

Riparian Bird Conservation Plan: A Strategy for Reversing the Decline of Birds and Associated Riparian Species in California

A Project of California Partners in Flight and the Riparian Habitat Joint Venture

More than 225 species of birds, mammals, reptiles, and amphibians depend on California riparian habitats. As evidenced by an abundance of symposia, riparian habitats are important to ecosystem integrity and function across landscapes and have been identified as the most important habitat for landbird species in California.

Riparian vegetation in California makes up less than 0.5% of the total land area, and estimated 347,000 acres. Riparian vegetation is critical to the quality of instream habitat and aids significantly in maintaining aquatic life by providing shade, a source of food (riparian insects), and nutrients that form the basis of the food chain. Unfortunately, riparian habitat has been decimated over the past 150 years.

The loss of riparian habitats has been suggested as the most important cause of population decline among landbird species in western North America. In addition to productive breeding grounds, riparian habitat provides vital overwintering and migration stopover areas and corridors for dispersal to Neotropical migrant and resident birds in California and throughout the west.

The mission of the Riparian Habitat Joint Venture (RHJV) is to promote conservation and restoration of riparian habitat sufficient to support the long-term viability and recovery of native bird populations and associated species.

The RHJV:

- Collects and analyzes existing data to inform land managers, planners and the public of the complex issues affecting California's riparian habitats;
- Will double riparian habitat in California by funding and promoting on-the-ground conservation projects;
- Provides guidance and technical assistance to private landowners, land managers, funders, agencies, and conservation organizations in the selection, design, and implementation of the highest priority conservation/land management projects.

The Riparian Bird Conservation Plan aims to synthesize and summarize current "state-of-the-science" knowledge of the requirements of birds in riparian habitats and provide recommendations for habitat protection, restoration, management, monitoring, and policy to ensure long-term persistence of birds and other wildlife dependent on riparian ecosystems.

Designing conservation efforts for riparian habitats based on the needs of birds is useful because birds occupy a diverse range of niches within riparian habitats and their territory needs are larger than all but the mid-size to largest terrestrial mammals. Through managing for a diversity of birds, many other elements of terrestrial biodiversity will be conserved.

Significant Findings

- The vast majority (10 of 14) of the selected “focal species” has suffered reductions in a significant portion of their former breeding range, and 7 of 14 species’ former breeding ranges are still declining. Extirpation appears to have resulted primarily from historical loss of riparian habitat throughout the state, which has also increased the fragmentation of remaining habitat patches. Where complete elimination of habitat does not explain the species decline, the loss of a particular habitat condition (such as the loss of a dense understory or shrub layer) is often the factor.
- The success of current riparian habitat restoration and rehabilitation efforts must be assessed using standardized bird monitoring techniques.
- Riparian restoration and protection sites should be prioritized by:
 1. Proximity to a natural hydrograph;
 2. Positioning within dispersion range of existing source populations for declining species, which will maximize the potential for range expansion;
 3. The ability to protect and manage adjacent upland habitats for foraging, flood refugia, and/or nesting habitat; and
 4. The extent to which land use within 7-12 kilometers from the riparian corridor (or even better, throughout the watershed) can be influenced or is likely to remain under management that is compatible with the maintenance of high bird species productivity.
- Bird reproductive success is significantly affected by brood parasitism by Brown-headed Cowbirds and high predation rates by both native and non-native predators, due to such structural and diversity factors as patch size, patch isolation, and the type and configuration of surrounding land use.

The full Plan includes references, glossary and appendices. You may view or download copies of the Plan from the Point Reyes Bird Observatory website at www.prbo.org.