

## THE TWO CHECK-LISTS OF 1931—A CRITICAL COMMENTARY

By JOSEPH GRINNELL

The year 1931 saw the publication of the Fourth Edition of the American Ornithologists' Union Check-list of North American Birds, brought to completion and edited by Dr. Witmer Stone, chairman of the Union's Committee on Classification and Nomenclature, and also the publication of volume I of Mr. James Lee Peters' much greater undertaking, a Check-list of the Birds of the World. The former book represents "finished business", at least for the time being; the latter is but one part in a series which will not be complete short of at least ten volumes and which will absorb all the time of one man for a minimum of fifteen years. The appearance of these two books of the same general nature and significance in a single year is epochal as regards America and would seem to justify more extended analysis and critical comment than is generally given in book reviews.

Of course it is the Check-list of North American Birds', the volume complete in itself, that is of greatest and most immediate interest to the majority of *Condor* readers, and I will devote most attention to it. This, in its three preceding editions, has been the standard for bird names in America for 45 years. In the first edition (1886) a total of 951 forms (species and subspecies) were listed as in good standing; in the second edition (1895) there were 1068 forms; in the third edition (1910) there were 1196; and in the present, fourth edition (1931) 1420 species and subspecies of modern birds are regularly listed. The first three editions were prepared by committees under the chairmanship of Dr. Elliott Coues and of Dr. J. A. Allen, successively.

The fourth edition of the A. O. U. Check-list serves also as one unit in a world-wide series of regional lists projected some few years ago under the general term *Systema Avium*. This scheme for the publication of authoritative lists of birds for each of the main zoogeographical regions originated in the British Ornithologists' Union; and it has already resulted in the issue of W. L. Sclater's "*Systema Avium Æthiopicarum*" (1924-1930) and G. M. Mathews' "*Systema Avium Australasianarum*" (1927). Our North American portion of the "*Systema*", it may be remarked, shows much fuller statements of geographic range than either of the others do, and it is at least quite their equal as to nomenclatural correctness and completeness of citations.

The features of the fourth edition of the A. O. U. Check-list may perhaps best be discussed in comparison with those of the third edition, with which latter all or most of my present readers are familiar. The geographic scope remains the same, that is, North America north of the Mexican boundary, plus the peninsula of Lower California. The time-limit for inclusion of new matter extended to the end of 1930, though it is to be observed that a few 1931 proposals have been entered—even a few last-minute changes which insofar as the present reviewer is aware had never been made known in print elsewhere. Established "introductions", such as Rock Dove and Starling, are now included in the main list. There are eleven of these non-native species.

The phylogenetic sequence observed in the new edition is entirely renovated—modernized as regards arrangement of both genera and the higher groups. Not only this, but within genera the species and subspecies are arranged, not in historical order (by accident of precedence in description), but in logically geographic order, from

<sup>1</sup> Check-list of North American Birds prepared by a Committee of the American Ornithologists' Union Fourth Edition Constituting the "*Systema Avium*" for North America North of Mexico Zoological Nomenclature is a means, not an end, of Zoological Science Published by the American Ornithologists' Union Lancaster, Pa. 1931 [our copy received October 7, 1931]; 8vo (150 x 231 mm.), pp. xx+526.

