

convenient way to give our readers an idea of its character although as regards the number of forms treated and the extent of systematic research required, the two works are hardly comparable. Nevertheless a further comparison may be desirable to show the extent of correspondence in nomenclature. In Mr. Peters' work there are 241 species and subspecies which occur also in the A. O. U. List: he has rejected two forms as not worthy of recognition viz. *Dichromanassa rufescens dickeyi* and *Branta canadensis leucopareia* and recognizes three forms which the A. O. U. Committee rejected viz.: *Ardea herodias oligisia*, *Buteo borealis alascensis*, and *Melanitta fusca dizoni*, while he also lists *Pelecanus occidentalis carolinensis*, *Fregata rothschildi magnificens* and *Nyroca marila nearctica*, which were recognized in the other List under the specific names given, the North American birds not being there separated as distinct forms. Of the 236 forms common to the two lists 194 bear exactly the same name in each except that about a dozen have the specific name doubled in view of the recognition of some extralimital race. Of the 42 remaining, 26 differ only in the generic name, due to the rejection of 10 genera recognized by the A. O. U. Committee and the recognition of three not accepted by it, and the change of three others on nomenclatorial grounds. Of the remaining 16 names ten differ from the A. O. U. List only in that the species is made a subspecies of another species and one in being elevated from subspecific to specific rank, changes that are not very serious. We thus have only six names changed on nomenclatorial grounds and these involve only three actual cases. We therefore find that while there is difference of opinion in forty instances as to the rank or validity of genera and species—purely ornithological problems, upon which there will always be diversity of opinion, there are only six questions of nomenclature involved. Three of these hinge upon the undecided question as to whether a word like *Oxyura* is invalidated by *Oxyurus*, the A. O. U. Committee ruling that it is and Mr. Peters taking the opposite view. The other cases are the questions of whether the name *Sula piscator* (Linn.) and *Buteo jamaicensis* (Gmelin) are recognizable and whether Audubon's Washington Eagle is recognizable as the northern form of the Bald Eagle known as *Haliaeetus leucocephalus alascanus*. This summary is very satisfactory as demonstrating how comparatively few differences are due to the old bugaboo "nomenclature."

Only time and constant reference to Mr. Peters' volume will show whether there are typographical errors though a rather careful examination of its pages by one who has recently had a good deal to do with such matters fails to detect any, except for the accidental duplication of the specific name of *Puffinus tenuirostris* on p. 56.

We heartily congratulate Mr. Peters on an important and tedious work well done and wish him all success in the completion of his monumental undertaking.—W. S.

**Casey Wood's 'Introduction to the Literature of Vertebrate Zoology.'**—As is generally known there has been accumulated at McGill

University, in Montreal, one of the most notable zoological libraries in America, including among other valuable collections the Blacker Library and the Emma Shearer Wood Library of Ornithology. Dr. Casey Wood widely known as an ophthalmologist and ornithologist and donor of the latter library, some years ago, conceived the idea of compiling a catalogue of all the works relating to vertebrate zoology in the McGill collections and the work,<sup>1</sup> a stout quarto of 643 pages, is before us.

Besides the annotated catalogue which occupies nearly three-fourths of the volume there is an "Introduction to the Literature of Vertebrate Zoology" by Dr. Wood and an "Index Indicis" for the guidance of students consulting the work. The frontispiece is a reproduction of an early painting of the Dodo in the Blacker Library.

The Introduction is presented in ten chapters tracing the literature from the earliest publications of the Greeks, Romans and Oriental nations down through the Middle Ages to the present time. There is also a separate review of treatises and monographs on ornithology and mammalogy published during the nineteenth and twentieth centuries; another on herpetology and ichthyology of the same period; and others on zoogeography, zoological museums and gardens, on the oriental literature of vertebrate zoology and on periodical literature on the subject; also a final chapter on rare and unique books and manuscripts in the University Library. The author is very modest in his protest that the Catalogue is only "partially annotated" and that the "Review" makes no claim to completeness. We may admit all this and yet marvel at the amount of matter that he has brought together. His "review," necessitating as it does only the briefest mention of each author or work, is amazing in the information that it presents and the wonderful grasp of the subject that the author possesses—indeed it contains almost as much history and biography as it does bibliography.

