owners into a single "Messenger-Dille Collection." This combined cabinet contains choicely selected sets of 682 species and subspecies of North American birds. It is thus one of the largest collections in the United States, and not only this, but the component sets have been selected with extreme care to secure perfectly prepared and typical representations of each species.

Mr. John E. Thayer, owner of the Thayer Museum at Lancaster, Massachusetts, has sent an expedition to Wrangell Island, which lies in the Arctic Ocean northwest of Alaska. The party will winter there, and thus be on the ground at the opening of the spring of 1911. The special object of this quest is the discovery of the eggs of the rare Spoon-billed Sandpiper. Mr. Thayer will also have a man in the delta of the Mackenzie River at the break of next spring, on the look-out for the breeding places of certain water birds.

Mr. C. W. Beebe, of the New York Zoological Park, is now in the far East studying fesants for a projected monograf of that group. He writes us from the Himalayas under date of May 27 that his party had been camping for a month above tree level as close to Mt. Everest as possible, making studies of *Ithagenes* and *Lophophorus*. It is found that the correlation of dry, damp and humid climates with pale, dark and irridescent plumages is very prominent among the fesants, as with many other birds. Mr. and Mrs. Beebe will return home late the coming autum by the way of California.

We have learned that the MS of Part V of Ridgway's Birds of North and Middle America is approaching completion. Mr. Ridgway has finisht with the hummingbirds, and is now at work on the trogons.

The American Bird Banding Association has been organized in New York City, with Dr. Leon J. Cole as President. The object of this society is "the banding of wild birds and the recording of accurate data on their movements." The metal band attacht to a bird's leg, bears a serial number and the inscription "Notify the Auk, New York." Record is kept of the number of each band used, and should the bird ever fall into anyone's hands, it is expected that the fact be reported together with the locality of capture. It is believed that important data bearing on the study of bird migration will thus be obtained. It is highly desirable that this work be carried on at many widely separated points. Persons interested and desiring further information or wishing to join the Association, should address the Secretary, Mr. C. J. Pennock, Kennett Square, Pa.

Mr. Malcolm P. Anderson writes us from Han-chung-fu, Shensi, China, under date of February 13, 1910, that his party had crost the Pe-ling, or backbone of China, twice. "This is no great feat," he says, "but in crossing the mountains we have found several excellent collecting grounds and discovered a considerable number of new mammals. We are pioneers in the zoological line in the parts we are visiting. One of the best collecting grounds I have seen in China is around a mountain called Tai-pei-san, 13,400 feet elevation, in western Shensi. We found this mountain half by accident, as reports of its whereabouts and the way to reach it were very indefinite. Once found, we campt at its base and made many trips up its slopes. Hunting was difficult in places, owing to the extremely slippery sides of the mountain. After arming our straw sandals with huge spikes to aid us in clinging to the snow we finally managed to secure three fine specimens of the 'goat-ox'. Besides this strange beast we got specimens of deer, wild boar, the 'goat-antelope', and a ripping collection of the smaller things." It will be remembered that Mr. Anderson, with two English assistants, was sent out by the British Museum a year or more ago, for the purpose of securing mammals in the interior of China. This is known as the "Bedford Expedition." Mr. Anderson expects to return to his home in California the coming winter.

PUBLICATIONS REVIEWED

THE DISSEMINATION OF JUNIPERS BY BIRDS. By FRANK J. PHILLIPS. Reprint from Forestry Quarterly, vol. VII, no. 1, pp. 1-16; April, 1910.

Definite information on so-called matters of common knowledge is often much needed, but often also vainly sought. In this paper Philips fills a long-felt want with his excellent demonstration of the importance of birds in the distribution of seeds, a topic burdened with much general but very little specific knowledge. He selects junipers as favorable to the study of avian dissemination, since the fruit is rather conspicuous and hangs on the tree a long time. Analysis shows juniper berries to have a high nutritive value, and observation and records from various sources prove that large quantities of them are eaten by birds. Mammals are of slight importance in spreading the seed.

In dense natural stands of juniper, birds are said to be responsible for from 60 to 90 percent of the total distribution, and in various localities where junipers are scattered it is shown that the entire reproduction is due to birds. Those who have seen the fence rows of the southeastern states markt with lines of red cedars and the barren, stony fields of certain eastern states dotted with them, will not question 100 percent bird dissemination of juniper.

