

**REVIEWS.**

*The Art of Bird-Watching.* By E. M. Nicholson. (Witherby.)  
10s. 6d. net. Illustrated.

THIS is a practical and stimulating book which can strongly be recommended to the attention of bird-watchers. It is something more than

continued....

that, for it raises fundamental questions of aim and methods. To these I shall return. Here let me say that on the practical side the book will make a special appeal to those interested in the biology of field work; it gives good detailed accounts of bird census work, ringing and trapping, and of the study of the inter-relations of birds, other animals and plants, now familiar as ecology. Generally useful are the hints on field equipment, method, and subjects for study.

From the wide range of matters dealt with it is possible here to select only a few for adequate comment. Among these I include the subject of the bird-watcher's chief implement, his field-glass. It would be an interesting and lively experience to hear the comments of a dozen representative bird-watchers and opticians on Mr. Nicholson's views (p. 21). He condemns outright the non-prismatic pattern, chiefly on the ground that one sees through it two intersecting circles instead of one. But that is only the case when the instrument has no bending bar. If the non-prismatic glass has its defects, it has one merit: good illumination and, according to an expert optician, it distorts an approaching object less than the prismatic. Still, most will agree with Mr. Nicholson that the best all-round glass is a prismatic 6 $\times$  or 8 $\times$ . After using (and losing) a Goerz 8 $\times$  and a Ross 10 $\times$ , both prismatic, I find myself with a 5 $\times$  non-prismatic, with bending bar, for tent work, and a 12 $\times$  prismatic for long work. The first has served its purpose well. With the second I find it sometimes difficult to "pick up". But, whatever the glass, one has to sacrifice something. Hence vast scope for differences of opinion. I know of one man who professes to prefer a telescope to any form of binocular.

Mr. Nicholson selects certain subjects for detailed treatment. Among these is the difficult one of bird utterances (pp. 60-70). He gives an excellent study syllabus, and raises the question of the method of recording, which is fundamental. For indicating length, stress and pitch he recommends the signs invented by Mr. Rowan. To the reader they would be easier to follow if each sign were attached closely to the corresponding syllable instead of being suspended at an appreciable distance above the word. In the form given they also create difficulties for the printer. Mr. Nicholson makes no suggestion as to how the specific quality of the sounds uttered by birds is to be symbolized. At present we depend on similes and our own notation. From a scientific point of view that is inadequate, for a bird is physically incapable of uttering certain of our sounds, e.g., the labial P, which we nevertheless use in recording its sounds; and it utters, or at least seems to me to utter, sounds for which we have no equivalent. The first condition of a satisfactory treatment of bird utterance is a careful phonetic study, and then the choice of a set of phonetic symbols, one symbol for each distinct sound, a new symbol for sounds purely avian. That could be done only by a capable field-naturalist who had gone through the usual phonetic course prescribed by a University.

I would add to Mr. Nicholson's study syllabus the recording of the movements of the mandibles in utterance. I have found them useful in determining a sound not within hearing, and sometimes also in establishing the specific quality of a sound group when modified by change of one sound element or by stuttering in excitement or by extreme change of pitch. Such records would help also to check a tendency to credit birds with more notes than they actually possess.

I turn to the thorny problem of bird mentality. Mr. Nicholson very properly points out that the bird-watcher "should take the trouble

to gain something like a true idea of bird-mind, since the only alternative is to use a false one" (p. 180). What he says further is equally to the point, especially with respect to the law of economy of hypothesis, which here means that bird behaviour should be interpreted in terms of the lowest grade of mentality that will fit the facts. That follows from the very definition of a cause as the least antecedent that will account for the given result. But there is yet another question that might be raised, still more fundamental. It is whether the field-naturalist *qua* field-naturalist need concern himself, or is well-advised to concern himself, with the direct study of mind at all. That it is possible to study animal behaviour without reference to mind, and in terms only of physical stimulus and reaction, no one will deny who admits the continuity of physical process from sense organ to effector (muscle or gland). Granted, then, that the field-worker *qua* field-worker can avoid the mental reference in his work, should he do so? It is no part of my business as reviewer to discuss this question on its own merits. But something may be said of it as part of the general question of the scope of the bird-watcher's work raised by Mr. Nicholson.

