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Abstracts

## FEATURE ARTICLES

### BREEDING DISPERSAL IN THE CALIFORNIA SPOTTED OWL

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*Abstract.* Spotted Owls (*Strix occidentalis*) are territorial, generally nonmigratory, and strongly philopatric. Nevertheless, California Spotted Owls (*S. o. occidentalis*) exhibited breeding dispersal during 7% of interannual observations of banded individuals ( $n = 54$  of 743 occasions). Based on ecological theory and published literature, we made *a priori* predictions about the factors associated with the probability of breeding dispersal and breeding dispersal distance, and about the consequences of dispersal. Breeding dispersal probability was higher for younger owls, single owls, paired owls that lost their mates, owls at lower quality sites, and owls that failed to reproduce in the year preceding dispersal. Sex had little effect on the probability of breeding dispersal. Dispersal distance was similar for female and male owls (median = 7 km, range = 1–33 km). We found no strong relationships between dispersal distance and any of the conditions that were associated with the probability of breeding dispersal. Dispersal resulted in improved territory quality in 72% of cases. These results indicate that breeding dispersal was condition-dependent and adaptive.

*Key words:* dispersal consequences, dispersal distance, dispersal probability, mate loss, Spotted Owl, *Strix occidentalis occidentalis*, territory quality.