

REVIEWS

EDITED BY KENNETH C. PARKES

Geographic variation in the White-crowned Sparrow *Zonotrichia leucophrys*.—Richard C. Banks. 1964. Univ. of California Publs. Zoöl., 70: 1–123, 28 figs., 43 tables. \$2.50.—This study is based on an examination of 2,103 breeding-season specimens representing 62 populations and groups of populations in various parts of the range. Mensural characters examined include length of wing, tail, bill, and tarsus; also tarsus/wing ratio and, when available, weight. These are thoroughly analyzed and samples of more than nine individuals are given elaborate statistical treatment. The results are interpreted in detail, and, in the course of this, effective use is made of numerous tables and figures. Both interpopulational and intrapopulational variations are investigated.

The examination of color characters is less thorough. Emphasis is on variation in rump coloration, segregated into seven categories. Color of the lores and the bend of the wing receive careful attention also. Variations in the colors of the striped upper back, fully as important as those of the rump, receive much less detailed treatment. Variation in colors of the under parts, which is of greater taxonomic significance than seems to be generally realized, was not investigated at all! The reviewer believes that examination of a wider range of color characters would probably have lent weight to some of the author's conclusions and might well have modified others.

The author finds the two Pacific coast subspecies *Z. l. pugetensis* and *Z. l. nuttalli* valid, but weakly separable from each other by size, chiefly the longer tarsus of *nuttalli*. Color differences between the two are considered unreliable due to differential feather wear, which the author attributes to a less extensive prenuptial molt in *nuttalli*. A comparison of freshly-molted specimens of the two races might have shed additional light on this question, but unfortunately this does not seem to have been done. These two similar races differ from the other subspecies in possessing shorter wings, darker upper parts, and yellow (instead of white) coloration at the bend of the wing.

In the vast remainder of the range the author recognizes only two subspecies: *Z. l. gambelii* (Alaska and most of western Canada) and the nominate race (eastern Canada east of James and Hudson bays, the western mountains of the United States, and the Cypress Hills of Canada). There is a broad area of intergradation in the Hudson and James bays region, and also in northwestern Montana and contiguous mountainous parts of Canada. The most reliable distinguishing mark separating these races is still the traditional one, the presence of a black interruption in the white superciliary stripe at the anterior corner of the eye (nominate race) versus the lack of such a black interruption (*gambelii*). Various degrees of intermediacy occur.

Surprisingly, Banks concludes that the black-lored birds of the mountains of western United States and the Cypress Hills of Canada (*Z. l. oriantha*) are not satisfactorily separable from the black-lored birds of eastern Canada, and he therefore relegates *oriantha* to the synonymy of the nominate race. It seems regrettable that he apparently did not investigate the useful color characters of the under parts or examine in more detail those of the upper back. Re-examination of material in the National Museum of Canada leaves no doubt in this reviewer's mind that, contrary to Banks, *oriantha* is a valid subspecies, separable from eastern black-lored birds by its paler upper back and lighter under parts (breast markedly paler gray; flanks and under tail coverts duller buff). Kenneth C. Parkes informs me that he had

independently come to the same conclusion utilizing the excellent series in the Carnegie Museum.

Banks also concludes that *Z. l. nigrilora* Todd must be considered a synonym of *Z. l. leucophrys*. This is based on the belief that it is better to assume that Forster's type of *leucophrys* was closer to the black-lored form and thus to retain the current nomenclature than to make confusing changes on the basis of what the type "might have been."

This same preoccupation with the importance of the phenotype of the type specimen has been shared recently by other authors writing on the subject and is responsible for much of the confusion that has plagued attempts to allocate with certainty the name *Z. l. leucophrys*. The type, after all, is but one individual taken by chance, in this case from an intermediate population (Fort Severn, Hudson Bay), and discloses little enough of the total contents of the population's gene pool. What is important is the population that produced the type. There is nothing magical about the type specimen and the mere assumption that it was black-lored does not automatically make the Fort Severn population black-lored too! On the contrary, there is ample evidence in Banks' own data that the Fort Severn population is primarily white-lored (as also are two birds from Winisk, still farther east, not examined by Banks). The evidence seems strong that the Fort Severn population is primarily white-lored, and that neither this topotypical population nor its name *leucophrys* Forster can be joined to the eastern black-lored race.

