

these are rather small issues among specialists who are equally passionate about how best to measure these animals that we study so intensively.

The illustrations are excellent, making this book immediately accessible to the newcomer. The only caution I would give the novice is to also consult the literature to determine which measurements out of this universe of the possible are likely to be the best to take for a particular study. But even those of us who are old hands at measuring birds can benefit by exploring this universe to see whether new, alternate, or better methods can be applied. Everyone who measures birds would do well to study this volume.—KEVIN WINKER, *University of Alaska Museum, 907 Yukon Drive, Fairbanks, Alaska 99775, USA. E-mail: kevin.winker@alaska.edu*

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Reed Warblers: Diversity in a Uniform Bird Family.—

Bernd Leisler and Karl Schulze-Hagen. 2011. KNNV Publishing, Zeist. 321 pp. ISBN 9789050113915. Hardback, \$95.00.—This book failed to meet my expectations—in the best possible sense of the word. Expecting a dry, scholarly work full of impersonal scientific facts, I was taken by surprise by this beautifully illustrated and informative book. Written in a personal yet rigorous scientific style, *Reed Warblers* is a prime example of a well-balanced book that both can and should be read by all who are associated with birds in either their work or spare time.

Any species of Acrocephalidae is a bugaboo for biology undergraduates. During zoology field trips, students find out that “reed warblers” are unobtrusive, skulking, and, consequently, hard to glimpse. During labs, students find out, to their despair, that the description “brownish upperparts, whitish underparts, inconspicuous eyering, etc.” fits not only the focal species but almost any other in the family. Being mostly plain-colored, secretive, and

cryptic, acrocephalids are not a prime example of a bird group that would have every biology student falling in love with them at first sight.

Indeed, looking at these “universal brown birds,” one can hardly think of a less promising bird clade. But first impressions are, as Bernd Leisler and Karl Schulze-Hagen persuasively show, misleading. Take a minute and contemplate a couple of examples from this superficially boring family. Watch a group of five Seychelles Warblers (*Acrocephalus sechellensis*) caring for a single egg in the nest. Catch a glimpse of an infanticidal secondary female Great Reed Warbler (*A. arundinaceus*) as she visits the nest of a primary female—to kill her offspring before it even hatches. Follow a tiny Marsh Warbler (*A. palustris*) traveling almost half a year from its European breeding grounds to its South African wintering grounds on a road ~9,000 km long—only to take the same treacherous trip back through inhospitable areas after just a couple of months of winter “holidays.” Check the nest of the Aquatic Warbler (*A. paludicola*) with five chicks; there is a good chance each was sired by a different male. Furthermore, don't forget that this last species, the rarest European migratory songbird, copulates ~1,000 times (!) longer than virtually any “normal” bird. The list could go on, only to confirm that the family of reed warblers is an ecological and evolutionary treasury full of enlightening surprises.

Reed Warblers is divided into 14 chapters, each concluding with a succinct summary, and a final Postscript. The authors first introduce the group by imaginarily traveling across the diverse habitats and geographic regions that reed warblers inhabit. Recent advances in molecular phylogenetics have overthrown the traditional systematics of this group (a prime example of taxonomic splitting), with one quarter of extant species in this clade described during the past quarter of a century! Consequently, chapter 2 logically discusses current views of phylogenetic relationships among the six genera of Acrocephalidae (*Nesillas*, *Calamonastides*, *Phragamaticola*, *Iduna*, *Hippolais*, and *Acrocephalus*). In fact, phylogeny as a background for understanding among-species similarities and differences (divergence among closely related and convergence among distantly related taxa) is an organizing theme throughout the book. Consistent color-coding of the various acrocephalids enhances the user-friendliness of the book and is shown on the cover for quick reference. This makes it easy for readers to interpret the cluster-analysis results of various traits (nest design, body morphology, song traits, etc.) presented in different chapters.

The authors, building on their long-term research experiences, pay meticulous attention to every aspect of acrocephalid biology. Chapters 3 through 6, on habitat and diet selection, show how this seemingly homogeneous avian group (exemplified by European members of the genus *Acrocephalus*) solved the problem of living in a seemingly homogeneous habitat (reedbeds and marshes) by very fine niche partitioning, ecomorphological differences, and interspecific aggression. The next three chapters focus on reproduction, ranging from the sometimes mind-bogglingly complex song of reed warblers, through nesting per se, to interactions with the Common Cuckoo (*Cuculus canorus*). In fact, most of what we know about cuckoo–host coevolution comes from studies of *Acrocephalus* hosts. Uncannily, humans themselves have inadvertently “created” the *Acrocephalus*

warblers as coevolutionary model species. The construction of medieval ponds have increased population sizes and accessibility of nests in mostly linearly formed (and, consequently, easily searchable) reedbeds. Furthermore, the trees planted on pond banks prepared “watchtowers” for female cuckoos. Chapter 10, on “the battle of the sexes,” covers a wide range of issues, including social and genetic mating systems, cooperative breeding, polygyny, and promiscuity. Reed warblers are also powerful migrants and the most successful long-distance colonists among passerines (chapters 11 and 12). Chapter 13 deliberates conservation and global climate change. The final chapter really exemplifies the integrative and holistic approach of the authors; they discuss morphological and behavioral convergences between reed warblers and their New World marshland counterparts.

