## ORNITHOLOGICAL LITERATURE

CHECK-LIST OF BIRDS OF THE WORLD, Vol. 7. By James Lee Peters, Museum of Comparative Zoölogy, Cambridge, Mass., 1951:  $6 \times 9$  in., x + 319 pp. Price \$6.00; no discount.

Apart from the small Old World family Eurylaimidae (the broadbills), of which 8 genera and 14 species are recognized, the seventh volume of Peters' monumental check-list of the birds of the world, the publication of which has now been taken over by the Museum of Comparative Zoölogy, is devoted entirely to neotropical families of the superfamily Furnarioidea, including the wood-hewers (Dendrocolaptidae), ovenbirds (Furnariidae), ant-thrushes (Formicariidae), ant-pipits (Conopophagidae) and tapaculos (Rhinocryptidae). No species in this group has been recorded from North America north of México.

Since these New World families were monographed by the late eminent ornithologist Dr. C. E. Hellmayr less than 30 years ago, a comparison of the two works is pertinent. Important changes include the elimination of subfamilies, a decrease in the number of species (527 vs. 540), and a great increase in the number of recognized forms (1581 vs. 1163). Several genera have been removed from the Formicariidae, *Melanopareia* being placed in the Rhinocryptidae, while *Psilorhamphus*, in addition to *Ramphocaenus* and *Microbates*, are referred to the Sylviidae. Of the genera we note that "Dendroplex" is merged with Xiphorhynchus, "Dendrophylax" with Leptasthenura, "Drioctistes" with Phacellodomus, "Microxenops" with Xenops, "Apocryptornis" with Grallaricula. Six genera (Ochetorhynchus, Spartonoica, Hellmayrea, Gyalophylax, Roraimia, and Simoxenops) are added to the Furnariidae, two (Xenornis and Myrmophylax) to the Formicariidae.

This reviewer is impressed not only with the standard of accuracy and attention to details characteristic of Peters' work, but also with his conservative taxonomic treatment in contrast with the works of certain other authors.—James Bond.

BIRD PORTRAITS. By J. C. Harrison, with an introduction by Seton Gordon. Country Life Limited, London, and Charles Scribner's Sons, New York, 1950:  $8\frac{3}{4} \times 11\frac{1}{2}$  in., 119 pp., with 16 color plates and numerous reproductions of pencil drawings. \$12.50.

J. C. Harrison deserves to be far better known in America than he is, for he is one of the most gifted bird artists of our times. Anyone who has worked hard at drawing birds can tell at a glance from the many illustrations in this book how patiently Harrison has studied his models. No one but a very thorough observer would give a Golden Eagle (Aquila chrysaëtos) the particular head-shape shown at the lower left on p. 17, or an Eagle Owl (Bubo bubo) the peculiarly ungraceful lumpiness which makes the sketches on p. 35 so beautiful and authentic.

Of special interest are the drawings of the Osprey (*Pandion haliaetus*) on pp. 20 and 21. Several of these, especially Nos. 6 and 7, seem a trifle too heavy-winged or heavy-bodied; but Harrison's work is so dependable on the whole that we cannot help wondering whether our American Osprey may be more slender of wing than the European bird. Such a subspecific difference would be quite possible. Two figures shown on p. 20 are, incidentally, wrongly identified: No. 1 is a Golden Eagle and No. 3 an Osprey, rather than vice versa.

For several reasons the pencil sketches are an especially valuable part of the book. They have great appeal *per se*, for they are drawn directly, they are not fussed over at all, and they are full of life. Even the most meager outlines have character and charm. Some of the duck and grebe drawings on p. 83 and the ptarmigan on pp. 96 and 97 are especially good. A notable fact about all these pencil sketches is that they graphically report on natural history as well as on the beauty, strength, and poise of birds. Note in this connection the sketches of Monta-

gu's Harrier (*Circus pygargus*) on pp. 23 and 27. Here we see a female calling to her mate from the nest; the male and female passing food midair; a female alighting with a bit of material for the nest.