The bulk of the publication is devoted to a thorough analysis of mensural characters. Pacific coast populations have the shortest wings, those of eastern Canada and the mountains of western United States the longest. Across Canada all mensural characters, except the bill, increase in size from west to east. No good correlation between wing length and migratory habits was found. There appears to be little correlation between temperature (as indicated by latitude and altitude) and body size. The presence of the darkest-colored populations on the humid Pacific coast fits generally with Gloger's rule.

There is useful information on detecting racial intermediacy in specimens as expressed by the lores; also there are data on molt and aging. Documentation is good throughout and there is a bibliography of over five pages.—W. EARL GODFREY.

Birds of the New York area.—John Bull. 1964. New York, Evanston, and London, Harper and Row; pp. i-xiv, 1-540, maps, line drawings. $8\frac{1}{2} \times 5\frac{3}{4}$ in. \$8.95.—As an expatriate New York Stater, I often find it difficult to convince skeptics among bird students west of the Alleghenies that the New York City region is one of the best areas in North America in which to study birds, in abundance, in the field. Using the figures given by Peterson (*The birds*. New York, Life, Inc., 1963; see p. 90), we find that only four states (Texas, California, Arizona, and Colorado) have lists that surpass the 412 species known from the New York City region. Although this total is admittedly "loaded" with casual strays, it should be pointed out that at least 190 species have been known to *breed* in this area, more than are presently known from 30 of the states.

This rich avifauna, coinciding with the densest human population in North America, has received exceptionally thorough attention from local students (notably members of the Linnaean Society of New York), and has been documented in three books, the latest before me for review. Ludlow Griscom's *Birds of the New York City region* (1923), published by the American Museum of Natural History, was

the descendant of a 22-page magazine article (later pamphlet) by Frank M. Chapman, entitled "Birds of the vicinity of New York City," published by the same museum in 1906. Still under the imprint of the American Museum was Allan D. Cruickshank's *Birds around New York City* (1942). Finally, ringing one more change on the title, we have *Birds of the New York area*. Although John Bull, the author, is a Research Assistant at the American Museum of Natural History, and utilized that institution's resources while writing his book, the latest in this progression of regional works has been issued by a commercial publisher rather than by the Museum itself. This may account for the omission of the word "City" in the title, the publisher thus hoping for a wider geographical sales appeal for the book.

Just as Cruickshank's book was not "a new Griscom," so Bull's is not a "new Cruickshank." Each is distinctive in style and format, and Bull's strikes me as by far the best organized, most thorough, and potentially most useful of the three. Griscom's book, published before the era of field guides, devoted a now-unnecessary proportion of its text to recognition characters. It lacked a bibliography, as did Cruickshank's book. The latter had no subheadings within its accounts, requiring undue reading effort to extract a desired item of information. Bull's book, on the other hand, contains a 17-page bibliography, and each species account is carefully organized into sections. These typically include *Range* (of the species as a whole); *Status* (local); *Migration* (including extreme dates, "normal" migration period, and maximal numbers recorded); *Breeding* (including general breeding habitat, usual nest sites, and local egg dates); and, where appropriate, *Wintering*, *Subspecies*, *Specimen data*, *Remarks*, etc.

An excellent introductory section includes discussions of qualitative data (records and their evaluation), quantitative data, subspecies, birding areas, and a summary of local migration patterns. The historical section seems brief but adequate, and there is a useful chapter analyzing the changes in the local avifauna (including no less than 20 additional breeding species, 7 discovered in 1960-1962 alone) since 1942. A probably unique chapter discusses hurricanes and their impact on the birds of Long Island.

Supplemental material includes (a) a chapter on "escapes"; (b) a hypothetical list; (c) a list of the four fossil bird species known from the area; (d) a so-called glossary which explains only four abbreviations of museum names, five zoogeographic terms, and six "biological and taxonomic" terms; (e) the bibliography; and (f) a gazetteer. The last does not, in my opinion, match the high standards of the rest of the book. Most of the localities listed are omitted from the accompanying map, "but will be found on road maps." The rationale for this listing of unmapped localities escapes me. Further, names of mapped localities are followed by numbers from 1 through 92, which mean only that the locality is mapped; a simple asterisk would have served the same purpose and would have been less confusing. A useful addition would have been an indication of which localities are, ornithologically, of historic interest only; many localities whose names appear in the literature or on labels of Long Island birds are now completely urbanized.

