



BOOKS: ORNITHOLOGY

Raising the Bar for Bird Guides

Hugh Dingle

In the first three decades of the 20th century, amateur naturalists could find little in the way of guidebooks for easy identification of birds or other organisms in the field. Bird books either presented their subjects as works of art or were manuals with morphological measurements that were useful only if one had the bird, usually dead, in the hand. There were persevering birdwatchers, and some of them, like Ludlow Griscom of Massachusetts, attained near-mythical stature for their field

identification abilities. But there were no readily available, easy-to-use references to help the aspiring field observer. All this changed in 1934, with the publication of the late Roger Tory Peterson's first field guide (1).

Peterson's idea was elegant in its simplicity. In the preface to the second (1947) edition of his 1934 book, he describes Yan, the young hero of Ernest Thompson Seton's *Two Little Savages*, observing ducks in a showcase and noticing "that all the ducks were different—all had blotches or streaks that were their labels or identification tags...." Peterson set out to produce a guide where the blotches or streaks that separated birds were clearly noted in order that "live birds may be run down by impressions, patterns, and distinctive marks...." Peterson's 1934 illustrations were somewhat schematic and formal, and most were in black and white, but they included the novel feature of arrows that pointed to the distinguishing "field marks" that separated each species from all others, even those of very similar color or pattern. This "Peterson system" was later expanded to produce guides to a number of natural history topics. The series of over 40 volumes became a goldmine for its publisher (Houghton Mifflin) and established Peterson as a true revolutionary.

Field guides, including newer editions of Peterson's, now contain much improved methods of identification and presentation.

Both kinds of improvements are amply represented in the three books reviewed here. Each volume also contributes to the evolving nature of the basic field guide.

Of the trio, Kenn Kaufman's *Birds of North America*, the first title in a new series called "Focus Guides," is the most suitable choice for North Americans who wish to get started in birding, although it also has much to offer to more advanced birders. Almost since the advent of field guides, ornithologists and birdwatchers have debated whether the diagnostic aspects of birds are best presented in paintings or photographs. Kaufman opts for photographs, but his great innovation is to edit these using computer technology. Kaufman and his collaborators scanned over 2000 photos of some 760 species. They then digitally adjusted the files to obtain consistent color, size, lighting, and shadow and en-

cm by 11.5 cm by 1.9 cm), it can easily be carried in almost any pocket. The handy layout positions the images and the text and maps on facing pages. The range maps contain a surprising amount of information by using color coding for summer and winter ranges, migration routes, and a rough indication of abundance. Color tabs mark the pages where particular types of birds are presented; a corresponding list on the first page allows users to skip to the appropriate section. Although terse, the species descriptions in the text provide the information required for most identifications. An introductory section covers the basics of birdwatching, bird topography, and other background information. In addition, Kaufman offers overviews of some groups of birds (including gulls, shorebirds, warblers, and sparrows) in brief but informative supplemental sections that precede the accounts of their members.

In contrast to Kaufman's book, *The Sibley Guide* is most suitable for experienced birdwatchers and ornithologists, for whom it has already become a "must have" book. David Sibley intended his to be the quintessential

identification guide, and he has succeeded admirably. The work carries the Peterson tradition of identifying blotches and streaks to the nth degree. Each of 810 species is presented in a half-page or more of color paintings, which include different postures and several aspects of flight. Illustrations portray both sexes, different forms of polymorphic species, adults and juveniles, geographic variants, and, in some cases, behavioral characteristics. Thus, the multiple representations of some species spread over two or more pages; the highly variable red-tailed hawk, for example, gets no less than 49 images. Short annotations on the illustrations highlight critical field marks. Sibley begins the book by providing an extensive overview of the external

