SPECIAL REVIEW

A coded list of birds of the world.—Ernest Preston Edwards, 1974. Published by the author, Sweet Briar, Virginia. 174 pp., map endpages. \$9.00. Birds of the world: a check list.—James F. Clements. 1974. New York, Two Continents Publ. Group, Ltd. xx + 524 pp., map endpages. \$15.00. An annotated list of birds of the world.—Michael A. Cunningham and Joseph G. Griffith. 1974. Published by the authors. XI + ii + 50 pp. $(36 \times 22 \text{ cm})$. No price given (inquiries to Mr. Griffith at 2143 South Myrtle Ave., Monrovia, California 91016). Reference list of the birds of the world.—John J. Morony, Jr., Walter J. Bock, and John Farrand, Jr. 1975. New York, Dept. Ornithol, Amer. Mus. Nat. Hist. x + 207 pp. (looseleaf). \$6.00.—At the XIVth International Congress at Oxford in 1966, the late Professor David Lack organized a meeting to consider his proposal for the publication of an "authorised" list of the orders, families, subfamilies, genera and species of birds of the world. He had already presented his brief for this "King James version" (Lack's own comparison) in the guise of a review of volume 2 of Vaurie's "Birds of the Palearctic fauna" (1966, Ibis 108: 141-143). Lack proposed that an international committee prepare such a list and that "the national ornithological societies" should commit themselves in advance to adhere to this list in all regional publications. To some extent in this review and to a greater extent at Oxford, Lack attempted to reinforce a supposed dichotomy between taxonomists and all other ornithologists (conveniently ignoring the modern eclecticism that has blurred such distinctions), blaming on the former the confusion and frustration allegedly felt by the latter in the absence of an agreed standard classification and nomenclature. Lack clearly saw himself as speaking for the beleaguered nontaxonomists, although he had himself dabbled in the taxonomic pond several times, notably in the Apodidae. Oliver Austin gave a good account of the Oxford meeting, and of the reaction to Lack's proposals (1967, Auk 84: 142-146). It was clear that there was no support for any "authorised" list among the taxonomists who were being asked to supply this document for Lack and his followers. The taxonomists knew full well that the time was not then ripe, as it may justifiably never be, for any definitive statement of consensus on avian classification. Further, in Dr. Austin's words, "the way must be kept open always for the free expression of honest differences of opinion and for the development of logical systematic thought on sound biological grounds."

Although the concept of an "authorised" world list of birds seems, I am relieved to say, to have been abandoned, one of the points raised by its proponents has had validity until very recently. With the continuing difficulties in the completion of the "Peters" check-list, there has been no single more-or-less modern source to turn to for a complete, even if unofficial, list of birds of the world, suitable for such varied purposes as the keeping of a life list by the well-traveled birder and the inventorying of specimen collections by the museum curator. The seven Peters and six extant "Peters" volumes, spread as they are over nearly 40 years of publication, represent an

incomplete list and a composite taxonomic viewpoint satisfactory to nobody—least of all the editors of the post-Peters volumes, who have commissioned revisions of the groups included in volume 1 (1931) for a replacement edition intended to bring classifications of certain major orders into accordance with more modern views. The generally agreed-upon need for some sort of complete world list has now been met in four quite different ways, under four quite different kinds of authorship.

Ernest P. Edwards is a professional ornithologist of broad experience, especially with neotropical birds, but he is not primarily a taxonomist. James F. Clements, described by his publisher as "uniquely qualified to compile the first [sic—Edwards' list predates Clements'] complete one-volume check list of birds of the world" is a well-traveled amateur birder (another world list compiled by an amateur has been announced by the English publisher Collins, but it has not yet appeared at this writing). The authors of the "Annotated list" are associated with the cage bird trade; the junior author is President of Orn Imports, Inc. The three authors of the "Reference list" were, when the list was compiled, all associated with the Department of Ornithology of the American Museum of Natural History; all are professional, taxonomically oriented ornithologists.

Edwards' "Coded list" is a hard-bound book, but the text (except for the introduction) has been photographically reproduced from typewritten pages. After the introduction and a list of orders and families, the body of the work consists of a list of species occupying one line apiece. First comes a code for the species (discussed below); then the scientific name, English name, and a letter symbol indicating which of eleven areas of the world (keyed to a map on the endpages) the species inhabits.

