

## BOOK REVIEWS

**San Diego County Bird Atlas**, by Philip Unitt. 2004. Proceedings of the San Diego Natural History Museum, No. 39. 644 pages, numerous color maps and photos. Hardback \$80 (ISBN 0-934-797-21-8).

San Diego County, in southernmost California, boasts the largest number of species for any county or area of comparable size in the United States—almost 500, more than most states. Commensurate with this large total comes this heavy tome, packed with information and looking more like the avifaunal work for some states than for a “mere county.” As well as a large avifauna, San Diego County lays claim to a burgeoning human population which, as Unitt notes, combines third-world growth rates with first-world consumption rates. The inevitable result is increasing pressure on all habitats throughout the county. The production of the San Diego County Atlas (hereafter Atlas) coincided with the development of a multiple-species conservation plan for metropolitan San Diego and similar plans for other parts of the county. Thus, the Atlas offers a timely benchmark from which the efficacy of such plans can be evaluated, as well as an exhaustive model of how a regional avifaunal work should be approached.

Following the introduction and acknowledgments comes a thorough chapter on methods (grid cells were approximately 5 km, or 3 miles, on a side); one table lists observers who contributed data directly and to relevant Christmas Bird counts, and another (Table 4), which lacks a title (and would have been better as an appendix), lists by grid cell the observers, hours of coverage, and total species recorded. The Atlas is based largely on data obtained 1997–2002 and includes census data for both breeding and winter seasons—a great leap in coverage over a breeding bird atlas, but also a huge increase in workload. Paradoxically, the same growing human population that pressures the environment also provides a large pool of atlas volunteers—something that regions with sparse human population densities cannot match (e.g., the state of Nevada). At the outset, Unitt set coverage goals for each of the 479 grid cells, goals met for 97% of cells in both summer and winter; consequently, the birds of San Diego County are now among the best known in North America. Historical data were also researched, to put present patterns in context, and all species recorded in the county have accounts. Thus the Atlas is much more than an atlas of breeding and wintering species: it is an updated and expanded version of Unitt’s 1984 work, *Birds of San Diego County*.

After the methods comes a chapter summarizing results of the Atlas, during which 11 species were confirmed nesting in the county for the first time, ranging from the Sooty Tern to Yellow-headed Blackbird. Range extensions were detected for many other species, both breeding (Cassin’s Kingbirds spreading to higher elevations) and wintering (Gray Vireos in little-visited desert habitats). Five species were added to the county list during the Atlas period (and 29 have been added since Unitt’s 1984 work). The Atlas also highlights the position of San Diego County at the edge of many species’ ranges along the Pacific coast, e.g., as the southern breeding limit for the Belted Kingfisher and Swainson’s Thrush. More sobering is that at least 70 species, close to 15% of the county list, have experienced range contractions at some point in recorded history, due to multiple factors and at scales ranging from global (Peregrine Falcon) to local (California Quail). Other subjects discussed in this chapter are annual irregularity in occurrence, cowbirds and their hosts, exotic species, and climate change.

The “plan of the species accounts” chapter is followed by an overview of geography, climate, and habitat (for which “developed” is a notably extensive category). Two color maps (from which I assume the atlas grid was inadvertently omitted) show elevation and habitat; the latter, while helpful, is at so fine a scale that some details are virtually impossible to discern, and a full-page map would have been easier to use. Then come a discussion of conservation concerns, with two maps that summarize

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the total number of species by grid cell in both breeding and winter seasons, and a short chapter on wildfire, an important but controversial component of the county's ecology. The species accounts take up 555 pages and are followed by appendices that list: (1) all species and subspecies of San Diego County birds (including notations for breeding status, regulatory status, and level of documentation); (2) scientific names of plants mentioned in the species accounts; and (3) a list of photos used in the species accounts, with photographers and location details (which are uneven at best). Perhaps inevitably, given the dynamic nature of regulatory status, some errors and typos crept into Appendix 1: the status for the Vermilion Flycatcher is attributed to the Dusky-capped Flycatcher; the Xantus' Murrelet is now considered threatened, not of special concern; and some special concern species are not designated as such, e.g., the Black Swift and Loggerhead Shrike. Seventeen pages of literature cited precede the index, and the book jacket features a striking male Costa's Hummingbird (front cover) and a flock of Elegant Terns (back cover).

The sequence of the species accounts follows the most recent proclamations of the American Ornithologists' Union, so the book starts with waterfowl and then gamebirds before one reaches the more familiar realm of loons. Following the main accounts is a section treating several exotic and "hypothetical species" (i.e., species whose occurrence in the county is deemed hypothetical, or unproven). The main species accounts begin with a brief note on general habitat and status in the county, followed by up to four seasonal sections whose inclusion varies (by relevance) with species. Sections on breeding distribution and nesting interpret and expand upon the breeding distribution map and the chart of nesting schedules. A migration section gives arrival and departure dates, migration routes, etc., and the winter section expands upon the winter distribution map with comments on habitat, abundance, etc. Each account for a regularly occurring species usually features at least one map; breeding and winter maps are combined for some species (e.g., Cassin's Vireo); in other cases, separate subspecies warrant their own maps (e.g., Sage Sparrows). Lacking maps are some rare breeders (e.g., American Dipper) and winter visitors (e.g., Williamson's Sapsucker) and species that occur only as transient migrants (e.g., Baird's Sandpiper). The nesting and migration sections treat all occurrences regardless of seasonality, whereas winter was defined as December to February (with a few exceptions). A conservation section of varying length points out trends in population or distribution, discusses known and potential causes for these trends, and sometimes makes suggestions that could be taken up by conservationists. These species accounts are packed with information yet very readable—a rarity in this age of uninspired writing (and editing).

