

at the nests. The chicken eggs were the brown type, and measured 45-63 mm in length. Three of the 72 eggs had more than one hole (two in each of the three eggs). I collected four specimens of destroyed eggs during the period 18 July-4 August 1957 (ChM no. 1984.64).

Brackbill (1969) reported Red-bellied Woodpeckers taking the eggs of House Sparrows (*Passer domesticus*). This appears to be the only other report of their taking birds' eggs. However, Phillips *et al.* (1964) have reported the closely related Gila Woodpecker (*M. uropygialis*) eating chicken eggs.

I thank W. Post for useful suggestions on the manuscript.

#### LITERATURE CITED

- BRACKBILL, H. 1969. Red-bellied Woodpecker taking birds' eggs. *Bird Banding* 40: 323-324.
- PHILLIPS, A. R., 1964. *Birds of Arizona*. Tucson, Arizona; Univ. Arizona Press.

#### REVIEWS

Florida Field Naturalist 18(3): 58-59, 1990.

**The Birder's Handbook: A Field Guide to the Natural History of North American Birds.**—Paul R. Ehrlich, David S. Dobkin, and Darryl Wheye. 1988. Simon and Schuster, New York, NY. ISBN 0-671-65989-8. Paperback, 815 pages. \$15.95.—For those interested in observing and learning more about birds in the field, this is the most valuable book to appear since Roger Tory Peterson's field guide. Unlike other field guides, it answers all those questions you've always had about birds once you've identified them. In essence, "The Birder's Handbook" compresses an entire ornithological library into a volume that

can be thrown in a backpack, carried in your car, or leisurely perused at home. And it is the least expensive bird book, per page, I have seen.

The format is modeled on a standard identification guide, and is designed as a companion volume for one. On the left-hand pages, accounts are given of all the bird species that breed in North America; opposite them, instead of pictures, are essays that pertain to the species on the facing page.

The accounts, two to a page, briefly describe the biology of each species: nesting habits, incubation time, care of the young, mating system, foraging habits, conservation status, etc. Much of this is presented in an ingenious line of symbols and numbers which is quickly and easily understandable. Suppose, for instance, you have just seen an Eastern Phoebe carrying nesting material. A glance at the species treatment will tell you, among many other things, that the bird was a female, that its nest is likely to be in or on a human-built structure, that 4-5 white eggs will probably be laid in it, that they will hatch in 16 days, and that the young will fledge a couple of weeks later. The treatment also refers you to brief essays (in this case Vocal Development, Brood Parasitism) that would make interesting reading after seeing an Eastern Phoebe, and to a comprehensive bibliography.

The treatments are jam-packed with interesting information. As a combined scientist-birder, I was pleased to see question marks used to indicate where knowledge was incomplete. "The Birder's Handbook" serves not just as a guide to what is known about the biology of North American birds, but also to what is not known, thereby pointing out where birders could make important contributions to science. The short section in the introduction on "Dealing with Uncertainty" should be a model for the authors of other field guides.

The several hundred essays cover the entire panoply of avian evolution, ecology, behavior, taxonomy, biogeography, and conservation, as well as presenting short biographies of important ornithologists and the origin of bird names. There is even one on the role that birds have played in the arts. Not only are these interestingly written and up to date, but they manage to present a vast amount of material in digestible, understandable chunks. Complex subjects such as why birds would evolve altruistic behavior (e.g., adults helping other adults to breed rather than reproducing themselves), what goes on inside eggs, how natural selection operates, and how birds fly, are presented clearly and concisely.

The essays will clear up many mysteries for curious birders, such as why gulls and shorebirds often stand on one leg, why hummingbirds spend so much time perched, and how owls manage to find prey in the dark. Birders can learn current theories about more persistent mysteries, such as why female raptors tend to be larger than males, why many birds form flocks, why Bachman's Warbler has disappeared, how migrating birds navigate, why redwings vary the exposure of their "epaulettes," why songbirds are becoming less abundant in the East, and why some bird species have forsaken monogamy for various other sexual arrangements.

Finally, concern for the environment is woven throughout the book. It is both historical (there are treatments and essays on all North American birds that have gone extinct in historic times), and current (with essays on threats to birds and on how to help conserve them). Birds are, of course, important indicators of global environment problems from climate change to the destruction of tropical rain forests and forests in North America. The millions of birders in the United States represent a largely untapped resource for helping to keep track of what is happening to the natural environment, and trying to keep those happenings from destroying Earth's avifauna and us along with it. Birders also are in a position to add a great deal to the scientific understanding of avian biology. Until now, however, there has been little in the way of literature that would help the average birder make the transition from spotting and identifying birds to understanding them. Now this fascinating and inexpensive volume will make that step easy for all who are interested.—**John Harte**, Energy and Resources Group, Building T-4, Room 100, University of California, Berkeley, California 94720.