BOOKS, PAPERS AND LITERARY NOTES

Edited by ALLAN MCEVEY

Reviews

BOOKS AND PAPERS

Buller's Birds of New Zealand.—A new edition of Sir Walter Lawry Buller's *A History of the Birds of New Zealand*, reproducing in six-colour offset the 48 stone-plate lithographs by J. G. Keulemans, from the 2nd edition, 1888. Now edited and brought up to date by E. G. Turbott. 1967. Whitcomb & Tombs Ltd., N.Z. Pp. xviii + 261, 6 figs., 14¾" x 10½". $14.70 (N.Z.). In these days of gaudy colour close-up photographs of birds, with wings frozen by electronic flash into perhaps faithful yet anything but lifelike or pleasing attitudes, it is a pleasure to turn once again to traditional artists of the last century. To ornithologists in many countries J. G. Keulemans is no stranger and his illustrations of New Zealand birds are competent and have the mellowness of time about them.

Buller's great work, long out of reach of all but the wealthy, has nevertheless continued to be regarded as a standard reference by all serious students, and his lively descriptions of birds and their behaviour have rarely been surpassed: indeed scientists seem to have forgotten how to write in such a beautiful literary style or have ceased to try. The publishers are therefore to be congratulated on publishing a new edition which will bring joy to every possessor of it.

There is no need here to review in any detail a text that has stood the test of three-quarters of a century and more. Suffice to say that the editor has retained long stretches of original text where this is factual. He has added a short commentary of his own on the present status of each bird, but has chosen wisely to omit Buller's long digressions into what are, today, largely irrelevant details of nomenclature, egg sizes and his passion for collecting.

Advanced ornithologists who will still have to refer to the original work will deplore these omissions and so will bibliophiles who would have preferred the aura of a facsimile edition. Art critics will lament the omission of the plates of the first edition (1873) which had such delicacy of colour and grace of design. But with its almost exact colour reproductions of the nevertheless famous plates of the second edition, fine printing and binding, this book is an aristocrat worthy of its predecessor, a book to buy and use, and keep for one's children and grandchildren.—J. M. CUNNINGHAM.

Guide des oiseaux de la Nouvelle-Calédonie et de ses dépendances. By Jean Delacour. 1966. Delachaux & Niestlé, Neuchâtel (Switzerland). Pp. 172, four colour plates and 54 black-and-white drawings by Lloyd Sandford, 8" x 5¼". Written in French, this field-guide is primarily intended for the inhabitants of New Caledonia. Its appearance could not have been better timed, in view of the recent establishment of the Noumea Museum and the Ornithological Society of New Caledonia. English-speaking naturalists have long been served by Ernst Mayr's *Birds of the Southwest Pacific*, but several species (visitors, vagrants and introductions) have been subsequently added to the New Caledonian list, and there are now considerable data on status and local distribution that were not available to Mayr.

The introduction provides background information on the main island and its satellites (especially the Isle of Pines) and on the more distant and geologically very different Loyalty Islands—their location, area, physiography, climate, vegetation and geological history. General observations are made on the composition and origin of the avifauna, which comprises 110 species, 91 of which are resident; a further 6 species have been intro-

duced. Endemic to the islands are 1 family, 4 genera, 20 species and more than 40 subspecies. Some problems are put before New Caledonian naturalists, especially the rediscovery of three birds, each known from a single collection, namely the lorikeet *Charmosyna diadema* and the nightjars *Aegotheles cristatus savesi* and *Eurostopodus mystacalis exul*. The author finds it hard to believe that they are really extinct. Above all, Delacour urges the islanders to protect their beautiful and interesting birds and to conserve their habitats.

The main part of the book consists of species-by-species accounts of all the birds recorded from these islands. They are arranged under families in systematic sequence and are headed by recommended French name, scientific name (including trinomials) and local name. Descriptions are terse but adequate. Local and extralimital distributions are given and, where available, notes on the living bird. In short, the treatment is much the same as in the author's accounts (with Mayr) of the birds of Malaysia and the Philippines; but because of the smaller fauna the present treatment is fuller and a much higher proportion of the birds is figured. Delacour has drawn on published information (a complete bibliography is provided), the results of his own visits in 1962 and 1964, and personal communications from residents.