Incidentally, I continue to insist that "English name" is the only correct term for what Edwards calls "vernacular name" and Clements calls "common name." Both of the latter terms are correctly applicable only to names used by the people who are sympatric with the birds. The majority of the true "vernacular" or "common" names of the birds of the world are not in the English language, and even in the English-speaking world, many of the "official" English names are merely "book" names that we ornithologists have imposed upon the world, "Towhee" and "Chewink" are genuine vernacular names, whereas "Rufous-sided Towhee" for *Pipilo erythrophthalmus* is not. And by no stretch of the imagination can one consider a name like "Guttulated Leaf-gleaner" (= *Syndactyla guttulata*) either "common" or "vernacular." These names are simply English names, many recently invented, for the species involved, and should be so designated.

The Edwards code for each species consists of three parts: a family number, a letter (or letters in the sole case of AA, Struthioniformes) for the order, and a number indicating position within the family. Thus Sterna dougallii is 14N58, indicating that it belongs to the Laridae (the 14th family of its order) and the Charadriiformes (order N), and is the 58th species in sequence among the 87 listed in this family. Edwards states in his introduction that "These code numbers should be very useful in working with computers and for such

things as labeling eggs, and could be cited in other books and checklists." He has anticipated the problem of future changes in classification by stating that this is edition a of his book; should the code numbers change in future editions, the edition from which the cited code number was taken can be specified by using the italic letter prefix, as a14N58. To me, the anticipation of such changes in the meaning of a code number counteracts any usefulness such a number might have. The venerable A.O.U. numbers used for North American birds have not reflected the actual current species sequence for many years, yet are useful in the computers of the Bird Banding Laboratory and elsewhere precisely because of their permanence. There are bound to be discoveries or splittings of additional species before a new edition of the Edwards list is published. Edwards implies that these would be accommodated by changing the codes for the whole family, as suggested above. If present code numbers are to be retained, the only way new species could be inserted adjacent to their closest relatives is by appending an additional symbol; otherwise they must be assigned the next available number for their families, standing at the end of the line perhaps far removed from their congeners. The recently described tanager Buthraupis aureodorsalis Blake and Hocking (1974, Wilson Bull. 86: 323), for example, would either have to become something like 66Z124a, to place it next to its closest relatives, or else become new number 66Z245 to follow the presently last species of tanager, Rhodospingus cruentus. The latter species itself illustrates this sequence problem. The other books under review place this species in its traditional spot next to Coryphospingus among the emberizines. Edwards, however, apparently found Paynter's arguments (1971, Bull. Brit. Ornithol. Club 91: 79-81) that Rhodospingus is a tanager to be persuasive. Edwards had probably completed the coding of the tanagers when he decided to follow Paynter's allocation of Rhodospingus. Paynter had only the most tentative suggestions as to where among the tanagers this genus belongs. Edwards thus had to place Rhodospingus at the very end of the tanagers, far removed from the genera to which Paynter had suggested it might be related.

Edwards' letter code for the geographic distribution of each species is of minimal value. Few users of the book will readily memorize the list of symbols, and will need to refer constantly to the explanation in the introduction. Although "N" for "Neotropical mainland and nearby islands all around" is straightforward enough, the symbols can get complicated, as evidenced by the example given by Edwards himself: "HP;w.HP,O" means "breeds in Palearctic; some individuals spend the winter in the Palearctic and some in the Oriental mainland as defined above." In allocating birds of peripheral areas, a few discrepancies have inevitably crept in. For example, Saxicola dacotiae and Fringilla teydea, endemic species of the Canary Islands, are listed as "E" meaning "African mainland, north to Sahara, and western islands." Acceptable enough, as the Canaries are clearly geographically nearest to Africa although avifaunally overwhelmingly Palearctic. However, Anthus berthelotii, which is confined to the Canaries plus Madeira, is given only as "HP" or Palearctic in its distribution. Page after page of suboscines are margined on

the right with a solid column of N's for Neotropical, with no further subdivision. I cannot imagine anyone who could not possibly need or want more detailed distributional information about a species of antibre or cotinga than that it is "Neotropical."

At the end of the book is a "Bibliography of many of the important books on birds of various parts of the world." This list combines well-known standard regional works (both checklists and field guides) and works on groups of birds (Brown and Amadon on Falconiformes, Goodwin on Columbidae, Johnsgard on Anatidae, etc.) with a few selected revisionary papers (not books) that may have influenced Edwards' thinking on taxonomy (Bock on herons and plovers, Feduccia on ovenbirds and woodhewers, Jehl on Charadrii, Olson on Rallidae, Sibley and Ahlquist on nonpasserines, Vaurie on Cracidae). As there are only some 55 entries in this bibliography, it is not surprising to find major omissions such as, to mention only a few examples, Ripley's "Synopsis" and Ali and Ripley's "Handbook of the birds of India and Pakistan," Bannerman's volumes on the Atlantic islands, Delacour's waterfowl volumes, and the Philippine manuals by Delacour and Mayr and by duPont. And surely, with entries for Gilliard's "Birds of paradise and bowerbirds" and Rand and Gilliard's "Handbook of New Guinea birds," inclusion of the eccentric publications on the same subjects by Iredale was superfluous.