For most species that exhibit geographic variation, a taxonomy section notes which subspecies occur(s) in the county. When multiple subspecies occur, short but helpful notes on their distinguishing characters are usually provided (such information is sometimes also given when only one subspecies occurs). These sections range from straightforward statements (e.g., for the Common Merganser) to succinct and helpfully field-oriented synopses (e.g., Willow Flycatcher), to quite thorough mini-treatises with opinions on the validity of some subspecies (e.g., Fox Sparrow). Occasional lapses include no section for some species, such as the Black Swift and Magnificent Hummingbird, although it is unclear what the baseline was for acknowledging subspecies and their validity. Nonetheless, the discussions of taxonomy, with their biogeographic context and field-identification pointers, are a great bonus of the atlas, one unrevealed by the book's title or even perhaps by casual perusal.

The overall design is generally effective and little space is wasted (unlike layouts full of white space, which are common to so many books). My only dislike of the Atlas relates to the color photos that accompany most species accounts; the purpose of these photos eludes me. The Atlas is written in an accessible but somewhat technical vein, for ornithologists, serious birders, and conservationists. Its hefty bulk, dense text, and high cost conspire against it cultivating a popular market—for whom color

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photos might be a plus (as in the more public-friendly *Oklahoma Breeding Bird Atlas*, by Reinking). Some of the photos are quite attractive but the quality varies considerably, and none is helped by the small scale at which they are reproduced (most 3.2 inches wide). Many were taken in or near San Diego County, but many weren't, and I see no value to having images of "plastic" ducks (i.e., birds photographed in zoos) or of photos from as far afield as Alaska and Florida. The photos help break up the text, but so do the maps, and fewer but larger photos, or even good black-and-white artwork, would be preferable—and might have lowered the cost? How many people will pay \$80 for a county bird atlas, even if it is the most comprehensive one ever produced in North America?

By now the myriad strengths of this ambitious project should be apparent. It offers a fascinating account of a diverse avifauna, and will be of great value to all western field ornithologists, southern California conservationists and agencies, and anyone else with an interest in the status, distribution, and taxonomy of North American birds. Importantly, in the increasing cluster that defines southern California, the Atlas provides baseline data that have the potential to help improve the quality of life for both avian and human inhabitants of San Diego County. Last but not least, note the relatively short lapse between completion of field work and publication—testament to good planning, which included funds for writing and editing, and to the almost single-minded dedication of the author, to whom all inhabitants of San Diego County should be grateful (whether or not they realize it or have ever looked at a bird!).

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**Oklahoma Breeding Bird Atlas**, by Dan L. Reinking (editor). 2004. University of Oklahoma Press, Norman; [www.oupres.com](http://www.oupres.com). xii + 519 pages, over 200 color maps and photos. Hardback \$59.95 (ISBN 0-8061-3409-7); paperback, \$34.95 (ISBN 0-8061-3614-6).

What does Oklahoma have to do with western birds you may ask? Well, this attractively laid out and informative work (hereafter the OBBA) should help answer such a question. Almost 230 bird species are known or assumed to have nested in Oklahoma, which straddles the biogeographic divide in North America between "East" and "West." Species breeding in this under-regarded state range from the Henslow's Sparrow to the Black-throated Sparrow, from the Wood Thrush to the Mountain Bluebird. Indeed, within a single atlas block there were breeding records for both Chuck-will's-widow and Common Poorwill! So, while Oklahoma is not a western state, it does offer a view into where the West starts from an avian perspective, and why.

The OBBA begins with acknowledgments, an introduction (discussing the work's genesis, methods, codes used, limitations, and a brief summary of results), and a succinct chapter on the state's vegetation. Then come individual species accounts, followed by two appendices (notes on an additional 12 species not recorded in the atlas years, and samples of the data forms), a bibliography, index, and the author and photo credits.

Atlasing work spanned five years (1997–2001), largely involved volunteers, and was coordinated by the George M. Sutton Avian Research Center. Protocols followed recommendations of the North American Ornithological Atlas Committee, with the census block size being the U.S. Geological Survey 7.5-minute quadrangle (about ten square miles). Stratified sampling resulted in a total of 583 blocks being selected, of which only ten were unvisited (because of land-access issues and a shortage of volunteers). The main limitation in any such project covering an area the size of Oklahoma is that only a small area can be surveyed—in this case about a twelfth of the state's total land surface. But this was considered adequate to provide a good representation of the current distribution of most breeding species. (Fittingly, the