In the Postscript, the authors touch upon the important issue of an increasing gap between traditional field-experience-based natural history and modern theory-driven science. The former’s descriptive nature is sometimes looked upon with contempt by those who pay great attention to being abreast of the development of the contemporary competitive and impact-factor-obsessed science. At the same time, the latter’s “ivory-towering” is sometimes viewed with an analogous contempt by the general public. This dichotomy is paralleled by a gap between amateur birdwatchers and professional ornithologists. Leisler and Schulze-Hagen argue that both descriptive natural history and up-to-date experimental science have their irreplaceable roles and that both are necessary for our comprehensive understanding of the natural world. An apt example is provided by the classic monograph *Reed-Warblers* by Brown and Davies (1949)—both the authors and their field helpers were amateur birdwatchers. However, the gap between amateur and professional ornithology has grown dramatically since then. Therefore, books that captivate both groups are especially valuable and may set the stage for more collaboration in the future. *Reed Warblers* is exactly this more generally attractive book.

Leisler and Schulze-Hagen wrote *Reed Warblers* in 5 years and managed to cover even the most recent literature—of 926 references, almost half (400) come from 2001–2010, and 35 sources were published shortly before the book went into print (2011). The book is both up-to-date and great from an educational point of view. By presenting the particular traits and patterns of the reed warbler family as specific examples or tests of general rules, it shows students how any (behavioral) ecologist and ornithologist should think. In addition to the lively and readable style, *Reed Warblers* includes brilliant life-like drawings by D. Quinn and photographs that are both aesthetically pleasing and document biologically relevant aspects of reed warbler biology.

Many laymen and students think that the most exciting part of science is the discovery of a new species or, say, a first description of a novel bizarre behavior. Leisler and Schulze-Hagen do a great job of showing that the opposite is true; the really exciting part of science comes when various pieces of the puzzle, having been collected over decades, fit together and start to make sense—to remind us that the more we know, the more questions arise. This *understanding*, and not merely discovery or priority of description, is the ultimate meaning—and source of deep excitement—of scientific endeavor.

I found little to criticize in *Reed Warblers*. The book is taxonomically weighted toward temperate *Acrocephalus* warblers that the authors themselves have focused on in their long-term research. This, of course, reflects a general temperate-zone bias in biological research (which is explicitly mentioned by the authors)—there are simply much fewer data from the tropics than from the Palearctic. In addition to rare typos and several unclear figure and table captions, one might quibble about how well specific references fit in particular sections versus others.

Throughout my reading of *Reed Warblers*, a common denominator of various chapters came repeatedly to my mind: this is exactly the book I would have liked to have at hand when starting my own research as an undergraduate student years ago. The authors do a great job of changing gears among natural-history descriptions accessible to any layman (see, e.g., how reed warblers build their nests on p. 143), concrete quantitative results of research papers inaccessible to most laymen, and lucid explanations of general ecological theories. Their clearly written and well-organized masterpiece is to be recommended to both novices of ecological science and its seasoned veterans.—TOMÁŠ GRIM, *Department of Zoology and Laboratory of Ornithology, Palacký University, tř. Svobody 26, 771 46 Olomouc, Czech Republic. E-mail: tomas.grim@upol.cz*

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Riddle of the Feathered Dragons: Hidden Birds of China.—

Alan Feduccia. 2012. Yale University Press, New Haven, Connecticut. 368 pp. ISBN 9780300164350. Hardback, \$55.00.—Controversy regarding avian origins originated with the 19th-century discovery of the iconic *Archaeopteryx*. The Urvogel possessed a seemingly dinosaur-like skeleton yet was cloaked in a set of exquisitely preserved, modern-appearing feathers. More recently, discoveries of supposedly “feathered dinosaurs” from Mesozoic lake deposits in China have provided well-publicized support for the notion that birds evolved from the “raptor-like” dromaeosaurid theropod dinosaurs. Indeed, recent conventional wisdom holds that birds are little more than “flying dinosaurs.” Nevertheless, a cadre of respected researchers in this field remain unconvinced. In his latest book, *Riddle of the Feathered Dragons: Hidden Birds of China*, Alan Feduccia has assembled a comprehensive, lucid, and detailed analysis of the importance of these new specimens and what they may, or may not, tell us about avian origins.

Feduccia, an experienced paleo-ornithologist, has gained a reputation for cautious skepticism regarding the dinosaur–bird nexus. In this book he challenges entrenched orthodoxy, drawing sharp focus on some of the sensationalistic, if questionable, science that has been marshaled to support the theropod–bird link. Feduccia cautions against what he and others see as a “verificationist” approach to the complex and rapidly expanding fossil data, noting that the field of bird origins has too often taken an overtly political tone