

The Second Atlas of Breeding Birds in New York State.

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The book begins with extensive acknowledgments, necessary for such a large project and an interesting read, in and of itself. It is followed by a series of introductory chapters that give information on the second breeding bird atlas (background, field methods, summary and interpretation of results), the natural history of New York (habitats, land-use change), and ornithology and bird conservation in the state. Species accounts covering 244 breeding species and hybrids make up a large portion of the book. Appendix 1 presents brief synopses of an additional 18 rare, improbable, or extirpated species. Throughout the book, the text frequently cites the primary literature listed in the extensive Literature Cited. The very detailed index contains not only scientific and English bird names, but incorporates topics and subtopics such as “disease,” “nestboxes,” and “breeding code definitions,” greatly enhancing the ease of navigating the book.

Chapter 1 (Introduction and Methodology) relates the history of breeding bird atlases in New York, details methods used during the second atlas—including field methods, data processing, quality control, and review of records—and explains how maps and trend lines were generated and are to be interpreted. A series of descriptive maps of New York at the end of this chapter seems out of place and might have been better placed in Chapter 3, Habitats of New York. Chapter 2 (Summary of Results) analyzes and discusses atlas data. It begins with an extensive discussion and analysis of “effort,” one of the most problematic aspects of breeding bird atlases. Up to a certain point, the more effort (in terms of hours and “quality”) that an atlaser puts into a block, the more species he or she will find, greatly complicating the comparison of blocks, species, and atlas results when there are differences in effort. In New York, more effort was expended during the second atlas, resulting in an estimated 0.405 more species recorded per block by effort alone. Because of this, for each species, the authors calculated a correction factor (uniformly applied to all species) to adjust the percent change between atlases in number of blocks in which a species was detected. The chapter continues with several summary tables of results including lists of species found during the atlas, species richness per block, species’ trends, and species grouped by habitat groups and migratory strategy. Each section includes a discussion of the possible significance of and reasons for observed results and changes. The chapter ends with an interesting attempt to show how atlas data can be used to monitor population change and the limitations of such analyses. The example used is the hypothesis that species’ distributions are moving poleward in response to climate warming, but many other questions also could be addressed with atlas data.

One of the primary hypotheses offered to explain changes in bird distributions is change in land use, addressed in Chapter 4. The final sentence of the chapter sums up the difficulty of determining the role of land-use change in bird-distribution patterns: “With the exception of wetlands, agricultural lands, and forest, bird habitats are not monitored with sufficient frequency or detail to establish meaningful, long-term correlations between patterns of changes in breeding bird distributions and patterns of changes in land use” (p. 68). Chapter 5 is a comprehensive account of the history and current state of ornithology and birding in New York. Chapter 6 (Conservation of New York’s Breeding Birds) focuses on the 84 breeding species of greatest conservation need

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The Second Atlas of Breeding Birds in New York State.—Kevin J. McGowan and Kimberley Corwin, editors. 2008. Cornell University Press, Ithaca, New York. 696 pp, 25 paintings, 245 black and white drawings, 258 tables, 164 charts/graphs, 512 maps. ISBN 978-8014-4716-7, \$59.95 (cloth).

The Second Atlas of Breeding Birds in New York State presents the results of field work from 2000 to 2005. During this ambitious project, over 1200 people spent more than 155 000 hours in the field documenting the current distribution of New York’s avifauna. The second atlas adopted almost identical field protocols and surveyed the same blocks as those of the first atlas (1980–1985), allowing for comparisons between the two surveys.

and evaluates the distributional changes between first and second atlases in the context of conservation.

The bulk of the book consists of accounts, each two pages long, of 241 species and three hybrids found breeding in New York. The first page has text and a drawing of the species, usually demonstrating some aspect of the species' breeding biology. The text describes and discusses changes in the species' breeding distribution, abundance, and habitat in New York through recorded history. Despite being authored by many different people, the species accounts are extremely consistent in quality, flow, and content. One quibble is that sometimes there are so many citations embedded in a paragraph that a nonscientist unaccustomed to reading scientific literature may have difficulty following the text. The second page of each species account has two maps of New York, a table with basic statistics (number of blocks in which the species was observed in each atlas period and percent change between atlases), and a graph showing the 40-year population trend of that species in New York, derived from the Breeding Bird Survey or other sources. One map shows the species' distribution during the second atlas. Blocks are shaded with different colors according to whether breeding was confirmed, probable, or possible, or the species was not observed. The second map

illustrates whether the species was observed only in the first atlas, only in the second atlas, in both atlases, or neither atlas in each block. Although unequal survey effort complicates the interpretation of this type of analysis, the "change map" can be the most effective way to communicate distribution shifts, contractions, and expansions. Overall, the text complements the graphic elements and vice versa, the maps are intuitive and informative, and statistics and numbers are kept to a minimum. Readers desiring more analyses, numbers, or discussion can consult the introductory chapters or a table containing detailed information on breeding in Appendix 2.

New York state's second breeding bird atlas was an enormous and enormously successful project, and this book does justice to that effort. The book strikes the right balance between being an informative and readable reference for the general public and being a scientific document for ornithologists, managers, students, and conservationists. It is a valuable, up-to-date resource on the state of New York's breeding birds for those both inside and outside of New York and should serve as a solid basis for comparison with the next New York atlas, scheduled for 2020.—NANCY DRILLING, Rocky Mountain Bird Observatory, P.O. Box 1232, Brighton, CO 80601. E-mail: nancy.drilling@rmbo.org.