

Book reviews

An excellent review on bird migration

Ian Newton 2008: *The Migration Ecology of Birds*. — Academic Press. 976 pp. ISBN 978-0-12-517367-4.

Ian Newton is one of the most productive authors of ornithological handbooks. In addition to having made a highly respected career as a specialist on finches and from the 1970s on many raptor species, he has written several top-quality books which review an amazing quantity of scientific data in a concise and informative way. These include, for example, *Population ecology of raptors* (Poyser 1979), *Population limitation in birds* (Academic Press 1998) and *The speciation & biogeography of birds* (Academic Press 2003).

Although there are several recent books on bird migration, Newton's exceptional ability to review the essential knowledge from thousands of scientific papers in a logical way has now led to publication of the best and most updated of them. Research on bird migration has gone forward rapidly even in recent years due to satellite telemetry and other increasingly sophisticated methods. Newton concentrates on most recent developments in migration research, but he also summarizes older knowledge. The book deals with all aspects of bird migration, and for those interested in original data, it also lists a few thousand citations on 111 pages.

After an introductory chapter 1, chapter 2 reviews the methods behind the newest results. Ringing and laboratory experiments have been among the main techniques during the 120 years of scientific study on migration, but the development of smaller tracking devices in particular initiated a significant breakthrough in monitoring migratory flight.

Part one of the book includes eight chapters which deal migratory flight, weather effects and other aspects, fuelling the flights, incredible journeys, raptors and other soaring birds, speed and

duration of journeys, finding the way, and vagrancy.

The timing and control of migration is the main topic of part two, with chapters on annual cycles and control mechanisms. Part three concentrates on large-scale movement patterns, with separate chapters on geographical patterns, seasonal occupation of breeding areas, sex and age differences in migration, variations on a migratory theme, site fidelity and dispersal, and irruptive migrations, both on boreal seed-eaters and on owls, raptors and waterfowl.

Part four reviews evolution and movement patterns of migratory flight. The chapters deal with evolutionary aspects, recent changes in bird migrations, biogeographical legacies, and distribution patterns. Finally, part five on migration systems and population limitation discusses population ecological questions, on which Newton is a leading expert in the ornithological world. The five chapters separately present Palaearctic–Afrotropical and Nearctic–Neotropical migration systems, questions on population limitation in breeding and in wintering areas, conditions on stopover sites, and mass mortality of migrants. There is a useful glossary before the references.

This book is an impressive source of knowledge on the most fundamental issues on bird migration. It includes an immense amount of data which is presented in a lucid style, readable to everyone seriously interested in birds. Original data can be found in tens of tables, maps and diagrams. Results from various parts of the world on various bird groups are presented, with many examples from Finland showing our long history on migration study and especially large-scale ringing. Summaries and concluding remarks provide good overviews of the contents. This book is the most thorough and updated review of all aspects on migration, a “must” to all professional ornithologists and keen amateurs.

Pertti Koskimies

European bird songs extensively covered

Schultze, A. & Dingler, K.-H. 2007: Die Vogelstimmen Europas, Nordafrikas und Vorderasiens (The bird songs of Europe, North Africa and the Middle East). — Musikverlag Edition AMPLE. 2 MP3 discs. ISBN 978-3-938147-01-6. Publisher's (<http://www.ample.de/>) price 69.95.

This two-disc MP3 package covers a highly impressive set of 819 bird species, with nearly 3,000 recordings and 19 hours 20 minutes duration. All the European breeding species and regular migrants are included, plus most vagrants and many species from "exotic" geographic areas such as Azores and certain parts of Middle East. For many species not just songs but also flight calls and even nestling and fledgling calls are included. For ornithologists carrying out bird counts during summer months, the latter are of particular interest. The included booklet says that the recordings are from the archives of – to name a few – Claude Chappuis, Karl-Heinz Dingler, Guy Gibbon, Krister Mild, Pavel Pelz, Jean C. Roché, Andreas Schulze and Alfred Werle. The booklet lists some details of the recordings in German only, but you can freely download an English version from the publisher's website.

The package can be criticized from poor documentation: there is nothing on recording locations, dates and persons. This fact limits the use of this set as a reference for e.g. rarities committees that have to frequently evaluate field recordings. It might also be misleading for an average person trying to identify an unknown backyard singing bird. For example, the song of Redwing (*Turdus iliacus*) varies within Finland, so that local dialects can be distinguished, but for an untrained ear they might sound like different species. At a larger geographic scale, several species similarly vary in their songs and calls. Bird vocalizations may also vary depending on season; hence an inclusion of recording dates would have been useful as well.

Some geographic variation in song is often covered (e.g., Blue tit *Parus caeruleus*), but occasionally the user would have appreciated an indication of the subspecies. This issue is of importance, considering the frequency of taxonomic splits and the fact that many subspecies indeed

sound different, e.g. the calls of two northern Chiffchaff subspecies (*Phylloscopus collybita collybita* and *Ph. c. abietinus*). Recordings of unknown origin are thus often useless or even misleading as references.

