

## ABSTRACT

### AN EVALUATION OF THE CALIFORNIA WILDLIFE HABITAT RELATIONSHIPS SYSTEM: SMALL MAMMAL ASSEMBLAGES IN SIERRAN MIXED CONIFER HABITAT

Results of a small mammal species inventory and habitat study within 3 Sierran mixed conifer habitats were compared to predictions by the California Wildlife Habitat Relationships (CWHR) System. Accuracies for species predicted present/absent were 92.3% for multi-storied, open (medium/large trees), and sparse (medium/large trees) habitats. Reproductive activity accuracies were 92.3% (multi-storied), 91% (open), and 89.7% (sparse). Predictions for species expected absent and not reproductively active were  $\geq 98.5\%$  correct. Predictions for species present and expected reproductively active were  $\leq 50\%$  correct. All habitats had similar relative abundances for *Tamias speciosus*, *Tamiasciurus douglasii*, and *Spermophilus beecheyi*, respectively, contrary to CWHR predictions. All habitats had similar relative abundances of *Peromyscus maniculatus* as CWHR predicted. Presence of *Peromyscus maniculatus* (multi-storied), *Tamias speciosus*, and *Tamiasciurus douglasii* was not associated with microhabitat features examined. Presence of *Peromyscus maniculatus* was associated with high shrub cover (open), and high total canopy and tree vegetation less than 1 m (sparse).

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