

mal's pelt, carcass, or photograph—a seemingly higher standard of proof than they use in crediting some jaguar reports from Mexico. But this epistemology does not allow the full weighing of subjective evidence that Matthiessen and earlier observers found persuasive.

For example, in his 1931 book *Mammals of New Mexico*, U.S. Biological Survey investigator Vernon Bailey, one of the premier naturalists of the twentieth century, cited two jaguar sightings—relayed to him by the New Mexico state game warden—in northeastern New Mexico (on the Great Plains) from 1902 and 1903. Bailey found the reports credible, but because the animals weren't recorded as killed, Brown and López omit any mention of the sightings, and express doubt about a jaguar from the same region that was reported in the *Journal of Mammalogy* as having been killed in 1938 and the pelt preserved (but not available to them for inspection). Similarly, they omit mention of a jaguar seen and pursued by a government hunter and his dogs, but not captured, in New Mexico's San Andres Mountains in 1937.

This methodology leads Brown and López to label incontrovertible physical evidence of jaguars significantly north of the border, particularly in New Mexico, as aberrations. They regard a record backed by extant photos (also from Bailey's research) of a jaguar poisoned in 1902 in the Datil Mountains north of the Gila National Forest as "an extreme location." They mention a female jaguar killed near the Grand Canyon the winter of 1907/1908, for which a photo exists, but omit mention of her kittens reported to have died with her. However, they do document

cubs captured alive in 1906 in the Chiricahua Mountains of southern Arizona, and acknowledge reports of young jaguars killed on the Mogollon Rim of Arizona.

The bias in this book against crediting all but a small portion of New Mexico and Arizona as fully within the jaguar's past breeding range mars a fascinating and otherwise informative work. Although it cannot stand as the sole basis for the ambitious task of recovering the jaguar in the United States, *Borderland Jaguars* is definitely a worthwhile read. ☾

*Reviewed by Michael J. Robinson, who works for the Center for Biological Diversity in Pinos Altos, New Mexico.*

## Prairie Birds

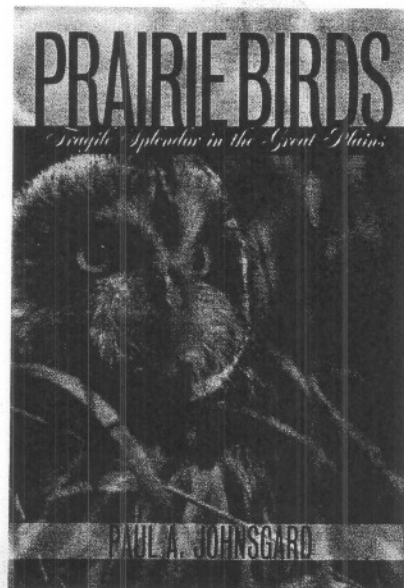
### Fragile Splendor in the Great Plains

by Paul A. Johnsgard  
University Press of Kansas, 2001  
359 pages, \$29.95

DECLINING POPULATIONS of migratory land birds is a conservation issue that continues to attract widespread interest. The plight of migratory birds in eastern deciduous forests was first brought to national attention by John Terborgh's *Where Have all the Birds Gone?* Presently, some of the best information on population trends of North American land birds is provided by the Breeding Bird Survey program, a long-term effort supported by volunteers across the United States and southern Canada. Recent data show that some of the most alarming declines are not among forest species but are in the birds of grassland eco-

systems. Grasslands are in peril worldwide; major threats include conversion to agricultural land use, encroachment by woody shrubs, and exotic invaders. Dramatic losses are commonplace; less than 0.01% of the original prairie of Illinois persists today. Recognition of the problems facing grassland plants and animals has been growing, spurred on by two recent volumes: *Ecology and Conservation of Great Plains Vertebrates*, edited by Fritz L. Knopf and Fred B. Samson, and *Ecology and Conservation of Grassland Birds of the Western Hemisphere*, edited by Peter D. Vickery and James R. Herkert.

To this list can be added Paul A. Johnsgard's most recent book, *Prairie Birds: Fragile Splendor in the Great Plains*. Part personal recollection and part scientific review, this book is a comprehensive summary of the natural history of grassland birds in North America. *Prairie Birds* is dedicated to Aldo Leopold and Annie Dillard, and Johnsgard retraces their footsteps by using his own lyrical prose to describe a lifetime spent observing prairie birds



in Nebraska and the Dakotas. The text of the book is complemented by beautiful pen-and-ink drawings that carefully illustrate the morphology and behavior of his subjects—no mean feat given the subtle plumage markings of most grassland birds.

The introductory chapters set the stage for the book, providing necessary background information on the geological history of the Great Plains, interactions among the plant and avian communities, and current threats to grassland birds. The tone of these chapters is more summary than synthesis. What is a prairie bird? Johnsgard handles this fundamental question by reviewing lists compiled by Kendeigh, Mengel, Knopf, and other authorities. Objective criteria are not presented, leaving the reader to wonder what ecological attributes are shared among the species included in the book. What are the most important threats to grassland birds? The usual suspects—fire, livestock grazing, land use practices, and cowbirds—are systematically reviewed, but the rela-

tive importance of such perturbations is not evaluated.

The bulk of the chapters of *Prairie Birds* are devoted to describing the natural history of 33 species of grassland birds. One of the great strengths of the book is that Johnsgard has used a comprehensive review of the scientific literature to prepare the highly readable species accounts. The formalities of scientific writing are dispensed with by dropping citation of scientific papers in the text and by using English units in place of the metric system. Abbreviated citations follow each chapter with complete references collected at the end of the book.

The result is that the text is approachable for a layperson but also contains enough information to be of use to a scientist. Reading through the main chapters, it quickly becomes apparent that the species accounts follow the same template: chapters open with a personal anecdote, and continue with discussions of the etymology of birds' names, habitat, and diet, followed by details of social system and reproductive behavior, fecundity rates, and survivorship. The formulaic structure allows specific details to be found quickly but also becomes somewhat repetitive. Some chapters conclude awkwardly, dribbling off into minor details of demographic rates.

*Prairie Birds* concludes with a conservation perspective. Given his deep affection for grassland birds, Johnsgard could have used his final chapter to aggressively argue for new conservation measures. Innovative ideas are certainly needed. Instead, this chapter simply presents the evidence for habitat loss and population trends from the Breeding Bird Survey

program. An additional appendix compiles a list of protected sites with significant grassland habitats. Inspection of the map of protected sites serves as a sharp reminder of how little land has been set aside for prairie ecosystems. Clearly, effective conservation of grassland birds will require economic incentives, appropriate recommendations for the management of private lands, and expansion of protected natural areas in America's heartland. The details of natural history condensed in *Prairie Birds* provide a compelling reason to take up this challenge. ☪

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## The Wild East

### A Biography of the Great Smoky Mountains

by Margaret Lynn Brown  
University Press of Florida, 2000  
479 pages, \$55 cloth, \$19.95 paper

DO NOT BE MISLED by the subtitle of *The Wild East: A Biography of the Great Smoky Mountains* (part of the University Press of Florida's *New Perspectives on the History of the South* series). This "biography" offers no geology, paleontology, or prehistory of the Smokies, and only a cursory treatment of natural history. *The Wild East* is principally a history of the region as affected by commercial exploitation and the reactions it engendered, roughly from 1900 to the present. Above all, it is a history of Great Smoky Mountains National Park, established in 1934.