Bull's book is decorated with a number of attractive line drawings by Cornelius J. Ward. A double-page map of the entire area (pp. 506-507) serves also as front and back endpapers; it is regrettable that the endpapers were not devoted to more detailed maps of important sections. The map used by Bull (credited to Richard E. Harrison and George Colbert) includes an enlarged insert of the heart of the region, from northeastern New Jersey to Long Island just east of the Nassau-Suffolk county line. This same map and inset have been used in outline form in the text

to illustrate local breeding distributions. Most of these plot, with dated dots, the history of species with expanding ranges in the area. The use of the same outline map for all species has led to redundancies, as the inset is not enlarged enough to show distributions in significantly better detail, merely repeating the dots on the main map. Budgetary considerations were probably involved here, but in a nine-dollar book an additional expenditure for more and better maps might have been justified.

I shall leave comment on details of the individual species accounts to local students who will, no doubt, happily extend extreme migration dates and add additional sight records of strays. Every compiler of regional works knows that such lists are, in some senses, out of date even before they are published. The species accounts have been prepared in a thorough and scholarly manner, and are eminently readable. Though not a specialist in the field of systematics Bull has sometimes necessarily made taxonomic judgments in this book, usually quite sensibly.

The geographic scope of these handbooks has steadily increased. To Griscom's New York City region Cruickshank added Putnam County, New York, and New Jersey northeast of a line from New Brunswick to Asbury Park. Bull has added the small western panhandle of Fairfield County, Connecticut, an additional extension southward into New Jersey, and much of Orange County, New York. Scrutiny of the text indicates that knowledge of bird distribution in some of these peripheral areas is far from that attained for Long Island and New York City proper. This book may well stimulate productive field work in the less well known areas.

The book as a whole is attractively designed, printed, and bound. Other urban areas may well envy New York, not only for the wealth of its bird life and the ample records thereof, but also for its latest diligent and knowledgeable compiler.—KENNETH C. PARKES.

Check-list of birds of the world A continuation of the work of James L. Peters. Vol. X.—Ernst Mayr and Raymond A. Paynter, Jr. (eds.). 1964. Cambridge, Massachusetts, Museum of Comparative Zoology. Pp. i-ix, [x], 1-502. \$10.00.—This is the third volume of J. L. Peters' *Check-list* to be completed since his death. It covers the birds usually known as hedge sparrows, thrushes, babblers, and the New World sylviids, with the following groupings and authorships:

Family Prunellidae (accentors or hedge sparrows), S. Dillon Ripley; family Muscipidae (part)—subfamily Turdinae (thrushes), S. Dillon Ripley; subfamily Orthonychinae (logrunners, etc.), Herbert G. Deignan; subfamily Timaliinae (babblers), Deignan; *genera sedis incertae* (babbler relatives), Deignan; subfamily Panurinae (parrotbills), Deignan; subfamily Picathartinae (Picathartes or rock fowl), Deignan; subfamily Polioptilinae (gnatcatchers, etc.), Raymond A. Paynter, Jr.; addenda to Vol. VII, family Rhinocryptidae (part), Paynter.

There is a comprehensive index.

The treatment is much the same as that in the two previous volumes, also under the editorship of Ernst Mayr and Raymond A. Paynter, Jr. The same high quality of scholarship and editorship is maintained, and this volume is a worthy companion of the other "Peters" volumes.

The above might be a sufficient review for the professional ornithologists who keep the work by them as a standard tool in their research, and who look forward to the early completion of the set. But there is a continuing influx of new students, professional and amateur, to whom "Peters" is not so well known, and there are also some points of general interest, so that a few further comments are in order.

Peters' *Check-list* is a systematic list of birds of the world to be completed in about 15 volumes, of which volumes I–VII, IX, X, and XV have appeared and the remaining volumes, to cover the untreated parts of the order Passeriformes, are in preparation by various specialists. "Peters" is *the* reference for classification, correct names, minimal synonymies, and the essentials of geographical distribution of all the known living birds, and its usefulness will extend throughout the foreseeable future. It is indispensable to any serious student whose bird studies span at least two continents.

Such a check-list may look like dry reading, but a great many things can be "read" from it, and it has many uses besides being a list of acceptable species names to use in arranging a collection or a local list, or to provide the "right name." It is also a key to correlating the data published on the same species under different names over the years and from different places, and it is further a primary source for zoogeographical data, combining as it does reliable geographical data with the phylogenies suggested by the classification.

