## **BOOK REVIEW**

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**The Known Birds of North and Middle America**. Part 1, 1986; Part 2, 1991. Allan R. Phillips. A. R. Phillips, Denver, CO. Part 1, lxi + 259 pp., 2 color plates, 9 black and white figures; Part 2, lii + 249 pp., 5 color plates, 5 black and white figures. Price: Part 1, \$60.00; Part 2, \$64.00. Order from Allan R. Phillips, 3540 South Hillcrest Dr. #5, Denver, CO 80237.

When I was first becoming deeply interested in birds, many times did I read and reread the fifth edition of the A.O.U. Checklist of North American Birds and Grinnell and Miller's Distribution of the Birds of California. Anyone familiar with these works knows that subspecies figure prominently in them. What are these subspecies, I wondered, and how could I learn to identify them? The A.O.U. Checklist and Grinnell and Miller were long on the where, said a little about the when, but were almost silent on the what. Field guides taught me how to distinguish species, but they tiptoed gingerly around—or ran in horror from—the identification of subspecies. Still, my curiosity persisted. Later, I learned of Mayr and Short's Species Taxa of North American Birds, Ridgway's Birds of North and Middle America, and Phillips, Marshall, and Monson's Birds of Arizona. Now the door began to open, but the way it led was not easy. The literature was vast and scattered. Ridgway's work, the most recent (1901–1950) comprehensive source giving descriptions and keys for all subspecies, is no longer up to date. Many subspecies have been described or revised since the publication of most of the volumes. Now we have Allan Phillips' The Known Birds of North and Middle America, parts 1 (December 1986) and 2 (May 1991). Phillips (Part 1, p. lvii) says "this book is by no means a substitute for Ridgway's classic, . . . [but] it does attempt to bring Ridgway's and Hellmayr's lists up to date in certain respects."

Allan Phillips is probably best known to readers of Western Birds as co-author of The Birds of Arizona (1964) and Annotated Checklist of the Birds of Arizona (1981). Among the dozens of papers he has published, one of the best known must be "Semipalmated Sandpiper: Identification, Migration, Summer and Winter Ranges" (American Birds 29:799-808, 1975), in which he exposed as false the notion that the Semipalmated Sandpiper winters widely in the eastern U.S. That paper exemplifies Phillips' hallmark style, continued in Known Birds: using studies of museum specimens to attack and debunk conventional wisdom. Not surprisingly, this style brings Phillips into frequent disagreement with more conventional ornithologists.

Part 1 covers the swallows, corvids, shrikes, tits, nuthatches, wrens, dippers, bulbuls, Wrentit, mimids, and creepers; Part 2 covers the waxwings, silky flycatchers, Olive Warbler, kinglets, Old World warblers and flycatchers, gnatcatchers, thrushes, accentors, wagtails, pipits, starlings, and vireos. Each species account begins with a citation of the original description, type locality, and vernacular names in English, Spanish, and French. The reader will quickly discover that, among English names, Phillips much prefers those widely used in the first half of this century (e.g., Hartlaub's Jay, White-necked Raven) over novelties coined by Eisenmann or the A.O.U. Checklist committee (Bushy-crested Jay, Chihuahuan Raven). Next comes an outline of the species' range, describing breeding and winter ranges, migration routes, and occurrences of vagrants, often in fairly general terms. Species migrating to Middle America get a paragraph specifying extreme dates in that area. Erroneous and dubious reports are pointed out—and often roundly criticized. Historic changes in status and distribution, if any, are described, and the reasons for them are explained.

"Remarks" or "Notes" cover taxonomic or nomenclatural problems or disputes—often in vivid and colorful language.

Finally comes what I consider the real meat of the book, the section, under each polytypic species, on geographic variation. Most of these sections are by Phillips himself, but some were contributed by other ornithologists: Robert W. Dickerman, Daniel D. Gibson, Kenneth C. Parkes, Mario A. Ramos, Amadeo M. Rea, and J. Dan Webster. Each subspecies receives the same treatment as the species as a whole, and its distinguishing characters are summarized. How monumental and arduous a task it was to assemble this information can be appreciated only by someone who has attempted to research geographic variation in even one species, as I learned in my study of the Willow Flycatcher.

Not only have Phillips and his contributors characterized all currently known North and Middle American subspecies in the families covered, their studies prompted the description of no fewer than 78 new subspecies. Most of these, as might be expected, occur in Mexico or Central America, whose birds have been studied far less than those of the U.S.A. or Canada. Still, 26 of the new forms occur north of the Mexican border, and at least 9 of them occur in California (7 of these were described by Rea).

