

The Riparian Bird Conservation Plan, by California Partners in Flight and the Riparian Habitat Joint Venture, version 1.0. 2000. 88 pp. Available free (in pdf format) from the Point Reyes Bird Observatory (PRBO) website: <http://www.prbo.org/CPIF/Consplan.html>.

Habitat loss may be the leading cause of population declines and range reductions among landbirds in western North America. To reverse this trend and maintain existing populations, remnant high-quality habitats must be protected and degraded habitats restored. Although efforts to protect and enhance riparian habitats are underway, land managers designing restoration programs face a high degree of uncertainty in deciding which management actions will be most effective. To reduce this uncertainty, the full range of knowledge and skills from the natural and social sciences should be brought to bear on the problem. In addition, dissemination of information among scientists, managers, and stakeholders should be rapid, reciprocal, and continuous (Mangel et al. 1996).

Recognizing these challenges, California Partners in Flight (see Bonney et al. 2000 for a discussion of the Partners-in-Flight approach) teamed up in 1994 with a diverse coalition of federal, state, and nonprofit organizations and landowners to form the Riparian Habitat Joint Venture (RHJV). The RHJV was modeled after the highly successful joint ventures of the North American Waterfowl Management Plan, and to date 19 organizations throughout California have joined this initiative to protect biodiversity. Broadly stated, the RHJV's goal is to conserve, increase, and improve riparian habitats to protect and enhance California's native bird populations.

As a major step toward achieving this goal, the RHJV, with PRBO as the leading organization, produced the first edition of the Riparian Bird Conservation Plan (hereafter "the plan") in August 2000. The plan's goal is to provide scientific information and technical guidance to help private landowners, land managers, agencies, and conservation organizations select, design, and implement the conservation and land-management projects of highest priority. More specifically, the plan synthesizes current scientific knowledge of the requirements of birds in riparian habitats and recommends strategies for habitat protection, restoration, management, monitoring, and policy. The plan's guidelines are flexible, so that land-management practices designed to benefit wildlife do not conflict with resource-dependent economies.

Although the plan has a California focus, many of its recommendations are relevant to other western states. In part this is because the plan presents separate conservation objectives for eight of California's ten bioregions. To capture the conservation needs of these regional avifaunas, fourteen focal species were selected. It is hoped that the restoration strategies necessary to support these species represent a multispecies umbrella that will protect the riparian bird community at large (Lambeck 1997). The plan contains historical and current data on the distribution of these focal species from more than 350 sites throughout the state and provides population targets for each species in these eight bioregions. In documents separate from the plan (links on the PRBO website), each focal species is profiled in detail. These profiles present valuable information on life history and distribution but differ from other species accounts (e.g., *The Birds of North America* series) in that they focus on species-specific conservation priorities.

The plan has tremendous potential to advance avian conservation efforts and, given the resources now being devoted to riparian restoration, its release could not be more timely. Although a landmark effort in its current form, there are aspects of the plan that could be improved. For example, it would help if there were greater acknowledgment of the degree to which particular conclusions or recommendations are based upon speculation versus empirical evidence. Recommendations that are based on best guesses and/or anecdotal observations could then be tested with rigorous scientific methods. In this manner the document has the potential to function as an important hypothesis-generating tool supporting adaptive management. In

BOOK REVIEWS

adaptive management, science is used to evaluate current management practices, design tractable management experiments, monitor their effectiveness, and recommend midstream adjustments (Walters 1986). Although the plan does provide some research and monitoring recommendations, this section of the plan should be expanded. In its present form this section informs land managers of the need to integrate scientific investigation and management actions but offers less to the research ecologist interested in learning which uncertainties need focused investigation.

Ultimately the Riparian Bird Conservation Plan takes a heroic step forward in tightening the link between science and on-the-ground management, integration sorely needed if we are to meet today's conservation challenges. The plan is a valuable resource that should be consulted by all those interested in managing riparian resources. Additional habitat-based bird-conservation plans (e.g., for oak woodlands) are being developed by California Partners in Flight, with drafts available at the PRBO website.

LITERATURE CITED

- Bonney, R., Pashley, D. N., Cooper, R. J., and Niles, L.(eds.). 2000. Strategies for bird conservation: The Partners in Flight planning process. Proceedings of the 3rd Partners in Flight Workshop, 1-5 October 1995, Cape May, New Jersey. Proceedings RMRS-P-16. U.S. Dept. of Agriculture, Ogden, UT.
- Lambeck, R. J. 1997. Focal species: A multi-species umbrella for nature conservation. *Conserv. Biol.* 11:849-856.
- Mangel M., and 41 others.1996. Principles for the conservation of wild living resources. *Ecol. Appl.* 6:338-362.
- Walters, C. J. 1986. *Adaptive Management of Renewable Resources*. McMillan, New York.

Gregory H. Golet