The classification used here seems an eminently practical one, with some innovations that are improvements. The hedge sparrows are of uncertain relationships and those possible with the thrushes are emphasized by placing the hedge sparrows just before the thrushes. The family Muscicapidae as used here includes the great assemblage of insect eaters, largely of the Old World, birds usually grouped as thrushes, babblers, flycatchers, sylviid warblers, and perhaps a few others. The arrangement of these birds into groups implying relationship, and drawing limits for the groups, present some of the most difficult problems in songbird classification.

Some of the more notable points in Ripley's treatment of the thrushes, here called a subfamily, may be mentioned. One is the transfer of what I described in 1957 as a "flycatcher," *Muscicapa gabela*, to the thrushes as *Erithacus gabela*. Both treatments are defensible, and these cases help to point up how ill-defined are these two groups. The monotypic genus *Zeledonia*, the wren-thrush of Central America, sometimes placed in a separate family, is placed between two old world thrush genera.

The genus *Hylocichla* of North America, as used here, includes only the Wood Thrush. The other species often placed in it, the Hermit Thrush, Veery, Gray-cheeked Thrush, etc., are transferred to the genus *Catharus*, otherwise of Central and South America. The Varied Thrush of western North America, often placed in a separate genus *Ixoreus*, is here merged in the large, old world genus *Zoothera* better to indicate its relationship.

The placing of *Stizorhina* and *Neocossyphus* side by side in the thrushes is a thought-provoking change which the late Dr. Chapin supported. These two west African genera are alike in size, color, and pattern. Yet one has the bill and feet of a flycatcher, the other the bill and feet of a thrush. Similarities in color and pattern are evidently thought to outweigh differences in structure.

The babbler family Timaliidae of many earlier authors has been notorious for being a catch-all for genera of uncertain relationships. Thanks in part to Delacour's earlier work, Deignan has produced a more satisfactory arrangement and stabilized the nomenclature. This he has done by including in one large subfamily the birds which seem obviously babblers, and placing the ones of doubtful relationships in four other groups.

The large subfamily Timaliinae is thus fairly coherent even with the inclusion of the North American Wren-tit, *Chamaea*, which the A.O.U. Check-list allocates to a monotypic family. Deignan's subfamily Orthonychinae of nine small genera is

definitely not coherent within itself and other relatives are not clear, but most of the genera are Papuan and Australian and this grouping as a "geographical subfamily" has definite advantages. The *Genera Sedis Incertae* seems equivalent to subfamily rank, and includes five monotypic genera which defy other classification. They are from widely separated areas, Celebes, Himalayas, Principe Island, and Madagascar. The parrotbills, subfamily Panurinae, form a small Eurasian family, and the two species of strange rock fowl west Africa comprise the Picathartinae.

Paynter's contribution of the new world Polioptilinae contains genera of uncertain relationship both within and without the subfamily, as stated in a footnote.

There may be some who will cavil at this lack of definiteness in classification. But presenting the facts is better than trying to hide our uncertainties in classifying untidy nature under a cloak of apparent definiteness. The only immediate way to improve our classification of songbirds may be to multiply the groupings, family or subfamily, and more often use the category *incertae sedis*.

My impressions as I leaf through the volume are that the generic and specific limits used by the authors tend to show a moderate, middle of the road approach. There are monotypic genera, medium sized ones, and also large ones, such as *Turdus*, with 62 species. One of them, *T. poliocephalus*, has 50 subspecies.

Commenting on the use of names, in matters of priority versus selection of a junior name by some person or group, is a singularly fruitless occupation. In general, priority is followed. But in a few cases a junior name has been used. The authors and editors have not always seen eye to eye on this, with resulting compromises indicated by footnotes framed in the subjunctive mood. But here, in "Peters," we have a list of names which can be used by ornithologists as a list of *nomina conservanda* if they so wish, a course I favor. This applies to the nomenclatural aspect of the names, of course. Names will continue to be changed for zoological reasons, as our understanding changes.

In closing this review let me congratulate the authors and editors on an important piece of work well done.—A. L. RAND.

Evolution of nest-building in the weaverbirds (Ploceidae).—Nicholas E. Collias and Elsie C. Collias. Univ. California Publs. Zoöl., 72: pp. 1–162, 38 pls. \$5.00.—The publication of this important contribution gives a new dimension and a new standard for comparison in the still all-too-little-studied field of construction of nests and other objects by animals. The weaverbirds, Ploceidae, show a vast range of nest types from some of the most elaborately woven structures made by any birds (*Ploceus* and *Malimbus*), to the outstanding example of a communal nest "block" within which each pair has its own compartment (*Philetairus*), to a complete absence of any nest building and even to brood parasitism as the mode of reproduction (in *Anomalospiza* and in *Vidua*). In the course of a year of field studies in Africa, and subsequently in Asia, the Collias made detailed observations on the nests and on the methods by which the nests were built, in about 25 species representing some 14 genera and all the subfamilies of the weaverbirds except the parasitic Viduinae. This basic and voluminous information, coupled with that obtained in later studies of captive weavers in aviary conditions, provides the bulk of the information presented in the present report.

