

- southern Québec. Association québécoise des groupes d'ornithologues, Province of Québec Society for the Protection of Birds, Canadian Wildlife Service, Environment Canada, Québec Region, Montréal, QC, Canada.
- HOWELL, S. N. G., I. LEWINGTON, AND W. RUSSELL. 2014. Rare Birds of North America. Princeton University Press, Princeton, NJ.
- MENGEL, R. M. 1965. The birds of Kentucky. Ornithological Monograph No. 3, American Ornithologists' Union, Anchorage, Kentucky.
- PALMER, R. S. 1949. Maine birds. Bulletin of the Museum of Comparative Zoology 102: 1–656.
- PHILLIPS, A., J. MARSHALL, AND G. MONSON. 1964. The birds of Arizona. University of Arizona Press, Tucson, AZ.

Woodpeckers of the World: A Photographic Guide

Gerard Gorman. 2014. Firefly Books, Richmond Hill, ON. xx + 528 pages and >700 full-color photographs and range maps. ISBN: 177085309X. \$49.95 (Hardback).

At last count, there were 239 species of woodpeckers (including wrynecks and piculets) in the family Picidae, far outnumbering the number of books focusing exclusively on this family, including prior classics like Lester Short's (1982) or Hans Winkler et al.'s (1995) contributions. The latest addition to this growing genre is *Woodpeckers of the World: A Photographic Guide*. Similar to the format of both Short's (1995) and Winkler et al.'s (1995) non-photographic guides to woodpeckers of the world, Gorman's book begins with a brief introduction to various aspects of woodpecker life history (including taxonomy, distribution, anatomy and morphology, habitat, behavior, breeding, plumage and molt, food and foraging, conservation, and more); this introductory section is then followed by photos, distribution maps, and brief species notes on all 239 species.

If you are interested in obtaining a general overview of woodpecker biology, or filling your brain with detailed nuances about particular woodpecker species, Gorman's book offers spotty satisfaction. The introductory section on woodpecker biology is a mere 21 pages (including copious photographs), compared to 47 pages in Short (1982) and 35 pages in Winkler et al. (1995) (the latter in minuscule print) leading us to ask whether this trend indicates that we are losing more and more information on the biology of woodpeckers as time goes on. On the plus side are Gorman's relatively systematic, if brief, mention of juvenile plumages in the

species accounts, perhaps finally providing the necessary baseline data for analyzing the adaptive basis of the considerable variability found in this character in the family, and a relatively compelling and concise summary of the adaptations woodpeckers have for drumming and drilling (in other words, why woodpeckers do not get headaches—no doubt the world's most-asked question about this group). Otherwise, the bibliography (none of the text is referenced) is almost entirely limited to literature post-2002 (for reasons of space, apparently), and in most respects the species accounts are so cursory as to only provide a reader with a rudimentary understanding of each species. There is, for example, mention of cooperative breeding in Acorn Woodpeckers (*Melanerpes formicivorus*), at least in the *Breeding* section of the introduction, but scant additional details in the species account, where we are told “families create and share sap wells.” True, but not up there with what we'd argue are the 25 most interesting or exciting facts known about this species. At least Red-cockaded Woodpeckers (*Picoides borealis*) get “this species has a complex and fascinating breeding biology” in the caption of one of its photos! Similarly, the ecological role of woodpeckers is briefly mentioned in the ‘Indicators and keystones’ section of the introduction, but is strikingly absent from, for example, the Red-naped Sapsucker (*Sphyrapicus nuchalis*) account, a species that has served as the poster child of vertebrate keystone species.

The book is also not going to help very much if one hopes to recognize or distinguish the species by their vocalizations. Is it not possible in this day and age to have links on the page that one can visit online to hear recordings of calls? Instead, we're left trying to make sense of a bewildering array of mnemonics from (choosing two species at random) “repeated, mewing, whining, inflected *ki-yew* or *ch-yew* alarm” to “a sharp, metallic *peek-it* or *pi-tik*, sometimes *pee-de-dink* . . . gentle *chuf* and *tyet* made by mated pairs.” We defy anyone to guess which of the 239 species those describe.

