REVIEWS

Check-list of North American Birds.—Prepared by a committee of the American Ornithologists' Union. Fifth edition. American Ornithologists' Union, Baltimore, Maryland. pp. i-xiii + 1-691. 1957. Price \$8.00. (Address: C. G. Sibley, Fernow Hall, Cornell University, Ithaca, N. Y). The major event of the ornithological year 1957 in America is the publication of our new Check-list, the fifth edition. I say our check-list advisedly, for while it was prepared by a committee of a few members of our Union, the raw material of which it is compounded has been gathered and published by a host of our active bird people, as well as workers abroad.

In this volume we have the inventory of all the birds of North America north of Mexico (and including Lower [now Baja] California and Bermuda), with names both scientific and common, and ranges. This is the standard reference for anyone studying or writing on North American birds, no matter what his interests.

For 18 years, since 1939, Dr. Wetmore has headed the committee that has revised the previous, fourth edition, published in 1931. The committee evaluated the pertinent literature, current and past, and here we have a synthesis of the research in taxonomy, distribution and nomenclature on American birds. Contrary claims and conflicting views have been weighed and opinions arrived at by decisive votes of the committee.

The new Check-list is a thicker book than the old one. The list proper covers in 650 pages what the old list covered in 375 pages, and the list of fossil birds, a feature of the 1931 edition has been omitted from the new one. This increase in size has been due not so much to the inclusion of more forms, of which there are only 266 more, but rather to the greater detail in which ranges are given. For instance, the Black-bellied Plover entry now covers nearly a page, instead of less than half a page. I get the impression that a reasonably complete list of the birds, including migrants, casuals and accidentals, for any state, could be done from the new check-list.

The number of forms admitted is 1686, compared with 1420 in the earlier edition. But this does not tell the whole story. Some species, accepted by the old list, have been dropped from the new one, as can be seen by reference to the hypothetical list, and some of the subspecies of the 1931 list are no longer recognised.

The additions include birds that have colonized naturally since 1931 such as the Fieldfare and the Cattle Egret; introduced species that have established themselves such as the Spotted-breasted Oriole and the Chukar partridge; strays such as the Little Egret and the Wryneck; and subspecies recently revived or described such as the western arctic Glaucous Gull and the Oklahoma Carolina Chickadee. But not all alleged new records have been accepted, and not a single valid new species has been described from this area since before 1931, the proposed warbler *Dendroica potomac* (1940) not being accepted.

Field work by our bird people has greatly increased our knowledge of bird ranges, and outstanding discoveries include those of the nesting grounds of the Bristle-thighed Curlew and Ross' Goose. There remain some further puzzles however, as the nesting grounds of the Marbled Murrelet on our Pacific coast; that of the large dark subspecies of the White-fronted Goose formerly known as the Tule Goose (? Arctic Islands); and that of the Polynesian Tattler (? in Siberia).

Other changes in this volume, compared with the old list, are many. A very welcome one is the species heading giving both technical and common names, with the range of the species as a whole outlined, followed by the ranges of each species in detail. Vernacular names for subspecies, provided in the old check-list, have disappeared, and only the common name for the whole species is given. The dis-

appearance of all subspecific vernaculars will cause some confusion, when for instance one looks in vain for the Willow Thrush, and finally discovers by comparing scientific names that it is the western subspecies of the Veery.

Some will rue the passing of such well known names as Duck Hawk (the species is now listed as Peregrine Falcon, the name by which it is widely known in the Old World). But we still have such names as Loon (not Diver), and Oldsquaw (not Long-tailed Duck). In a very few cases there is a footnote mentioning alternative names, such as Hungarian Partridge (for Gray Partridge) and Merlin (for Pigeon Hawk). Those who have lauded the stability of common names will be surprised on comparing the five editions of the check-list to see how many have changed. This is right and proper, too, for English common names are part of our language and must grow and change with it.

The arrangement and scope of orders and families is in general that of the 1931 check-list, (Wetmore's arrangement). Many changes, especially in the perching birds, have been suggested recently, but we will be able to weigh those more clearly when the dust has settled. Meanwhile carrying on the old arrangement has many practical advantages for people working with lists and curating collections of American birds.

There have been some name changes for nomenclatural reasons, and some will be very confusing, such as the generic name *Plautus* switched from the Great Auk to the Dovekie, and the changed use of *Empidonax wrightii* (see p. 346). But unless we make these changes we will find different ornithologists using the same name for different things, and worse confusion.