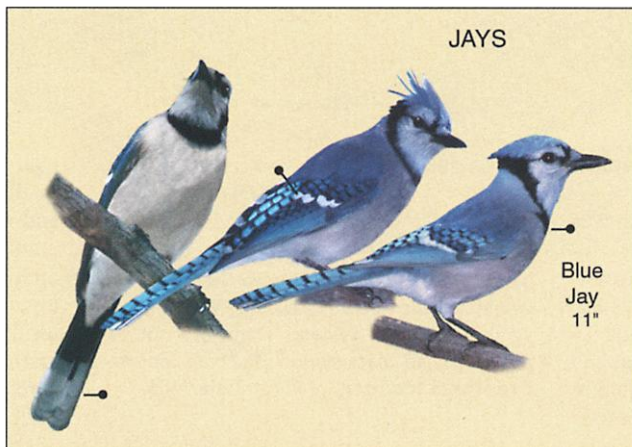
morphology and of factors (such as light conditions and feather wear) that affect the appearance of a bird in the field. This material and his discussion of the distinguishing characteristics of various taxa above the species level help the book meet the author's intentions. The guide's major innovation lies in the extent to which Sibley has depicted each species in the context of related forms and its individual variation. Not surprisingly, with the inclusion of so many details, the book (which measures 24.5 cm by 15 cm by 3.5 cm) somewhat exceeds the size of normal pockets.

Given the amount of space Sibley devotes to identification, other information about individual species is sparse. Written descriptions are minimal (many include only 10 to

Birds of North America

by Kenn Kaufman

Houghton Mifflin, New York, 2000. 384 pp. Paper, \$20. ISBN 0-395-96464-4.

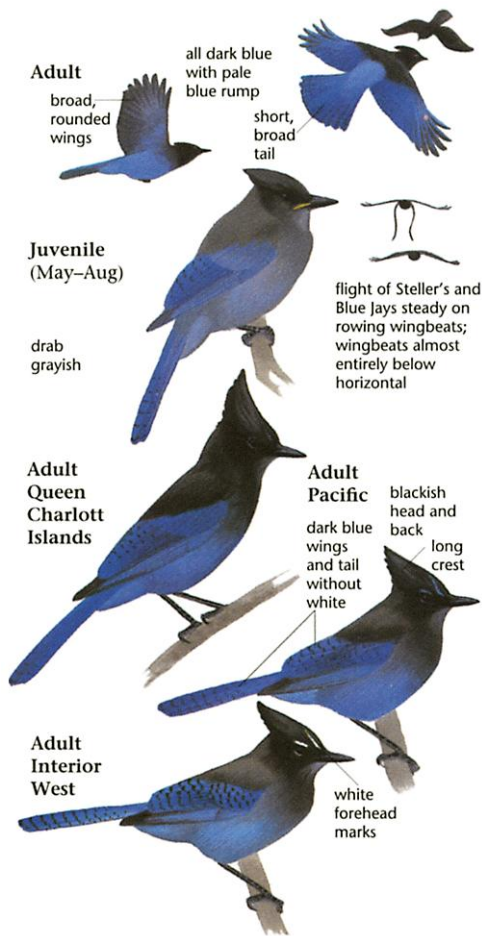


ID photos. Kaufman begins his description of the blue jay (*Cyanocitta cristata*) with "Brash, flashy blue jays are common in woods, parks, and yards throughout the east."

hanced the images to sharpen contrast and emphasize important field marks. Their efforts have produced a guide that combines many of the advantages of photographs and paintings. On the whole, the photos work well. Some demonstrate subtle yet important differences between species with exceptional clarity. For example, I know of no better illustrations for distinguishing the very similar gray and Bell's vireos, whose ranges partially overlap. A few of the images, however, simply don't work. The plumages in some of the thrush and sparrow photos, for example, look too much like those of worn study skins.

Some other features of the Kaufman volume make it exceptionally useful as a field guide. With its compact size (19.2

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Illustrating variation. Sibley's brief text on the appearance of Steller's jays (*Cyanocitta stelleri*) notes "[o]verall dark color with paler blue rump distinctive; shorter-tailed than scrub-jays."

