certain species of ducks the females have a spring moult of the down as well as of other parts of the plumage and that not only is the winter down renewed but in addition there grows what she terms a "nest down," which is longer, coarser and of a different color.

Yours faithfully,

H. F. WITHERBY.

326 High Holborn, London, W. C.

EDITOR OF 'THE AUK':

In 'The Auk' (XXXIV, pp. 206-207) is an interesting note by Mr. Bowles, calling attention to the differently coloured down in winter and summer in a number of Ducks. Apparently the author has not seen Miss Jackson's article in 'British Birds' (IX, p. 35, 1915) where she describes the down-moult of certain Ducks. It was first discovered by me in the Long-tailed Duck (Clangula hyemalis), where it is very striking, the down being whitish in winter and moulting into an almost black one in the spring. While studying Ducks I had already noticed that the description of nestdown did not agree with what I found on female ducks, but I did not grasp the reason, until I noticed the change in the Long-tailed Duck or "Old Squaw". Miss Jackson soon after, while working in the Tring Museum, discovered, to use her own words (l. c.) "that the females of the surfacefeeding Ducks and those of the genus Nyroca also acquired a special down just before the breeding season. Female Tadorna tadorna also have a down-moult in spring. This down is evidently used for embedding the eggs during incubation, and has been designated 'nest-down' by Dr. Hartert, a term I propose to use in describing it." I believe that all palæarctic Ducks, or at least the majority of them, have a down-moult in spring, but in some species the colour is the same, though the nest-down is often longer and coarser than the ordinary down. Where there is no material difference in colour, the down-moult is difficult to observe in skins, but of course very easily seen when one skins a fresh bird. I may add that Miss Jackson's article contains also valuable details about the springmoult in adult females of several British Ducks, which must also take place in American species.

ERNST HARTERT.

Tring, May 15, 1916.

Subspecific Designations.1

EDITOR OF 'THE AUK':

The exception taken in 'Bird-Lore' to the current practice of subspeci-

¹ Published by permission of the Deputy Minister of Mines, Canada.

fically naming birds by geographic probability is most timely. How can any one name the exact race on a sight record or, if specimens are taken, when they have not been compared with an authentic series and how useful are determinations when so made? They add nothing to our knowledge. If they agree with current conceptions they only reiterate previous statements without substantiating them; if they disagree they are futile unless supported by evidence. Further, if a writer knows the geographical probabilities, can he not assume that the same evidence is accessible to a reader? At best, the practice (the common one) is useless and too often fixes misconceptions instead of correcting them.

Then, what is the necessity of subspecifically naming everything seen, heard or written about regardless of the context? Is not the specific name close enough in the majority of cases? In ordinary practice we do not deem it always necessary to speak of a horse or dog by the name of its technical strain or race. We do not often find it necessary to speak of Clydesdale Horses, Guernsey Cattle or Blue Belton Setters, when we refer to horses, cows or dogs. When engaged in highly critical work or in special lines of investigation, where exact relationship is more or less the essence of the subject, we can use the most exact technical terminology, but how often is such refinement necessary, and if necessary is it safe to trust to mere unverified probability?

In cases cited by "J. D.", Evening Grosbeak, Coccothraustes vespertina or Hudsonian Chickadee, Penthestes hudsonicus are just as satisfactory as Eastern Evening Grosbeak or Acadian Chickadee. They tell just as much as the others, for one ornithologist should be as capable of determining the probabilities of geographic distribution as another. If a writer knows certainly the individual identity, or wishes to call attention to the subspecific distinction as such, he can be as definite as his knowledge permits or the case demands, but it smacks of pedantry to be needlessly precise and is often misleading.