east to west and north to south. The nomenclature has been sifted out in accordance with the rules of the International Code, but with deference to the rules of the old A. O. U. Code where not in conflict. One special ruling, not called for by either code, is in my opinion exceedingly unfortunate. This is the employment of but one "i" in the genitive singular of personal specific and subspecific names even where spelled originally with two "i's"; thus, the Check-list gives for the Baird Sparrow, *Ammodramus bairdi* whereas the original describer, Audubon, christened the bird *bairdii*. A curious reversal appears in such names as *mauri*, *turati* and *craveri*, originally so spelled, but which in the Check-list appear with two "i's"—this action on the ground that in each case the man's name originally ended with an "i" and another "i" must be added to make it possessive. And yet we find no such "improvement" of the specific name *lewis*, of the Lewis Woodpecker. Another case of departure from the original author's spelling is in the case of the California Blue Grosbeak, "*salicaria*" instead of *salicarius*, as the name was, and should continue to be, spelt. The safe rule, one which will surely be followed explicitly by most systematic students, is to preserve scientific names precisely as their authors originally spelled them; any tinkering whatever opens the way to everlasting changing of names on the basis of varying personal preference. The placing of accents on syllables of scientific names can almost be criticised under the same head; they are additions to the names as originally spelt—not desirable, it seems to me, therefore, even though grantedly of some use to an amateur who is trying to pronounce them.

A new feature is the use of footnotes, for the most part references to casual occurrences of species or to forms which have been proposed but which have not been admitted to full standing. Such references are often useful to have easily at hand, but there is lack of uniformity in their employment; very many citations are omitted which would have served quite as justifiably as those that are given. Perhaps uniformity would have meant much more space than could have been spared for this feature—in which case probably it would have been better not to attempt footnote explanations at all, especially in view of the extensive "Summary of Changes" in nomenclature which is given (pp. 380-400).

On the other hand, great improvement is shown over the third edition, in the matter of citations of original descriptions of systematic units up to the genus. These were entirely rewritten and extended and errors in the old Check-lists corrected. Furthermore, full statements of type locality are now given, both as to original wording of designation and as now to be understood. Original bases of Linnaean names (non-binomial authors like Catesby and Latham) are now given accurately. All this, I have reason to know, is the result of Dr. Stone's laborious personal research apart from his general work in behalf of his Committee.

With respect to the progressive subdivision of genera, a trend observable in some quarters, we find the new Check-list gratifyingly conservative. For example, the Sparrow Hawks, Pigeon Hawks and Duck Hawks all continue under *Falco*; the Rough-legs are included under *Buteo*; most of the Shearwaters, recently assorted under several "generic" names, remain under *Puffinus*; all the Vireos come under *Vireo*; etc. But *Melospiza* is not merged with *Passerella*, as someone recently proposed with very good ground. Subgeneric headings are entered where appropriate, and this is, to my mind, a wholly wise course for indicating groupings of species within genera.

In just one case that I have detected has this conservatism toward the recognition of genera seemingly gone to an unjustifiable extreme. Our White-headed Woodpecker, since 1858 accorded separate generic position, under *Xenopicus*, is suddenly placed under *Dryobates*, along with Downy, Hairy and Ladder-backed woodpeckers!

And to the present reviewer this came as an absolute surprise, since he had not seen a mention of such reallocation in any current literature. Possibly some paper *has* come out, covering the morphology of *Xenopicus* and coming to conclusions showing nearest, and close, affinity with *Dryobates*; but *if* no such study *has* appeared, then sharp criticism is here due on the principle that the A. O. U. Check-list is no place for publishing innovations. A proposal of such importance should be made to the ornithological world, with full evidence, through some well-known series, like the *Ibis*, or the *Auk*, or *Journ. für Ornith.*, and then time given for counter-evidence to be sought and presented—*before* authoritative acceptance. To anyone who knows the White-headed Woodpecker in life, when, only, association of function *and* structure is manifest, the generic grouping of this species with *Dryobates* is most astounding!