It is unfortunate that the authors did not have the opportunity to study representatives of *Symplectes*, a genus, or subgenus, of typical weavers that has developed

to a great degree the habit of systematically plucking and dropping all the leaves on the branches from which their nests are suspended, a habit that gives the superficial appearance of a purposive action designed to expose predators approaching on these denuded areas.

While the bulk of the report is concerned with descriptive details in each of the subfamilies and species studied, the authors give us the benefit of their observations and reflections in a solid chapter of some 30 pages on the evolution of nest-building in weaverbirds, with the data treated under the headings of the origin of the domed nest type, the materials used in nest construction, nest form and predation, the origin and evolution of "weaving" techniques, gregarious breeding and the compound nest, and the loss of nest-building activity.

The most primitive type of nest appears to be a cup-shaped structure. Next evolved the making of a semi-domed nest. From this developed two tendencies, both leading to domed constructions, one with a single side entrance, and the other with two side entrances. The latter type of nest building apparently gave rise to three trends: toward construction of a woven nest with one entrance; toward a type with two bottom entrances, which eventually led to the compound grass nest of the social weaver, *Philetairus*; and toward a twig-covered nest with one entrance, which culminated in the compound twig nest of the buffalo weaver, *Bubalornis*. The origin of the domed nest from the earlier, open, cup-shaped one, appears to have been a response to the need for protection against predators such as monkeys and snakes, and for protecting the young and the incubating parent from downpours and from the intense rays of the tropical sun.

It has been a particular pleasure for the reviewer to read this fine paper as his own first study was on the nest building of one of the weavers, *Quelea quelea*, in captivity 45 years ago. The present result has been worth waiting for.—HERBERT FRIEDMANN.

The birds of Colombia and adjacent areas of South and Central America.—R. Meyer de Schauensee. 1964. Narberth, Pennsylvania, Livingston Publishing Company, xvi + 427 pp., 20 pls. (12 col.) by E. L. Poole, 87 line drawings by G. M. Sutton; endpaper maps. $6 \times 9\frac{1}{4}$ in. \$10.00.—This handbook by the leading authority on the avifauna of Colombia is a most important and timely contribution to the popular study of Neotropical birds. As the first English-language field guide for a South American country, and one of the very few yet available in any language for tropical American birds, it goes far toward meeting a need that becomes increasingly acute with the accelerated growth of international travel. Written lucidly and with a minimum of technical terminology, the book will be of greatest value to the amateur ornithologist who, hitherto, has lacked any practical means of identifying South American birds. In all likelihood it will prove to be no less a boon to curators of museum collections and biologists in need of a convenient reference work while conducting research at tropical field stations.

The volume is based on de Schauensee's authoritative check-list entitled "The birds of the Republic of Colombia" (*Caldasia*, 1948-52), a most useful aid to taxonomists and zoogeographers but of little comfort to others. The handbook, with its illustrations, concise species descriptions, and more detailed references to habitat is, in a sense, a "fleshed-out" version of the more technical treatise and hence potentially much more widely useful.

The magnitude of the author's accomplishment becomes evident when one con-

siders the remarkable diversity of Colombia's avifauna. The Republic, with 1,556 species (2,640 subspecies), doubtless has a greater variety of birds than any other country in the world, and considerably more than twice the number of species credited to the whole of North America exclusive of Mexico. Since about 56 per cent of all South American species, and more than three-fourths of those found from Nicaragua south to the Amazon River are described in this book, it will be useful far beyond the boundaries of Colombia. The regions of most complete coverage are shown by a shaded map on the jacket.

An introductory chapter briefly traces the ornithological history of Colombia, which dates from the early part of the last century when native hunters began collecting plumes for the European millinary trade. Other sections of the introduction describe the geography and seven zoogeographical regions of the country and its four distinct altitudinal zones. In these short surveys one finds an explanation of the rich fauna. Two endpaper maps, one of the entire country and the other an enlargement of the Pacific and Andean regions, are a convenience; but there is need for a map of larger scale, perhaps as an insert.

