agents to be successful, resulting in dramatic changes over the past 30 years. The southern Sierras were especially impacted during the recent drought, and mortality is still ongoing in some locations. Mortality associated with these agents, particularly fir engraver, is expected to worsen in upcoming years.

**Bio:** Beverly M. Bulaon is a forest entomologist with USDA Forest Service, Region 5, State and Private Forestry, Forest Health Protection, stationed in Stanislaus National Forest. She serves the Eldorado, Inyo, Stanislaus, Sierra, and Sequoia National Forests as well as Yosemite, Devils Postpile, Sequoia-Kings Canyon, Death Valley National Parks and all other federal lands in between. Forest Health Protection (FHP) works closely with multiple agencies, universities, collaborators, and partners in topics related to forest health. FHP provides technical assistance and training in forest entomology and pathology, as well as developing additional resource products and technology for the Region. Contact: beverly.bulaon@usda.gov.