

THE BIRDS OF CUBA: AN ANNOTATED CHECKLIST—Arturo Kirkconnell, Guy M. Kirwan, Orlando H. Garrido, Andy D. Mitchell, and James W. Wiley. 2020. British Ornithologists' Club, Tring, United Kingdom. 472 pages. ISBN 978-0-9522886-7-1. £44.99.

Books on Cuba's birdlife appear to be a growing industry as of late, but that is welcome, as there is no shortage of fascinating material to work with. This offering from the British Ornithologists' Club (BOC) continues as Number 26 in the Annotated Checklist Series long offered by the British Ornithologists' Union (BOU). The BOU checklists—including previous checklists for the South Bahamas (Buden 1987), St. Lucia (Keith 1997), Cayman Islands (Bradley 2000), Hispaniola (Keith *et al.* 2003), and Barbados (Buckley *et al.* 2009)—are widely acclaimed for their completely referenced and authoritative accounts of each region's avifauna; and now, under the auspices of the BOC, the tradition continues.

The Birds of Cuba: An Annotated Checklist, co-authored by some of the greatest names in Cuban ornithology, does not disappoint. To be clear, this is definitely not a field guide. What it is, is a complete account of ornithology, ornithologists, and the distribution and abundance of birds on Cuba and its associated islands. Not surprising given the quality of the publisher and the expertise of the authors, this book is the perfect starting point for the study of any issue regarding Cuban ornithology.

The Birds of Cuba: An Annotated Checklist closely follows the standard format of other volumes in the Annotated Checklist Series. An "Introduction" of nearly 100 pages contains in-depth summaries of themes relevant to ornithology. A history of ornithology in Cuba from the pre-Columbian era through to the 21st century highlights the roles of dozens of explorers, collectors, observers, and scientists in the study of Cuban avifauna. Separate sections also highlight the history of searches for the Ivory-billed Woodpecker and the history of Cuban paleornithology. A discussion of the geology, geography, and climate of the island follows, as well as an introduction to the nearly 30 distinct habitat types on the island. In defining each habitat, a note is made about the distribution of the habitat on Cuba as well as rainfall characteristics, indicator species of plants, and typical birds found in the habitat.

A section on zoogeography synthesizes current knowledge of the origin of Cuba's avifauna, and is a real strength of the Introduction. This section begins with a review of the fascinatingly complex geological history and paleoclimate of the region. This review is then used to elucidate the history of bird colonization on the island, with colonization occurring primarily through over-water dispersal. The zoogeographic analysis has application beyond Cuba, with particular relevance to other islands in the Greater Antilles. This analysis is strengthened by the presentation of tables of endemic genera of birds in the Greater Antilles

and avifaunal affinities among the islands. A table of all Cuban fossils from Quaternary deposits of the late Pleistocene is then used in an exhaustive explanation of the origin of past and present avifauna on Cuba. Here, fossil evidence from across the region is combined with genetic resources, morphological studies, and phylogenetics to detail familial relationships, often looking beyond Cuba to birds of the Greater Antilles, Lesser Antilles, and the American continents.

The Introduction concludes with a rather short and somewhat optimistic section on conservation. Not surprisingly, the authors highlight "incompatible levels of disturbance and economic intrusion" resulting in the loss of habitat as a primary factor leading to species declines, but also cite invasive predators, hunting, and the pet trade. More interesting is an accounting of the long history of conservation awareness and activity in Cuba, and the early championing of a holistic approach to wildlife conservation through habitat protection. With significant advances in the number of parks and their effective protection following the 1959 Cuban Revolution, the country now has 211 protected areas covering more than 22% of Cuba's land area. Importantly, this protected area system provides a critical "framework for the quite considerable research, conservation, education, and awareness efforts" of many Cuban institutions.

Of course, the heart of the annotated checklist is the species accounts. Here, the authors feature 386 species, along with another 26 species classified as unconfirmed. Each species account includes names, status, and global range, followed by very detailed information on the distribution in Cuba, often with numbers and dates of occurrence. Similar detail is brought to a discussion of nesting data, including locations and dates, as well as descriptions of nests and eggs. A well-referenced section on taxonomy includes not only a delineation of subspecies and a historical treatment of taxonomic relationships, but also the authors' opinions on the many controversial or unresolved issues surrounding taxonomies. A complete list of specimens from museums around the world supports the taxonomic discussions.

A "Comments" section is sometimes the most interesting section of the species accounts and reflects the authors' experience in innumerable ways. For example, we learn that the restricted presence of the Bananaquit (*Coereba flaveola*) in northern Cuba, a species abundant everywhere else in the Caribbean Basin, might represent a relict of a once more widespread population rather than a recent invasion. The unknowns are sometimes highlighted, such as a complete lack of knowledge of the wintering grounds of the Cuban Martin (*Progne cryptoleuca*), and whether or not the Red-legged Honeycreeper (*Cyanerpes cyaneus*) is a naturally occurring or an introduced species. We are also granted reasons for optimism in the status of several threatened species, such as the Cuban Solitaire (*Myadestes elisabeth*) and Cuban Black Hawk (*Buteogallus gundlachi*).

Numerous full-color maps, landscape photos of key habitats,

and fine photos of Cuban endemics, rarities, and important museum specimens support the authoritative text. Appendices include a gazetteer of Cuban place names mentioned in the text, a complete list of Cuban endemic species and subspecies of birds, plants appearing in the text, and a very useful list of perhaps 1,000 references, with many coming from harder-to-find Cuban publications. This bibliography alone is a treasure for many researchers.

The Birds of Cuba: An Annotated Checklist is an exhaustively researched, comprehensive accounting of the birds of Cuba and will undoubtedly serve as a key resource for ornithological studies of Cuba and the Greater Antilles for years to come. My only regret is that for such an important reference book the publishers did not choose to wrap it in a durable, hard cover as was the standard for the BOU's Annotated Checklist Series. This book belongs in every serious ornithological library, as well as on the shelves of any researcher or birdwatcher with a passion for Cuban birds.

Literature Cited

- Bradley, P.E. 2000. The Birds of the Cayman Islands. British Ornithologists' Union Checklist Series 19.
- Buckley, P.A., E.B. Massiah, M.B. Hutt, F.G. Buckley, and H.F. Hutt. 2009. The Birds of Barbados. British Ornithologists' Union Checklist Series 24.
- Buden, D.W. 1987. The Birds of the Southern Bahamas. British Ornithologists' Union Checklist Series 8.
- Keith, A.R. 1997. The Birds of St. Lucia, West Indies. British Ornithologists' Union Checklist Series 15.
- Keith, A., J. Wiley, S. Latta, and J. Ottenwalder. 2003. The Birds of Hispaniola: Haiti and the Dominican Republic. British Ornithologists' Union Checklist.

—Steven C. Latta

Department of Conservation and Field Research, National Aviary, Allegheny Commons West, Pittsburgh, PA 15212, USA; e-mail: steven.latta@aviary.org