

ORNITHOLOGICAL LITERATURE

EDITED BY WILLIAM E DAVIS, JR.

AVIAN BIOCHEMISTRY AND MOLECULAR BIOLOGY. By Lewis Stevens. Cambridge University Press, Cambridge, U.K. 1996:272 pp. \$50.00 (cloth).—A synopsis on the first page of this book says it is "... the only comprehensive and up-to-date survey of avian biochemistry and molecular biology available." The author has written a clear and concise coverage of this area. The text covers such aspects as protein and amino acid metabolism, nutrition, lipids, carbohydrates, avian hormones, and metabolic adaptation. Part 2 of the book is devoted to "the avian genome and its expression" and summarizes this material not available elsewhere.

The text is nicely organized and cleanly presented. The figures are nicely done and relevant to the account. There were few, if any, typographical errors. The references are fairly thorough and up-to-date, although I suspect United States authors are a bit under-represented in the review. I was impressed that the author appreciated correct nomenclature and taxonomy and made an effort to use it in a book that essentially is about molecular biology. It frustrates me to see manuscripts about birds written by people who are not sufficiently informed to recognize appropriate nomenclature.

This text is well worth the money for those interested in the cellular-molecular level of ornithology.—C. R. BLEM.

ORIOLES, BLACKBIRDS, AND THEIR KIN: A NATURAL HISTORY. By Alexander F. Skutch. Illus. by Dana Gardner. The University of Arizona Press, Tucson, Arizona. 1996:291 pp. \$50.00 (cloth), \$21.95 (paper).—Who says there are no more heroes to emulate? Mine easily could be Alexander F. Skutch. At time when study of whole organisms is considered passé by some, Dr. Skutch has produced a masterful account of the natural history of a very important group—the blackbirds (and after his 90th birthday!). This book, his twenty-sixth, guides us to through a detailed, but never boring, account of how the orioles, blackbirds, and their kin go through their lives. Some accounts were taken, "with slight modifications" from Skutch's *Life histories of Central American birds*, published in 1954 by The Cooper Ornithological Society, and from a few other miscellaneous published sources. The material has been updated with references cited from the scientific literature through 1994, and new accounts were added.

Skutch writes clearly, cleanly, and with a lot of content. To my taste he adds just enough anthropomorphism to be interesting, but not unscientific. The book includes historical vignettes, personal asides, and insightful comments—all done in an economical, interesting manner. The sections on cowbirds alone are worth the price of the book. Beginning birders will enjoy the book and learn a great deal of fundamental ornithology. Advanced students will find much useful information and introduction to specific references. The reference section is not (nor was it intended to be) a comprehensive coverage of the blackbirds and their kin.

Gardner's black-and-white sketches are excellent, the binding and covers attractive, and the book is well worth the money (particularly the paperback version). All-in-all this is a wonderful book. It stands as an example of the way in which bird books of this genre should be done.—C. R. BLEM.

FINDING BIRDS IN SOUTHEAST ARIZONA. By the Tucson Audubon Society Publications Committee. Tucson Audubon Society, Tucson, Arizona. 1995:347 pp., color photographs, maps, bar-graphs. \$16.95 (wire-O binding).

A BIRDER'S GUIDE TO SOUTHEASTERN ARIZONA. By Richard Cachor Taylor. American Birding Association, Inc., Colorado Springs, Colorado. 1995:x + 342 pp., black & white photographs, drawings, maps, bar-graphs. \$16.95 (wire-O binding). Here we have the two newest bird finding guides to some of the hottest hot spots in North America—the canyons, deserts, and oases of southeastern Arizona. I am writing this review from the point of view of a New Englander who has visited southeastern Arizona three times chasing birds, mammals, herptiles, and butterflies. When I next go back, should I take along both of these books or will one suffice?

Physically, the books are nearly identical—same height, width, and thickness and same “wire-O” spiral binding with wrap-around back cover. By the way, who ever thought up these wrap-around covers? They are awful. If they did not have maps printed inside them, I would cut off the wrap-around flaps in an instant.