Most of the name changes are due to changing concepts of relationships, i.e. made because of our different interpretation of biological aspects of the birds. There is a present trend in ornithology to enlarge the scope of genera, and to restore to them their function of indicating relationship, rather than to use small genera and stress differences. This we see reflected in the new Check-list in such treatments as the merging of several small genera of pond ducks in Anas, Astur in Accipiter, Penthestes and Baeolophus in Parus, and Corthylio in Regulus. There are other cases that might equally have been acted on, notably the several small genera of egrets that might well go into Egretta.

Along with the broadening of the concept of the genus, is the trend to enlarge our concept of the species to include more geographical representatives. This finds expression in the new Check-list in such forms as the Florida Scrub Jay being united with the western Scrub Jays, the reduction of junco species from 8 to 7 (though all are geographical representatives and their ability to interbreed is remarkable), and in the recognition of the holarctic distribution of certain species by treating the American forms such as our Marsh Hawk and Winter Wren as conspecific with Eurasian forms. There are, of course, other examples which look similar but are kept as species, such as the Ipswich Sparrow (a geographical representative of the Savannah Sparrow).

It is not degree of morphological differences and ranges alone, but also other biological factors that are used in evaluating relationships. While some "species" of the fourth edition have metamorphosed into subspecies in the fifth, the reverse has happened when additional data were reviewed. Thus there are now two species of Dowitchers, and the Northwestern Crow emerges as a species, not a race of the Common Crow.

Perhaps the knottiest problems in outlining species limits are presented where two quite different looking forms meet with little or no overlap, and where some intergradation or hybridization may occur, at least locally, in the zone of meeting. Some

of these cases, brought into being by geological changes in the country, perhaps actually represent an intermediate stage between subspecies and species, and are thus "untidy" taxonomic units. The new Check-list has changed some of these to a conspecific treatment, as in the Gray Jay (P. canadensis and obscurus) and the Spruce Grouse (C. canadensis and franklinii), while others are kept in pairs of separate species as the flickers (C. auratus and cafer) and the orioles (I. galbula and bullockii). There are other cases which will undoubtedly receive additional field study from this point of view in the future; as the northern gulls, including the bird listed as L. argentatus thayeri; the northern geese, now all in B. canadensis; the Atlantic and Pacific Eiders; the two Brant; the Rose-breasted and Black-headed Grosbeaks; the Myrtle and Audubon's Warblers and the Eastern and Western Wood Pewees. Sometimes it seems that in cases like these the exact nomenclature is not so important as bringing out the facts, which the new Check-list has done in some cases (i.e. the flickers, juncos, orioles) by mentioning that hybridization occurs.

Dimorphism is well recognised in some species such as Screech Owl and Least Bittern, and there are some who would hold that the Blue Goose, Harlan's Hawk, and Great White Heron owe their distinctive coloration to dimorphism and do not merit the specific status now accorded them.

There are no universal objective criteria to apply as to how many subspecies to recognise. It is rather widely accepted that every moderately geographically separated population differs in some way from every other. There are some people who evidently think that if any of these differences can be found, the populations should be formally named as subspecies. Other workers think that this way lies chaos, and a stultification of taxonomy, and they would use a coarser screen in "sifting out" subspecies. The writers of the new Check-list used a fairly fine screen, but the committee has not accepted some of the very finely split millimeter races proposed in recent years.

In the treatment of clines, the new Check-list follows the common practice of allowing a subspecific name for each end of the cline, and sometimes an additional one for the central portion. Sometimes, as in the Great Horned Owl, Gray Jay, and Black-capped Chickadee certain western populations nearly if not quite duplicate some eastern ones, but are given different subspecies names without comment. However, in one case, that of the Ruffed Grouse, B. u. umbellus, two such populations are united under one subspecies name with a footnote mentioning the anomalous situation.

The committee has covered a tremendous amount of material, examined a great many debated points, and here we have a calm and balanced judgment. There has been perhaps a tendency to be conservative, in rejecting some proposed innovations. But nomenclature must keep in touch with the past as well as look to the future. Classification is not a finished subject. The new Check-list is one of the imposing landmarks along the road.

My main criticisms of this Check-list would concern additions to an already large volume. More comments or footnotes pointing out biological ambiguities affecting taxonomy, as is done for Arctic Loon and Yellow-bellied Sapsucker, would be welcome to researchers, even if some of the range material had to be further condensed. The second point is that the synoptic citing at least of new names proposed but not accepted since the last Check-list would have been welcomed by many taxonomists. But these are not really criticisms as much as asking for more of a good thing.—A. L. RAND.