20 words) as Sibley has relied almost completely on the visual images to convey information, although he does cover vocal repertoires well. Species distributions are portrayed on a small, one-size-fits-all map of North America. This succeeds reasonably well for widespread species, but is ineffective for those with relatively restricted ranges. For example, the North American range of the spot-breasted oriole is limited to the Miami, Florida, area. It is mapped in the book as a barely visible green dot; a spot on a map of Florida would have been much clearer. Kaufman and the National Geographic Society field guide (2) provide much more detailed coverage of distributions and habitats. *The Sibley Guide* succeeds because the illustrations offer a remarkably detailed and innovative aid to identifying North American birds in the field. Those desiring additional information about birds will want to look elsewhere; to satisfy such readers, Sibley has collaborated with a group of ornithologists to produce a companion volume (3), which is due for release next month.

The *Collins Bird Guide* (released in the United States as *Birds of Europe*), like

Kaufman's book, follows the more traditional format of presenting text and images on facing pages. Written by Lars Svensson and the late Peter Grant, with illustrations painted by Killian Mullarney and Dan Zetterström, the work took some 15 years to complete. It was originally published in Swedish (4) and translated and adapted by David Christie and Svensson. The wait has been well worthwhile, as the extraordinary quality of the artwork and text make the book the finest field guide to date of any region.

Svensson and his colleagues cover more than 800 species, including introduced birds and rare visitors, that occur in Europe (east to the Urals) and adjacent areas of North Africa and the Middle East. Each page of figures presents three to five species in clearly delineated panels. Depictions of birds in a particular plumage, such as female or immature, are placed in corresponding positions within the panels. Throughout the book, the illustrations exhibit a breathtaking artistic quality. The two artists have achieved a surprisingly consistent style; I found it nearly impossible to distinguish between their paintings without checking the initials at the bottom of each plate. The annotations on the figures are often remarkably effective at illuminating the field marks that best separate similar species, especially for the numerous "little brown jobs" that are so characteristic of the European avifauna.

The half-dozen pages of the introduction are packed with enlightening material, including a superb glossary and particularly useful accounts of the influence of viewing condi-

The Sibley Guide to Birds

by David Allen Sibley

Knopf, New York, 2000. 544 pp. Paper, \$35, C\$53. ISBN 0-679-45122-6.

North American Bird Guide

Pica (Helm Information), East Sussex, UK, 2000. 544 pp. Paper, £25. ISBN 1-873403-98-4.

tions, molt and abrasion of plumage, and difficulties in judging actual size through magnifying optics. In addition, the authors provide concise penetrating discussions of identification problems in groups that often challenge observers, such as the especially variable gulls and birds of prey. Another feature that sets this book apart from similar guides is its frequent use of small vignettes that depict birds in their habitats. These exquisite illustrations often reveal behavioral characteristics such as flocking

tendencies and feeding techniques. Similar

vignettes occasionally have been included in other field guides, but I know of no example in which they have been used to such good effect. The detailed text for each species further describes habitats and includes complete and often charming descriptions of calls and songs.

Some trade-offs were clearly required in order to include so many details in the text while maintaining the pocket-sized format (the book measures 19.4 cm by 13.6 cm by 1.4 cm). Species distributions are shown on a postage stamp-sized map of Europe, which, as in the Sibley guide, results in the loss of detail, especially for species with limited ranges. The small type can also be

Collins Bird Guide

by Lars Svensson, Killian Mullarney, Dan Zetterström, and Peter J. Grant

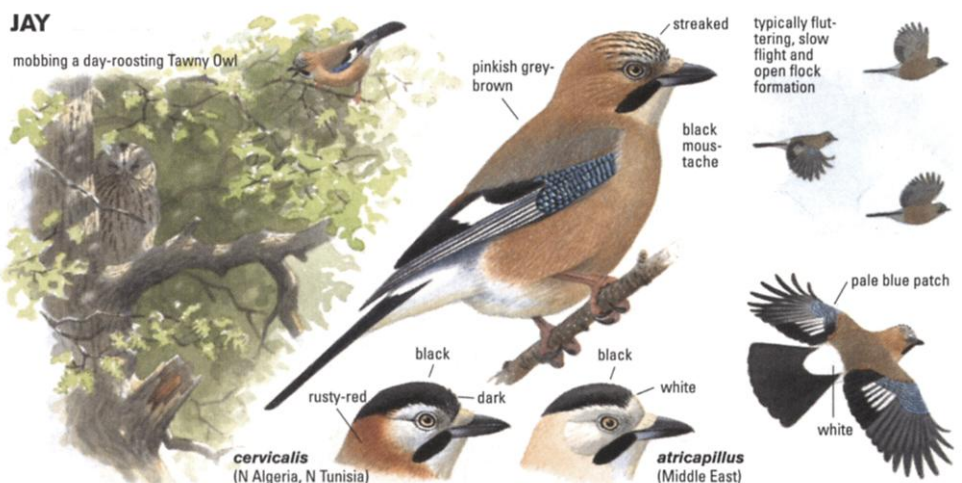
Harper Collins, London, 1999. 399 pp. £24.99. ISBN 0-00-219728-6. Large format, 2000. £29.99. ISBN 0-00-710082-5. Paper, 2001. £16.99. ISBN 0-00-711332-3.