Although in his introduction, Edwards states that the need for a list of all of the species of living birds of the world "has long been apparent, both to the amateur and the professional ornithologist," he nowhere specifically states the use or uses to which he expects his book to be put. I would guess that he would consider his coding system as his chief original contribution; my misgivings about this are presented above. Standardization of English names, while difficult, is not so hopeless a goal as standardization of scientific names, but Edwards frankly states that his basic philosophy of the desirability of "flexibility and convenience" in "vernacular" names has led him to make many changes from the names he encountered in the literature, even though some of these have begun to approach standardization. As a simple nominal list of species, the Edwards book would have value for those arranging specimens and other ornithological material into a convenient, if not authorized sequence (always remembering the pitfall described above with the example taken from the tanagers), were it not for the superiority of the American Museum's list for this purpose. The starkly minimal distributional information severely limits the usefulness of the book in obvious ways, as already suggested by Smart (1975, Bird-Banding 46: 193). I suspect that Dr. Edwards' book will be used by many others as I have used my copy—as a convenient place to tick off one's life list. Nine dollars seems a little high for a small book used mostly or solely for such a purpose, but perhaps my misgivings about the species code numbers may prove to be too strong, and this unique aspect of the Edwards list may turn out to be as useful as the author hoped.

As far as I can see, the world list by Clements has two, and only two superiorities to that by Edwards. Its format is highly attractive, with a clear, easily readable typeface and plenty of white space on every page for writing notes or comments. This generous format has, of course, resulted in a much thicker and heavier book; with height and width identical, the Clements book is 35 mm thick, the Edwards book 15 mm. The latter is thus more portable, an advantage for the traveler. The other way in which the Clements book is superior (at least in theory) is in the presentation of geographic distribution. Ranges are given in from 1 to 8 or 10 words—abbreviatedly, true, but "Southern Mexico to northeast Argentina" and "Tropical northeast Peru" are surely more useful entries for two antbirds than the unadorned symbol "N" Edwards used. Praise for Clements' range descriptions could be more wholehearted were it not for the multiplicity of minor inaccuracies, major errors, and inconsistencies, and for the omission of distinctions between breeding and wintering ranges. One can at least have faith in the accuracy of Edwards' symbols in general, and they do account for movement from one area of the world to another on migration. For some species, Clements gives only the breeding range; thus Branta bernicla is stated to occur on "Arctic coasts of North America, Eurasia" and Anser albifrons is "Arctic circumpolar." On the other hand, Chen caerulescens is listed as "Siberia, arctic America to Mexico" on this same page, and the range of Chen rossii is hopelessly inadequately given as "Canada to southern United States." Also on this page (27) is an example of outright inaccuracy, in the single word "Holarctic" being given as the range of the Old World species Branta leucopsis. At least "Holarctic" was spelled correctly; the misspelling "Paleartic" appears four times on that same page 27.

