



Book Reviews

Authors: Engstrom, R. Todd, and Winker, Kevin

Source: The Auk, 129(3) : 565-566

Published By: American Ornithological Society

URL: <https://doi.org/10.1525/auk.2012.129.3.565>

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

Book Reviews



EDITED BY R. TODD ENGSTROM

The following critiques express the opinions of the individual evaluators regarding the strengths, weaknesses, and value of the books they review. As such, the appraisals are subjective assessments and do not necessarily reflect the opinions of the editors or any official policy of the American Ornithologists' Union.

The Auk 129(3):565–566, 2012
© The American Ornithologists' Union, 2012.
Printed in USA.

Measuring Birds (Vögel Vermissen).—Edited by Deutsche Ornithologen-Gesellschaft. 2011. Deutsche Ornithologen-Gesellschaft, Wilhelmshaven, Germany. 115 pp. Christ Media Natur, Minden, Germany. ISBN 9783923757053. (€ 24.90).—This is a careful, useful, and important work on measuring birds and a very welcome addition to the ornithological literature. It is a spiral-bound, octavo-sized book on water-resistant paper with sturdy covers, made for ready use in the field, in the museum collection, or in specimen preparation. It is printed in landscape format in parallel columns in English and German and is well written and well illustrated. The authors correctly note that this is the first comprehensive work on the subject since the classic by Baldwin et al. (1931). This volume is more comprehensive, however, because the authors integrate measurements taken in bird banding and some of those used in specialized studies of morphology. The many types of measurements possible for ecomorphological studies are not all included; only those deemed to have become standards since the 1970s are incorporated. The goal is to guide users and hopefully achieve “a standardised coding and documentation of the measurements used” (p. 11). The authors certainly succeed in providing users an excellent guide.

This volume was written by a team of authors (S. Eck, J. Fiebig, W. Fiedler, I. Heynen, B. Nicolai, T. Töpfer, R. van den Elzen, R. Winkler, and F. Woog) who make up a group dedicated to “Ornithological Collections” in the German Ornithologists' Society (DO-G). The book is divided into nine chapters focused on aspects of measurement and two additional chapters that provide references and an index. The topics include why we measure birds; measurement accuracy; comparison of measurements between fresh or living birds and museum specimens; numbering flight feathers; live bird measurements; skull ossification as an aging method; body mass; measuring equipment; and detailed drawings and verbal descriptions of specific bird measurements. Overall, I found it an informative and rather comprehensive work, and I enjoyed reading it.

The section on measurement accuracy and reliability is right on. Not only are within-observer variations important (for example, I try not to measure >50 museum specimens in a day to

minimize error), but instrument quality and considerations of precision versus accuracy are critical. There is a good chapter on shrinkage that correctly concludes that there is no universal correction factor possible, given the variability of changes documented between live or freshly dead birds and the same individuals measured later as dried museum specimens.

As a measurement nerd, I thought that I might find a number of areas of disagreement, but these were relatively few. The authors sidestep one area of potential contention, that of measuring wing chord versus flattened wing length, by focusing mostly on the latter, which is the use that prevails across Europe. The amount of training that seems to be required among observers to attain accuracies to just 1 mm (pp. 33–34) does not argue for the strength of using flattened wing lengths over chord, although both may be superceded by accuracies obtainable by measuring individual primary lengths (Jenni and Winkler 1989). Also, the fact that there are fully five wing-length measurements that are not wing chord suggests that the final word on the best way to measure wing length has yet to be written. Wing chord, which is the prevailing method of measuring wing length in museums and in the Americas, does not appear in the index.

Although mentioned in more than one place, mostly with respect to among-observer variation (e.g., pp. 33–38), repeatability analyses would have benefited from a focused discussion (e.g., Bailey and Byrnes 1990). Other quibbles are small. Preparators of scientific specimens are usually not called “taxidermists” in most English-speaking countries (that term being reserved for preparators of specimens for exhibit). The term “juvenile” is too vague (Erritzoe et al. 2007); hatch year–second year (HY–SY) is a better descriptor. The summary of skull ossification is too narrowly focused on temperate-zone birds; many tropical passerines can take much longer than temperate-zone species to become fully ossified. Three-dimensional measurements and reflectance spectrophotometry will require their own summaries elsewhere. Measurement abbreviations are suggested but might have been reconciled with some already in use (e.g., Winker 2000). Finally, it is suggested that some measurements require softening of museum skins, which as a curator I would not permit. But

The Auk, Vol. 129, Number 3, pages 565–570. ISSN 0004-8038, electronic ISSN 1938-4254. © 2012 by The American Ornithologists' Union. All rights reserved. Please direct all requests for permission to photocopy or reproduce article content through the University of California Press's Rights and Permissions website, <http://www.ucpressjournals.com/reprintInfo.asp>. DOI: 10.1525/auk.2012.129.3.565

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*

LITERATURE CITED

- BAILEY, R. C., AND J. BYRNES. 1990. A new, old method for assessing measurement error in both univariate and multivariate morphometric studies. *Systematic Zoology* 39:124–130.
- BALDWIN, S. P., H. C. OBERHOLSER, AND L. G. WORLEY. 1931. Measurements of birds. Scientific Publications of the Cleveland Museum of Natural History, no. 2.
- ERRITZOE, J., K. KAMPP, K. WINKER, AND C. FRITH. 2007. *The Ornithologist's Dictionary*. Lynx Edicions, Barcelona, Spain.
- JENNI, L., AND R. WINKLER. 1989. The feather-length of small passerines: A measurement for wing-length in live birds and museum skins. *Bird Study* 36:1–15.
- WINKER, K. 2000. Obtaining, preserving, and preparing bird specimens. *Journal of Field Ornithology* 71:250–297.

The Auk 129(3):566–567, 2012

© The American Ornithologists' Union, 2012.

Printed in USA.

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*