A case study to evaluate ground-based, wildland survey methods for *Phytophthora ramorum* (cause of Sudden Oak Death) in Coast Live Oak (*Quercus agrifolia*) stands in California

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In a case study, we evaluated observers' accuracy in detecting *Phytophthora ramorum* and their ability to estimate percentage of infested area in coast live oak (*Quercus agrifolia*) stands in California. The study compared visual detection of symptoms on California bay laurel (*Umbellularia californica*) and oaks with results from three permanent 1-hectare plots. Each plot had 100% survey of all stems and varied in infection level (Sonoma County - 84% infection; Napa County - 68% infection; and Marin County - 4% infection). In 50 randomly selected plots at each site, an expert and novice observer noted the presence or absence of *P. ramorum*. These observations were used to test the following null hypotheses: (1) expert and novice observers have the same detection ability; and (2) expert and novice observers can accurately detect symptoms. The overall analysis shows the expert's assessments of infection level were closer to true than the novice's assessments. The observers tended to over-estimate the amount of infection by larger amounts when less disease was present. The novice assessment was 23% higher for the plot with 4% infection. The expert assessments were within the 95% confidence interval of the estimated proportion, indicating that a trained observer can accurately detect symptoms of *P. ramorum* in coast live oak stands in CA.