The drawings of flying birds of prey are appealing and worth careful study. Those showing the birds coming head-on are especially well done, and this angle is far from easy to draw. Students of aeronautics will be especially interested in the way the artist has depicted the primaries and alula feathers. The primaries of the Golden Eagle shown on p. 16 are wonderfully well drawn. Compare these primaries with those of the falconiform birds shown photographically on pp. 65, 70 and 71 in John H. Storer's "Flight of Birds" (1948. Cranbrook Institute of Science, Bull. 28).

Among the drawings of small birds none are more authentic than those on p. 45 of the Rose-colored Starling (*Sturnopastor roseus*). Anyone who has seen the Common Starling (*Sturnus vulgaris*) striding along through the grass hunting for food will instantly recognize the birds as starlings despite the crests and oddness of pattern. All the Raven (*Corvus corax*) drawings are good, though it seems to me that they do not show the tail quite wedge-shaped enough. I have studied *Corvus corax* in the American arctic, the Pennsylvania mountains, the Aleutians, and southwestern México and have many times noted that except when the tail is spread very wide in quick turning flight, the wedge shape is apparent. In some sketches on p. 39 I think the middle rectrices should have been drawn a trifle longer. The croaking bird, coming straight on with mouth wide open, is well done. Making that particular angle look just right is anything but easy draftsmanship.

The color plates, though beautiful, are less appealing to me as a group than the pencil drawings. (Ptarmigan disturbed by a Golden Eagle on the snowy corries of the Cairngorms' (p. 99) is dramatic as well as sound both geologically and ecologically. Its rocks look hard, its snow cold, its birds feather-covered. The rocks in the Golden Eagle frontispiece, on the other hand, have a soft, almost translucent quality which the artist probably did not in the least intend and which may not be apparent in the original. Most of the birds shown in the color plates have good three-dimensional quality, the light and shadow being well worked out; but the Golden Eagle shown on p. 19 is so light underneath, despite the rather heavy shadow it casts on the rock, that it seems almost disembodied. Here the artist might have made his effort count for more had he paid less attention to feather-detail and more to the mass effect of light and shadow. To me the fussiness of this painting tends to reduce the eagle both in size and power.

Harrison's brush work can be remarkably good. Note the way the accessory material in the 'Gray-headed Wagtail' (p. 47) has been whisked in; the freedom of strokes used in representing the marsh vegetation in the 'Mallard' (p. 75); the all but untouched parts of the sky in 'Barnacle Geese taking off' (p. 59).

'Bird Portraits' is a book both artist-commentator and publisher may well be proud of. Let us hope that it will find its way into the hands of many American students of birds and bird art.—George Miksch Sutton.

A BIBLIOGRAPHY OF THE PUBLISHED WRITINGS OF CHARLES JOHNSON MAYNARD 1845–1929. By C. F. Batchelder. The Journal of the Society for the Bibliography of Natural History, Volume 2, Part 7, pp. 227–260, January 4, 1951. The Society for the Bibliography of Natural History, British Museum (Natural History), Cromwell Road, London, S.W.  $7.6\frac{7}{5} \times 10\frac{1}{4}$ in., paper, 15s. 0d.

A published bibliography is particularly useful when it brings attention to important items in unexpected or out-of-the-way places—as this one does.

Maynard wrote much of general interest about the birds of eastern North America, and

his works on the birds of Massachusetts, Florida, and the Bahamas are among the most valuable historical references for those areas. Between 1872 and 1916 he proposed more than 40 names for bird species and genera. Many of his field notes are still of exceptional interest; for example, in his writings we find almost the only existing clue to the habitat and behavior of the Kirtland's Warbler on its wintering grounds.

Although first of all an ornithologist, Maynard's interests were broad and his subjects for publication included butterflies and other insects, snails, marine invertebrates, mammals, reptiles, frogs, plants, and Indians.

Yet many of Maynard's works would be missed in a most thorough search of the usual literature. This bibliography, possibly still not complete, lists almost 300 items published from 1868 to 1928, most of them about birds, but only two of them in ornithological journals now being published (or predecessors). Some were published in scientific journals but others found their way into farm, household, and sportsmen's magazines. Many of his books, pamphlets, and periodicals were products of his own craftsmanship—typesetting, presswork, woodcuts, lithography, and hand-coloring of illustrations—and the number of copies printed was small. His choice of method for publication reached the height of singularity when he described several new species of land snails as embellishment for price lists of natural history specimens he was offering for sale.