A step backward in the present edition, to my notion, in comparison with the third edition, is the entry of subspecies and full species in exactly the same typography, instead of the full species being in larger type, and instead of each group of subspecies being subordinated under a single binomial heading. There results an appearance of exaltation of the subspecies, as if in scientific classification the latter are of the same rank as species, which, at least on an average, they are not. Subgeneric, generic, family and ordinal names are properly given in distinctive type sizes—and so should subspecies. Subspecies are so numerous in the fourth edition (609 of them) that their multiplicity without any difference of printing, on many of the pages obscures the general phylogenetic significance of the Check-list. Only a person who has tried to teach ornithology can appreciate the amount of confusion created in the mind of even the adult beginner by a profusion of racial names—where the identity of the species (in the Linnaean sense) is buried in a profusion of subspecies the characters of which are not readily, or at all, appreciable to the non-systematist. This difficulty, I believe, extends far and wide among ornithologists who do not happen to be specialists in subspeciation; and it could be easily avoided, and at the same time the technical value of the Check-list preserved, by the use of differentiating typography as in the third edition. The system adopted in the fourth edition results, also, in many such unfortunate cases as the entry for the Green Jay, *Xanthoura luxuosa glaucescens* Ridgway, where there is no indication whatsoever of the authority or citation or type locality for the binomially named SPECIES, *Xanthoura luxuosa*! [The earliest name in this series of subspecies happens to apply to an extralimital race.]

Now with regard to vernacular names, the fourth edition shows here and there instances of decided improvement over usages in preceding editions. For example, we now find Eastern Mockingbird and Western Mockingbird instead of just Mockingbird and Western Mockingbird; Siberian Hawk Owl and American Hawk Owl instead of European Hawk Owl and Hawk Owl; Eastern Golden-crowned Kinglet and Western Golden-crowned Kinglet instead of merely Golden-crowned Kinglet in the first instance. These are correctly formed vernaculars, for they appreciably convey ideas concerning geographical occurrence of related forms, concerning relationships, or concerning features of distinguishment.

On the other hand, I regret to be compelled to point out, if I am to be thoroughly open in this review, that very many of the vernaculars in the new Check-list do not meet the needs of the lay student. Either vernaculars should be omitted altogether, as a few professionals now do in practice, or they should be supplied with proper regard for their easy use by the amateur or "popular" bird student whose number is hugely the greater over the dwindling coterie of us old-timers who do not like to see names changed from what they were in our own student days. In the new Check-list there remain a great many "common" names that give little or no clue to their

application such as would help the student, advanced as well as beginning, to remember them. Indeed, there are quite a few newly coined names of this character—vernaculars that, to my knowledge, have never appeared in the literature before; for example: "Dotted Wren" for our long known Dotted Cañon Wren; "Gambel's Wren-Tit" for the Intermediate Wren-tit; "Nicasio Chickadee" for the Marin Chestnut-backed Chickadee; "Barlow's Chickadee" for the Santa Cruz Chestnut-backed Chickadee; "Grinnell's Chickadee" for the Northern Mountain Chickadee; "San Lucas Sparrow" for San Benito Marsh Sparrow; "Bryant's Sparrow" for the Bryant Marsh [or Savannah] Sparrow; etc., etc.

And this brings me to another criticism—of the inordinate use of *personal* names. They are as a rule meaningless to the popular student of birds, and they tend to bring ridicule on the science with, upon reflection, seeming justice; I have heard the denunciation that systematists are prone to egotism, and that personal exploitation is the main object in their game! In this matter of the use of personal names in vernacular designation of species and subspecies I cite from *one* group, the jays: Couch's Jay, Woodhouse's Jay, Xantus's Jay, Belding's Jay, Steller's Jay, Semple's Blue Jay! What is there here to help any student to know what kind of a jay is concerned in each case? Human history, personalia, is surely *not* a first consideration in the study of systematic zoology. It does look as though the game of nomenclature were becoming more a matter of men and *their* names than of concepts of species and subspecies and of facts pertaining to *them*! Can't we stem this tendency? One important purpose of a general summation such as the A. O. U. Check-list is to be useful to present and future students in the earlier stages of their ornithological careers—to *new* students. The purpose should not be the acclaim of personal preferences or accomplishments on the part of the seniors in the field, or to impose these upon the juniors, save as these do, *in truth*, record advances in our science.