Birds of Europe

Princeton University Press, Princeton, NJ, 2000. 400 pp. Paper, \$29.95. ISBN 0-691-05054-6.

JAY

mobbing a day-roosting Tawny Owl



Birds and behavior. Svensson starts the text on identification of the Eurasian jay (*Garrulus glandarius*) with the comment "[p]lumage striking, yet a bird which few city-dwellers are acquainted with."

challenging. A large-format edition is available for those who usually leave their bird books at home. To "permit greater appreciation" of the artwork, this edition presents the illustrations at two and a half times their size in the original guide. It also features a larger font size, but the maps have been enlarged only very slightly. Most important for users trying to confirm identifications, neither edition includes immature birds for all species. Most of the omissions don't matter much, but in cases such as the little egret, information on immature plumages can be critical for separation from similar species. Nonetheless, these are minor caveats that detract little from an outstanding guide. I suspect even North American birdwatchers will want to own and treasure it.

Naturalists, birdwatchers, and ornithologists alike will find pleasure and utility in these guides. The three books should do much to further the continuing growth of birdwatching and, thus, provide impetus to the conservation of birds and the environment. The guides offer attractive depictions of their subjects and will greatly facilitate the identification of Northern Hemisphere birds in the field. They should be welcome additions to windowsills overlooking backyard bird feeders and to pockets or backpacks of birdwatchers and biologists bound for the field. Separately and collectively, they raise the standard and provide a challenge for the continuing evolution of field guides. Roger Tory Peterson would be pleased.

References

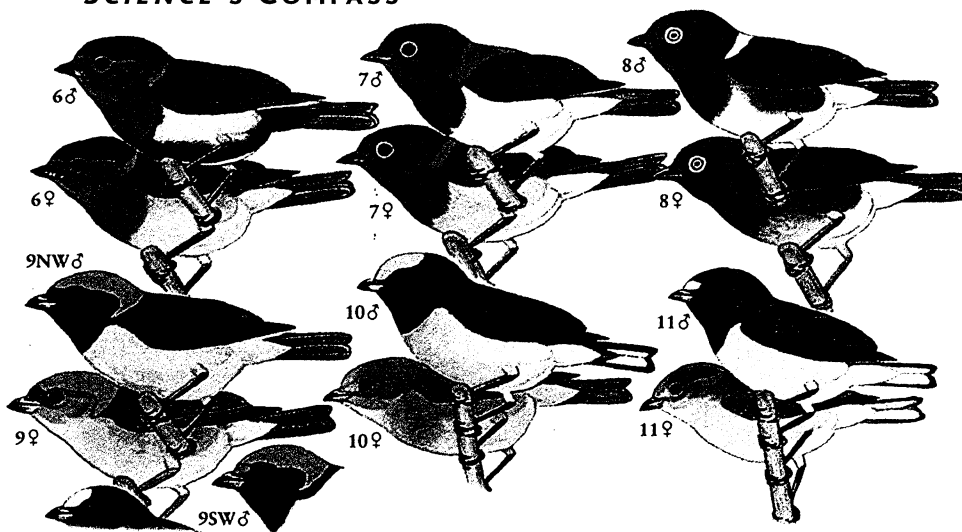
1. R. T. Peterson, *A Field Guide to the Birds* (Houghton Mifflin, New York, 1934).
2. *Field Guide to the Birds of North America*. Third Edition. (National Geographic Society, Washington, DC, 1999).
3. C. Elphick, J. B. Dunning Jr., D. A. Sibley, Eds., *The Sibley Guide to Birdlife and Behavior* (Knopf, New York, 2001).
4. L. Svensson, K. Mullarney, D. Zetterström, P. J. Grant, *Fågelguiden. Europas och Medelhavsområdets fåglar i fält* (Bonniors, Stockholm, 1999).