The bibliography is preceded by an introduction that tells something about the life of this versatile individual and discusses some of the problems he has presented to the bibliographer. It lists the items of the bibliography in chronological order. At the end, there is an index to new scientific names he proposed.—Harold Mayfield.

THE PRE-EGG STAGE IN THE ALBATROSS FAMILY. Biological Monograph No. 3. By L. E. Richdale. Otago Daily Times and Witness Newspapers Co., Ltd., Dunedin, New Zealand, 1950: 92 pp., 13 figs. Price 10s. from the author, 23 Skibo Street, Kew, Dunedin, S. W. 1, New Zealand.

In the third of his admirable series of monographs, Richdale presents original observations on the breeding behavior of the Royal Albatross (*Diomedea epomophora*) on Taiaroa Head, New Zealand, from 1936 to 1949, and uses these as a basis for comparisons with the breeding behavior of the other species of albatrosses. For these comparisons, he draws largely on his own field experience with Buller's Mollymauk, the subject of the second monograph in this series, and from the writings of R. C. Murphy, L. H. Matthews, W. K. Fisher, and F. C. Hadden.

By the term "pre-egg stage" is meant the period from the time the adults return to the breeding grounds until the egg is laid. The types of behavior observed during this period are named, defined, and discussed. Some of the names used for the behavior patterns seem overly anthropomorphic and at times inappropriate (as in the legend for figure 10 which reads in part "The fledgling... was refused further food and responded with the ecstatic ritual."). This, however, is quibbling, for the author never makes the mistake of interpreting the behavior anthropomorphically.

The photographs which illustrate the types of behavior are a fine example of the value of photography in life history work. Too often bird photographers concentrate on taking pictures of rare or striking birds for the sake of the pictures themselves. Richdale's photographs illustrate types of behavior and are thus important for their content as well as pleasing to the eye.

In his papers on penguins and tubinares, one of Richdale's major contributions has been his discussions of "unemployed" birds, and this subject is treated at length in this study. Nine classes of unemployed birds are recognized: non-laying mated pairs (pairs which were known to have bred in former years), non-laying paired birds (pairs which have not bred), mated pairs which lost eggs, mated pairs which lost chicks, birds which returned without mate, birds which attempted to breed elsewhere and later returned to Taiaroa breeding area, unattached birds, young birds which returned to place of hatching, and fledglings. The behavior of birds in each class is discussed, and the behavior of unemployed birds is contrasted with that of breeding pairs. The author's ability to identify individual birds, either by means of bands or by irregularities in the web of the foot, made this analysis possible.

As might be expected, the comparisons with the behavior of species with which the author is unfamiliar in the field are not as full as one might wish. The fault lies in the inadequacy of the literature, as anyone who has tried to find good descriptions of even the simplest behavior patterns will agree. Nevertheless, Richdale has made a definite contribution in pointing out what needs to be learned about the other albatrosses. His most important contributions, however, are the series of descriptions of types of behavior, which can be used by future workers as a basis for studying other species, and a full account of the breeding behavior of a second species of this relatively little-studied family of birds.

The author is to be commended further for having founded this monograph series as an outlet for his valuable studies, and we hope that many more such monographs will follow.— Robert W. Storer.

WHERE TO FIND BIRDS IN MINNESOTA. A GUIDE TO 62 BIRDING AREAS, PARKS, SANCTUARIES. Compiled by Kenneth D. Morrison and Josephine Daneman Herz. The Webb Publishing Co., St. Paul, Minn., 1950:  $5 \times 8\frac{1}{2}$  in., xiii + 122 pp. Illustrated with maps and line drawings. \$1.50.

