California Bird Species of Special Concern

A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California

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FOREWORD

The publication of Bird Species of Special Concern: A Ranked Assessment of Species, Subspecies, and Distinct Populations of Birds of Immediate Conservation Concern in California marks the culmination of a synergistic collaboration among California's top field and museum ornithologists, wildlife biologists, and conservationists to produce a definitive treatment of the status of declining and vulnerable bird populations in California. Since 1978, when the Western Field Ornithologists' J. V. Remsen Jr. prepared the first report on bird species of special concern for the Department of Fish and Game, information on the state's bird populations has expanded exponentially. The current project grew out of recognition by the Department and its partners of the pressing need for a rigorous and comprehensive evaluation of this recent information. We offer this volume as a product of success in achieving that vision and believe it sets a new standard for assessing the status of bird populations in California.

Through commitment to technical excellence, this volume ties together the threads of bird conservation in California by capturing elements of the most important current bird conservation initiatives. From the habitat-based California Partners in Flight bird conservation plans to the fundamental baseline bird population studies conducted by the Department and its partners, *Bird Species of Special Concern* combines the best of our collective knowledge and stands as a testament to the enormous potential of collaboration.

In producing this monograph, the Department worked closely with PRBO Conservation Science and Western Field Ornithologists. This project would not have been completed, however, without the extraordinary dedication and participation of California's ornithological and birding communities. The Department remains committed to a continued investment in population assessment and adaptive management as tools for effective conservation of the state's bird populations. *Bird Species of Special Concern* will focus these efforts on the varied, ongoing challenges facing at-risk birds and their habitats.

John McCamman Acting Director California Department of Fish and Game

Western Field Ornithologists is proud to unveil the first volume of its new monograph series, Studies of Western Birds, particularly with a work dedicated to the conservation of at-risk birds within California. We hope that this will stimulate other comparable works on at-risk birds elsewhere or additional lengthy treatises on any aspect of field ornithology within the region of interest of the organization-the Rocky Mountain and Pacific states and provinces, including Alaska and Hawaii, western Texas, northwestern Mexico, and the northeastern Pacific Ocean. Western Field Ornithologists strives for excellence in its publications. Of primary concern is the advancement of the long tradition of field ornithology in this region, both for pursuit of scientific understanding and to promote conservation of the region's varied and stimulating avifauna. Such efforts, including the present publication, are possible only with the participation of our membership, readership, and many partners. We invite you to join us and we seek your insights and help to further these goals.

> David Krueper President Western Field Ornithologists

PREFACE

The system used in this volume to rank the The system used in this con-conservation needs of at-risk birds—*Bird* Species of Special Concern—in California is new for the state but builds on an impressive foundation of prior ranking schemes developed elsewhere in North America and the world. The diversity of such systems reflects not only the varying needs and scales for which they were devised but also the difficulty of crafting a system that will be universally accepted for any particular purpose. Just as gut-level impressions of what constitutes an at-risk bird in need of immediate conservation action can vary widely among knowledgeable biologists, so too can opinions of what elements are desirable in an objective ranking scheme meant to reduce the biases inherent in a purely subjective assessment of conservation need and priority. The present system, unlike most, supports the rankings by the inclusion of thorough species accounts for all birds on the ranked special concern list. Although the decision to include these accounts greatly lengthened the time required to prepare this document, we judge the extra effort well worth it, both to document the state of, and limits to, current knowledge relevant to the conservation of at-risk birds and to provide guidance in management, research, and monitoring that will enable effective actions beneficial to these birds and their habitats.

Serving as the technical editors of this volume has been a humbling experience on many levels. The knowledge contributed to this process by a technical advisory committee of our peers, dedicated managers and technical experts at California Department of Fish and Game, authors of species accounts, and a wide array of field, quantitative, and conservation biologists who provided unpublished information, insights, and thoughtful reviews has been deep and impressive, strengthening this document far beyond what our own capabilities would allow. Conversely, we have been struck by how limited our collective knowledge is for many at-risk birds in California, reflecting their biological characteristics—such as patchy distributions, occurrence in low densities, naturally fluctuating populations, or cryptic behaviors—and the limited resources allocated for their study or conservation.

During the course of the preparation of this document, climate change has become a household word and the dominant conservation issue discussed in the media. Although the present volume acknowledges the importance of the longterm effects of climate change on birds, it focuses rather on the short- and medium-term threats to birds, particularly habitat loss and degradation as the direct result of human endeavors. Such activities will continue to have readily visible and cumulatively enormous effects on many bird populations. To varying degrees, the predicted indirect effects of progressive climate change will further complicate and exacerbate matters.

Despite declining populations and continuing threats to many at-risk birds, there is cause for cautious optimism in the many new habitat- or taxonomic-based conservation initiatives for birds that have begun or expanded their reach in the last decade. In concert with these efforts, lists of at-risk species can be powerful drivers of conservation, especially when restoration and management measures take a species-to-ecosystem approach, the one typically championed by these newer initiatives. We hope this volume will support and inspire bold measures of conservation for at-risk birds and for others now less threatened so they will not one day too receive the dodoesque distinction of being of special concern in California.

> W. David Shuford Thomas Gardali Inverness, California

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ACRONYMS AND ABBREVIATIONS

AB	American Birds	NAB	North American Birds
AFN	Audubon Field Notes	NABCI	North American Bird Conservation
AI scores	area importance scores		Initiative
AOU	American Ornithologists' Union	NASFN	National Audubon Society Field Notes
BBA	breeding bird atlas	NCCP	Natural Community Conservation
BBS	Breeding Bird Survey		Planning (act/program)
BCR	Bird Conservation Region	NEPA	National Environmental Policy Act
BLM	Bureau of Land Management	NWR	National Wildlife Refuge
BSSC	Bird Species of Special Concern	PC	population concentration (ranking criterion)
CalPIF	California Partners in Flight	PIF	Partners in Flight
CAS	California Academy of Sciences	PRBO	PRBO Conservation Science (formerly
CBC	Christmas Bird Count		Point Reyes Bird Observatory)
CBRC	California Bird Records Committee	PS	population size (ranking criterion)
CDFG	California Department of Fish and Game	PT	population trend (ranking criterion)
CEQA	California Environmental Quality Act	RS	range size (ranking criterion)
CWHR	California Wildlife Habitat Relationships	RT	range trend (ranking criterion)
EN	percentage of entire range within	SBMNH	Santa Barbara Museum of Natural History
	California (ranking criterion)	SDNHM	San Diego Natural History Museum
HCP	Habitat Conservation Plan	SPCR	Southern Pacific Coast (Southern
IPCC	Intergovernmental Panel on Climate		California) region of NAB
	Change	THR	impact of threats (ranking criterion)
GIS	Geographic Information System	UCLA	University of California, Los Angeles
LACM	Natural History Museum of Los Angeles	USDC	U.S. Department of Commerce
	County	USDI	U.S. Department of Interior
MAPS	Monitoring Avian Productivity and	USFWS	U.S. Fish and Wildlife Service
	Survivorship	USGS	U.S. Geological Survey
MCZ	Museum of Comparative Zoology	USNM	U.S. National Museum (Smithsonian
	(Harvard University)		National Museum of Natural History)
MPCR	Middle Pacific Coast (Northern	WA	(state) Wildlife Area
	California) region of NAB	WFVZ	Western Foundation of Vertebrate
MVZ	Museum of Vertebrate Zoology		Zoology