Most of the new subspecies were revealed through study of recently molted specimens in fresh plumage, some recently collected in areas from which few or no fresh-plumaged specimens had been available. Browning (1990, Taxa of North American Birds Described from 1957 through 1987, Proc. Biol. Soc. Washington 103:432–541) independently assessed the validity of the 15 new subspecies described in Part 1 and occurring in the area of the 1957 A.O.U. Checklist (Canada, U.S.A. excluding Hawaii, Baja California); he supported 10 of them. Specimens adequate to exemplify these subspecies are not found in every museum, however, even the largest. Certainly, the subspecies of the Winter Wren and Hutton's Vireo described by Rea cannot be evaluated without reference to the dozens of specimens collected by him over the last 13 years and now in the San Diego Natural History Museum.

Also of much interest are the subspecies described since 1957, date of the last A.O.U. Checklist covering subspecies, and so probably unfamiliar to many readers. Californians should note especially *Toxostoma leconteii macmillanorum*, restricted to the San Joaquin Valley and described by Phillips (in 1965) as darker than *T. l. leconteii*, occurring elsewhere in the U.S.A. These recent discoveries illustrate how the full extent of biodiversity is not yet known even in the United States, the reason for the "known" in *Known Birds*.

Phillips has not taken anybody's word for anything; he has reassessed all previously described subspecies as well. Quite a few of these he has synonymized, pointing out that the supposed subspecies characters were based on comparison of foxed with unfoxed specimens, worn with unworn plumage, adventitious staining with soot, or even wishful thinking on the part of the describer.

There are some innovations at the level of the species and genus, too, and, not surprisingly, quite a few differences from the sixth edition of the A.O.U. Checklist. I count 5 species and 10 genera split by the A.O.U. but lumped by Phillips, and 17 species and 2 genera lumped by the A.O.U. but split by Phillips. In addition, names of 8 species differ for purely nomenclatural reasons, that is, disagreements over the applicability or priority of original descriptions. Some of the innovations, such as the splits of Bicknell's from the Gray-cheeked Thrush and of the eastern and western Warbling Vireos, both suggested with question marks, represent intriguing hypotheses for further study. But others, such as the unexplained lumping of the Yellow-billed and Black-billed Magpies, especially in contrast to the splitting of the Santa Cruz Island and Florida Scrub Jays, seem arbitrary.

Before the reader gets to the meat of the book, however, he will have to run the gauntlet of Phillips' seemingly endless sermonizing. The introductory material occupies 45 pages in Part 1, 37 in Part 2. Some introduction is necessary in any book of this nature, but much of it in these volumes consists of bewailing humanity's defects. Furthermore, the species accounts are regularly interrupted by digressions whenever a misidentification or misinterpretation illustrates a point Phillips wishes to make. The basic ideas that Phillips espouses are fundamental, admirable, and, I hope, noncontroversial: the rules of nomenclature should be followed logically and impartially, conclusions in science should be based on reverifiable data, effective conservation of birds must be based on conservation of viable tracts of habitat, observational data should not be forced to fit an inappropriate theoretical framework, statistics should not be used to conceal a lack of adequate data, and so on. But by presenting his views so stridently, laced with personal attacks against those who have failed to meet his standards, Phillips risks alienating the very audience he is trying to reach. Worse, he invites being labeled as a crackpot and his audience's dismissing his results before it ever reads them. Among the many enemies that Phillips seems to have made over his long career, he must put himself at the head of the list.

To focus this review on Phillips' diatribes would be pointless and counterproductive. I do, however, have some criticisms of other aspects of the book. Economy of expression is another of Phillips' obsessions. He uses so many abbreviations that he needed six pages at the beginning of the book just to list them all. Saving space, and therefore money, was clearly a prime concern in this author-published book. The margins are so narrow that the page numbers occasionally got shaved off at the bottom, but there is appreciable white space at breaks not only between families but also between some genera. Professional editing and production would have yielded a more pleasing book. At least Phillips' striving for conciseness seldom led him into bad grammar.

Illustrations consist of 7 color plates and 11 distribution maps, covering selected species. Paintings by Ann Pulich depict three species of rough-winged swallows, three nightingale wrens, the Rufous-backed and Grayson's Robins, and three subspecies of *Catharus* thrushes; one by John C. Anderton depicts six Mexican subspecies of Warbling Vireo relatives. These are well done and useful, but unfortunately the two in Part 1 lack legends (refer to the text for explanations), and I am disturbed in Part 2 by the dissimilarity between the chocolate-colored bird designated as *Catharus fuscescens salicicola* in Plate 1 and the paler, more rufous one of the same subspecies photographed on Plate 3. More color illustrations of everything would have been ideal, as it is in color that most subspecies differ, but many color illustrations, a short print run, and a reasonably priced book are an impossible combination.