Everything else about this book gives the lie to the publisher's blurb about Clements being "uniquely qualified" to compile a world list of birds. Clements has obviously assembled a fairly good library of regional works (of which the bibliography lists 53, often inaccurately), and has proceeded to synthesize a single list from these, without any comprehension of avian classification, of the relative reliability and/or obsolescence of the works being used, or of the ornithological periodical literature. The arrangement of species within genera is sometimes adapted from those in Clements' reference works, but in the Tinamiformes, Podicipediformes, Procellariiformes and others, the arrangement is mostly alphabetical within the genus, unless (apparently) the genus contains only two species (thus Podilymbus podiceps and gigas; Oceanites oceanicus and gracilis). In group after group, close relatives are widely separated even when alphabetical sequence is not adopted; thus six species are listed between the semispecies Egretta garzetta and E. thula. Clements' command of generic classification can be deduced from his listing the Whistling and Bewick's Swans, often considered conspecific, in the genera Olor and Cygnus respectively (which, of course, is undoubtedly how they were listed in the American and the European reference works Clements used). Listing of the two species of reef heron as Egretta sacra and Demigretta asha probably had a similar genesis, but in this instance Clements managed to insert the Snowy Egret in between! His understanding of species relationships is illustrated by such items as the interposition of seven New World crows between the entries for the conspecific Eurasian forms Corvus cornix and C. corone. Other examples of his taxonomic and distributional naivété, chosen from among countless possibilities, include: attributing a Holarctic range to Melanitta fusca although recognizing the New World M. deglandi as a separate species (with a range of "Alaska to Baja (sic))"; using Vanellus for 11 species of lapwings and the old, small genera for 15, with no rationality as to which genera are lumped (and confusing Hoploxypterus with Hoplopterus); separating the semispecies Charadrius hiaticula and C. semipalmatus by 22 species; calling the range of Numenius tahitiensis and N. tenuirostris "Holarctic" while calling that of the Palearctic-breeding N. arquata "Southern Asia, Indonesia, Australia"; using Thalasseus for the New World species of crested terns only, while using Sterna for bergii, bengalensis, and zimmermani; attributing a New World distribution (and apparently only western at that—"Alaska to California") to the Holarctic Uria aalge; retaining Centurus for seven species while transferring the rest of that group to Melanerpes (and in so doing, dividing the species of "Tripsurus" between the two); attributing Melanerpes herminieri to "Guadeloupe Island (Mexico)"; et cetera ad infinitum. Typographical errors are also too frequent to count—just open at any page. On the Melanerpes/Centurus pages (204–205) alone I find portaricensis for portoricensis, hypobilius for hypopolius, Uruquay for Uruguay, Sphyrapious for Sphyrapicus (twice), and afflnis for affinis.

Clements has added comments in some instances about the status of a species (unique, known from two specimens, rare, endangered, probably extinct, etc.), but these are neither consistent nor dependable. Species that are well known as extinct birds (*Ectopistes migratorius*, *Conuropsis carolinensis*) are omitted from the book; the inclusion of certain other species probably represents the author's ignorance rather than any likelihood of their survival. For example, *Microgoura meeki*, known from six specimens collected in 1904 and sought in vain since then, is listed without comment. "Possibly extinct" seems optimistic for *Tadorna cristata*, known from three specimens, the latest in 1916. Clements gives the range of this species as "Japan," where it may have occurred many years ago, but the three known specimens are from Korea (2) and Vladivostok. And David Wingate will be shattered to learn that *Pterodroma cahow* is "possibly extinct."

Relying entirely on published checklists and field guides means, of course, that Clements has missed any species that have been described since the regional work for their area was published—Edwards, a professional, has kept up with most of the periodical literature and includes these new species in his book. Omitted by Clements, among others, are Mirafra williamsi (1956), Caprimulgus centralasicus (1960), Cichlornis grosvenori (1960), Nesillas mariae (1961) (the related genus Bebrornis seems to be completely omitted in Clements' book), Agelaius xanthophthalmus (1969), and Dendroica angelae (1972), all duly listed by Edwards. The status of Conioptilon mcilhennyi is wrongly given as "unique"; the species was described from a series of 10 skins, 2 skeletons, and 3 alcoholics. Both Clements and Edwards overlooked the reincarnation of Corvus mellori (1967, Emu 67: 191–210) and the rediscovery of Muscicapa lendu (1968, Ibis 110: 542–543). A complete search for omitted species is too time-consuming an activity for a reviewer, but the above sample will indicate the difficulty in attaining a complete list, whether by overlooking

the literature or by a simple oversight. This is a problem not only for the amateur like Clements, but for the professionals as well. Dr. Bock writes me that six omissions were found in the American Museum's species list by 2 June 1975.

The list price of \$15.00 for the Clement book would be appallingly high, even for a reliable nonillustrated work. The attractiveness of its format should not be allowed to mislead the potential purchaser—the checklist itself is so utterly unreliable that I could not recommend it at any price.

The "Annotated list" by Cunningham and Griffiths is in three parts: General Commentary, Preface, and the list itself. The introductory material omits information pertinent to an evaluation of this list, which was obtained from a letter from the junior author to the editor of The Auk, dated 2 August 1974, accompanying the review copy. The list was originally compiled in reaction to regulations proposed by the U.S. Department of the Interior for the restriction of importation of birds and other wildlife, but the authors believe that it might also be of some value in standardization of bird names. Mr. Griffith's letter says "particularly common names," but he also cites inconsistencies he has found in generic usage as examples of the need for standardization of scientific names.

