

ally return to questions we asked as children in an attempt to encourage readers to open their minds and to ask questions". This responds splendidly to the earlier reviewer's wish for a text "well suited for bedside reading by the merely curious". Unfortunately, the large coffee table format and the glossy reflective pages make it awkward to handle in bed and read by bedside light. But as an up-to date comprehensive survey of world lizards it has no equal. It provides

great perspective of their global importance, a fact strictly Canadian naturalists, who have only six species belonging three families of non-snake lizards to observe in their entire country, have little first-hand chance to appreciate.

FRANCIS R. COOK

Canadian Museum of Nature, Ottawa, Ontario K1P 6P4
Canada

Raptors of Western North America

Brian K. Wheeler. Princeton University Press, 41 William Street, Princeton, New Jersey 08540-5237 USA. 544 pages, 625 colour photographs, 56 maps, U.S.\$49.50 Cloth

This book is both a tour de force and a labour of love, and the immediate new standard for diurnal raptors in western North America. Raptors are known for their variable plumages, and standard field guides cannot cover the almost infinite permutations and combinations; hence, erroneous identifications are legion among regular birders, and even among raptor enthusiasts. No full-time museum, government or university employee has dared to undertake a book of this scope; it is all the more astounding that this hiatus was filled by a truck driver. More incredibly, Wheeler has developed the skills to take the great majority of the photographs himself. His experience and enthusiasm are evident throughout. He has reviewed the literature carefully and has been given access to unpublished information from graduate students and others; for example, numbers of Northern Goshawk and Bald Eagle territories are provided for each state. There are nearly two pages about the ten-year cycle of the Snowshoe Hare and Northern Goshawk, absent from most other raptor books; goshawks peaked at Duluth, Minnesota, during the irruption years of 1972, 1982, 1992 and 2001, mostly adults fleeing the mixed forest following each Snowshoe Hare crash.

Excellent historical accounts include notably that for the California Condor. There are four excellent glossaries: general, anatomy and feather, plumage and molt, and displays. The detailed descriptions of raptor plumages are unprecedented and unequalled. Fortunately, important points are highlighted in bold, making the tedious mass of description more user-friendly.

Readers will be amazed by the remarkable variability of plumage in species such as the Ferruginous Hawk (25 photos), Rough-legged Hawk (39 photos), and Swainson's Hawk (40 photos), and especially the Red-tailed Hawk; variants within the latter species are depicted in 82 photographs, 22 pages of verbal description and six maps.

John Economidy has contributed clear, accurate range maps for 33 species, six for the Red-tailed Hawk alone. The maps are incredibly precise, but I noticed four minor errors for Saskatchewan species: the Big Muddy area of Saskatchewan is omitted from the Golden Eagle; the two southern year-round localities for Bald Eagle should be winter only; recent small southerly extensions of Osprey and Northern Goshawk ranges are not shown; the two races of the Merlin are not known to overlap between Saskatoon and Prince Albert. The maps also give no indication of range changes in the past.

Since this veritable encyclopaedia of western raptors (an eastern counterpart became available simultaneously) is too heavy for most backpacks and too large for most glove compartments, most of us will use it as a reference in our libraries. One hesitates to quibble about the first edition of such a superb book. Yet the title is misleading, since owls are not included; inclusion of the term "diurnal" would have made the title more accurate. The ground squirrel has not lost half its range in western Canada, as it has in Idaho (page 521). Use of dieldrin, not DDT, was coincident with the early 1960s crash of the Merlin on the Canadian prairies (page 447). Use of "very uncommon" sometimes contradicts his definitions in the introduction. I detected few errors, but "verses" in place of "versus" jarred me (page 199). Wheeler has been involved in two previous hawk identification books, each excellent, each with William S. Clark as co-author. The first was *Hawks* in the Peterson Field Guide series and the second, *A Photographic Guide to North American Raptors*. For most general birders, either would suffice, although many plumages are omitted from both of the smaller books. If you are a raptor aficionado, don't let the cost of the new book deter you; the 603 colour photographs easily justify the price and the 33 colour maps are more detailed than anything previously available.

C. STUART HOUSTON

863 University Drive, Saskatoon, Saskatchewan S7N 0J8,
Canada