The bulk of the book is devoted to a systematic treatment of 87 bird families and their respective Colombian species. Families are arranged in the sequence of Wetmore and the listing of species is essentially that of the author's check-list. Each family is introduced by a line drawing of a more or less characteristic species. These sketches by Sutton (two by Poole) are superb and should be most useful as an aid to family recognition, a prerequisite to cracking the "species-barrier." For each family there is also a brief summary of general information, with emphasis on noteworthy morphological characters, behavior, habitat, and distribution. A novel and revealing innovation is the listing of the numbers of species, respectively, in Colombia, South America, the Western Hemisphere, and the world.

A key to the species—or an appropriate substitute—is an essential part of any guide to identification that is not fully illustrated. Traditional keys are all but useless in the field and the problem of devising a practical means of identifying birds under natural conditions becomes almost insoluble when coping with families having up to 150 species, as in Colombia. For purposes of his handbook the author has introduced (with a saving of about 150 pages!) an imaginative method of species elimination that, hopefully, is an improvement over the elaborate keys of his check-list. Under a heading "Aid to Identification" several prominent characters are listed, and the qualifying birds identified by numbers that refer to the appropriate descriptions. Species found only in the eastern lowlands are designated by the letter "E," a detail of considerable merit as few bird watchers are likely to venture beyond the Andes. Unfortunately, whatever the locality, several species usually share the same "character" and one may have to read a number of descriptions before finding one that is appropriate. Obviously keys alone, whatever their style, do not provide an open sesame to easy recognition of tropical birds in their natural habitats.

The species accounts are numbered in sequence within each family and are devoted entirely to matters of description and distribution. A more comprehensive treatment would be invaluable, but obviously this is precluded by limitations of space. Both English and scientific names are given for each species, and its length shown in inches. The English names are taken from Eisenmann's well known list (1955) of Middle American birds or, in the case of endemic South American forms, were selected (sometimes invented) in cooperation with Eisenmann. The brief descriptions of the adult plumage will usually lead to reasonably certain identification *if* a bird can be observed closely under ideal conditions, and *if* its family is recognized. Unfortunately, this

is not always possible in the field, and least of all in the tropics where a fleeting glimpse is so often "par for the course." As different families may have distressingly similar species, and several species of a single family are often virtually identical, the descriptions of many birds could have been both shortened and improved by emphasizing their distinctive characters as was done at the subspecies level.

Distribution is covered under two headings. Under the first there is a concise statement of the over-all range *exclusive* of Colombia. Many will find it annoying to read that a species occurs in Panama, Venezuela, and Ecuador, and have to seek elsewhere for reassurance that it is also found in Colombia. The ranges are remarkably free of error but the specialist will note some oversights and occasional evidence of carelessness. As a case in point the author may refer to British, Dutch, and French Guiana individually, or lump the three together as "the Guianas" despite the lack of records for one or more of the component countries. Distribution in Colombia is treated in greater detail under a separate heading, and includes useful references to habitat and zonal occurrence as a further aid to identification.

In all, 344 species are illustrated in one manner or another, to the great advantage of all users of the book. The 20 plates by Poole vary from adequate to very good indeed, the majority being of the latter category. The 12 color plates are almost uniformly satisfactory, but the frontispiece (Plate I) has suffered severely in reproduction. Several of the black-and-white plates portray heads alone and are of doubtful practical value except for species of conspicuous distinction. Nevertheless, several hundred species can easily be identified by their pictures alone and a great many others will be recognized from their descriptions. Unfortunately, the legends of the plates seem designed to confuse and annoy as both the generic and specific names are abbreviated, and the subspecific name alone written out.

As a pioneer work of broad scope and meticulous detail *The birds of Colombia* is an important landmark in the literature of Neotropical birds. Whatever its shortcomings, the book will almost certainly accelerate popular interest in a relatively little known fauna and influence appreciably the shaping of tropical American field guides of the future. Students who expect of the handbook an easy solution to the problems of identifying tropical birds will be disappointed more often than not. Others, less naive, will find it to be a most useful, if not wholly adequate tool.

As this review goes to press it is learned that a second, slightly revised printing of *The birds of Colombia* is in immediate prospect. The most noteworthy changes are the addition of 11 species (14 subspecies), the inclusion of family names in the Index, and use of the complete (not abbreviated) scientific name for each bird portrayed in the plates.—EMMET R. BLAKE.