No sources are given for the compilation of the names used in the list. In spite of the authors' claim to be striving for standard "common" (= English) names, they left a number of species designated only as "NCN" (unexplained, but apparently "No Common Name"). Of nine species of Nectariniidae so designated, I was quickly able to find English names for seven in standard regional works published prior to the checklists under review. The Edwards and Clements books include English names for all species.

The various audiences suggested previously for the Edwards and Clements books will find little to attract them in the Cunningham-Griffith list, which contains no distributional information. In spite of the title, the only "annotations" consist of a roman numeral following each species name. These refer to six categories defined in the Preface: I, Injurious; II, Considered injurious but not proved; III, Endangered; IV, Protected in the U.S. under the Migratory Bird Act, the various game laws, etc.; V, Protected in the U.S. under the same laws, but may be destroyed without permit; VI, Non-injurious. A few trinomials appear in the list; these are subspecies such as Ciconia ciconia boyciana and Branta canadensis leucopareia that appear elsewhere on lists of endangered forms. The word "EXCEPT" appears in front of any species not in category VI, without explanation. Mr. Griffith's letter to Dr. Austin states that the explanation was inadvertently omitted in the rush to finish the list. He writes: "All of the birds that are 'excepted' on the list require special handling or consideration for the reasons given." As I find no such reasons given beyond the titles of the categories, this explanation of "EXCEPT" is of little help.

Also undoubtedly attributable to haste of preparation is the large number of typographical errors. Eleven family names are misspelled, and the name Galbulidae is used twice, for jacamars and for barbets. Errors in spelling of scientific and English names of species are uncountable. In general, the authors

appear to have done somewhat better at integrating their regional reference works into a single sequence than did Clements—only 4 rather than Clements' 22 species, for instance, separate the semispecies Charadrius hiaticula and C. semipalmatus. Several extinct or probably extinct species are listed in the catchall category VI, the authors being obviously unaware of the status of such species as Tadorna cristata and Turdus (Mimocichla) ravidus. The "Annotated list" occasionally suffers from the kind of taxonomic and nomenclatural naivété exemplified by Clements. The North American Cardinal is listed as Richmondena cardinalis. It is followed by the "cardinals" of the noncardinaline South American genera Paroaria and Gubernatrix, then by the Pyrrhuloxia under the name Pyrrhuloxia sinuata. Last comes the Venezuelan Cardinal, listed as Cardinalis phoenicea, a species that, with cardinalis, comprises a superspecies within the genus correctly known as Cardinalis.

The authors, as importers of cage birds, are understandably upset about any current or proposed regulations that might make their stock in trade more difficult (or impossible) to obtain. This feeling led to the writing of the 9-page rambling harangue entitled "General commentary." The second half of this commentary is addressed (more or less) to a critique of the proposed USDI regulations, under the heading "THE LAW." The first half is a savage attack on Dr. Richard C. Banks as author of a Fish and Wildlife Service document entitled "A report of the potential hazards of the importation of wildlife" and on Assistant Secretary of the Interior Nathaniel Reed for a speech made before the Humane Society in Atlanta on 19 October 1973. Even if not legally actionable, the wording of these diatribes represents a slur on the professional standings and motivations of Banks and Reed.

Scientists might well read this strange document, which is clear evidence of the validity of the old saying, "A little knowledge is a dangerous thing." As self-appointed spokesmen for the cage bird trade, Cunningham and Griffiths certainly have a position to uphold when they conceive their livelihood to be threatened by unwarrantedly severe government regulations. They are not ignorant men. Their commentary (as well as the list itself) gives ample evidence that they have access to a large amount of information about vertebrates. Some of the individual points they make are undoubtedly valid. Had their statements been presented more rationally, they might well have gained a certain amount of sympathy from scientists who are also currently baffled by myriads of regulations governing permits and reports on collection and importation of specimens. Any such latent sympathy, however, is dispelled immediately by the torrent of half-truths, inaccuracies, adolescent sarcasm, and red herrings (not to mention the treatment of Banks and Reed) given by the authors. In the context of the present review, there is no point in dwelling further on this; the "Annotated list" cannot be recommended as a usable world list of birds.

The "Reference list" is quite different in both format and intent from the works already discussed. No English names are used, and no distributional information is provided. Instead, every generic and specific name is followed by two boxes (which form vertical columns on the page) that can be used for any kind of directory or inventory, whether of museum specimens of various

kinds, photographs, sound recordings, or life list species. In addition to the nominal list, which occupies most of the work, it has several useful appendices. The first consists of so-called "explanatory notes." At the minimum, these notes provide for each family an indication of the authority from which the nomenclature and sequence of species was taken—more often than not the Peters check-list. In many cases the arrangement of early volumes of Peters has been abandoned in favor of more recent revisions, but inconsistently. The authors have accepted, for example, Short's classification of the species and genera of grouse (1967, Amer. Mus. Novitates No. 2289), characterized by many lumpings of taxa recognized by Peters, but have elected to follow Peters' somewhat oversplit classification of the Laridae rather than the drastic lumpings of Moynihan (1959, Amer. Mus. Novitates No. 1928). I need hardly say that the classification of the woodpeckers is that of "Short and Bock, MS.," the "Lost Gospel" of ornithology.