The specific job of the field-worker is clearly the scientific study of the physical reactions of animals under natural conditions. That is what he mainly does and is alone in doing. To this he can and should add the record of perceptible external physical stimuli. That leaves the account still incomplete, even on the physical side. There remains, firstly, the internal physical stimuli and the physical processes in the nervous tracts or conductors. The study of these internal processes the field-worker *qua* field-worker wisely leaves to the physiologist, who, working by methods of his own, thus completes the behaviour account on the physical side. There remains, secondly, the mental account. Now nothing can be known of the sub-human mind except by inference from physical behaviour or physical structure. This inference is the peculiar job of the psychologist working with a technique totally different from that of the field-worker, a technique that involves special training and knowledge. This being so, it is a strange reflection upon the status of psychology that, whereas the field-worker would not dream of pronouncing upon the internal physical processes which he cannot perceive and therefore leaves to the physiologist, he has usually no hesitation in pronouncing boldly and abundantly on those internal mental processes which equally he cannot perceive. Field-work, physiology, psychology, each has its own technique and demands a special training. Not only is the field-worker not equipped *qua* field-worker for psychological inference, but attempts on his part to explain the physical by the mental have often the unfortunate effect of leaving him content not to pursue the external physical stimulus. Hence his own due account is left incomplete on the physical side. What psychology has suffered from most is incomplete physical data. I may add that it took me personally some years to decide to cut the mental factor out of my field-work. Once the decision made, there came a sense of release. One was left with observable facts and was quit of problems for which, under the given conditions, there could be no solution.

What is said in the preceding paragraph is in nowise inconsistent with Mr. Nicholson's advice to bird-watchers to make themselves familiar with the problems and results of modern comparative psychology. There is at present a regrettable gap between the work of the

psychologist and that of the field-worker. The latter knows little of the vast amount of valuable experimental work done by the former, and the psychologist seems unaware of the considerable output of first-class observational field-work. It is to be hoped that one effect of the creation of that "Society of Bird-Watchers" that Mr. Nicholson contemplates will be the bridging of the gap. Whether the bird-watcher is contributing facts to biology, in the field of distribution, or to psychology, in the vaster field of behaviour, one of the conditions of his efficiency is contact with workers in other parts of his field.

F. B. KIRKMAN.

*A Bird-Painter's Sketch Book.* Written and illustrated by Philip Rickman. (Eyre & Spottiswoode.) 30s. net.

THOSE who have visited Mr. Rickman's exhibitions will know that he can draw birds very well, and not only that, but that he can compose and paint a very nice picture. This volume is welcome in giving us a more intimate and varied view of his work. The delicate sketches in monochrome are especially attractive and have been very well reproduced. In some of these Mr. Rickman has caught attitude and general appearance very well, as in the Great Crested Grebes, Shovelers and Smew; in others, such as the Dunlin and the Moss Pond at Netherby, we have delightful little finished sketches, while yet in others we have detail and attitude combined, as in the studies of young Woodcock and the page devoted to Snipe. Here and there, as in the Raven and Bullfinch, there is a tendency to an unnatural smoothness, which we hope Mr. Rickman will not cultivate. Of the coloured plates, the Smeaws and Goldeneyes on the edge of the tide and the Pheasants on the plough are perhaps the best pictures, but the Scottish moss in spring with a Snipe drumming in the sky makes a strong appeal by its naturalness. That the artist can master detail is shown by the series of Pheasant feathers in colour. The text to accompany such sketches is always a difficulty, and Mr. Rickman's detailed descriptions of the species depicted, with a few, rather trivial, notes on their habits, is not, we think, the best solution that could have been devised. A more informal collection of notes on what he had seen while making his sketches, such as the curious attitude adopted by young Woodcock and the actions of the old birds which he watched pairing, might have been more appropriate and interesting. It is, however, for the sketches themselves that the book will be valued, and for these we have nothing but admiration.

