

A Comparison of Environmental Factors, Vegetative Structure, and Small Vertebrates of SOD High-Risk and Low-Risk Oak Woodlands in San Luis Obispo County, California

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Coast live oak (*Quercus agrifolia*) woodland occurs within 60 miles of the California coast from Humboldt to San Diego Counties. Sudden oak death disease (SOD) has infected coast live oak stands from Humboldt County to within 10 miles of the San Luis Obispo County line and threatens several thousand acres of coast live oak woodland in the county. The most threatened woodlands are mesic stands within several miles of the coast where coast live oak frequently occurs in association with tan oak (*Lithocarpus densiflorus*) and California bay (*Umbellularia californica*). In these stands, annual rainfall averages 100 cm, resulting in woodland that is botanically complex for coastal-central California. However, little information is available on the vegetative structure and the fauna of this habitat. During 2002 to 2004, we sampled the vegetation, small mammals, birds, and herpetofauna in high-risk coast live oak woodlands at 5 study sites in San Luis Obispo County. Since 1993, we have conducted identical sampling methodologies in comparatively xeric blue oak (*Quercus douglasii*)-coast live oak woodlands on the Camp Roberts Military Facility approximately 10 miles north of Paso Robles in San Luis Obispo County. In this paper, we will compare the environmental factors (climate, rainfall, soil), vegetative structure, and small mammal, bird, and herpetofaunal communities in high-risk coast live oak woodlands to those in low-risk blue oak-coast live oak woodlands. We expect that the habitat most at risk for SOD in San Luis Obispo County also has unique habitat characteristics and associated faunal communities, thus making a case for the importance of maintaining and managing these coast live oak woodlands.