



## Restored riparian vegetation is important for wintering birds in California's Central Valley

Our results show the importance of restored riparian habitat to a variety of birds. The use of restored vegetation by wintering birds demonstrates yet another benefit that restoration in the flood plain can provide wildlife.

Knowing how birds respond to riparian restoration is a cost-effective way to evaluate the success of restoration efforts. Although previous studies have focused on breeding birds, information on migrant and wintering species is lacking, leaving an incomplete picture of restoration success.

We estimated species richness and abundance for birds that winter in remnant and restored riparian vegetation in the San Joaquin and Sacramento valleys of California. We compared age-class distribution and site persistence (time of site use) for birds at the same sites to assess habitat quality. Older age-classes and longer site persistence may indicate better resources (food, cover) and hence higher quality habitat.

Species richness was greater at the remnant sites, largely due to uncommon year-round residents. Wintering-only species had similar species richness values in remnant and restored sites. Of the 10 most common wintering species, 4 were more abundant at remnant sites, 3 at restored sites, and 3 did not differ between sites. We found more adult Lincoln's Sparrows and Hermit Thrushes (both wintering species) at remnant sites. All age-classes of those two species, along with White-crowned Sparrows and adult Fox Sparrows, were more persistent at remnant sites.

### Key Points and Management Implications

- Restoring vegetation to California's flood plains benefits both breeding and wintering birds.
- Previous studies of bird response to restoration rarely include demographic data and wintering birds.
- Restored sites and remnant sites in the Central Valley harbor similar wintering bird species.
- For certain species, remnant riparian harbors more birds, more adults, or birds that stay longer.

Latta, S.C., C.A. Howell, M.D. Dettling, and R.L. Cormier. 2012. Use of Data on Avian Demographics and Site Persistence during Overwintering to Assess Quality of Restored Riparian Habitat. *Conservation Biology* 26:482-492. PRBO publication #1839