The sound quality is on average high, good enough for studying songs and calls, and (with occasional reservations) for "play-back". A few recordings sound odd apparently due to "cleaning up" poor-quality recordings, such as the 2nd recording of Eagle Owl (*Bubo bubo*). Also the volume level varies so that some songs cannot be efficiently used for play-back, such as in a cell phone, which is a common use among Finnish field ornithologists.

Moreover, personally I don't like the woodpecker drumming recordings. Here, the pauses between drum bursts have been drastically cut (for space limitations), which can give a false impression about the drumming behavior of woodpeckers, and might also affect their responses to play-back.

The selection of included songs and calls mostly depends on material availability and space limitations. In this respect the present set is truly admirable. Still, wader flight calls are rarely included in these commercial sets of recordings, and this work is no exception. Moreover, for playback users a clear indication of alarm calls would help avoid playing unwanted sounds. Also, some recordings are of limited use due to a suboptimal selection of calls. For example, the Caspian Gull (*Larus cachinnans*) track does not include the characteristic "long call" of this species. Luckily, this particular call can be heard in Jännes (2003), which – by the way – also serves as an example of providing good recording information.

Regrettably, the MP3 set also includes several misidentifications. A list on these can be found in the thorough review by Robb (2004) that can be used with this MP3 set. Most of these errors result from using Roche and Chevereau (2002) as the single most important source for recordings. Robb's (2004) list should perhaps be expanded to contain also Taiga Flycatcher (*Ficedula albicilla*). The flycatcher is probably copied from Mild (1987), but the present MP3 track seems to present Eastern Chiffchaff (*Phylloscopus [collybita] tristis*). In Mild's (1987) recording, the Chiffchaff sings in the foreground, whereas the flycatcher

sings quietly in the background but cannot be heard on the present MP3 track, and it may have been deleted.

To sum up, this MP3 set includes most European breeding, migrant and vagrant species, and for many of these, both songs and calls are included. Despite the lack of proper documentation and occasional errors, this set is the most comprehensive to date, and serves as a valuable source of bird vocalization for students and average ornithologists. For more sophisticated uses, such as on rarities committees, the lack of recording documentation decreases its usefulness.

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References

- Jännes, H. 2003: Calls of Eastern Vagrants. — Author's edition, Helsinki. CD.
- Mild, K. 1987: Soviet bird songs. — Author's edition, Stockholm. 2 C cassettes + booklet.
- Robb, M.S. 2004: Recensies. Andreas Schultze 2003. Die Vogelstimmen Europas, Nordafrikas und Vorderasiens. — *Dutch Birding* 26: 319–327.
- Roche, J.C. & Chevereau, J. 2002: Bird sounds of Europe and North-West Africa. — Sittelle, France. 10 CDs.

A new tool toward proper use of terminology

Erritzoe, J., Kampp, K., Winker, K. & Frith, C.B. 2007: *The Ornithologist's Dictionary*. — Lynx Edicions, Barcelona, Spain. 290 pp. ISBN-10: 84-96553-43-4, ISBN-13: 978-84-96553-43-9. Publisher's (<http://www.lynxeds.com/>) price 19,00.

Lynx Edicions has become famous for their high-quality scientific publications. This dictionary, tailored for ornithologists, is a recent addition to the Lynx book family. The book is relatively small in size: 12.5 × 20 × 1.5 cm, which means flexibility in use: in the field, as a pocket guide during a congress or on the office desk. This book describes over 5,000 words found in ornithological literature. However, as the authors state in the Introduction, specific terminology normally well explained in scientific literature is usually not included, nor are layman's terms that can be found in almost any

dictionary. A truly valuable feature of this book is the inclusion of many terms that are nowadays ignored but can be found in older publications.

My criticisms rise from occasional poor, even erroneous descriptions of some terms and term-selection inconsistencies. My intention, however, is not to claim that the book would be full of mistakes, it is not. It is difficult to explain thousands of terms and simultaneously keeping it compact, but I would like to point a few cases that provide the user an idea of potential terminological biases. For example, the term 'edge effect' is described as meaning a peak in bird richness at the edge (my words) of an ecotone between two habitats. However, 'edge effect' may also define many other things at ecotones: for example, changes in microclimatic conditions and faunal, floral and fungal abundances across the ecotone. Most of these edge-distance response curves are not bell-shaped, and species richness may not necessarily be either. Many statistical techniques are adequately described, but for some reason e.g. GLM, GLMM and multivariate statistics are missing, although these are relatively often used in ecological research. The book usefully includes many if not most ornithology-related journals, but many journals are missing without the reader really being able to understand why. For example, *Ecography* frequently publishes high-quality ornithology but is missing, let alone *Ornis Svecica*; on the other hand the journal *Ecology* is there, and so is the *Journal of the Bombay Natural History Society*. These reflect a lack of consistency in selecting terms to be included, at least in some areas. Finally, although *Ornis Fennica* is included, the book claims it to be published by 'Ornitologiska Föreningen', but anyone can check the publisher from, for example, this *Ornis Fennica* issue or using internet.

Experts in research fields other than mine (conservation biology, species-habitat relationships) may be able to point out more errors and inconsistencies. Therefore I am reluctant to recommend this book to be used as a sole reference for this information. Nevertheless, for most terms it provides at least a decent idea on the meaning, and will certainly aid reading scientific texts.

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