*The Birds of the Air or British Birds in their Haunts.* By Allen W. Seaby. (A. & C. Black.) Illustrated. 5s. net.

THE author's pen and ink sketches distinguish this book from so many similar rather trivial accounts of birds seen in various parts of the British Islands. Most of the sketches are good, and many of them are really excellent, and most characteristic of the species depicted. These drawings are certainly generously distributed throughout the book, and it is perhaps rather ungracious to suggest that we should have appreciated a still greater proportion of space to have been so occupied. Mr. Seaby takes us from the Scilly Islands to the most northern point of the Shetlands and writes pleasantly of the birds he saw in the widely different haunts in which he sought them out. He has certainly covered a great deal of ground and gives a "snapshot" of a large number of species, but it is usually not more than a brief view before

we pass on to the next attraction. These sketches, both verbal and line, may lead a reader to begin to study birds, and this, we assume, is the object of the book, which is thus welcome.

*Nature by Night.* By Arthur R. Thompson. Illustrated. 12s. 6d. (Ivor Nicholson & Watson.)

MR. THOMPSON is an entomologist, and this has led him out at night and thus into a field of observation which has certainly been much neglected. More than half the book is devoted to mammals, and here the author seems to have met his best success both in observations and photographs, and especially with badgers. Two chapters are devoted to birds, but there is little novelty in the observations made, and except for a series of Barn-Owls in a loft the photographs are daylight ones, while those of the Eagle-Owl and White-fronted Goose appear to be from captive birds. Other chapters are devoted to reptiles, amphibians and insects.

The photographs throughout the book are excellent and very well reproduced. Those of the badgers, which are among the few taken by flashlight, are most attractive and interesting.

*The Grey Squirrel.* By A. D. Middleton. (Sidgwick & Jackson.) 4s. 6d. net. Illustrated.

MR. MIDDLETON has contributed a valuable scientific paper on the grey squirrel to the *Proceedings of the Zoological Society*, and the present work is a more popular account of our knowledge of the animal in this country. Ornithologists will be specially interested in what the author has to say about the grey squirrel's habit of eating the eggs and young of birds. Lists are given of eighteen species of birds whose eggs or young have been observed to have been taken, but Mr. Middleton states that there are no quantitative data, so that a reasoned discussion of what effect the squirrel has upon bird populations in woodland districts is impossible. He states, however, that in many such districts the grey squirrel has reached an average population of two per acre, and, quoting Mr. E. M. Nicholson's estimate that five breeding pairs of all species per acre is a heavy bird population for woodland, he concludes that it would not be a formidable task for a pair of squirrels to eat every egg five birds could lay in a season. That such a thing ever occurs is, however, not likely, as eggs and young birds appear to form only occasional items in the grey squirrel's diet, and the chief harm it does is to fruit, corn, and trees. It is interesting to note that this squirrel peels the bark from deciduous trees, whereas the red squirrel specializes on conifers. Ornithologists will probably agree that the grey squirrel is an alien animal that we can well do without, but more observations are certainly required before we can say exactly what effect it has generally on birds, and particularly in those districts where it is numerous, and at those times when vegetable food is scarce.

#### BIRDS IN LOCAL REPORTS AND TRANSACTIONS.

*Report of the Oxford Ornithological Society on the Birds of Oxfordshire, Berkshire and Buckinghamshire, 1930.*

THE activities of this Society continue to enlarge and its Reports become of increasing importance. Mr. W. B. Alexander's appointment in 1930 to carry out a three-year programme of research in economic

ornithology and to act as director and supervisor of the Society's organized activities in the field was an important step forward. With a constantly changing undergraduate membership it is most important that continuity and progress shall be maintained by active permanent officials, and Oxford is fortunate indeed to have both Mr. B. W. Tucker and Mr. W. B. Alexander.

