Birds of the world (del Hoyo et al.: *Handbook of the birds of the world. Volume 12. Picathartes to tits and chickadees*)

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Volume 12 of the *Handbook of the birds of the world* is a beautifully illustrated volume summarizing up to date information on 15 passerine families, of which 1 is African (picathartes), 11 are Australo-Papuan, some extending into southeastern Asia and neighbouring islands (Australasian babblers, logrunners, jewel-babblers and allies, whistlers, Australasian robins, fairy-wrens, bristlebirds, thornbills, Australian chats, sittellas, and Australasian treecreepers), and 3 are more widespread (babblers from Asia, Africa and North America, parrotbills from Palearctic and Oriental regions, and tits and chickadees from Nearctic, Palearctic, Oriental and Afrotropical regions).

The volume opens with the foreword on the avian fossil record and origin of birds by KJ Caley. The author lays out the current view on avian origin, gives a brief overview of an early radiation of Cretaceous birds (Enantiornithes, or “opposite birds”, and other toothed birds), then focuses on Neornithes, or modern birds, giving a relatively extensive overview of the existing fossil record, the history of its discovery, and taxonomic placement of the fossil taxa. Extinct groups of birds and most significant fossil specimens are described systematically (by order), and, to the delight of non-paleontologist reader, scientific names are accompanied by sketched illustrations for some extinct birds. The emphasis on geographic distribution of fossil records and inferred ecology of representatives of different fossil genera provides a context for understanding contemporary biogeography of avian families. Many controversies around taxonomic placement of different fossil specimens are highlighted (sometimes the order for some fossils is reassigned), allowing the reader to appreciate the complexity of the fossil data. This section sets up a rough time-frame for the origin and geographic distribution of extinct and contemporary orders of birds. A recent review on the origin of birds¹ and a genomic study² may clarify some of the unanswered questions in this section.

The main body of the book comprises family accounts, followed by beautiful colour plates illustrating the majority of currently recognized races for all species, and species accounts. There is much to learn about individual species from family accounts. Undoubtedly the fascinating collection of action photos of birds in their natural habitats, accompanied by descriptive texts explaining captured behaviour, is one of the major attractions of this volume (as of the whole book series). Each of the photo captions includes species’ English name in bold; scientific name, locality and author’s name are listed below each caption. The family accounts are divided into sections on main aspects of the birds’ biology. The section on systematics describes features shared by members of each family and all of its genera, and highlights controversial placement of some members (e.g., for babblers, Timallidae, the section acknowledges inclusion of some definite non-babblers and exclusion of some true babblers), calling for revisions after molecular work is finished and flagging the areas in need of further work. Some taxonomic treatments perhaps are too conservative (e.g., placement of some members of tit family, Paridae, has been challenged by Päckert and Martens³). The section on morphological aspects presents a variation in bird’s sizes, shapes of bill and wing, plumage of adults and juveniles and other features, focusing on group-specific adaptations to habitats. The habitat section summarizes various habitats the family encounters and then describes general types of habitats and species that share them, highlighting interesting facts (e.g., seasonal changes in
habitats, co-occurrence of species). Common behavioural traits for the family are followed by descriptions of territorial displays and social organization in the section on general habits. The voice section provides descriptions of singing behaviour and vocalization (now supplemented by growing open-access on-line audiovisual library 4), touching on song function when it is known. The section on food and feeding comprises a synthesis of data on diet content, prey capture techniques and their seasonal changes, and provides quite a detailed description of various hunting strategies for various family members. The breeding section provides much detail on social systems, territoriality, presence of helpers at the nest and their role in rearing the young, courtship and nest-building behaviour, number of broods, nest shape, clutch size, incubation and growth of young. Seasonal mobility (such as altitudinal or latitudinal shifts) and post-breeding dispersal of young, known from ringing recoveries and other studies, are discussed in the movements section. The section on relationships with man includes such information as, e.g., birds’ behaviour towards humans, their past and present attractiveness to native hunters, and birds’ native names. Status and conservation section outlines the (usually depressing) population changes (due to human modification of birds’ habitats, introduced mammalian predators and other causes); some successful conservation efforts are reported (e.g., remarkable recovery of the Black Robin, Petroica traversi, from the total population of five individuals). The last section of each family account is a general bibliography, which includes short references (authors’ names and year) mentioned in the text and also some “suggested further reading”. Whereas some revolutionary studies, such as recent molecular work are often referred to in the text, most sources of data and inferences remain anonymous. While making the text easy to read, this lack of direct references makes finding the sources of reported findings somewhat difficult. References to scientific descriptions and general list of over 4000 references are given in the end of the volume.

Species accounts follow the set of superb illustration of currently recognized races; they open with the list of common names (in English, French, German and Spanish), and comprise the following sections: taxonomy (briefly discusses taxonomic affinities of the species and, sometimes, controversies around them), subspecies and distribution (describes geographic distribution of currently recognized races and includes a map of species’ range), descriptive notes (on bird’s appearance and voice), habitat, food and feeding, breeding (where information is available, this section includes detailed summary of studies), movement (reports data from ringing recoveries where available), status and conservation (provides a brief description of threats) and bibliography.

Overall, this volume of the Handbook of the birds of the world represents an outstanding effort in integrating data on morphology, behaviour, biogeography and molecular work as well as in pinpointing the areas in need of further research. This book will be of a great interest to birders, naturalists and ornithologists.


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