

Humboldt Marten Denning Ecology in a Managed Redwood-Dominated Forest Landscape

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The Humboldt marten (*Martes caurina humboldtensis*) historically occurred in California's coastal redwood-dominated forests from northern Sonoma County to the Oregon border. The subspecies was thought to be extirpated due to over-trapping and loss of habitat until a small, remnant population was rediscovered in 1996 on the Six Rivers National Forest. Surveys conducted from 2004 to 2011 on managed forests owned by Green Diamond Resource Company to the west of the remnant population yielded marten detections at several stations in the Pecwan and Bear Creek watersheds. To better understand the composition, movements, fates, and habitat use of marten on these managed lands, a collaborative effort between Green Diamond, the U.S. Forest Service Pacific Southwest Research Station, and the Yurok Tribe was initiated in 2012. Between October 2012 and April 2016, 33 individual marten were captured (18 male, 15 female), and 24 (13 male, 11 female) were radio-marked. More than 2,600 telemetry locations have been obtained resulting in the identification of 100 rest sites and 15 den sites. After documenting reproduction in 2013, all adult female marten were monitored throughout each denning season (2014-2016) to determine denning phenology, kit production, and the characteristics and spacing of denning structures. This study is ongoing and has the promise of providing important insights on how managed forests in the redwood region can provide denning habitat for coastal marten.