Nowadays when ornithologists are splitting so finely and keen authorities disagree so widely not only upon what forms to recognize but also upon the applications of individual identity, the personal authority of a determination is quite as necessary as the identity itself. The fact is that the subspecies is a highly technical subdivision and of very little interest or use to the non-technical student who can usually avoid it with safety to himself and benefit to science. Many of the abuses of modern feather-splitting would be obviated if less importance was placed upon the subspecies. However true these forms may be as matters of fact they are the smallest and least important of zoölogical divisions. We have studied these slight differences so closely and with such concentration that in many minds these minor racial differences have eclipsed the major specific likenesses. If we altogether ignored subspecies except where their use was found neces-

¹ Review of Ornithological Magazines,— 'The Auk', by J. D. Bird-lore, Mar.,-Apr., Vol. XIX, 1917, p. 97.

sary, and then only after verification, a great number of imaginary, useless or very slight distinctions would automatically sink into practical obscurity while those whose value was proved by their continued use would be confirmed.

It is unfortunate that the A. O. U. Committee has not seen fit to give us in the Check-List vernacular specific names. Each subspecies, no matter how slightly defined, has been given a distinctive popular name, but at present we have no means of speaking vernacularly of the more much important group, the species. Instead, in many cases, the proper specific name has been applied to one of the subordinate races, usually the type form, thus restricting to one race the term and popular concept that properly belongs to the whole species. A Shetland pony is as much a Horse as is a Clydesdale, and a dog is a Dog whether setter or hound. So an evening grosbeak is still an Evening Grosbeak whether it belongs to the western or the eastern group, and a robin is an American Robin whether it is P. m. migratorius or P. m. propinguus. The current practice of the A. O. U. has fostered the feeling that when a subspecies is defined the type form remains the species while the new form is subordinate to it. In fact our concepts, or at least the popular expression of them, have not kept pace with the growth of the trinomial system. The species does remain intact in spite of the fact that we discern minor groupings within it and so should be presented in our nomenclature. All this has been provided for in the authorized latin nomenclature for the scientific student who should already be possessed of correct principles, but the general public which draws most of its inspiration and forms a large part of its fundamental concepts from the popular system of English names is given a misleading guide. The vernacular system was designed primarily for the use of the general non-scientific public and not for the scientist who has only adopted it informally as a matter of colloquial convenience. Why not adapt it to its original purpose and as the work of scientific minds make it inculcate scientific truths rather than misstatements.

Considering all things, the unwisdom of encouraging careless subspecific designation, the general public's lack of legitimate interest in a purely technical subject, and the convenience of all concerned, why not cut the Gordian knot cleanly and while restoring the logical names to the species discard subspecific vernacular names altogether? The very fact of having no convenient vernacular handle for merely technical distinctions would automatically instil caution in the inexpert by eliminating the familiarity that breeds contempt, without hampering the specialist. The sooner the species is given a popular name, the facts of subspecific relationship presented to the public with scientific accuracy and perspective and the indiscriminate use of the subspecies by the inexpert discouraged, the sooner will some of the difficulties of the present practice disappear.

P. A. TAVERNER.

[The first paragraphs of Mr. Taverner's communication, and comments in the current numbers of some of our ornithological journals bring up a matter of very great moment to editors, i. e. What to do with sight records and how to be consistent in the practice of any plan that may be adopted? A few remarks on this subject would seem to be in order although they do not cover the main point of Mr. Taverner's letter.

'The Auk' has questioned the accuracy of certain 'sight' records published elsewhere and has in turn been criticized for certain 'sight' records that have appeared in its own columns. 'J. D.' writing in the review pages of 'Bird-Lore' criticizes the publication of 'sight' records -- more particularly of races only slightly differentiated from others, yet we rarely find any but 'sight' records in 'Bird-Lore' and the last number contains a positive 'sight' identification of Dendroica dominica dominica although it is questionable whether this race can be positively distinguished in the field from D. d. 'The Condor' recently contained a severe editorial criticism of the publication of 'sight' records by incompetent observers and scored authors who have not posted themselves on the previous literature of their subject, yet in the same issue appeared the first record of a certain bird for the State of Texas, a 'sight' record, casually published, without editorial comment by an author whose name does not appear in any of the indices to 'The Condor' as a previous contributor to ornithological literature. Certain minor ornithological journals and independent publications of 'bird clubs' consider that all is grist that comes to their mill and publish any records that their members may hand in. These statements are made not in a spirit of criticism but simply to show the difficulty of consistency and also the nature of the condition that we face.

