

Preface

This book by avian conservationists reviews current research and identifies information gaps that need to be filled if we are to effectively conserve birds in the next several decades. Approximately half of the chapters were presented orally in a symposium at the 1996 joint meeting of the American Ornithologists' Union and the Raptor Research Foundation organized by ourselves. The remaining chapters were solicited to provide a broad review of avian conservation, fill important gaps in the coverage of this expanding field, and allow working managers and conservation pioneers to interject their thoughts. We strived to obtain chapters that not only discussed research needs, but also suggested how to most effectively implement research results for avian conservation.

The book is organized into seven parts. First, we reflect on recent approaches, growing pains, and future courses of action of the growing field of avian conservation biology. We then discuss important new techniques for conserving and monitoring birds. Genetics, spatial modeling, and methods for monitoring abundance and demography, important tools that subsequent chapters rely on, are discussed. Captive breeding, reintroduction, translocation, population viability modeling, and proactive conservation are discussed in part III on approaches for conserving endangered and sensitive species. Specific case studies reviewing research and future research needs in forested and nonforested landscapes are the focus of parts IV and V. Most of these chapters rely on research conducted in North America. We broaden this perspective in part VI by presenting discussions of research results and needs from a variety of European, island, neo- and paleotropical projects. Part VII includes discussions about how to make research applicable to management needs. These chapters are written by land managers and researchers working for management agencies. We provide short introductions to each section to provide cohesion needed with a multiauthored volume such as this.

Several threads weave the book together. First, an expanding human population has caused widespread changes in bird habitats. All habitats are affected to varying degrees, and birds respond quickly to these changes. Second, most avian

conservation is currently based on short-term, correlative studies of bird abundance, which may be misleading. Instead, conservation needs to be rooted on long-term, experimental studies that measure avian population viability (productivity, survival, and dispersal). Third, research has often proceeded independent of consultation with actual managers. A closer relationship needs to be developed between researchers and managers if effective conservation strategies are to be developed.

The decline of many bird species throughout the world is alarming and the cause of much research and management. We hope this book makes an important contribution to the conservation of birds by: (1) highlighting the peril many species experience; (2) showcasing some of the best research projects designed to understand why birds are declining and reverse those trends; and (3) presenting the advice of practicing managers to underscore important research approaches often not considered by research scientists. Our intent is to provide a recipe for successful conservation during the next ten to fifty years. We hope conservation biologists, managers, and students interested in the conservation of birds will take the messages in the book to heart. Use the ideas herein to: (1) gauge the quality and relevance of your research; (2) stimulate new research areas; and (3) improve your communication of needs to researchers and results to managers. Above all else, use these thoughts to improve the conservation of birds as we enter a new century with ever increasing human demands on our natural resources.

We offer our sincere thanks to all who encouraged, reviewed, and guided our development of this book. Each chapter was peer reviewed, and we thank the following colleagues for their comments: Yoram Ayal, Paul Banko, Steve Beissinger, Carl Bock, Jeff Brawn, Henry Campa, Andy Carey, Dick DeGraff, John Faaborg, Hugh Ford, Mark Fuller, Rob Fuller, Joe Ganey, Fred Gehlbach, Lauren Gilson, Alejandro Grajal, Sue Haig, Andy Hansen, Sallie Hejl, Chuck Hunter, Dick Hutto, Fran James, Scott Johnston, Robert Kenward, Steve Knick, Rick Knight, Mike Kochert, Stephen Kress, Dave Manuwal, Bruce Marcot, Bill McComb, Mike Morrison, Raymond O'Connor, Berry Pinshow, Richard Porter, Martin Raphael, Harry Recher, Scott Robinson, John Rotenberry, Ian Rowley, Vickie Saab, Tom Sherry, Bill Sydeman, Jeff Walters, John Wiens, and Amotz Zahavi. Financial support for the project was provided by Sustainable Ecosystems Institute and the AOU/RRF 1996 Local Committee. Barbara Dean and her staff at Island Press showed great patience and guidance in preparing the final copy. Lastly, we would like to thank all the authors for contributing and revising in a timely (or less than timely!) fashion.

J. M., Clearview, Washington
R. S., Meridian, Idaho