Every good bird finding guide should give the reader help in deciding when to visit, what to wear, and where to stay. Both of these guides offer sound advice on these subjects. Books of this genre should also provide a general introduction to biomes and climate, and in this regard the Audubon Society book is superior, providing color photographs of typical habitats. The Audubon Society guide also offers nine pages of timely advice to the would-be visitor to Mexico and this is a definite plus.

The main body of text in these guides is in two or three parts and includes maps of, directions to, and discussions of the best birding locales; seasonal bar-graphs; and comments on selected species. First, the birding areas: As a three-peater, I have my favorite spots in southeastern Arizona, so I chose four—Madera Canyon, the Chiricahua Mountains, Mount Lemmon, and the Patagonia-Sonoita Creek Preserve—to compare coverage between the two books. “Finding Birds in Southeastern Arizona” covers these four areas with 26 pages of text and six maps; “A Birder's Guide to Southeastern Arizona” uses 57 pages and nine maps. Everything about the ABA guide is superior in this crucial section of the text. The maps are clearer, and nothing is more important than a clear map! Taylor's text offers keener insights into all that is new and wonderful along the way, and although there is an unnecessarily greater emphasis placed on rarities, his are the words I would choose to follow. Not only are there a lot more pages of description of these sights, there are considerably more words per page in the ABA guide and so the reader has more than 2.5 times the text in Taylor's book, at least on these sites.

Second, the seasonal bar-graphs: In a word, they are excellent in both books. To the serious bird student, these bar-graphs are gold mines. I must admit I favor simple, straightforward bar-graphs and for this reason I prefer those in the Audubon Society guide; too much “going on” in the ABA bar-graphs.

Third, discussions of selected species: The ABA guides always contain an enlightening chapter on “Specialties,” those species that for one reason or another birders most want to see. *A Birder's Guide to Southeastern Arizona* offers up a long list of specialties, along with information on locating and identifying them. *Finding Birds in Southeastern Arizona* includes annotations on *all* of the birds of the region, not just the “most wanted,” and this is noteworthy and commendable.

Now, back to the original question. Do I buy both books and pack them along to Arizona or do I choose between the two? Personally, I like to have as many compact nature guides along as I can fit in a small box in the middle of the front seat of my rental car. I would get them both, since each has outstanding features lacking in the other. However, if I ab-

solutely had to choose, Richard Taylor's "A Birder's Guide to Southeastern Arizona" would have pride of place in my luggage.—BRIAN E. CASSIE.

BARN OWLS: PREDATOR-PREY RELATIONSHIPS AND CONSERVATION. By Iain Taylor. Cambridge University Press, Cambridge. 1994:xvi + 304 pp., 46 photographs, 28 drawings, 81 graphs and tables, 2 maps, 2 appendices. \$37.95 (cloth).—The Barn Owl (*Tyto alba*) ranges across the warmer regions of six continents and perhaps has been as well studied as any owl species in the world. The author of the present study has chosen to present the ecology, biology, and conservation of the Barn Owl primarily through an investigation of the relationships between this bird and its prey. Taylor's study area was in southern Scotland and with the help of co-workers and local farmers, he managed to keep track of all of the Barn Owls in his 1600 km² main study site, as well as those in two smaller replicate study areas. His studies, conducted from 1978–1992, as well as field research studies from other parts of the world, especially in New Jersey and Utah, form the basis of this book.

After a short introduction to the Barn Owl and the author's research area and methods, the book presents chapters on distribution, diet, foraging behavior, ecology and behavior of the prey, prey selection and foraging habitats, ranging and roosting behavior, molt, breeding seasons, nest sites, courtship and eggs, production of young, dispersal, mortality, population size and regulation, and conservation. Two conventions that will make using this book particularly easy for researchers are the use of headings on the right-hand pages and the inclusion of a summary as each chapter's conclusion. If only all authors and editors took the time to include these! There is a 365-reference bibliography and the illustrations and graphs are well done.