BOOKS: ORNITHOLOGY

Dealing with Superabundant Diversity

Thomas S. Schulenberg

In 1934, Roger Tory Peterson published the first edition of *A Field Guide to the Birds*, in which he outlined the distinguishing features of 440 species of birds of eastern North America. His patternistic illustrations and clear and simple-but-precise prose sparked a revolution. Field guides now exist for a wide variety of taxa, for all points



Teeming with tanagers. The 137 species of tanagers from Ecuador fill seven crowded plates in the field guide. This portion of one plate includes the country's three *Chlorophonia* species (6, 7, and 8) and three of its ten *Euphonia* (9, 10, and 11).

on the globe. That said, guides to birds of tropical countries with high diversity have been few and far between. The challenges to producing adequate guides for these regions are formidable. Over 500 bird species may be found within a few square kilometers of Amazonian forest, for example, and the total avifauna for countries even as small as Ecuador surpasses 1500 species. New species are regularly added to country lists, and previously undescribed species are also found with surprising frequency. Furthermore, aspects of a bird's biology such as its behavior, voice, habitat, and elevational distribution all play important roles in the conscious and unconscious decision-making processes that lead to an identification. Thus a functional field guide must be something more than a compilation of details of plumage color and pattern, something approaching the status of a mini-handbook to an avifauna's natural history. But, with the risk of producing a book that loses any pretense of portability (of being a guide that can be carried in the field), where does one draw the line at what information to include?

With *The Birds of Ecuador*, Robert Ridgely, an ornithologist at the Academy of Natural Sciences in Philadelphia, and Paul Greenfield, a resident of Ecuador who has studied and painted its avifauna for nearly three decades, address this problem by providing a two-volume set. The *Field Guide* volume, "intended primarily for field use," contains plates, distribution maps, and text geared toward the identification of all the birds of Ecuador

(excluding the Galápagos Islands). Its companion, *Status, Distribution, and Taxonomy*, suggested "for your library (or hotel room or even car)," covers the occurrence and systematics of these same species. Undoubtedly, the field guide will be the volume most often consulted; an excellent aid for field identification of Ecuadorian birds, it will also be useful in much of Colombia, northern Peru, and western Brazil.

Illustrations make or break a field guide. The 96 color plates, all by Greenfield, are vibrant, clear, and very effective. They depict nearly the entire avifauna, including migrants and species known in Ecuador only from a single record. They also show many rarely illustrated plumages (such as in the highly polymorphic hawks and eagles). Every illustrator must interpret the living, active bird two-dimensionally, and each artist, no matter how skilled, approaches this task differently. Having all paintings prepared by a single person offers the significant advantage of a consistent style that greatly facilitates comparisons among plates.

The maps in *Field Guide* are a great improvement over previous efforts. Most indicate a species' distribution with light stippling, which is easier on the eye than solid blotches of color; patchy or poorly known distributions are depicted with dots for each locality. The authors present numerous details on voices (songs and calls) and on "habits," such as sociality and foraging behavior. Most of this information, as well as many aspects of species' occur-

The Birds of Ecuador Volume I: Status, Distribution, and Taxonomy. Volume II: Field Guide

by Robert S. Ridgely
and Paul J. Greenfield

Cornell University Press,
Ithaca, NY, 2001. Vol. I,
868 pp. Paper, \$70. ISBN
0-8014-8720-X. Vol. II,
956 pp. Paper, \$50. ISBN
0-8014-8721-8. Slip-
cased set. Paper, \$110.
ISBN 0-8014-8722-6.

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