Instances of departure from the treatment of the authority followed are indicated by a superscript number in the main list, referring to an explanatory note in the appendix. For example, the list of Momotidae follows Peters with a single exception—a paper by Wetmore is cited as documentation for the recognition of Baryphthengus martii as a full species rather than a race of B. ruficapillus. In some instances opinions alternative to those followed in the main list are given recognition in these notes, but this practice has been followed in an exceedingly spotty and inconsistent manner. Statements such as "P.[teroglossus beauharnaesii is placed by some authorities in a separate genus, Beauharnaisius" (p. 163) could be formulated by the dozen, but are in fact rather rare (although generic names used by Peters and synonymized by the accepted later authority are generally listed). For example Ripley (in vol. 10, 1964, of the "Peters" check-list) is cited as authority for the Turdinae. Only two explanatory notes are given for this subfamily: Sibley's 1968 transfer of Zeledonia to the Parulidae (accepted), and Farkas' 1971 merger of Pseudocossyphus with Monticola (not accepted). Yet perusal of Ripley's list would show any number of instances in which alternative opinions, some widely held, could have been presented. Suggestions that have not been accepted, like that of Farkas mentioned above, could have been multiplied to the extent that it might have been better to have excluded this category of note entirely. A personal example is convenient for demonstration of this point. In 1971 (the same year the Farkas "lumping" was proposed), I made a number of taxonomic suggestions about Philippine birds (Nemouria 4), some of which were original and others in support of statements by previous authors. Morony, Bock, and Farrand have ignored the following (at least the first of which is widely accepted): merger of Chalcites in Chrysococcyx; validity of the name Coracina ostenta Ripley; merger of Oriolus albiloris in O. xanthonotus; relationships among blue flycatchers of the genus Cyornis (lumped with Niltava in the "Reference list," but see Parkes 1965, Ann. Carnegie Mus. 38: 61); removal of Zosterops meyeni from Z. japonica. Any active taxonomist could undoubtedly lodge a similarly justified complaint. Among these should certainly be Storrs Olson, whose prizewinning generic revision of the Rallidae (1973, Wilson Bull. 85: 381-416) was not followed "because it recommends no sequence of species," a handicap that Edwards managed to overcome. The authors give themselves a blanket escape clause by stating on p. vii of their introduction: "With rare exceptions, the accepted classification of a group is followed without modification [or comment] even if we disagree strongly with parts of it." The tricky phrase here is, of course, "the accepted classification." Presentation of a classification within the post-Peters volumes of the check-list by an author chosen for this purpose by the editors is not, and in my opinion should not be, equated with instant and automatic acceptance (any more than is any other revision). It would have been less ambiguous had the authors written "the cited" rather than "the accepted" classification. I suspect that this is what they meant—accepted for purposes of their list, rather than "accepted" in a wider sense that smacks of the ghost of David Lack.

A second appendix lists new species of birds (with literature citations) described since the publication of the basic major reference work for the pertinent family as listed in Appendix I. There are no fewer than 61 of these, but because of the relative antiquity of some of the reference works used, some of the "new" species were described more than 40 years ago! Thus the authors' insistence on Peters, vol. 2 (1934) rather than Olson (1973) as the basic reference for the Rallidae has resulted in "Edithornis" (= Pareudiastes) silvestris Mayr 1933, being listed as a "new species."

Appendix III is an index to family, subfamily, and tribal names, including a few frequently encountered synonyms, and Appendix IV is an index to generic names, more liberally provided with synonyms and thus highly useful for cross-referencing this publication with others frequently consulted. The main list is augmented with appropriate symbols to refer the reader to notes in Appendix I or references to descriptions of new species in Appendix II, and also with symbols indicating species known only from one or a few specimens that may be hybrids or aberrations, and species that are definitely or possibly extinct. Dr. Bock informs me that the omission of the "extinct" symbol from the entry for the Great Auk was a proofreading lapse rather than an expression of supreme optimism on the part of the authors.