Interspersed through the text are the illustrations, including four superb colour-plates depicting 18 species. The first plate is devoted to New Caledonia's most famous bird, the Kagu, sole member of the gruiform family *Rhynochetidae*. Plate II illustrates the six species of native pigeon. *Drepanoptila* is a beautiful little pigeon, whose coloration recalls no other; this monotypic genus is endemic to the main island. Another endemic is the aptly named *Ducula goliath*. Plate III illustrates the parrots, including both races of *Eunymphicus cornutus*, a species of much interest to Australians since Cain (*Ibis* **97**: 452) transferred it to the Western Australian genus *Purpureicephalus*. Delacour, however, implies that it is nearest to *Cynarorhamphus*. These opinions are perhaps not so conflicting as may first appear, for their authors virtually agree in placing *cornutus* among the precursors to *Platycercus*. Apart from its narrow crest, *Eunymphicus* is chiefly notable (to judge from the plate) for its massive bill, doubtless an adaptation for extracting seeds from conifers, especially kauris.

The last plate depicts six passerine birds. Among them are the endemic warbler genus *Megalurulus* and two exquisite honeyeaters of the genus *Myzomela*, namely *dibapha* (= *sanguinolenta*), a race of which occupies the main island, and *cardinalis* which replaces it on the Loyalty Islands (and over much of the Pacific). Another example of faunal differentiation between these islands is illustrated by the parrot-finches: the widespread *Erythrura trichroa* on the Loyalty Islands, and the endemic *psittacea* on the main island.

The 54 black-and-white drawings should serve their function of amplifying the written descriptions. Sandford has a flair for posing his birds naturally, and in the best of his drawings the draughtsmanship is very good.

Author, artist, block-maker, printer and binder have all done their work well. Students of the Australasian avifuna will need this book or a friend who has a copy.—G. M. STORR.

A Handlist of the Birds of Victoria. By W. Roy Wheeler, 1967. Victorian Ornithological Research Group. Pp. 88; 9¼" x 6"; $2.75. The publication of all bird species known to have been recorded for each Australian State is highly commendable. State boundaries, of course, mean nothing to birds, their distribution being governed mainly by geographical and ecological factors, but only by knowing State range can a careful analysis of Australian distribution be formed. In the past ten years the bird species of Western Australia, South Australia, Tasmania and New South Wales have been assessed by new publications or earlier ones brought up to date. At about the same time as Mr. Wheeler's book on Victorian birds has appeared so also has Dr. Storr's work on those of the Northern Territory. A like review of Queensland birds is now badly needed.

Dr. Leach in 1908 compiled his *Descriptive List of Victorian Birds* (not mentioned by Mr. Wheeler), containing nearly 400 species. Leach's well-known *An Australian Bird Book*, which in earlier editions covered only

birds known from Victoria, included notes on 395 species. John McKean in 1959 printed a bare list of 413 species for that State and the present *Handlist* covers 437, whose occurrence in Victoria is acceptable. Twelve further species are included in a Supplementary List, but these are rejected or require further confirmation.

A tremendous amount of research is needed to give a careful range outline for each species, which in the present publication is depicted by shaded portions on Victorian outline maps, a highly commendable method, and a written mention for each of eight State subdivisions in which it has occurred. Breeding range, distinct from migration movements, is not given. There is little doubt that others, perhaps because of constant travel or research on a certain species, will find some errors of omission or commission, but the present reviewer, as mentioned in his New South Wales *Handlist*, agrees with Mr. Wheeler when he states: "Lists such as this one are made to be built on and if help already given is any criterion then further help should fill the gaps that must appear in such a publication".

This Victorian *Handlist* follows in taxonomic sequence, and in specific limitations, the 1926 Official Checklist, thus differing from recent *Handlists* for South Australia, Western Australia, New South Wales and Northern Territory. Following the 1926 *Checklist* has created problems in positioning introduced birds for the Rock Dove, *Columbia livia*, should have been placed in the family Columbidae (omitted because the two native Australian species placed in it do not occur in Victoria), and the Pycnonotidae (misspelled Pycnontidae) is placed between the thrushes, Turidae, and chats, Epthianuridae.