One more matter which will be deplored by many is the retention of possessives in personal vernaculars, as illustrated in the paragraph above. The majority of active bird students, at least in the West, prefer to speak of the Woodhouse Jay rather than say "Woodhouse's Jay". This is in accord with the commonest usage in other connections. We talk about the Hudson River, the Selkirk Mountains, San Francisco Bay, the Lincoln Memorial, the Douglas spruce, the Washington palm. Certainly the persons whose names have been employed in the naming of birds no more *own* those birds than, for instance, did David Douglas own the kind of spruce tree named after him! The next edition of the Check-list should take heed both of majority preference and good usage in this matter.

The new sequence adopted in the fourth edition has not been met by any renumbering of the species and subspecies. I think this was a wise decision—to avoid new numbers altogether, but to include the old ones, as is done, in brackets following each name. To facilitate the use of the new order, there is a concordance (pp. 473-478) of each old number with the page in the present edition where the name it concerns is to be found. Thus the numbering system employed in most collections of birds' eggs is not upset—it can be continued on the basis of the new list indefinitely. For Dr. Stone saw to it that even names of forms newly appearing in the present edition are given appropriate bracketed numbers.

As to the fossil record for North America, this has been brought down to date (indeed to June, 1931) and comprises a separate list of 156 extinct species, these in addition to ten forms of "sedis incertae" and many modern forms entered as from Pleistocene. The preparation of the fossil portion of the Check-list, we are told in

the Preface (p. xiv), was entirely the work of Dr. Alexander Wetmore. Advance in this field of ornithology is indicated by the fact that only 72 fossil species were listed in the third edition, in 1910.

The statements of range of species in the new edition have been entirely rewritten and many of them greatly expanded. As a whole, this feature thus shows marked advance over what it comprised in the third edition. But in the last twenty years there has, of course, been a huge increase in the volume of distributional data available; and I am not sure that the present edition is as satisfactorily a correct reflection of the present knowledge of the distribution of North American birds as the third edition was when it was issued. There is evidence that all published data have not been critically and discriminatingly scrutinized as they should have been; it looks as though in some cases "records" that have openly been pointed out as dubious have been taken at face value and probable errors thus perpetuated.

In the Preface (p. v) acknowledgment is made of the use made of the "extensive records" of the Bureau of Biological Survey. With no doubt whatsoever there has been accumulated under the auspices of that Bureau a far greater mass of data concerning the distribution of North American birds than exists in one place elsewhere. But those data are from miscellaneous and heterogeneous sources, many of them furnished by inexperienced observers. Exceeding acumen is required to sort such out, else mistakes will inevitably be entered in our literature. Very many of the "casual" and "breeding" records from those auspices need to be checked (and verified)—by an experienced distributional student—before their authenticity and significance can be accepted as reliable. I venture to say, from recent personal experiences in running down locality references of B. S. source, that many range designations in the fourth edition are more or less faulty, some of them seriously so. It is not, be it understood, here intended to cast discredit upon the services of the B. S. in amassing its huge store of distributional data. That store has enormous potential values and is immensely worth the effort expended. But the values in question cannot be derived from it without the exercise of a rather rigid standard of discrimination on the part of a talented geographical student; admittedly this would be an exceedingly difficult and laborious matter to have handled satisfactorily in connection with the Check-list.

Some of the seeming mistakes of a distributional character in the new Check-list, and one or more of which illustrate my point, are as follows. Of the Allen Hummingbird: "Has been recorded *casually* in migration in eastern and *southern* California", etc. [*italics* within quotes, here and below, mine]—when the bird really is numerous and regular in its migration through southern California, as the literature plainly shows. Of the Anna Hummingbird: "In *migration* casually to Arizona", etc.—whereas this species is not known to "migrate" at all. Of the Dwarf Horned Owl, *Bubo virginianus elachistus*: ". . . North to San Francisco Bay, California"—a range ascription never before suggested in print, to my knowledge. By the entire omission of the race *Otus asio inyoensis*, the Inyo region of eastern California lacks any Screech Owl of any kind. The type locality of the Arizona Verdin is given as "*northern* Lower California", instead of southern Lower California; and thereby the race *Auriparus flaviceps lamprocephalus* is wrongly given recognition.

