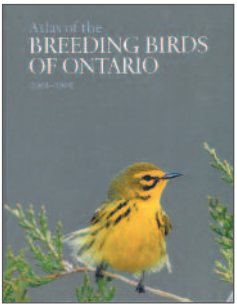
Book Reviews



Atlas of the Breeding Birds of Ontario, 2001-2005. 2007. Cadman, M.D., D.A. Sutherland, G.G. Beck, D. Lepage, and A.R. Couturier (eds.). Bird Studies Canada, Environment Canada, Ontario Field Ornithologists, Ontario Ministry of Natural Resources, and Ontario Nature, Toronto, xxii + 706 pp., 900+ distribution and relative abundance maps, 400+ photos of birds and habitats, and 300 graphs showing population change by life zone. ISBN 978-1-896059-15-0. Hardcover, $92.50 + GST.

In 1987, the Federation of Ontario Naturalists and the Long Point Observatory published *Atlas of the Breeding Birds of Ontario*, compiled by Michael Cadman *et al.* A total of 1,351 atlassers reported 123,879 hours of data collection, and breeding status was indicated in shades of red for 292 species and 2 hybrids in a 617-page book.

The new volume is totally different. More than 3,000 atlassers contributed in excess of 150,000 field hours and submitted 1.2 million bird records. The results for 286 species and two hybrids are presented in full color on 9x12-inch glossy pages.

The opening chapters consist of Acknowledgments, Goals, Methods, Ontario biogeography, Overview of coverage and results, Changes in bird distributions between atlases, and Interpreting species accounts. Among the 43 coloured maps are target point count coverage throughout the province, precipitation, growing season, elevation, human population, forest cover, fieldwork hours, species per 10-km square and 100-km block, species per square adjusted to 20 hours of effort, number of point counts per square and per 100-km block, human population change and change in improved pasture from 1981 to 2001, and change in total species and in forest species, grassland species, shrubland species, and aerial foragers since the 1981-1985 atlas.

The species accounts follow the customary two-page bird atlas format, with a stunning colored photo of the breeding bird and a colored map of southern Ontario showing the current breeding evidence (Possible, Probable, or Confirmed) for each 10-km square. A central black dot is added in each square where the species was found in the first atlas but not the second, and a central yellow dot designates each square where a species was found in the second atlas but not the first. A smaller map shows

map shows current presence and changes for the entire province of Ontario by 100-km blocks. The facing page, for most species, shows contour mapping in bright colors of the relative abundance (birds per 25 5-minute point counts) as well as a bar graph showing probability of observation in the first and second atlases in each of the five physiographic regions and for the entire province. One can tell at a glance whether a species in increasing or declining, and where these changes are taking place. The bird name is given in English, French, and Latin. After a brief introductory paragraph, the species text, which is all new, is grouped in three paragraphs: Distribution and population status, Breeding biology, and Abundance.

Following the species accounts are paragraphs on the status of twenty species of historical breeders. Appendices, in addition to the required Literature Cited and Index, include details of data processing and validation, collection and mapping of abundance data, species at risk, gazetteer of place names, list of plant and animal names, a glossary, bird conservation initiatives, and three fascinating tables: (1) For each species the number of squares with Possible, Probable, and Confirmed status in the first and second atlas in each of the five regions of Ontario; (2) The proportional change from the first to the second atlas for each species, grouped by habitat, arranged from species of greatest increase to greatest decline; and (3) Population size estimates by region, based on point counts in the second atlas corrected for detectability.

This book will surely serve as a model for other atlas projects worldwide, as it shows how the raw data from atlas projects can be refined in various ways to make them more useful for conservation planning. It is a classic in several respects. It represents a unique collaboration among national, provincial, and non-governmental organizations; a Herculean effort to sample the huge roadless areas of northern Ontario; use of five-minute point counts adjusted for time of day to estimate relative abundance throughout the province; and use of kriging to interpolate abundance from the 24 nearest neighbors to each target cell for abundance mapping. As a salute to the environment, the paper on which the book is printed was harvested from responsibly managed forests certified by the Forest Stewardship Council, and net profits from the book will be used for bird conservation projects in Ontario.

Chandler S. Robbins, Patuxent Wildlife Research Center, Laurel, Maryland 20708, USA.
E-mail: crobbins@usgs.gov