

New Mexico . . . the fifth largest U.S. state, with sumptuous vistas of colorful deserts, forested mountains, snowcapped peaks, steep canyon walls, and flat prairies. New Mexico, a largely untamed land that harbors a high diversity and abundance of raptors, from the familiar Red-tailed Hawk, encountered daily in nearly all areas of the state, to rarities such as the Gray Hawk, the White-tailed Kite, or the Mexican Spotted Owl.

I have known since 2000 that I would someday work on a book titled *Raptors of New Mexico*. My own introduction to the state's birds of prey was likely no different from that of numerous other people. It occurred in the fall of 1988, during a brief stay in the state, in the form of a trip to the Bosque del Apache National Wildlife Refuge. Besides numerous Red-tailed Hawks and Northern Harriers, my memories of that trip also include a distant view of an eagle on the ground next to the carcass of a Sandhill Crane. I moved to New Mexico the following fall and became further acquainted with New Mexico's raptors during a visit to HawkWatch International's Manzano migration monitoring site on Capilla Peak—to this day I have never seen so many Sharp-shinned Hawks as on that occasion! In 1992 I started my own raptor research, not in New Mexico, but instead a study of Ospreys in the Gulf of California in Mexico. It was not until 2000 that I began working in New Mexico, first studying Ferruginous Hawks in the Estancia Valley, the Plains of San Agustin, and San Juan County's badlands, as director of research for Hawks Aloft. Today raptor research has lost none of its novelty. All encounters with wild-ranging birds of prey are thrilling moments, even if simply hearing the hiss—reminiscent of an espresso machine—of a Barn Owl nesting in the rafters of an abandoned building.

This book is intended as a dual celebration: of eagles, hawks, and owls and of New Mexico's natural heritage. The information presented in all the chapters draws on countless scientific studies and surveys conducted in the state, particularly on its vast holding of public lands. Until now, much of that information had been published only piecemeal in the technical literature. Perhaps just as much information had not been published, existing instead in the form of reports and entries in the field notes of biologists. Also included in this volume are data from New Mexico wildlife rehabilitators and shelter organizations on injuries and illnesses sustained by raptors. Although those data are generally untapped by conservation biologists, they reveal the many ways in which we humans directly or indirectly harm raptors.

While assembling this volume, an important effort was made to weave together the science of raptor research, the more traditional natural history narratives, and the aesthetics and visual impact of photography. Thus in the midst of research findings are stories from the field, rare observations of skirmishes in the skies, of predation, raptors living in buildings, or clumsy fledglings crashing to the ground. The hundreds of photographs contained in *Raptors of New Mexico* represent more than just visual signposts or entry points for the text. Some also constitute visual records of occurrence in the state or of important or unusual facets of a raptor's life history. Others are used to emphasize important field marks for species identification purposes. Yet others simply capture the regal, almost menacing beauty of birds of prey.

The chapters of *Raptors of New Mexico* are of unequal length, and intentionally so. Very little information other than distributional has been gathered for a number of raptors in New Mexico. The chapters focusing on those species are correspondingly short. For

other raptors, much more information is available. In fact, much of what we know about the Northern Goshawk, the Harris's Hawk, the Flammulated Owl, and especially the Mexican Spotted Owl we owe to research conducted by some of the contributing authors in New Mexico. Additional species are monitored closely in the state, especially where they may be affected by some forms of land use such as oil and gas development and mining. This is true for example of the Golden Eagle and the Ferruginous Hawk, whose life habits are now fairly well known in New Mexico. For all of these birds the format of the book allows an in-depth treatment of their distribution, natural history, and population status. Also intentional on my part was letting the authors speak in their own voices and from their own experiences. Contributing authors were given freedom to choose the main thread of their narratives, and, where needed, to insert additional headings or subheadings in the text of their chapters.

Throughout *Raptors of New Mexico*, the vernacular names of bird species are capitalized; the common names of plants, mammals, reptiles, amphibians, and invertebrates are not. Thus the reader will find mention of the Golden Eagle and the Northern Flicker, in contrast to the black-tailed jackrabbit and the prairie

rattlesnake. This discrepancy of grammatical usage is admittedly distracting, but in no way does it reflect judgment passed on the relative importance of birds among all life organisms. In an article published in the *Auk* in 1983, the ornithologist Anselm Atkins urged the American Ornithologists' Union to abandon its rule of capitalizing bird species names, a rule enforced by ornithological scientific journals. "Until we do," Atkins wrote humorously, "we ornithologists, with our Important Capitals, continue to look Curiously Provincial."

Raptors are indicators of ecosystem health. Although the outlook for most of New Mexico's raptors seems bright, a few species are declining. Investigating their declines can result in learning moments, a chance to understand and lessen impacts on nature. At the same time, our knowledge of the distribution, taxonomy, and ecology of New Mexico's raptors is a work in progress—and probably always will be. This book is not intended as the final word on any species. Instead, it aims to help educate New Mexicans and others about raptors, inspire the public to spend more time discovering them through their own observations, provide an information resource for management and conservation purposes, and point to some of the questions in need of answers through future research.