Returning to the subject of ranges: Even at the risk of incurring a measure of opprobrium as a hypercritic, I feel that it might prove useful in future undertakings of the sort to point out in the new Check-list the comparative lack of any consistently followed order in the statement of distribution and of manner of occurrence. Highly desirable would have been uniform adherence to a plan of verbal composition and punctuation such as might have been previously worked out so as best to meet the

requirements of logic and quick understanding. The life-zone concept is employed in defining ranges (though unfortunately no life-zone map appears in this edition), but without uniformity. The limits of the normal breeding range are often not distinguishable because extreme marginal (often casual) occurrences are the ones cited. Indeed, casual or "accidental" occurrences are given undue prominence, whereby the much more important facts of regular geographic limitation are obscured if not completely buried.

There is a "Hypothetical List" (pp. 365-375) with 48 entries, consisting of (1) valid species the record of whose occurrence in North America is open to question; (2) forms described as distinct species or subspecies but now regarded as hybrids, color phases, or individual variations; and (3) alleged species figured on plates of Audubon and Wilson but which have not since been identified with any living birds. A useful feature is the inclusion also of all names [in brackets] which have appeared in "hypothetical" standing in the preceding editions, with an indication of what disposition has now been made of them. It is interesting to note that four of these former "hypotheticals" now appear in the regular list, namely, Common Black Duck, Rufous-necked Sandpiper, European Curlew, and Redshank. Eleven species in regular standing in the third edition have been transferred to hypothetical status in the fourth edition.

A detailed "Summary of Changes, Additions and Eliminations in the Present Edition of the Check-list as Compared with the Third Edition" provides an analysis which well repays the reading of it. One thing of interest showing here, is the list of 41 forms named binomially in the last edition and which now bear trinomial names.

The volume closes with an Index of 48 pages and close to 2200 entries. This no inconsiderable task in itself was in part the work of Dr. T. S. Palmer, as acknowledged in the Preface. But even with the helps such as this one, from various fellow committeemen, the entire undertaking of bringing out the fourth edition, involving probably double the effort put by Dr. Allen on the third edition, constituted a huge task on the shoulders of one man, the Chairman of the Committee. Indeed this might aptly be called the *Stone* Check-list of North American Birds.

One further comment: It is doubtful in my mind if any formally constituted committee ought ever again undertake this particular job—better it be the responsibility of one man (as in the case of Peters' list of the birds of the world), with such aid as he chooses to elicit from other individuals. A committee is too prone to be ruled by the fiat of some one aggressive individual who happens to be guided in his decisions by his own "judgment" [which too often equals "hunch"!]. Also, no one person takes the laborious responsibility of looking up a queried case for himself, each leaving it to the other fellow to look up or else assuming that some other committee member *will* or *has* looked it up. It is humanly impossible for a committee to do as thoroughly any work involving a great amount of detail as a single competent man who feels the entire burden of responsibility on his own shoulders. This I have seen demonstrated over and over again in the behavior of committees. Indeed, it is often the case that the energies and time of five men are dissipated in argumentative debate led by some aggressive, talkative individual over some few questions of minor import, leaving many vital considerations untouched.

I may suggest finally that the alert, active, systematically inclined student will at once acquire *two* copies of the new Check-list, one to keep as a book, unmarked, the other to begin immediately to mark up in pencil—with corrections of typographical and factual mistakes, with emendations of ranges to accord with the results of critical examination he or others may make of the existing records, and with departures in all other respects from time to time as authoritative revisions are published. In the

interests of advancement of American ornithology, not to exceed ten years should be allowed to elapse before the appearance of the next, *fifth* edition of the A. O. U. Check-list. I have no sympathy with the often-heard plea for permanence and stability, save as these ideals may be achieved upon the firmest foundations of fact and correct interpretation; and these are slow of accumulation. The issuance of Check-lists at rather frequent intervals records the progress *toward* the ideal (of course, never actually realizable)—and in doing that it stimulates activity in our field of science.