Cedar birds and robins are indicated as the most important juniper distributors. A few names may be added to the list Phillips gives, of birds the Biological Survey has found to eat juniper berries. They are: for *Juniperus*,

species undetermined, Mockingbird (*Mimus polyglottos*), Red-breasted Nuthatch (*Sitta canadensis*), and Varied Thrush (*Ixoreus naevius*), and for *Juniperus virginiana*, Fish Crow (*Corvus ossifragus*), Grackle (*Quiscalus quiscula*), Song Sparrow (*Melospiza melodia*) and Redbird (*Cardinalis cardinalis*).

The author's principal conclusions are that: "Birds are reponsible for most of the dissemination of the junipers," and "General observations seem to point to the dense southern stands as a center for the dissemination along the lines of bird migration."—W. L. M.

MCGREGOR'S "MANUAL OF PHILIPPINE BIRDS."[1]—This work admirably meets the heretofore keenly felt need for a single volume of convenient size, containing descriptions of Philippine birds. In fact the only previous reference work covering the region is the bulky Catalogue of Birds in the British Museum, not only the size of which but its rarity precluding general use.

McGregor's Manual strikes us as having been planned with great care to secure essentials and leave out non-essentials; and the plan is followed consistently thruout. The scientific name, an English name, and such native names as seem to be commonly used with some degree of accuracy are given for each species. A well selected synonymy provides references to the important literature pertaining to each species. Detailed distribution, by islands, is given in each case. Concise descriptions, including metric measurements are given for each and where there are plumage variations, these are separately described in detail. Brief characterizations of the genera and larger groups, together with simple but direct keys, render identification a less formidable task to the reader unfamiliar with oriental birds than would otherwise be the case.

The system of classification followed by McGregor is that set forth in Sharpe's Hand-List. The reason advanced for adopting the system is the adequate one, that it is "both convenient and well known." It is a pity that American ornithologists cannot allow themselves to fall into line with the rest of the world, to the end that uniformity of arrangement may be attained. There will always be differences of opinion over the relative positions of certain groups; but such minor points might well be conceded in the faunistic treatment of birds, "for the sake of convenience and uniformity."

We are interested to observe that McGregor, an independent, systematic student of the bird-life of a large archipelago where there are many closely allied forms in a group and where the problems of speciation are manifold, thruout his book wholly ignores the *trinomial* designation. And this too in view of the historical fact that McGregor used to be an ardent trinomialist, describing "subspecies" galore! Everything nameable at all is treated in his new book as a binomial, just as does Sharpe and many other English authorities always referred to by Americans in this connection as "conservatives." Do we not see the pendulum beginning to swing back again from trinomialism towards the consistent and non-ambiguous binomial?

Perhaps the dogged adherent to the *trinomial* will before long be referred to as the "old-fashioned conservative!"

The present reviewer is unable in the rather brief time allotted to the perusal of McGregor's Manual, to find anything in it not worthy of commendation in a work of this sort. Of course, if the reviewer were familiar with the Philippine ornis, it is quite probable that he might differ with the author in minor details of characterization, or range. But he is not; and in common with a host of other students will always turn to the Manual when information within its scope is desired, with confidence that it is in its entirety unimpeachable as an authority in its field.—J. G.

THE VERTEBRATE FAUNA OF CHESHIRE AND LIVERPOOL BAY. Edited by T. A. COWARD, F. Z. S Volume I. The Mammals and Birds of Cheshire. By T. A. Coward and C. Oldham, F. Z. S., M. B. O. U. With illustrations from photographs by Thomas Baddeley. Witherby & Co., London, 1910; 8 vo., pp. I-XXXII + 1-472. Price 26 shillings net.

The two volumes of this work cover the mammals, birds, reptiles, and batrachians of the region, about as much space being devoted to the birds as to all the other groups combined. This is partly due to the fact that there are many more species of birds in the region than of the other classes of animals, and partly because the birds' habits and life histories are so much better known as to warrant treatment in greater detail.

In the introduction some space is given to a quotation of the local regulations for the protection of wild birds and a discussion of their effectiveness, the conclusion being that on the whole the laws are futile and inadequate, tho it is admitted that a few species have noticeably increast in numbers thru their enforcement.

A discussion of the migratory movemeuts of the birds follows, in which they are divided into groups—summer residents, winter residents, birds of passage, partial migrants, irregular migrants, and casual wanderers. In the body of the work two hundred and thirty-one species are treated, as having been satisfacto-

1 A Manual | of | Philippine Birds | by | Richard C. McGregor | Part I | Galliformes to Eurylaemiformes | [Seal] | Manila | Bureau of Printing | 1909 8 vo., pp. I-X, 1-412. Part II | Passeriformes (otherwise same title page), pp. I-XVI, 413-769. Part I was issued April 15, 1909, and Part II, January 31, 1910.