Arctic Birds of Canada.—L. L. Snyder, with 72 illustrations in black and white by T. M. Shortt and 72 distribution maps. University of Toronto Press, Toronto;

pp. i-x, 1-300. 1957. \$4.75.—The Canadian Arctic, last frontier of North America, is now being extensively penetrated and occupied by civilized man who, no doubt, will proceed to make it over in his own fashion, though this may yet take a little time to do. The era of the summer tourist is, however, just around the corner. Most of those visiting or living in the Canadian arctic nowadays are quite uninformed about the birds they encounter.

This book, prepared by the Curator of Ornithology at the Royal Ontario Museum, will undoubtedly be used primarily for identification in the field or laboratory. It provides much more substance than is to be found in the standard field guides. This is doubly important in remote areas where a reference library is not to be found around the next point of land.

The author uses an introductory chapter to establish his area (beyond the tree-line) and to touch on some of the special characteristics of arctic birds, the nature of the land they inhabit, and the particular problems they face. Two identification aids are also provided here—a key to orders, and groupings by habitat.

The main body of the book treats 72 species. Each family is skilfully delineated in a few introductory paragraphs and for each species there is an illustration, a distribution map, and a descriptive commentary that may run to three or more pages under the following headings: additional names (English and Eskimo), status, habitat, characteristics, and remarks.

Sub-arctic species that occur occasionally in the region, and other accidental or erratic avian visitors are treated separately in an appendix which thus nicely separates the improbables from the probables. A glossary of technical terms, an index, and a bibliography—which, despite its length, the author is careful to describe as 'partial'—complete the book.

While it has been a real accomplishment to bring together for the first time a compilation of the present extent of our knowledge of the birds of the region, it is perhaps equally important that he has underlined time and again how much is not known about them. The young ornithologist anxious to work on arctic birds will find many leads to ornithological pay-dirt, and the more casual traveller in the arctic will better be able to assess the significance of his bird observations. As most of the boreal gulls, sea birds, and waders regularly migrate through, or winter in more temperate regions, this book will prove useful to students who never expect to visit the arctic.

For the stay-at-home systematist and the vicarious traveller, the distribution maps will be particularly appealing. Since many of the birds treated are holarctic, and are so described in the text, it would have been most informative if at least some of these maps had indicated distribution in Alaska and Greenland, and even the old-world arctic, in order to relate the Canadian populations to the whole. However, it must be conceded that the research needed to provide such an addition might have been of a rather formidable nature and is perhaps beyond the scope of this book.

For those who like to add to their collection of bird art, this book will be a highly satisfying accession. Terence Shortt, of the Royal Ontario Museum, excels in scratch-board medium and he is at his finest here. His ability to portray the living bird in characteristic pose against a deftly authentic background leaves no doubt of his knowledge of the bird on its home grounds as well as his skill as an artist.—William W. H. Gunn.

Observations on Birds in Southeastern Brazil.—Margaret H. Mitchell. University of Toronto Press. x + 258 pp., 1 color pl., 10 photos., 4 maps. 1957. Price, paper \$4.50, cloth \$5.50.—To the increasing number of persons with an ornithological

bent visiting Brazil, this book will be particularly useful. The more serious student of neotropical birds will find in it much data not previously recorded. Mrs. Mitchell lived for four years in Rio de Janeiro, and in pursuit of her avocation spent most of her spare time with binoculars and note-book, visiting the adjacent areas and the surrounding states. She advises the bird-watcher of the parks and other localities about Rio de Janeiro and São Paulo where a variety of species may be seen readily and the nature of the habitats. The book consists chiefly of an annotated list of 289 species with some notes on identification and local distribution, and-most valuable of all-many items of behavior. These nuggets of natural history data are valuable, because so little is recorded about the habits of tropical American birds. To reports of her own experience, Mrs. Mitchell frequently adds material translated from earlier literature on Brazilian birds, much of it previously scattered or in Portuguese. As there is no descriptive handbook of Brazilian birds, and as Mrs. Mitchell did no collecting, identification often presented a problem. The author did not pretend to name every species observed; with commendable frankness she indicates her doubts in many instances, stating the basis for her identification. Dr. Oliverio Pinto, dean of Portuguese ornithologists, made available the large skin collection of the São Paulo State Museum. This reviewer shares Dr. Pinto's opinion that Mrs. Mitchell has made a real contribution to the knowledge of Brazilian birds.