We now come to pass comment upon the first installment of Peters' list of the birds of the world<sup>2</sup>. This first volume may be accepted as indicating the manner of treatment which will be followed throughout the ten or more volumes which will be required for completion of the undertaking. The last summary of the sort was R. Bowdler Sharpe's Hand-list of the Genera and Species of Birds, published by the British Museum, 5 volumes, 1899-1909, with a General Index issued in 1912. In reviewing this latter work, J. A. Allen (*Auk*, xxvii, 1910, pp. 93-95) pointed out that it was already, at the time he reviewed it, far behind the times, in point of sequence, in criteria for recognizing forms, and in other respects—though nevertheless of very great use to working ornithologists. Great extensions of knowledge have taken place since even 1910, and an inventory for the whole world has been more and more acutely needed of the later years.

Sharpe listed approximately 18,939 "species" (which, however, meant species plus subspecies, since he used only binomials). This, then, can be accepted as the figure for the World's known ornithis in 1909. One is prompted to wonder what the figure now is. If we take Peters' volume I as basis, which lists approximately 1830 species and subspecies, then it can be figured that the conclusion of his labors fifteen years or so hence will show somewhere near 20,000 recognized forms as the total for the world. It must be recalled here that many of the "species" listed by Sharpe have proven to have no standing at all according to the modern point of view, so that the subsequent great activity in naming new forms must be discounted in making estimate of ultimate totals.

Giving attention now to the Peters volume: The phylogenetic sequence followed is thoroughly modern, exactly as in the new A. O. U. Check-list insofar as it goes—which is through the Falconiformes. This circumstance, of close concordance in arrangement in the two lists, is superlatively helpful to the student, enabling him to use both lists, one supplementing the other, in general systematic and museum work. Peters deals with modern birds only; no fossil species are listed, though the names of fossil orders and families are included in their proper places so as to complete the phylogenetic picture. Incidentally, a novel definition for "fossil" is offered (p. vii): "Any bird is considered as belonging among the fossils if it is not known from at least a fragment of the skin and feathers."

As contrasting with the A. O. U. Check-list, Peters omits any and all vernacular names. This, I believe, will detract seriously from the general usefulness of his list. There is little or no excuse on the basis of economy of space, since at least half of the name-line in most cases is blank! Advanced students in any field must have regard for their juniors; it is the plain duty of the former to employ aids, wherever feasible, toward the saving of time and mental energy on the part of future and younger students. Then Peters uses the spelling "Linne" instead of Linnaeus, this constituting

<sup>2</sup> Check-list | of Birds of the World | Volume I | by | James Lee Peters | Assistant Curator of Birds, Museum of Comparative Zoology | at Harvard College | [design] | Cambridge | Harvard University Press | 1931 [our copy received October 14, 1931]; 8vo (148 x 228 mm.), pp. xviii+345.

an exception to most current usage including that in the A. O. U. list. A Swede ought to know about Swedish history, so I referred to Erik Nordenskiöld's "The History of Biology" (Knopf, New York, 1929) finding there (on pp. 203ff) that Linnaeus (this the original, avowed spelling) was not ennobled (to *von Linné*) until well along in his career. Furthermore, on the title and introductory pages of the tenth edition of the *Systema Naturae* (1758), whence most of our Linnaean names date, there is no use anywhere that I can find of the spelling "Linné". Peters appears to have made the wrong choice in this matter.