This is a neat little volume for anyone who goes birding in Minnesota. The North Star State is a varied and fascinating area, with its lakes, coniferous and deciduous forests, and wide prairies. Its biotic resources include the northernmost bit of land in the United States, a large portion of the Quetico-Superior wilderness, the great muskeg north of Red Lakes, the source of the Mississippi, a part of the Red River valley with still discernible beach lines of old glacial Lake Agassiz, and near-Carolinian conditions in the Southeast along the Mississippi.

Some idea of its ornithological possibilities may be gathered by listing a few of the state's breeding birds. These range from Western and Eared Grebes, Franklin's Gull, Prairie Chicken and Sharp-tailed Grouse, Marbled Godwit, and Sprague's Pipit in the West; through Spruce Grouse, Pigeon Hawk, Arctic Three-toed Woodpecker, Canada Jay, Hudsonian Chickadee, and Evening Grosbeak in the North; to Red-bellied Woodpecker, Tufted Titmouse, Carolina Wren, Blue-gray Gnatcatcher, and Prothonotary and Cerulean Warblers in the Southeast. Truly, this is varied fare for the bird finder.

To suit their purposes, the compilers of this book have divided Minnesota into four roughlyequal quadrats, Southwest, Southeast, Northwest, Northeast. Within these quadrats they have presented detailed notes on sixty-two stations which hold typical, or unusually promising, ornithological possibilities. Individual points of interest have been treated by forty-nine persons, most of them Minnesota bird students with special knowledge of certain regions.

Under the places or areas treated, there are road or trail directions, discussion of the terrain, and notes on vantage points for observation, hazards of the areas, and species records of unusual interest. There is a listing of characteristic bird species or groups from each station, with brief tabulations of season of occurrence and local habitats. The information presented is concise and highly usable.

Users of the volume are warned, very properly, by the compilers that not every species listed under a given area is always to be found there. Despite this warning, it must be expected that some visitors will become irked if they miss a single one of a station's bird desiderata. This attitude is one which every author or compiler of local bird guides has to face. It may Sept. 1951 Vol. 63. No. 3

fairly be classed as an occupational hazard, to be endured by those who serve in this useful capacity.

Mr. Morrison and Mrs. Herz have done for Minnesota what Olin Sewall Pettingill, Jr., in two forthcoming volumes, is doing for the country as a whole. Such labors of love are certain to make the lot of the birding-traveller happier and more productive.—Maurice Brooks.

TRAPPING METHODS FOR BIRD RINGERS. By P. A. D. Hollom. British Trust for Ornithology Field Guide Number One. The Potter Press, Oxford, 1950:  $5\frac{1}{2} \times 8\frac{1}{2}$  in., 40 pp., 25 figs. Paper 2s. 6d.

In this Field Guide, the British Trust for Ornithology presents information on automatic and non-automatic traps as well as several types of nets which have been used successfully by British ornithologists. Trap specifications for small birds are similar to those found in Lincoln's "Manual for Bird Banders." American ornithologists, however, might well be able to adapt to their needs the basic principles of the crow trap (p. 7), raft duck trap (p. 8), Skokholm Dunlin trap (p. 24), or the Winchelsea Starling net (p. 37). Techniques little used in this country are *Bat Fowling* (p. 33), "the catching at night of shrub or hedge-roosting birds in a net attached to two light poles" (see also Lincoln, 1947: 67), and *Dazzle Netting* (p. 39, and Lincoln, 1947: 66), blinding birds by flashlight.

It is self-evident that certain basic techniques must be employed in any thorough lifehistory study. Color-banding is one of these basic techniques. Only by observing marked birds can precise data be obtained on re-nestings, second broods, change of mates, territorial boundaries, post-nesting activities, etc. Bird trapping, then, becomes an essential aspect of life-history study. Furthermore, the life-history student often discovers that traps which have proven successful for some species are unsatisfactory for his problem. Modifications of existing trap-types, therefore, frequently must be made to fit specific needs. Consequently, it is believed that the present pamphlet will be of value to the student of bird behavior as well as for the bird-banding cooperator.—Andrew J. Berger.

HANDBOOK OF ATTRACTING BIRDS. By Thomas P. McElroy, Jr. Illustrated with 51 figures by Lambert Guenther. Alfred A. Knopf, New York, 1950: 8 × 6 in., xiv + 163 pp. \$2.75.