The county reports contain much information of interest on local distribution, fluctuations in numbers, dates, and so on, of common birds, as well as notes of wider interest on rarer birds. A separate section is reserved for eight species to which special attention has been directed, and this has points of considerable value.

The following items of special interest, all of which were in 1930 except those dated 1929, may be noted: in Oxfordshire a Golden Oriole on May 1st, a Great Grey Shrike from May 3rd to 11th, several Black Redstarts (January, February, March and November), a Gadwall on November 10th, 1929, Ruffs so early as March 12th two years running, a Common Sandpiper wintering two years, and the breeding of the Tufted Duck at Eynsham Hall in 1926 and subsequently. In Berkshire a Grey Wagtail nesting near Reading for the fourth consecutive year, a Dipper seen on November 12th and a Common Scoter in August. In Buckinghamshire the chief event recorded was the nesting of the Common Sandpiper near Leighton Buzzard in 1929.

*Transactions of the Norfolk and Norwich Naturalists' Society for 1929-30.*

The President, Mr. G. H. Gurney, takes as his subject for the yearly address "The Mentality of Birds, with some notes on Sexual Selection", which is founded upon observation of birds in captivity. The report of the Committee on "Wild Bird Protection in Norfolk in 1930" is full of notes on the status of the more interesting breeding birds and references to the occurrence of rarities. Under Broadland, which refers chiefly to Hickling, the Bittern, Bearded Tit, Marsh- and Montagu's Harriers and Short-eared Owl did well during the year; on Scolt Head Island there were two nests of Roseate Terns, about five hundred pairs of Sandwich Terns and twenty-two nests of Oyster-Catchers; from Cley we have brief notes by Mr. R. M. Garnett of many birds observed during the year. Several beautiful photographs, well reproduced, adorn the Report.

*The London Naturalist for the Year 1930.*

The Ornithological section of the London Natural History Society continues to be very active. Under Records for 1930 we find grouped under counties condensed notes, very useful for reference, of birds new to previously published lists, as well as records of interest, many of the latter coming from the London reservoirs. A well drawn-up paper on "Birds of the Harrow District, 1925-1930" is contributed by Mr. T. H. Harrison, who, with his brother, certainly made very good use (from our point of view) of his time at the school. The carefully annotated list of birds includes no less than 157 species recorded by the author and his friends in six years within a radius of five miles of Harrow-on-the-Hill. A notable point brought out by Mr. Harrison is that in the period covered a definite increase has been noted in twenty-seven nesting species and a decrease in only seven. Mr. Harrison suggests as a tentative theory that this may be due to the rapid increase in houses and housing estates and a consequent concentration in remaining untouched areas—a driving inwards

rather than outwards. This appears to have forced certain species to occupy unsuitable terrain and, if Mr. Harrison's theory is correct, one can scarcely expect such an increase to be more than temporary. It is to be hoped that systematic observations bearing on this interesting question will continue to be made.

*Cardiff Naturalists' Society, Report and Transactions, Vol. LXII., 1929.*

In this Report, published in 1931, we find a paper by Messrs. G. S. Ingram and H. M. Salmon on the birds which have been observed, chiefly by the authors in the last ten years, at the Llanishen Reservoirs on the outskirts of Cardiff. A Scandinavian Lesser Black-backed Gull (*Larus f. fuscus*) is noted as identified on October 12th, 1930, while one on January 20th, 1929, has already been recorded in our pages (Vol. XXIII., p. 251). A further paper by the same authors, entitled "Ornithological Notes, 1928-9", gives details of the more interesting occurrences reported in the period.

*Report on Somerset Birds, 1930.* By Rev. F. L. Blathwayt. and B. W. Tucker.