The distribution maps, emphasizing Mexico, are helpful, except for Figure 4 in Part 2 (in which some or all of the shading slipped out of place during printing). Many more maps would have been desirable, however, especially because the descriptions of ranges are often too general. For example, I can not figure out to what extent, if any, Lanius ludovicianus excubitorides occurs in California (Part 1, page 77), and I can not figure out which race(s) of the American (Water) Pipit winter(s) in California. Phillips tries to express range descriptions in terms of "parts of an idealized state or province" (Figure 1 in both parts 1 and 2), i.e., standard sectors designated by terms like "central-western." This works well enough for an approximately square state such as Arizona but is "an inappropriate theoretical framework" for an irregular, complex one such as California. More use of counties and exact localities to express ranges would have been preferable.

Graphic devices would have helped greatly in the presentation of subspecies characters, too. In a complex species such as the Hermit Thrush, the reader will have to construct for himself a diagram like Figure 1 to pick his way through the maze of

darker versus paler and grayer versus rustier. Such diagrams would have facilitated understanding of the variation in many species.

Phillips excoriates arrogance, a vice too prevalent in all human endeavors. Yet even he seems to slip into it, writing that he "seldom count[ed] numbers of specimens examined.... Such details I leave to those with little to do" (Part 1, p. lx). Now, Phillips is correct when he says "for practical purposes, i.e., recognition and identification of mensural subspecies, one needs the *normal ranges* of measurements, not means or statistics" (Part 1, p. lvi). But aren't the simplest of statistics, means and standard deviations, the tools with which one assesses the likelihood of measurements falling toward the extremes of a range and possibly into the range of another subspecies? And doesn't the number of specimens examined convey a notion of the strength of a statistical base? Like Phillips, we should all "eschew statistical smoke-screens," but I think he has taken a phobia of numbers a bit too far. Fortunately, most subspecies are *not* mensural, being defined instead on differences in color and pattern.

The method of literature citation in "Known Birds" can be maddening. Many frequently cited references are abbreviated and keyed in the introduction. There is an extensive bibliography at the beginning of the account of each family, but I can not divine any principle by which the references in these bibliographies were organized.

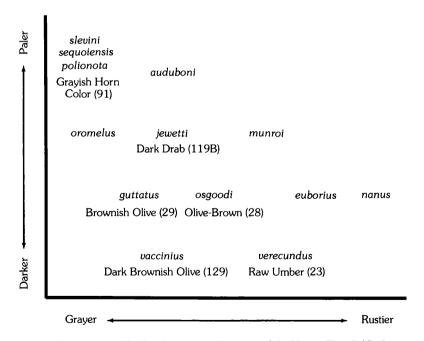


Figure 1. Variation in back color among subspecies of the Hermit Thrush (*Catharus guttatus*). Color names and numbers are from Smithe (1975, Naturalist's Color Guide, Am. Mus. Nat. Hist., New York) and determined by comparison to recently collected fresh-plumaged specimens in the San Diego Natural History Museum. Other subspecies are placed in comparison as implied by Phillips.

They are all run in one continuous paragraph, requiring the reader to pore laboriously through the entire paragraph to locate any given reference. Still other references are cited in text. And some references may never actually be cited at all. For example, on page 189 of Part 1, under *Toxostoma longirostre*, we find "Miller 1957." Yet I can't find the reference in either the list of abbreviations or the list following the heading for the family Mimidae. Perhaps this and other mystery references crop up in places I haven't thought to search, but Phillips has made it difficult for readers to follow his tracks.

An even more fundamental and less excusable flaw is Phillips' not giving the year of collection, catalogue number, or museum housing the type specimens of subspecies newly described by him in this book. Fortunately, the other contributors supplied these data in the accounts they wrote. I certainly sympathize with Phillips' desire to protect what few bird collectors remain from the persecution of misguided bureaucrats and zealots (Part 1, p. xxii). But as Phillips so rightly points out, the foundation of science is hypotheses being tested and observations being repeated. If one cannot locate the type specimens, how can one test the hypothesis that the subspecies defined by them is valid?

I should point out that Part 2 is better than Part 1 in a number of ways: better labeling of figures, more thorough descriptions of ranges, addition of a symbol drawing attention to newly described taxa, etc.

Although few will find this book easy reading, I believe that every reader of Western Birds can benefit from it. The two volumes are packed with basic, descriptive ornithology and the results of a lifetime of original research. Much of the information in them is accessible nowhere else. Regrettably, Phillips is apparently planning no further volumes.

Regardless of what any of us thinks of Allan Phillips, surely all of us can agree that exposure to new and different ideas can only stimulate our minds. Conformity is boring; controversy is exciting. I urge every reader to look beyond both Phillips and his opponents to the issues their disagreements raise.