Now as to the best plan to adopt in regard to 'sight' records. We may, it would seem, divide such records into two categories: (1) Races or species which so closely resemble other forms as to render positive identification impossible without having a specimen in hand. (2) Species which are rare or unusual in the locality at which the observation is made and with which the observer has perhaps had no previous experience. In cases of the first category the extreme attitude would be to publish no records except those based upon specimens actually collected. This would of course be out of the question. Almost all of our data on bird migration, bird habits, etc. are based upon 'sight' records and must of necessity be so. As a matter of fact we are willing to accept practically all sight records for everyday birds and only balk when it comes to records of rare or unusual species. There is just as much chance of one of the Juncos that we record as J. hyemalis hyemalis belonging to one of the western races as there is of the Evening Grosbeak of the past winter belonging to the western instead of the eastern form, the possibility to which 'J. D.' calls attention. But we fail to see where we should profit by refusing to record observations on eastern Juncos under the caption Junco hyemalis hyemalis. Any compiler of a state report or general work where subspecies are used will undoubtedly quote our observations under that heading because the evidence of specimens actually collected is so overwhelmingly in favor of the accuracy of this disposal of them. Therefore why should not the original observer make the same assumption? If we adopt Mr. Taverner's plan for all sight records of trinomially named birds we see no possible alternative but to abandon the use of subspecies entirely. Another point to be considered in this connection is the case of species which are very close to one another such as the Black-capped and Carolina Chickadees; Olivebacked and Gray-cheeked Thrushes; Louisiana and Northern Water-Thrushes; Western and Semipalmated Sandpipers, Common and Longbilled Dowitchers, etc. Some observers, under certain conditions, can distinguish most of these in life, but there are others who surely cannot. How can Mr. Taverner's plan be applied to these? Trinomials we may remind him do not represent degrees of difference but the fact of intergradation, and there are certain subspecies which can be separated far more easily than can some species. If subspecies are abandoned as such many of them will have to be elevated to specific rank, as all of them are in Sharpe's 'Hand List' and certain other works.

'J. D.'s criticism points out no definite policy and we are not clear whether he has Mr. Taverner's plan in mind or whether he would reject 'sight' records of this kind entirely. We can hardly suppose that he takes the latter view since we think that everyone will admit that we gain something by recording the fact that Evening Grosbeaks of some kind visited us last winter even though we cannot say just which race each flock belonged to.

Now we are not rejecting Mr. Taverner's plan entirely. We think it is an excellent one in cases where a reasonable doubt exists as to the identity of the subspecies or in intermediate territory where two subspecies merge one into the other. In fact the plan has already been used in 'The Auk' but unfortunately it has caused misunderstanding, for the following reason. It often happens either from preference or accident, that the binomial form (Junco hyemalis, for instance) is used to indicate the eastern race of Junco instead of the more proper trinomial form (J. hyemalis hyemalis), as was the general custom prior to the last A. O. U. 'Check-List'. It is thus not clear without further explanation whether the binomial name refers to the eastern race alone, or to this whole group of Juncos without indication of any individual race, as Mr. Taverner would use it. It would therefore seem clearer to adopt the plan used by Mr. Mousley (Auk, 1917, p. 215) in recording a brown-headed Chickadee, i. e. "Penthestes hudsonicus subsp.?" Mr. N. C. Brown on the same page adopts Mr. Taverner's plan and writes "Penthestes hudsonicus," but has to add a statement that the form of the subspecies was not determined, in order to make it clear that he was not recording the true P. hudsonicus hudsonicus. In the case of 'sight' records of closely related species Mr. Taverner has no suggestion and we can apparently only take the word of the observer if he be reasonably reliable, although even in the case of reliable persons there must always be a certain percentage of error in such cases. Long experience in compiling migration records leads us to place far less reliance upon the average dates computed from sight records for the smaller thrushes and members of the genus Empidonax, than for any other species, and we feel that any general statement of the time of occurrence of these and a few other species based on 'sight' records, when we know that the closely allied species was also present, should be accompanied by another based solely upon such collected specimens as may be available.