The book is written in an informal and pleasantly modest style. Brazilian names are given with their meaning and derivation; these names are often pungent and even humorous. Absent any list of English names for South American species, the author felt reluctantly obliged to accept the subspecific designations applied by the "Catalogue of Birds of the Americas" to the local races—though these sometimes obscure recognition of wide-ranging birds. The work closes with a glossary of Brazilian terms, a good bibliography, and a well-prepared index.—E. Eisenmann.

Key-List of the Palaearctic and Oriental Passerine Birds.—Col. Owen E. Wynne. 1956. (T. Buncle & Co. Ltd., Arbroath, Scotland. 12/6). 136 pp. This handy booklet lists each species with a very brief indication of the species range, names the subspecies (giving their authors and date of description, but without ranges), and supplies an English name for each species. The author states frankly that this is a compilation and makes no claim that his work is a conventional checklist. Nevertheless, it was compiled with care, is modern in its systematic groupings, and in practice has proved to be a very useful "aide memoire". The paper appends a modest but serviceable bibliography of recent major distributional works, and a list of the authors who described the birds included, with years of birth, and of death if no longer alive, referring to biographical sources.—C. Vaurie.

Prontuario de la Avifauna Española.—Francisco Bernis. Sociedad Española de Ornitología, Madrid, Spain. 77 pp. 1955. Price 30 pesetas.—From the viewpoint of ornithology Spain is the most interesting and the least known country in western Europe. This check-list covers the entire Hispanic Peninsula (including Portugal), as well as the Balearic and Canary Islands. The nomenclature now current in Europe is followed, but synonyms used in earlier works on Spanish birds are mentioned. For each species and subspecies range and status within the area (whether breeding, migratory, or casual) are indicated in very abbreviated form. A Spanish name is supplied for each species—generally brief, and usefully descriptive or suggestive. The names, though many are new, are assured popular dissemination by adoption in the recently published Spanish edition of the internationally successful European field guide by Peterson, Mountfort and Hollom.

The 'Prontuario' is commended to those providing Spanish names for Latin-American birds—a task required because so few New World species have developed Spanish vernaculars of consistent application. The hardest problem is to select Spanish group names. Adoption of the 'Prontuario' group names for the same groups in the New World would be a long step towards the establishment of uniform Spanish bird names for Latin-America—just as we have uniform English names for the United States and Canada. The 'Prontuario' also sets a standard of brevity in the construction of specific names. It consistently uses compound descriptive adjectives (much as in English), rather than the longer, more formal, adjectival phrases often seen; for example, the Red-backed Shrike is Alcaudón Dorsirrojo, not 'de Dorso Rojo'. The carefully chosen vernacular names of the 'Prontuario' reflect a recognition of their importance in promoting popular interest in birds.—E. Eisenmann.

Acta XI Congressus Internationalis Ornithologici. Basel 29 V.-5 VI. 1954.—Sir Landsborough Thomson, president; Adolf Portmann and Ernst Sutter, editors. Birkhauser Verlag, Basel, Switzerland. 680 pp., 12 pl., many figs. 1955. Price, 36 Swiss francs. This well-printed and illustrated volume of the Proceedings of the Eleventh International Ornithological Congress, held in 1954, will prove of exceptional interest to students of birds.

The many important contributions in the 110 separate articles include the proceedings of the Congress; the reports of symposia on visible migration, on hearing and analysis of voice, and on the biology of penguins; several general papers of broad significance; and a large number of highly varied contributions presented in the meetings of the sections on Morphology and Paleontology, Systematics and Behaviour, Migration, and Folklore. More than half of the articles are in English; almost all the others are in French or German, sometimes with English summaries. The volume as a whole is a valuable and varied presentation of current ornithological studies. It should stimulate attendance at the next International Ornithological Congress, to be held at Helsinki in June 1958.

International Union for Conservation of Nature and Natural Resources. Proceedings and Papers of the Sixth Technical Meeting held at Edinburgh in June, 1956. xxii + 265 pp. \$3.75. (Society for the Promotion of Nature Reserves and The Nature Conservancy; procurable from the latter, 19 Belgrave Square, London, s.w. 1.) This book includes over eighty papers (or summaries) on a variety of subjects, delivered at sessions devoted to the following general themes: management of nature reserves, biological consequences due to the presence of myxomatosis, rehabilitation of areas biologically devastated by human disturbance, relation of ecology to landscape planning.