While we have only praise and admiration for anyone who has the courage and perseverance to compile a bibliography, especially such a monumental one as this, a reviewer is apparently expected to give some helpful criticism. The only suggestion that occurs to us is that in the 'Review' a little more definite or consistent sequence in the comments relative to the works of a given science or country would be helpful and a more exact chronological order in contiguous items. Just how exactly authors' names are supposed to be quoted we are not quite sure but we note that Charles Cory appears without his middle letter "B" while curiously enough a middle letter "B" appears in the name of John Bartram, which we do not think he possessed, but these names are correct in the "Catalogue," where

<sup>1</sup> An Introduction to the Literature of Vertebrate Zoology Based Chiefly on the Titles in the Blacker Library of Zoology, the Emma Shearer Wood Library of Ornithology, the Bibliotheca Osleriana and other Libraries of McGill University, Montreal. Compiled and Edited by Casey A. Wood, M.D., LL.D., Collaborator, Division of Birds, Smithsonian Institution. Oxford University Press, London: Humphrey Milford, 1931. Pp. i-xix + 1-643. Price \$15 or 3 Guineas.

however, the present reviewer does not fare so well, as his name is spelled in three ways while in the index one of his works on Eastern Pennsylvania appears as "Eastern Peru"! We note very few such errors, however, and they are of small importance. The "Index Indicis" will be a great help to those using the volume although there seem to be a few errors in the allocation of certain titles, such as the inclusion of two works devoted wholly to North American mammals among the "general treatises."

All zoologists and librarians as well, as the student or general reader in search of information, owe Dr. Wood a debt of gratitude for his painstaking labor in the preparation and publication of this work, as well as his efforts for many years past in collecting the wonderful ornithological library upon which, in part at least, it is based.—W. S.

**Miller on the American Shrikes of the Genus *Lanius*.**—Seldom if ever has a limited group of birds been studied so exhaustively as have our shrikes in this monograph<sup>1</sup> of Mr. Miller's. And so completely has he covered the ground that it is hard to find anything that he has overlooked, while his method of treatment might well serve as a model for such studies.

The species considered are *Lanius borealis* and *L. ludovicianus* though he regards the former and its subspecies *invictus* as races of the Old World *L. excubitor*. The paper is divided into two nearly equal parts entitled "Systematic Revision and Analysis of Variation" and "Natural History." We like the latter term which of late years has been much less frequently used than formerly, for we should rather be known as a "naturalist" than as a scientist, ecologist or similar supposedly more brilliant title!

The first consists of a discussion of the characters exhibited by shrikes of the genus *Lanius* with tables showing their variation with regard to sex and age. Then follows the chapter on characterization of species and subspecies with synonymy, discussion of the type, and detailed description of the various plumages of each form, including a statement of its range; and finally a discussion of geographic variation of the several characters with respect to climate, environment, etc., illustrated by tables, diagrams and photographs of habitats.

Under natural history we find accounts of molt, migration, habitats, territory, courtship, nests and eggs, incubation, growth of young, food, foraging, impaling instinct, digestion, preening and bathing, modes of progression, vocal notes, causes of death and age—truly an exhaustive treatment.

With regard to the systematic discussion Mr. Miller recognizes four more races of *L. ludovicianus* than does the recent A. O. U. 'Check-List.' Doubtless with the vast amount of material at his disposal his treatment is the more logical of the two though in such cases we must remember that

<sup>1</sup> Systematic Revision and Natural History of the American Shrikes (*Lanius*) By Alden H. Miller. Univ. Calif. Publ. Zool., Vol. 38, No. 2, pp. 11–242, 65 figs. in text. October 24, 1931. Price \$3.00.