Mr. Wheeler can be congratulated on his enterprise and a *Handlist of the Birds of Victoria* is a must for anyone interested in Australian ornithology and Victorian birds in particular. The Helmeted Honeyeater fittingly adorns the front cover, as it is the only endemic Victorian species.—A. R. McGILL.

List of Northern Territory Birds. By G. M. Storr, 1967. Spec. Publ. W. Aust. Mus. No. 4. Pp. 90. Col. pl. There is a saying that brevity is the sister of talent. With limited space, Dr. Glen Storr has presented a masterpiece of conciseness in a reference work that will be of indispensable use and necessity, as well to the amateur as the professional. With one exception, nothing of importance has been omitted: the inclusion of family headings would have made it easier to find the different groups without recourse to the Index.

The main text, using appropriate sub-titles, deals adequately with the known range, status, breeding season and habitat of 346 individual species, listed under subspecific headings; there is an Appendix of 16 species confirmandae. Doubtless, many more can and will be added to the main list before long. Wherever possible, references are given to taxonomic papers, there is a comprehensive Bibliography of the birds of the region and, unusual in Australian publications of this kind, a valuable Gazetteer of place names.

The classification employed differs from the familiar sequence of the Australian *Checklist*, being based on Peters' "Birds of the World" for the non-passerines and that recommended by the committee appointed at XI International Ornithological Congress (Basel, 1954) for the Oscines. On the other hand, it will be noted that the author has adhered to the time-honoured vernacular names of the Australian List, a procedure which has everything to recommend it. The Latin specific names should be acceptable to all.

Dr. Storr expounds the view, fashionable in some circles, that the practical aims of taxonomy and nomenclatural stability are more important than the Darwinian theory. To this end, it would appear, the large number of subspecies listed has been kept to a minimum. Conservatism in this direction is always commendable. The author's reference to evidence of clinal variation, if there is such a thing, brings to mind a remark made by Huxley, the originator of the term, that the number of "clines" that may be recognized in a region is only limited by one's imagination. Very few clines have been properly demonstrated for this continent. Dr. Storr's sweeping assertions in this connection are unacceptable. Subspeciation in Australian birds is very

little understood and, with the rapid annihilation or dispersal of populations resulting from human exploitation of their natural habitats, the whole question is likely to remain so. It is conceivable that the trinomial lists of today will be unintelligible to future generations unless somebody prepares a very detailed documentation and anaylsis of geographic variation whilst conditions are still favourable.

Many readers, especially those who depend on Cayley, will be puzzled, or even shocked, by Dr. Storr's lumping of certain genera. Here, once again, the author demonstrates his radical leanings. For instance, the Bustard, he says "may as well remain where its original describer placed it" (i.e. under *Otis*—H.T.C.) and he has applied the same reasoning to the Ringneck Parrots (listed under *Platycercus* instead of *Barnardius*). Some other changes are *Gallinula* to include *Tribonyx* and *Porphyrio*, *Vanellus* for all the plovers (following Bock, 1958) and *Hirundo* for the martins and Welcome Swallow, but strangely enough, not the White-backed Swallow, *Cheramoeca*, which looks like an *Hirundo*, despite its peculiar habits.

An interesting suggestion is that the Turquoise Wren, generally known as *Malurus callainus*, can be regarded as a subspecies of *Malurus splendens* of Western Australia. *Cracticus* has been adopted, perhaps rightly, for the Butcher-Birds *and* Magpies, *Gymnorhina*. All this confusion of names may be indicative of the times, a rebellion against the "old order" and the asseverations of its founders.

Glen Storr is a provocative writer, with a wide knowledge in birds and other fields. We look forward to his next production (could it be the Birds of Queensland?) where, it is hoped, will be preserved much of the relish of the subject of this review.—H.T.C.