There is, however, at least one good reason for buying this book: namely, the photographs, which are not only plentiful, but both beautiful and fun to browse, at least if you are a woodpecker aficionado. Gorman indicates that the photographs are “not included merely to enliven the text [but] are integral to the work [and] illustrate particular plumages or behavior.”

Neither of us have spent much time chasing after woodpeckers in far-flung parts of the world, so the lovely photos of exotic species such as the Blond-crested Woodpecker (*Celeus flavescens*) of South America and the Yellow-faced Flameback (*Chrysocolaptes xanthocephalus*) of the Philippines are both striking and even inspirational. This is particularly true when one runs across tidbits about little-studied species such as the photo caption for Buff-rumped Woodpeckers (*Meiglyptes tristis*) indicating that the species is "...fairly social, with birds often foraging together in parties and in 'bird-waves' with other species," a statement that makes us suspect that an exploratory trip to Malaysia to find out more about those "bird-waves" might be really interesting. Nearly all species are illustrated, although there are a few exceptions, such as the (nearly or completely extinct) Ivory-billed (*Campetherus principalis*) and Imperial (*C. imperialis*) Woodpeckers; perhaps historic photographs might have been reproduced for consistency, if nothing else?

Another potential reason to buy this book is if you are planning a "big woodpecker year" (identifying as many of the 239 species as you can in one calendar year) and are looking for another book on woodpeckers for your valet to cart around the world for you on your journeys. We admit to never having heard of anyone attempting such a feat, but short of waiting for one of those Buff-rumped Woodpecker waves to show up in your back yard, presumably this would be the way to go about making the most of one's library of woodpeckers-of-the-world books. In fact, if we had to choose from our collection of woodpecker tomes, we might very well grab Gorman's version, although, in contrast to Winkler et al. (1995), this volume does not attempt to be a field guide. And why not travel the world in search of woodpeckers, other than it would potentially entail ignoring a rather large number of other interesting (non-woodpecker) species? The *Guinness Book of World Records* awaits, and we'll personally send a copy of Gorman's book to the first reader who breaks 200. Be sure to send us the address of your valet.

Walter D. Koenig, Cornell Lab of Ornithology, Ithaca, NY, USA, wdk4@cornell.edu.

Eric L. Walters, Department of Biological Sciences, Old Dominion University, Norfolk, VA, USA, ewalters@odu.edu.

LITERATURE CITED

- SHORT, L. L. 1982. Woodpeckers of the world. Monograph Series Number 4, Delaware Museum of Natural History, Greenville, DE.
- WINKLER, H., D. A. CHRISTIE, AND D. NURNEY. 1995. Woodpeckers: an identification guide. Houghton Mifflin, New York, NY.

Rare Birds of North America

Steve N.G. Howell, Ian Lewington, and Will Russell. 2014. Princeton University Press, Princeton, NJ. xx + 428 pages. ISBN: 9780691117966. \$35.00 (Hardback). Also available as an e-book.

Any student of population ecology will likely be familiar with Cohen's (1969) classic stochastic birth-immigration-death-emigration model to describe natural dynamics of a population. To understand population dynamics, one needs to estimate rates for each of these four pillars of life history theory. Arguably, the most difficult of these parameters to measure are death and emigration, mainly due to the inherent bias associated with field studies wherein observers rarely sample individuals outside of a particular study site (Koenig et al. 1996). Once an organism disappears, its fate is largely unknown and one is left to, in many cases, estimate mortality and emigration rates. As a result of this "black hole" in our understanding of population demography, a recent focus on patterns of dispersal that includes both invasion biology and vagrancy has resulted in a surge of recent attention; thus making Howell et al's (2014) *Rare Birds of North America* quite timely.

Ornithologists and birders have long held a fascination with vagrants, often referred to as accidentals in birder parlance. Birds are arguably the most likely to exhibit vagrant tendencies because of their propensity for long distance and seasonal movements (Lees and Gilroy 2014), often associated with a breeding and non-breeding location. Why birds may end up off course or outside of their normal range has perplexed ornithologists for at least the last century. In the