Effectiveness of management program for Sudden Oak Death in Oregon

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We have worked with the Oregon Department of Forestry to analyze how effective previous treatments were at preventing the spread of *Phytophthora ramorum*. We used data from 2015 to 2022 for EU1 and 2002 to 2022 for NA1. We used the PoPS (Pest or Pathogen Spread) modeling framework to simulate both NA1 and EU1 strains of *P. ramorum* in Oregon. The model simulates reproduction, dispersal, and establishment of the disease through space and time based on current infections and environmental data. We calibrated the NA1 model from 2002 to 2015 and validated it from 2016 to 2022. For EU1, we calibrated the model from 2015 to 2020 and validated it with 2021 to 2022 data. We ran the model with two scenarios: 1) using actual treatments that were applied and 2) with no-treatment interventions at all. We compare the total infected area with management to that detected in the field and to the simulation with no treatments in order to quantify the potential prevention in infected area based on the treatments applied by ODF and the Forest Service. We show that the treatment efforts have prevented thousands of acres from being infected far beyond the area that was treated.