A Comparative Study of Some Social Communication Patterns in the Pelecaniformes. By Gerard Frederick Van Tets, 1965. Ornithological Monographs No. 2. A.O.U. Pp. 88. Numerous line drawings. The order Pelecaniformes comprises a high percentage of sea and water birds for which colonial nesting has been proved to offer a number of selective advantages (low predation pressure, optimal use of safe and suitable nest-sites, mutual stimulation and synchronization through social facilitation). It is to be expected, therefore, that the species involved should possess highly developed social behaviour patterns to strengthen the pair bond and to facilitate nest relief and defence, and also to promote flock cohesion of benefit to the members of a group in joint activities, e.g. co-operative and communal fishing in the Pelecanidae and Phalacrocoracidae.

At various places in North America and Europe the author observed 15 species belonging to all families of the Pelecaniformes except the tropic birds. He found that the social communication patterns (threat, recognition, male advertising) have been derived from four major sources; locomotion, fighting, nest-building and begging. They are described in detail and their phylogenetic development, including their changes in form and function, is described. The social communication patterns in question are composed of a limited number of distinct postures, movements and calls which have proved to be sufficiently consistent within each taxon to be used as systematic characters. This is demonstrated by a number of diagrams figuring some common social behaviour patterns of pelecaniform genera and species, following the method K. Lorenz used in his paper on courtship behaviour in ducks, Anatidae. The paper is illustrated by a considerable number of very instructive drawings.—KLAUS IMMELMANN.

Whooping Crane Population Dynamics on the Nesting Grounds, Wood Buffalo National Park, Northwest Territories, Canada. By N. S. Novakowski, 1966. Canadian Wildlife Service Report Series Number 1, Ottawa. Pp. 20, 5 tables, 14 figs., 11″ x 8½″. $0.50 (Can.).

Bionomics of the Sandhill Crane. By W. J. Douglas Stephen, 1967. Canadian Wildlife Service Report Series Number 2, Ottawa. Pp. 48, 27 tables, 20 figs., 11″ x 8½″. $0.75 (Can.).

The Whooping Crane is extremely rare (38 birds believed to exist in September 1966), while the Sandhill is sufficiently common in certain parts

of the Canadian Prairies to cause complaints of damage to grain crops. These two reports on the species' biology and their differing problems in wildlife management are detailed, profusely illustrated, and lavishly produced. They show how the applied biologist's findings can be presented in a manner more palatable to the interested layman than is often the case.

Canadian Wildlife Service, 1966. Pp. 96, numerous photographs, 11" x 8¼". $1.00 (Can.).

"The Canadian Wildlife Service and the provincial agencies are the trustees of Canadian wildlife. We have used various media—movies, television, press releases, magazine articles, scholarly monographs, pamphlets, even cartoon stories where appropriate—to inform, and sometimes to persuade, the public. Most of these communicate aspects of the wildlife situation: this publication attempts to present the entire scope of the Wildlife Service's work to the citizens of Canada, owners of this valuable renewable resource." (From the Foreword.) This presentation is very attractive, and the work (ranging from fish hatchery and caribou management to goose banding and waterfowl habitat surveys) equally impressive, both in extent and detail. A 1961 survey showed that Canadians spent $275 million on hunting and fishing activities alone, a figure which indicates the value of wildlife as a renewable resource in a civilized community. Australians who believe this country to have as great a wildlife potential as Canada will look at this publication with wonder and envy.

All three publications are available from Roger Duhamel, F.R.C.S., Queen's Printer and Controller of Stationery, Ottawa.—D. F. DORWARD.

