

BOOK REVIEW

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Handbook of the Birds of the World, Volume 5. Barn-owls to Hummingbirds. Edited by Josep del Hoyo, Andrew Elliott, and Jordi Sargatal. 1999. Lynx Edicions, Barcelona, Spain. 759 pp., 76 color plates, 406 color photographs, 758 distribution maps, 3 figures, and 1 table. ISBN 84-87334-25-3. Cloth, \$185.00.—The *Handbook of the Birds of the World* (HBW) will be the first series to illustrate all of the species of birds on earth and to provide access to all of the essential information about each one of them. In fact, the editors claim that it will be the first work to deal with each member of an entire class of the animal kingdom. HBW is not yet half completed—it will consist of 12 volumes in all—and yet it already totals 3519 pages in volumes 1 to 5. The rate of production has been impressive considering the immense volume of material contained and that the first volume appeared in 1992.

Volume 5, reviewed here, completes coverage of the raptors begun with the falconiforms in Volume 2. In addition to the Strigiformes, Volume 5 covers Caprimulgiformes and Apodiformes, but the majority of this review will be concerned with the owl sections considering the primary interests of the readership of the *Journal of Raptor Research*.

The owl portion of Volume 5 was written by 13 authors, including some well-recognized owl experts and some individuals who will not be familiar even to those who follow the owl literature closely. More surprising than the use of little-known authors is that many living owl experts are not among the authors of this work.

A Forward discusses factors concerning risks to survival of bird populations in general and is followed by a very brief Introduction that notes three new developments for Volume 5: more plates and photographs, the longest single-species account to date (the Barn Owl [*Tyto alba*]), and the inclusion of details on restricted-range species.

Illustration of the species covered in this volume could only be described as lavish: the photographs

and paintings are excellent. Nineteen artists contributed the 76 color plates, seven of whom produced the owl plates. My only complaint regarding the color plates is that the heads of the tytonids are uniformly too large in proportion to their bodies. Outstanding photographs show species in natural habits illustrating a variety of behaviors.

The bulk of the book is taken up with family and species accounts: two families for the strigiforms (242 pages), five for the caprimulgiforms (144 pages), and three for the apodiforms (294 pages). Each family account begins with a map of the group's worldwide distribution, the general distinguishing characteristics, size range, habitat requirements, the number of genera and species, the number of species considered to be threatened, and the number that are extinct. Family accounts range from 6 to 77 pages in length and are followed by accounts for each species. Species accounts range in length considerably, reflecting the extent of knowledge on the various species.

Tytonidae, containing only 16 species, is the third longest family account in the book, mirroring the wide geographic range and quantity of information available on the group. M.D. Bruce compiled a huge quantity of knowledge about the biology of tytonids, but I noted a few discrepancies between what Bruce presented and the original sources. For example, in the second paragraph on page 57, P.A. Stewart used 30°N latitude in the United States to delimit northern and southern populations of Barn Owls for the purpose of studying dispersal. Bruce, however, gives 3°N as the latitudinal demarcation. In the first paragraph on page 54, Bruce's summary of the results of my study on lifetime reproductive success in Barn Owls incorrectly states that in one year, 11% of owl pairs produced second broods. This should have read that over the 19-year study, 11% of pairs produced double broods. The latitudinal error may be typographical, and the second-brood error may be the result of a too-hasty reading of only the paper's abstract. They render some doubt, however, about the accuracy of other information in the account.

The family account of Strigidae is about twice as long as that of Tytonidae for a family with 12 times the number of species. A good discussion of recent DNA-DNA hybridization and mitochondrial DNA data reaffirms that strigiforms and falconiforms are not closely related despite their host of shared adaptations for prey capture. DNA also clearly confirms that the caprimulgiforms are the closest relatives of strigiforms. Just like the account of Tytonidae, this account presents a huge quantity of information on the biology of the typical owls.

One of the most serious criticisms of previous volumes of HBW (Gill, *Condor* 96:566–567, 1994; Jehl, *Condor* 100:405–409, 1998; Bates, *Condor* 100:

769–775, 1998; Brightsmith, *Auk* 116:1158–1159, 1999) was that literature citations are not given in the text, making it difficult or impossible to ascertain the source of a particular bit of information. I, too, found this omission to be a frustration, making the large body of references included less useful than it could have been.

The entire HBW series with its extensive access to the literature and wonderful illustrations is a must for every library, but the cost and sheer bulk may deter individual ornithologists from obtaining the entire set. Raptor biologists, though, will want to add volumes 2 and 5 to their libraries.—**Carl D. Marti, Raptor Research Center, Boise State University, Boise, ID 83725 U.S.A.**