On the other hand, in the matter of preserving precisely the original spelling, even to the double "i" where originally so spelt, Peters adheres without deviation to the rules of the International Code of Zoological Nomenclature. This is a wholly defensible course—which cannot be said of the A. O. U. list. The ranges of species in the Peters list are defined succinctly as of *normal* occurrence; casual records are not taken into account. This means that there is no fogging of the explicit distributional status of a species such as the student usually seeks to know. Commendable conservatism is shown in the recognition of genera; as an example, *Accipiter* is used for the Goshawk as well as the Sharp-shinned and Cooper hawks. *Astur* is not employed—as it is in the A. O. U. list. Also the Mallards, Teals and Pintails are all included under the one genus *Anas*.

There is a, to me, less fortunate tendency toward uniting New and Old World holarctic series of forms, all as subspecies within single species; as examples, the Scoters, Goshawks and Marsh Hawks. In some of these cases, intergradation may be well established, and therefore Peters' action right; but I doubt the propriety of putting the European and Green-winged teals as subspecies under one species as Peters does; and there are other equally dubious cases. The A. O. U. rulings in this regard seem most frequently correct. There are other sorts of difference between Peters' and the A. O. U. list—particular cases involving specific versus subspecific status or the employment of different names for the same form. In most of these cases, the pro's and con's have been thrashed out in preceding literature; it will suffice here merely to cite some of them.

Peters uses the name *Haliaeetus leucocephalus washingtoniensis* (Audubon), based on a young bird from Kentucky, for the Northern Bald Eagle. The A. O. U. uses the name *H. l. alascanus* C. H. Townsend, based on an adult bird from Unalaska, for the same subspecies. After reviewing this case, I concur with the A. O. U. For the Red-tailed Hawks, Peters uses the name *jamaicensis* Gmelin (1788) as the middle element in the series of names, rather than *borealis* Gmelin (1788, one inch farther down the same page!); thus, *Buteo jamaicensis kriderii* instead of *Buteo borealis kriderii*, for the Krider Hawk. But the brief description Gmelin gives under the name *jamaicensis* is so vague, applicable perhaps to a young bird, while that under *borealis* is unmistakable, that again we concur with the A. O. U. ruling in favor of the use of the latter, as in literature generally heretofore. Incidentally, Peters does not recognize a western race of Red-tail at all, the name *calurus* being synonymized under *borealis*. Thus he calls the Red-tails of the whole breadth of the continent from Massachusetts to California, *Buteo jamaicensis borealis*. I would like to see a full revisionary study of the Red-tails (which has not been published upon, if such has been made) in support of this ruling, before accepting it. Some other cases which raise doubt are to be seen in Peters' treatment of the Sharp-shinned Hawks, the Scaup Ducks, the Brant, and the Snow Geese.

The Peters list includes a few forms, that I happen to know something about, whose tenability I doubt. *Buteo* "*jamaicensis*" *alascensis* Grinnell does not appear to



be separable from *calurus*. *Melanitta "fusca" dixonii* (W. S. Brooks) has not been clearly demonstrated as a good form. *Ardea herodias oligista* Oberholser was quite certainly based on an individual variant of *A. h. hyperonca*; anyway, there is no separate race of Great Blue Heron "resident" on the Santa Barbara Islands, as Peters indicates (see the clear statement of this case by A. B. Howell, Pac. Coast Avif., No. 12, 1917, pp. 43-44). And there are many other groups in which thorough, critical revision is needed, before the treatment, in Peters or in the A. O. U. list, can be thought of as approaching finality.

A very great value in periodic summations of the sort here under review lies in the stimulation they furnish for renewed attention to systematic groups whose arrangement or constitution come to appear unsatisfactory to students with increasing material and knowledge at their command. The value of the laborious services of such men as Sharpe, Stone and Peters cannot be justly appreciated save in the perspective which can develop only with a lengthening course of systematic history in view. Incidentally, these reflections, with other considerations, have led the present reviewer to wonder whether leadership in systematic zoology be not passing from the Old World to America.

*Museum of Vertebrate Zoology, University of California, December 13, 1931.*