Now that four species lists of birds of the world are available to us, how close have we come to a standardized or consensus classification? The first hint that all is not yet agreed upon is afforded by the total numbers of species admitted. Edwards recognizes 3656 species of what he calls "sub-passerines" and 5252 passerines, for a total of 8908. Clements gives only a grand total of 8904, remarkably close to that of Edwards. However, totalling his species counts given for each family, I arrive at 3692 nonpasserines and 5266 passerines, for a total of 8948, or 44 more than Clements himself counted. Morony, Bock, and Farrand list 3750 nonpasserines and 5266 (!) passerines, for a total of 9016 species. However, their list includes 69 extinct or probably extinct species, a category partially omitted by the other two authors. A simple subtraction of 69 from Clements' total figure would be misleading, however, as he has included some species (as mentioned earlier) that are virtually certainly extinct. Cunningham and Griffith give no figures, nor did I wish to count the species they list.

The family list and sequence used by both Edwards and Clements is basically that of the familiar Wetmore classification, so that it is not surprising that there is little difference between Edwards' total of 171 families and Clements' 173: but within the lists are a few differences. Clements retained the old grouping of the finchlike birds into the two families Ploceidae and Fringillidae. Edwards retained the latter, but admitted the Estrildidae as a separate family. Clements set up a family Hyliadae (sic) for the two strange and dubiously related African genera Hylia and Pholidornis. As for Cunningham and Griffith, their family list of 154 appears to be something of a composite from several sources, but I did not track it down. The nonpasserine families, although differing slightly in sequence, are those of Wetmore. Passerine families recognized by Wetmore but not by Cunningham and Griffith include Hyposittidae (placed in Sittidae rather than Vangidae), Paradoxornithidae, Chamaeidae (both in Timaliidae), Ptilogonatidae, Dulidae (both in Bombycillidae), Vireolaniidae, Cyclarhidae (both in Vireonidae, but with the probably congeneric Vireolanius and Smaragdolanius listed first and last in the family respectively), Tersinidae, Coerebidae (both in Thraupidae, including Coereba), Zeledoniidae and Catamblyrhynchidae. The last two have disappeared completely, as I fail to find Zeledonia or Catamblyrhynchus listed anywhere. The American Museum authors fall heir to the lumping tradition of that institution's department of 20 or 30 years' standing, and hence admit but 160 families. They have, not unrelatedly, locked themselves into the sequence of passerine families imposed by the editors of the "Peters" check-list after Peters died; this subject has been thoroughly covered by many authors, and I will content myself with a reference to the discussion by Dr. Austin cited earlier in connection with the Lack proposals.

In addition to the gross differences among these four lists at the level of family sequence and of numbers of families and species admitted are innumerable differences involving generic placement, sequences of genera and species, and decisions as to specific or infraspecific rank for taxa. If any of the four were to be considered to approach being an authoritative list, one might think it would probably be that compiled by the three professional taxonomists at the American Museum of Natural History. Yet I, as a sample of only one taxonomist, disagree profoundly with some of the decisions made by these three (who are all my friends and colleagues, as is Dr. Edwards), either on their own initiative or through their strict adherence to a published source, and every other avian taxonomist in the world will have a personal set of disagreements. If the near simultaneous appearance of these four world lists has had only one beneficial effect, it is the clear demonstration of the folly of attempting or even of contemplating the compiling of an authorized world list of birds. One case history will serve to underline this point. Zusi and Jehl (1970, Auk 87: 760-780) studied two interesting species of Pacific shorebirds, one of which is extinct. They determined that the correct name for the extant species is *Prosobonia* cancellatus (sic = cancellata), and that it should be placed in a tribe Prosoboniini among the sandpipers (Scolopacidae). Note that this paper well predates all four lists under review. The AMNH "Reference list" follows Zusi and Jehl, but of course uses no English name. Edwards overlooked the species completely. Clements used the long traditional scientific name *Aechmorhynchus parvirostris*, placed it in the sandpipers, but called it Paumotu Plover. Cunningham and Griffith used the same scientific name but misspelled it, placed it in the plovers, and called it Sharp-billed Sandpiper!