The Breeding Biology of Ross's Goose in the Perry River Region, Northwest Territories by John Pemberton Ryder. Canadian Wildlife Service Report Series—No. 3, 1967. Pp. 56, 13 photographs, 9 maps, 10 figs., 21 tables, 11" × 8½", 75 cents. After the first discovery of a breeding colony of Ross's Geese in the Perry River region, it was believed (1952) that only about 2,000 of the birds existed. Further investigations led to estimates of over 10,000 in 1958, and over 30,000 in 1962 after autumn counts in the Californian wintering grounds. During an aerial survey of breeding grounds in the Northwest Territories in 1965, Ryder counted 32,000 birds and thought there could be more. Little, however, was known about the species' nesting habits. This account of studies made in 1963 and 1964 reveals that pairing took place prior to arrival at the breeding area, laying began immediately the nesting islets and surrounding shallow lake water were ice-free, and that gonad-size and body-weight fell steadily after arrival; there was no re-nesting. Body-weight began to increase again after the chicks hatched. Laying was closely synchronized in the colony, but "clutches started later are smaller than those started earlier, to compensate for the time lost in nest initiation", a conclusion remarkable in view of the brief time-span involved: "early" clutches were started on 9 and 8 June and "late" ones on 11 and 12 June, 1963 and 1964 respectively. A general picture is also given of the movement of families away from islet colonies to feeding grounds after hatching, colour variation in downy young, weather, predation, parasites, behaviour, and food. A bird list ("avian phenology chart") of the area with date of first sighting of each species is appended, but this does not clearly indicate the main arrival times of the migrants.

The information is presented with many tables and figures. These and the conclusions drawn seem sometimes scarcely justified by the available data, which however must have been difficult to obtain under the rigorous conditions of an arctic spring.—D.D.

On the Moult of Birds. A special issue of *Journ. für Orn.* 107: **I-VIII**, pp. 448, 1966, has been devoted to a monograph—"Die Mauser Der Vögel" by Erwin Stresemann and Vesta Stresemann. The authors outline the history of the subject from the beginning of the 19th century. Their own work covers about 10 years of research mainly at the Berlin Zoological Museum, and about half a year at the American Museum of Natural History, New York, and some time at the British Museum. It became evident that in many cases collectors and preparators had either failed to collect or had failed to preserve specimens which would have materially assisted in this study. Birds in moult do not make attractive skins.

The monograph defines the terminology employed in the study of moult, and discusses the nature and pattern of moulting in some forty Orders of birds. It will be of very great value to museum workers, taxonomists, and everyone seriously interested in what can be learned from the condition of the plumage of any bird that is seen or handled.—E. F. BOEHM.

In Brief . . .

(It is not possible for the Review Editor to check the bibliographical accuracy of all titles and references supplied by contributors.)

Australasian Literature

Regional.—"Motunau Island Canterbury, New Zealand, An Ecological Survey" by R. H. Taylor *et al. Depart. Scientific Indus. Res. Bull.* **178**. $1.50. One section lists birds present, describes habits of the White-flippered Penguin, *E. albosignata*, and gives details of breeding density of some sea-birds on the basis of counts of burrows and nests.—H.L.S.

Species.—*W. Aust. Nat.* **10**, May '67. "Field Notes on the White-breasted Robin", by R. H. Stranger (pp. 115-116). Adds information on call-notes and behaviour and compares it with the Western Yellow Robin. "Notes on breeding the Red-winged Wren, *M. elegans*, in captivity" by A. Y. Pepper (pp. 119-121). A useful account of first breeding in captivity.—D.L.S.

Overseas Literature

Zoogeography and Regional Refs.—"Apparent zoogeographical dispersal patterns in two avian families. 2. Estrildidae" by C. J. O. Harrison. *Bull. B.O.C.* **87**: 63-72. Includes discussion on the Australasian species. "Biology of the Birds of Whero Island, New Zealand, with special reference to the Diving Petrel and the White-faced Storm Petrel" by L. E. Richdale. *Trans. Zool. Soc. Lond.* **31**: 1-86, 1965. Twelve species bred on the island, 25 appeared as visitors and 14 were observed offshore. Three species, the Southern Skua, Diving Petrel and White-faced Storm Petrel are treated in detail.

"Les Pigeons de la Nouvelle Caledonie" by J. Delacour. *Oiseau* **35** suppl.: 52-57. Descriptions of the six local pigeons, two of which are endemic.—J.McK.

Moult.—"Feather growth and moult in some captive finches", by I. Newton. *Bird Study* **14**: 10-24. Includes data on moult in Greenfinch.—J.McK.

Conservation.—"The Delay in Ovulation Produced by pp'—DDT and its Possible Significance in the Field" by D. F. Jeffries. *Ibis* **109**: 266-72. Indicates that a double-brooded bird could be thrown "out of phase with the food supply for the late broods".—J.McK.

