



Soil Scientists Dig the Forest

On June 6 and 7 2025 the Professional Scientist Association of California and the California Forest Soils Council held a joint field meeting that featured JDSF at multiple sites. The tour “Soils, Climate, and Prescribed Fire from Coast to Inland in Mendocino County” was attended by about 50 people.



Dr Jones describes treatments and initial results at Fire Mitigation Research site.

The tour started off exploring the Pygmy Forest and its historic soil study sites, including its “soil pits”. Soil pits are used to describe soil types and

teach about unique soils. JDSF has protected these pits so that generations of students can learn from them. Staff helped clean up the sites in preparation for the visit. Professor Emeritus Dr Susan Marshall talked about the soil as well as Tera Sholars discussing what is now known as “Mendocino Cypress Woodlands” unique vegetation. Forester Lynn Webb welcomed the group to JDSF and provided a quick overview.

Hans Jenny, professor of soil science at UC Berkeley, did pioneering research in the pygmy forest and his 1941 book is a key development in the science. The photo here shows the unique soil that results from coastal geology and climate



Frog provides scale to soil pit

and vegetation. The accumulation of cement like layers and acid result only in specialized plants growing there. Click [HERE](#) to learn more.

Forestry Aids helped ensure safety as the caravan of vehicles moved to the next site. The second site was a soil pit located more inland. Here Dr. Michel Jones talked about the upcoming study to reintroduce prescribed fire in the pygmy— a research project being undertaken by Dr. Scott Stephens of UCB. He also spoke about the next stop, the Fire Mitigation Study, that he, Dr. Pascal Berrill and Dr. Rob York are involved in. The soil scientists engaged in a lively discussion of the fire effects. California Geological Survey staff, Patrick K. Brand and Dave Longstreth discussed the region's geology as well as an interesting new study on how variable bedrock strength is.

Caspar Watershed was the last stop of the day. The new and ongoing studies were described

by Anna Tompson of PSW and Graduate Student, Mairead Brogan. The tour visited the sites where they measure the movement of water through the trees and soil.



Anna Tompson of PSW explains how water is tracked from soil to tree.

Most of the attendees camped at Mendocino Woodlands State Park. The following day the group visited the Willits Bypass Mitigation site then traveled back to Fort Bragg through the forest discussing the Soil Climosequence. Highway 20 spans dry inland and more temperate and wet climates that in turn influence soil development. Camp 20 Picnic area and the old scales/emergency helispot were the two increasingly coastal influenced in this sequence.