One question remains: how well have these lists succeeded in achieving their own stated aims for their intended audiences? Being a commercial publication, the Clements book is of course touted as invaluable to everybody—specifically, "teacher, student, conservationist, scientist or bird-watcher." Most of this proclaimed audience consists of people with a vested interest in accuracy, which immediately and conclusively eliminates the Clements book from serious consideration. One body of opinion, to which I most emphatically do not belong, claims that amateurs (meaning in this case most birdwatchers) are not interested in accuracy of detail, and that minor errors do not matter for such an audience. Leaving aside such points as the threshold between minor and major errors, I continue to argue that it is the informed professional who can detect errors and make allowance for them, whereas the amateur must assume that the information being provided (in this case for an outlay of \$15) is accurate and complete. There is thus an even greater obligation to achieve accuracy in those works addressed to the interested but largely uninformed reader. By any reasonable criterion that I can think of, the Clements book fails to merit sales success.

Although I have expressed doubts as to the practicability of Edwards' coding system, this at least deserves evaluation through attempted use, not merely through the speculations I have presented. And, though the distributional information be minimal, it is certainly better than nothing, and can be expected to be very close to wholly accurate. I think that as a small, convenient list of the species of birds of the world, the Edwards book is worth having on hand. The professional ornithologist will recognize the author's relatively few taxonomic and nomenclatural idiosyncracies, and the amateur can generally trust Dr. Edwards' judgment. The author writes me that he is already aware of some omitted species, and typographical errors, and that he has received helpful comments from several taxonomists. A revised and improved edition should be out within a few years, and should certainly be worth buying.

The Cunningham and Griffith list was compiled in an effort to evaluate all species of birds with respect to endangered, legally protected, injurious or neutral status, in response to a proposed Department of the Interior ruling that all imported wildlife is to be considered potentially injurious unless specifically given a clean slate. Their findings are presented in a context that does not encourage faith in their objectivity or their accuracy. Their goal, however, seems a worthy one, and Mr. Griffith's letter mentions future revisions. Rather than compiling still another variation on the world list, perhaps the authors could settle on one of the other published lists as a framework for their evaluations of status. And the introductory material should be more inclusive and less inflammatory.

The list by Morony, Bock, and Farrand is intended primarily for purposes other than those to which the other three lists will be put. As a catalogue

or index of birds of the world for all kinds of curators, I foresee its widespread adoption. The looseleaf format will permit the issuance of corrected pages should the sponsoring institution be so inclined (as I hope it will), or, alternatively, the insertion of pages of explanation or comment by the user of the work. And for curators who, like myself, prefer not to follow the dictates of the "Peters" sequence of passerine families, a copy of the well-indexed "Reference list" can still be used as a finding guide to the actual arrangement of specimens within the collection. The three authors have performed a genuine service, which will be greatly augmented if indeed the "Reference list" can be periodically amended, and I recommend its purchase by all institutions needing a handy and inexpensive index to birds of the world.—Kenneth C. Parkes.

REVIEWS

EDITED BY WALTER BOCK

Birds of New York State.—John Bull. 1974. Garden City, New York, Doubleday/Natural History Press. Pp. iv + 655, monochrome frontis., 9 col. pls., 167 maps, 82 figs. \$29.95.—This is the third "Birds of New York" in a 130-year period. James DeKay wrote the first state book in 1844 and my father, Elon Howard Eaton, wrote the second in two volumes in 1910 and 1914. Probably no other state can boast of three state bird books, spaced at 60- and 70-year intervals. (It should be noted that four different books have been published on the birds of the New York City area—Chapman in 1906, Griscom in 1923, Cruickshank in 1942, and Bull in 1964.) These are excellent historical sources for tracing the activities of man and his effects on the birdlife of the northeastern deciduous forests. DeKay treated the Passenger Pigeon while it was still in its prime and the Wild Turkey was still found in at least six counties. By my father's time, the Passenger Pigeon was gone, except for one in captivity (though he shot them as a boy and was one of the last to see them in the wild). The Wild Turkey had retired to the rugged country of south-central Pennsylvania. By Bull's time, the Passenger Pigeon had long been gone, but the Wild Turkey and many other species have returned and started to prosper, reflecting the recovery of much of the Allegheny Plateau. It is these records, which are for the most part accurate, that excite the historian's and ecologist's interest.

Eaton's treatment added about 100 species to DeKay's state list; now, 60 years later, Bull's analysis adds 44 new species bringing the modern total to 410 species accepted as having occurred in New York. As stated on the flyleaf, "We now have a valid comparison of the bird life of the past with that of the present and a solid foundation for future work."

The book is organized in three parts: The introduction includes ornithological history, the environment, outstanding birding areas, conservation, escapes, analysis of avifauna, analysis of breeding limits, taxonomic treatment, species of restricted breeding range, and terms and abbreviations. The second part, "Family and species accounts," makes up the bulk of the book, about 550 pages. Part 3 includes a useful gazetteer, a bibliography, and an index.