This is another book which briefly discusses methods for attracting birds to gardens, estates and farms. There are the usual chapters on Why Attract Birds?, Artificial Feeding, Trees, Shrubs and Vines Attractive to Birds, Helping Birds at Nesting Time, Homes for Birds, Attracting Waterfowl, Birds in the Small Garden, Care of Young and Wounded Birds, etc.

Mr. McElroy discusses recognized theories and techniques (territoriality, value of running water, sanctuaries) which may be used to attract birds, but he adds nothing to what has already been presented by McKenny (1939. "Birds in the Garden and How to Attract Them") and Baker (1941. "The Audubon Guide to Attracting Birds"). Desiring thorough coverage, the authors of such books discuss birds whose breeding habits vary from those of Wood Ducks to Baltimore Orioles and Song Sparrows. The suburban dweller or owner of a small garden must, indeed, feel discouraged when his serious efforts fail to attract Purple Finches, Crested Flycatchers and Yellow Warblers. Greater emphasis might have been placed, therefore, on birds easily attracted to small gardens—such as the Song and Chipping Sparrows, House Wren, Cardinal and Catbird.

Encouragement should be given to any book which furthers public education on the subject of predation (Chapter 14) and which stresses the value to wildlife of bushy hedgerows over clean ones (p. 91), but these facts are well known to ornithologists and one wonders how broad an audience these books reach.

This attractively made handbook will, however, serve as an excellent source of information for scout leaders and for the public school teacher who wishes to develop a teaching unit on birds and who is besieged by questions on birds and bird houses by all children, and some parents, at one time or another.—Andrew J. Berger.

## DAVID CLARK HILTON

Dr. David Clark Hilton, who was born on a farm near Dorchester, Nebraska, on April 22, 1877, and who died December 12, 1945, had an international reputation as a physician and surgeon. As a young man he headed the Science Department of Cotner University and was Demonstrator in Anatomy at the University of Nebraska. He became an attending surgeon at St. Elizabeth's Hospital in 1905 and Chairman of Surgery at Bryan Memorial Hospital in 1926, and held these two positions all his life. He did post graduate work in Vienna and Paris in 1927. He was consultant in General Surgery for the U.S. Veterans' Bureau Hospital from 1932 to 1940. During the First World War he was a Captain in the Medical Corps. He was instrumental in organizing the 110th Medical Regiment of the Nebraska National Guard, of which outfit he was Commanding Officer from 1925 to 1940. He was Division Surgeon of the 35th Division of the National Guard from 1927 to 1940. He was a graduate of the Command and General Staff



School of the U.S. Army, being retired in September, 1940, as a Brigadier General of the line. His interest in military medicine took him to Warsaw, Poland, as American delegate to the International Congress of Military Medicine and Pharmacy in 1927 and to England, as delegate of the 6th Congress, in 1929. He was awarded the Cross of the Army Medical School by Poland in 1927. Honors of many sorts were conferred upon him and his duties, like his interests, were many. He was very active in the Masonic Order and in the Episcopal Church. He is survived by his wife, Sarah Luella O'Toole Hilton, and three children: Mrs. Blossom Virginia Gish of Texas, Mrs. Ruth Burgert of Chicago, and Dr. Hiram David Hilton of Lincoln, Nebraska, himself an accomplished surgeon.

David Hilton was interested all his life in birds. His knowledge concerning, and defense of, the birds of prey made a deep impression on a Nebraska lad who was one day to become a bird artist. The friendship between the famous surgeon and the artist continued. During the last years of his life Dr. Hilton visited México. His letters from that country were full of ornithological questions—some of them difficult to answer. The family of David Hilton, knowing how deeply interested he would be in water color portraits of some of the very birds that had so puzzled him in 1944 and 1945, have offered to finance the reproduction of eight of these in full color and to present the engravings to The Wilson Ornithological Club. The first of the series, that of the Rufescent Tinamou, appeared in the June issue of the *Bulletin*. The next will probably appear in March, 1952. The reproductions will appear also in a book, 'Mexican Birds,' now being published by the University of Oklahoma Press.