So much for the class of cases discussed by 'J. D.' and Mr. Taverner. Now as to the second category we feel that there is no escape for the editor and that he must simply use his best judgment as to what to publish and what to reject. No definite rules can be set up for him to follow. Several factors enter into the question; the reliability of the observer; the circumstances of the observation; and the possibility of identification under the conditions given. A record of a rare warbler, for instance, is received. If we know nothing of the observer we make inquiries, and if the record is lacking in circumstantial details, we ask the observer for a more detailed statement. If all these prove satisfactory, if there was adequate time for a full study of the bird at close quarters with glasses, and characteristic markings were noted on the spot, and identification verified later from books or specimens, then the record seems worthy of acceptance provided that the editor feels that he, as an average observer, could identify the bird under the same circumstances.

In the case of obscurely colored birds or those which have no prominent distinctive markings, and which cannot often be closely approached, like shore birds, gulls and other water birds; or warblers in autumnal plumage, we should probably reject all 'sight' records of rare or unusual species unless made under very exceptional circumstances. Rejections such as those referred to do not in any way reflect upon the accuracy or good faith of the observer. They are simply cases that are physically impossible of definite determination without resort to the gun.

In regard to obvious errors of observation, Dr. Frank M. Chapman, in a discussion of this question ¹ which can be read with profit in this connection, says: "it is difficult, in fact sometimes impossible, to convince the observer of his error." We have found that by placing before him unnamed skins of the bird the observer thought he saw, and of other allied species, at about the distance at which the live birds were seen, that he is made to realize more clearly the difficulties which enter into the case.

As we said before we cannot govern publication. All sorts of sight records, good, bad and indifferent are being published and will be published in increasing numbers. We face a condition not a theory, and the compiler of general works and faunal lists must decide for himself what to accept and what to reject, but if editors will try to live up as closely as possible to some such plan as above outlined they cannot fail to assist him materially in his work. Mr. Taverner's suggestion to provide vernacular names for the specific groups as the 'Check-List' has both advantages and disadvantages. The current use of "Brown-headed Chickadee" for the un-

¹ Bird-Lore, 1902, p. 166.

determined subspecies of the Hudsonian group is evidence of the need of such a term under such conditions. But the task of making the average amateur understand the use of the more or less abstract specific designation when each "variety" has its own latin name is not an easy one. He wishes to use a name for a concrete thing not for a group, so that unless we abandon subspecies entirely we doubt the practicability of using specific vernacular names.—WITMER STONE.]

NOTES AND NEWS.

Dr. Edward Pierson Ramsay, of Sydney, Australia, a Corresponding Fellow of the American Ornithologists' Union since 1884, died at his home in Truro, near Sydney, December 16, 1916, at the age of 74. He was born at Dobroyde House near Sydney in 1842. He was a Fellow of the Royal Society, a Fellow of the Linnæan Society, an honorary member of the Field Naturalists' Club of Victoria and for twenty years, from 1874 to 1895, curator of the Australian Museum in Sydney. He was one of the leading Australian ornithologists of his time and was also interested in botany and entomology.

His first paper on birds entitled 'On the Didunculus strigirostris, or Tooth-billed Pigeon from Upolo," appeared in the 'Ibis' in 1864 and during the next 30 years he published many papers on zoölogy. The list of his publications in the 'Royal Society's Catalogue of Scientific Papers' numbers 120 titles and most of them relate to birds. His earlier contributions appeared in the 'Ibis' and the 'Proceedings of the Zoological Society of London,' but after 1877 he published most of his papers in the 'Proceedings of the Linnæan Society of New South Wales' and in the 'Records of the Australian Museum.' One of his best known publications on ornithology was his 'Tabular List of all Australian Birds at present known' issued in two editions in 1878 and 1888. He was also author of 'Notes on Food Fishes and Edible Mollusca of New South Wales,' 1883, and of a number of short papers on mammals and fishes.

In commemoration of his work a genus, *Ramsayornis* Mathews, 1912, and at least 10 species of birds and two of mammals have been named in his honor.— T. S. P.

NEWELL A. Eddy became an Associate Member of the American Ornithologists' Union in 1885, and retained his membership for a long series of years.

He died at his home in Bay City, Michigan, on February 28, 1917. Mr. Eddy was born in Bangor, Maine, May 20, 1856, being the son of