Of course, not everyone who picks up Iain Taylor's book is or will be an owl biologist. Most, I assume, will be interested in owls in general and will want to know if the biology and ecology presented are sound and if the book is readable. They will want to read the book, not merely "use" it. For all of them (and you), owl fanciers and research biologists alike, the book is very highly recommended. Taylor's discussions are first-rate: well researched, well written, and thought provoking. When there are suspect references in the literature, Taylor questions them. When research is lacking into some aspect of the Barn Owl's life, Taylor points this out and offers suggestions to future researchers. This book is an outstanding model for comprehensive, well structured, and enjoyable scientific literature.—BRIAN CASSIE.

THE MEGAPODES MEGAPODIIDAE. By Darryl N. Jones, René W. R. J. Dekker, and Cees S. Roselaar, illus. by Ber van Perlo. Oxford University Press, New York. 1995:262 pp., 8 color plates, 24 range maps, 18 numbered text figs., 5 tables. \$60 (cloth).—This family of galliform-like birds is unique in that all members use some form of naturally occurring heat to incubate their eggs, earning them the vernacular names of "thermometer" or "incubator" birds. Some species build mounds and use heat from the decomposition of damp organic matter, while others use burrows and geothermal heat or solar-heated volcanic sand. The chicks are extremely precocious, digging their way out of incubation mounds or burrows without assistance, capable of flight on the day of hatching, and receiving no subsequent parental assistance.

This third volume in Oxford University Press' series on bird families of the world provides a thorough treatment of this fascinating family which is restricted to the Indo-Australia and

Pacific Islands area. The monograph is divided into two parts, the first nine chapters deal with aspects of the biology and conservation of megapodes; the second part includes accounts of the seven genera and 22 species. Chapter two deals with the rather problematical taxonomy of the group. Here megapodes are treated as the sister group of all other galliformes instead of a sister group of cracids. The authors also conclude that brush-turkey genus *Talegalla* is not as closely related to *Alectura* and *Aepyodius* as had previously been considered and this is used as justification for changing the common name of the three *Talegalla* species from brush-turkey to talegalla. They describe three new subspecies in the genus *Megapodius* in which they include 13 species (the number recognized in various taxonomic schemes over the years has varied from three to 19). They also changed the name of *Megapodus* species from scrubfowl to megapode. I consider both of these name changes ill-advised. I object to using genus names as common names because, unless you are a Greek and Latin scholar, they are not as descriptive as English names ought to be. The use of megapode for a subset of the megapodes (the title of the monograph) provides lots of room for confusion.

The third chapter deals with megapode distribution, biogeography, and speciation, and the fourth discusses behavior and demonstrates the link between reproductive behavior and other behaviors of the megapodes. Chapters 5–8 discuss aspects of the breeding biology of megapodes including adaptations in embryo physiology and mating strategies. Chapter nine discusses the grim problems associated with island living, habitat destruction, and production of large, nutritious eggs in areas overpopulated with humans—particularly in the context of the breakdown in traditional tribal constraints on over-exploitation of megapode eggs.

The species accounts are thorough, starting with nomenclature and descriptions of plumages, weights and measurements which often include tabular data, range and range maps, previously unpublished sonagrams to augment vocalization descriptions, behavior and abbreviated references (with full references in the References section). I found the abbreviated reference section at the end of each species account, although redundant, an excellent feature since it facilitates looking up references for a particular species. The range maps are excellent, and demarcate ranges of subspecies but many contain historical data and hence do not represent current distribution. For some, however, historical information is identified, and for the Malleefowl *Leipoa ocellata* present and past distributions are given. The plates are excellent, depicting immature plumages and chicks where appropriate, and female plumages in the few dimorphic species. The plates are accompanied by a mini text which is very helpful when perusing or comparing species.

This is a thorough treatment of a fascinating family of birds. The list of more than 800 references, many of them from the 1980s and 1990s, a period of renewed interest and intense research on megapodes, includes references from a wide variety of journals in several languages. Aside from my quibbles about the name changes mentioned above, my only criticism of the book is the level of redundancy, perhaps inevitable in a multi-authored, complicated monograph. We read, for example, that the heat in megapode mounds results from microbial respiration in at least four places. Nevertheless, this is an excellent monograph, the product of exhaustive research, that should be in the library of anyone interest in Australasian birds or in the range of adaptation in birds.—WILLIAM E. DAVIS, JR.