

## STATUS AND DISTRIBUTION—INTRODUCTION

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The Willow Flycatcher breeds throughout most of the United States and parts of southern Canada, occurring in a broad range of habitats across a wide elevational range. Interestingly, recent trends in distribution and abundance are variable across the species' range, likely the result of geographic differences in the nature and extent of human-associated alteration of the landscape, and possibly ecological differences among subspecies. In the eastern and southeastern U.S., the Willow Flycatcher has expanded its range over the last few decades (Sedgwick 2000a), and breeds in riparian shrubs and forests, and in human-altered landscapes such as shrubby old-fields and young pine plantations (Sogge 2000). In the Pacific Northwest, the species has disappeared from many lowland riparian areas, but has become a common breeder in regenerating clearcut habitat (Morrison and Melow 1983, Altman et al. *this volume*; M. Sogge and E. Paxton, unpubl. data). There, intensive timber harvesting may have provided new breeding habitats, and given the extent of clearcuts in Oregon and Washington, it is possible that Willow Flycatchers are now more abundant and widespread than in the past (but see Altman et al. *this volume*). In contrast, Willow Flycatchers in the southwestern U.S. have declined to the point of near extinction as urbanization and a burgeoning human population have resulted in widespread loss and degradation of riparian habitat. Willow Flycatchers are now absent as a breeding species from the Central Valley of California, where they were once common (Harris et al. 1987), and have been dramatically reduced in number along the lower Colorado River, which in historic times probably supported one of the largest Willow Flycatcher populations in the southwest (Unitt 1987).

Despite years of concern about declining Willow Flycatcher populations, surprisingly few data have been available to effectively gauge trends in distribution and abundance, or to establish links between declines and potential causative factors. The following series of papers provides current information at regional and local scales critical to the management and conservation of endangered, rare, and declining species. The section begins with a rangewide synthesis by Mark Sogge and his colleagues describing the distribution of breeding sites of the Southwestern Willow Flycatcher, summarizing nine years of surveys and including analyses of

site characteristics such as habitat type and land ownership. This overview is followed by state-wide assessments of flycatcher status in California (Barbara Kus and co-authors) and Arizona (Charles Paradzick and April Woodward), which together support half of the Southwestern Willow Flycatchers in the United States. Chris Farmer and co-workers focus their attention at an even more local scale, considering Willow Flycatcher occurrence and habitat use at one of the largest coastal sites in California—the Santa Ynez River. Brian Kulba and Bruce McGillivray round out the presentations on breeding populations with their summary of the distribution and habitat characteristics of Willow Flycatchers in Alberta.

Several themes run through each of these papers, drawing attention to areas requiring further investigation. All of the authors assessing the status of Southwestern Willow Flycatchers point out that while many years of survey data are now available, their usefulness in determining population trends is severely limited because of inconsistent survey scope and effort across years. Standardized surveys at selected sites will be essential for detecting future population trends and assessing response to management (U.S. Fish and Wildlife Service 2002). Baseline data are needed for populations in less-studied parts of the flycatcher's range, such as Texas, and syntheses of historic and current status published for New Mexico, Utah, and Colorado. Second, regional compilations of survey data indicate that Southwestern Willow Flycatchers primarily occur in extremely small populations, the majority numbering fewer than five territories, heightening the risk of local extirpation through stochastic events. Each of the authors touches on the need for an improved understanding of the spatial connections between flycatcher populations and the extent to which they are structured in one or more metapopulations. Third, all of the authors present data describing general habitat features of sites used by flycatchers, comment that many evidently suitable sites are unoccupied, and note that flycatchers are sometimes found breeding in atypical habitats. Further research is needed to describe the range of habitat types used by Willow Flycatchers, and to identify the local and landscape-level hydrological and geomorphic conditions that support such habitats. Habitat selection by breeding flycatchers also needs to be investigated, as well as the

roles that site fidelity and social attraction play in determining local flycatcher distributions.

The volume of literature devoted to breeding Willow Flycatchers defies the reality that this species spends over half the year on wintering grounds outside of the United States. Until recently, much of our knowledge of this part of the flycatcher's annual cycle was based on little more than distributional maps in popular field guides, hardly adequate for an understanding of the factors influencing population trends of

breeding birds. Section I thus concludes with the first published information on the distribution and habitat use of Willow Flycatchers on their wintering grounds in Central America. Janet Lynn and coauthors provide detailed information on the types of habitats used by Willow Flycatchers, as well as threats to those habitats, and in so doing not only contribute new information on Willow Flycatcher ecology, but provide a strong foundation for future research and monitoring at these and other wintering sites.