This report, as usual, is well and carefully drawn up, and has a number of useful and interesting items. The Willow-Tit (*Parus a. kleinschmidti*) was satisfactorily identified, and can now be definitely added to the county list, though its status and distribution are still to be determined. The Crossbill (*Loxia c. curvirostra*) is definitely recorded as breeding near Wellington, the nest being found and the bird watched on to it, while in Ashton Park two birds were observed in the act of pairing and a male was seen a month later feeding a striped bird. Black-caps are reported in February; the Peregrine again nested in an inland locality; three Grey Phalaropes are recorded in addition to those already mentioned in these pages (Vol. XXIV., pp. 166 and 226); and the Tufted Duck is considered to be now well established in the county as a breeding-species. Mr. Meeson's notable discoveries of the breeding of the Garganey and Spotted Crake have already been recorded in our pages (Vol. XXIV., pp. 54 and 56).

*Report of the Cambridge Bird Club, 1930.*

Cambridge are fortunate in having a very keen band of ornithologist undergraduates now in residence. Besides general observations on birds in the county, special enquiries are being conducted on corporate lines concerning the local distribution of certain species and flight-lines and roosts. Careful observations have also been made, with very useful results, on migrant waders at the Cambridge Sewage Farm. Mr. D. L. Lack has already published in our pages two accounts of these observations (Vol. XXIV., pp. 145 and 280), but further details will be found here. We are glad to see that it is intended to issue shortly a county list, which if done in sufficient detail will be a very welcome piece of work. Data on the local status of regular residents and winter visitors are being collected with this end in view.

*Report on the Birds of Wiltshire for 1930.* Edited by the Rev. M. W. Willson.

THIS is the second year of the Reports on Wiltshire birds, as revived by Mr. Willson, who, we are glad to see, has an increased number of observers. No striking events are chronicled, but there are a number of useful distributional notes. The Dipper has been recorded to breed

in ten different localities in the two years, Peregrines frequented Salisbury Cathedral in autumn but did not breed, and an Eagle, thought to be a Golden, was seen in the north of the county in April, and another at a great height over Salisbury in June.

*Report of the Marlborough College Natural History Society for 1930.*

This contains not only the usual year's list of observations but a revised "Hand-List of Birds of the Marlborough District". This has been carefully compiled by L. G. Peirson and N. T. Walford, and contains 206 forms. The *Practical Handbook* order and nomenclature has been followed, and dates of arrival and departure of migrants, dates of laying, periods of incubation and fledging and number of broods are given in condensed form, besides an estimate of general status. Birds not now found in the district and those which have occurred less than five times are printed in small type. The limits of the district are unfortunately not given. This list thus brought up to date will prove of the greatest use.

*Eton College Natural History Society Report, 1930-1.*

The chief ornithological item in this report is a "Hand-List of the Birds of Eton" (a limit of three miles from Eton College being fixed) compiled by G. B. Blaker and J. R. W. Blathwayt. In a number of the commoner species the number of nests found is given or fairly exact facts are stated with regard to status, but in many of the scarcer birds we should have liked more precise details. The Grey Wagtail, for instance, is described as "an uncommon resident" but nothing is said of actual nests; and the Willow-Tit is "probably a common resident", but no evidence for this is given; of the Pied Flycatcher G. B. Blaker states, "seems to have nested at Eton ever since 1860. Recently it has nested in the Vice-Provost's garden, and I have several times seen a male of this species by Sheep's Bridge". The 1860 record is well known, but the rest of the statement in its present form is valueless, and should not have been made without the necessary evidence. We hope that Mr. Blaker will not delay in giving us the full facts. There are a number of other statements in the list which lack proper data or for which no authority is given, and we hope that this may be remedied in future editions.

*The Heron in Somerset—Supplement.* By B. W. Tucker.

This contains information supplementary to that in the same writer's main report published in 1929. Additional details are given of heronries formerly listed, as well as news of a small overlooked colony on Exmoor and a curious case of an isolated nest in an orchard. A separate part deals with ecological data under various headings and an excellent map of all the heronries of the county adds much to the value of this as well as of the main paper.