Breeding Birds of Napa County, California, an Illustrated Atlas of Nesting Birds, by Murray Berner, Bill Grummer, Robin Leong, and Mike Rippey. 2003. Napa–Solano Audubon Society, Vallejo, CA. 200 pages, with 2 color endpaper maps, numerous black-and-white maps and drawings. Paperback, \$25. Available from Napa–Solano Audubon Society, P. O. Box 5027, Vallejo, CA 94591. ISBN 0-615-12290-6.

Napa County, a small and largely rural county not far north of San Francisco, is perhaps most famous among the general public for its vineyards. But it is also home to a diverse breeding avifauna, ranging from the Greater Roadrunner and Northern Spotted Owl to the Yellow-billed Magpie and Snowy Plover. With the publication of this important work, we are brought one county closer to having breeding bird atlases available for all nine central California counties that border the San Francisco Bay estuary. Atlases have been published for Marin, Sonoma, and San Mateo counties, and field work has been completed for Alameda, Santa Clara, and San Francisco counties (W. D. Shuford pers. comm.); maps for this last county, and for the work-in-progress Contra Costa county atlas, are available over the World Wide Web. A pilot year of atlasing was conducted in Solano County in 1988, but that county since seems to have slipped through the cracks.

The concept of breeding bird atlases is by now fairly familiar: political entities (counties, states, etc.) are divided into blocks, usually based on a grid, and each block is censused to determine which species breed there. Field work generally involves a few years (five in this case, 1989–1993) that allow most or all blocks to be adequately sampled, and also allow for year-to-year variation to be appreciated: breeding species, and especially their abundance, may change between wet and dry years. Field work for an atlas is a great way to give purpose to one's recreational birding and typically generates a wealth of new information. After data have been collected and proofed accounts.

Atlases vary greatly in their approach to presenting the data, from the 480-page Marin County atlas (Shuford 1993), a mini-treatise on the natural history of coastal California birds, to the bare-bones San Mateo county atlas (Sequoia Audubon Society 2001), which simply provides maps and data with no species accounts. The Napa atlas represents a happy medium, with full-page accounts for all of the 156 species found during the atlas period. Each account includes a grid representing blocks with confirmed, probable, and possible evidence for breeding, three paragraphs of text that put each species into context by discussing its habitat (in general terms), distribution in the county, breeding seasonality, and perhaps a note on historical breeding records or population trends. Almost half of each page is taken up by a blackand-white sketch of the species, as seen through the eyes of a number of artists. Foremost among these is Sophie Webb, whose wash drawings are particularly attractive (see, for example, the brood of California Quail chicks, or the stately Spotted Owl); also notable are the raptors of Zev Labinger, the bold scratchboard images of Dana Gardner, and the soft pencil of Keith Hansen.

Oddly, most of the standard "introductory" material is placed at the end of the book, which opens simply with a table of contents, preface, acknowledgments, and a county map of place names, before dropping the reader head first into the species accounts and maps. After the accounts come a short but interesting discussion of county biogeography, a summary of weather during the atlas period (which spanned four dry years followed by a wet year), an explanation of the concept of a breeding-bird atlas, a discussion of methods employed in this atlas, and a summary of results. I see no benefit to this counterintuitive layout, and find atlases with this material at the front of the book (e.g., for Marin and Sonoma counties) to be more logical. Appendices explain breeding-criteria codes, show an example of an atlas field card, and list monthly rainfall and temperature data for Bothe–Napa State Park. There is a sevenpage bibliography, and fold-out endpapers provide color maps of Napa County highways, cities, and waterways (front endpaper), and vegetation (back endpaper).

The Napa atlas bears a resemblance in layout to the Sonoma County atlas (Burridge 1995), and a comparison of the two is perhaps inevitable: despite having a significant coastline, Sonoma County hosted 159 breeding species in the six years of its atlas study (1986–1991), which highlights the richness of Napa County, with its 156 species in five years. The Sonoma atlas has a similar one-species-per-page format (although text sometimes spills over the limit, with the "surplus" grouped into a few pages at the end of the species accounts). Bird illustrations sprinkled through the Sonoma accounts are overall less aesthetically pleasing than the Napa illustrations. The Sonoma atlas has no color, and the Napa vegetation map, although a little small, is a definite plus. The species accounts of the Sonoma atlas flow better to me and. although suitably varied in prose, appear to have been crafted to a more standarized template. The maps of individual species in the Sonoma atlas are far superior to my eyes, which are those of someone not very familiar with either county. Showing the county outline, a main highway, and (unnamed) population centers under the grid of atlas blocks is extremely helpful (and typical of most atlases). By contrast, the Napa atlas "maps" are simply an abstract mass of geometry-and this is my one strong criticism of an otherwise good work. Note also that because blocks with less than 50% of their area within Napa County were not censused (some 25 in all), the grids in the species accounts look strangely at odds with the grids on the endpaper maps. For Sonoma County, all blocks that constituted some part of the county were included, surely a preferable approach. But both of these atlases are excellent overall, and combining their good points could benefit forthcoming projects.

One other difference between the Napa and Sonoma atlases reflects a larger issue in the world of atlasing. From the completion of field work to publication was an agonizingly long ten-year period for the Napa atlas. Sonoma County's atlas took "only" four years to be published, still rather a long time. The authors of breeding bird atlases are often volunteers with varied writing skills, and they tend to have full-time commitments in the "real world." But breeding-bird atlases are important documents; they are a baseline for future studies and help form the cornerstones of conservation. When organizations plan projects such as a breeding-bird atlas, I urge them to attempt to raise funds sufficient to expedite writing and publication. One medium that may help in getting data out is the Internet: witness the preliminary maps (in color, another virtual bonus) and draft text for the San Francisco County atlas, which can be seen at www.sffo.org/index.html. On the downside, however, feelings that the information is "out there" may not spark the incentive to polish and publish a final product, which might, in theory, be a draft for life.

In conclusion, the Napa County breeding-bird atlas is a document both useful and attractive, and the the Napa–Solano Audubon Society and all others involved are to be commended for producing this important work. Imagine the day when all California counties have atlases of this quality completed, and published. . . .

LITERATURE CITED

- Burridge, B. (ed.). 1995. Sonoma County Breeding Bird Atlas. Madrone Audubon Soc., Santa Rosa, CA.
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