Species.—"Social Behaviour of the Ruff, *Philomachus pugnax* (L)", by A. J. Hogan-Warburg. *Ardea* **54**: 109-229. A comprehensive account of this species at its breeding grounds. "Evolution in the House Sparrow. 1. Intra-population variation in North America" by Robert K. Selander and Richard F. Johnston. *Condor* **69**: 217-258. This paper, the first in a series on evolution in *Passer domesticus* in North America and other regions in which it has been introduced since 1850, presents an analysis of individual age and sexual variation in external morphological characters undertaken in preparation for studies of geographical variation. These studies are based on 2877 adult and first year study skins of birds collected at 37 localities in North America, the Hawaiian Islands, Bermuda, England and Germany. "On the food of nestling Cattle Egrets" by W. R. Siegfried. *Ostrich* **37**: 219-220. Dec. 1966. Insects constituted the bulk of the Egrets' food. Grasshoppers accounted for 84·6 of all the insects taken. "Distribution and dispersal of Central Pacific Lesser Frigatebirds, *Fregata ariel*", by Fred C. Sibley and Roger B. Clapp, 1967. *Ibis* **109**: 328-337. *Fregata ariel* is an abundant and widely distri-

buted breeding bird in the Central Pacific. Most of the juvenile birds banded at the Phoenix Islands disperse to the Solomons, Bismark Archipelago, New Guinea or the Philippines. A few travel north to the Ryukyu Islands, Japan, Taiwan and Siberia and a few also move to areas southwest and southeast of the Phoenix Islands. "Breeding behaviour of the Narrow-billed Prion and Broad-billed Prion on Whero Island, New Zealand", by L. E. Richdale. *Trans. Zool. Soc. Lond.*, 1965, **31**: 87-155. Comprehensive account of the breeding biology and populations of the two Prion species with a discussion on the starvation theory in Petrels. "New Information on the Solomon Islands Crowned Pigeon, *Microgoura meeki* Rothschild" by Shane Parker. *Bull. B.O.C.* (1967) **87**: 86-89. The continued existence of *Microgoura meeki* on Choiseul and perhaps other islands must be admitted as a possibility. "The Cape Pigeon, *Daption capensis* Linnaeus at Signy Island, South Orkney Islands" by R. Pinder. *Br. Antarct. Surv. Bull.* **8**: 19-47. Detailed study of the breeding biology of the Cape Petrel. "Adult Survival Estimates for two Antarctic Petrels" by Robert Hudson. *Br. Antarct. Surv. Bull.* **8**: 63-73. Mean annual adult survival rates are given for *Daption capensis* and *Pagodroma nivea*, based on banding data from Signy Island.—J.McK.

Literary Notes No. 9

An Ornithologist's Library.—The following question was put to several ornithologists: "If, in the light of your *present* knowledge of ornithological literature, and of your *present* experience in ornithology, you were just taking up the study of birds, which six books would you aim to purchase as the first in your ornithological library and why? Approx. maximum price $20.00 per book or total of $120). The replies:

Mr. H. T. Condon (S.A. Museum).—When purchasing any book on birds it should be remembered that most publications nowadays are readily available from state libraries and the libraries of ornithological societies.

Operating on a limited budget, the following are those I should like to have at hand at all times. (1) A. Landsborough Thompson, editor. *A New Dictionary of Birds*. Nelson, 1964—comprehensive, modern treatment. (2) J. C. Welty. *The Life of Birds*. W. B. Saunders, 1962—modern, readable introduction to all aspects of ornithology with a large number of references for further reading. (3) N. W. Cayley. *What bird is that?* Angus & Robertson, 1966 (4th edition)—valuable, not so much as an identification guide but for the amount of up-to-date information included. (4) J. A. Leach. *An Australian Bird Book*. Whitcombe & Tombs (9th edition)—for the species descriptions. (5) R.A.O.U. (Committee). *Official Checklist of the Birds of Australia*, 1926—for use in conjunction with (3) and (4). (6) H. T. Condon. *A Handlist of the Birds of South Australia*. 1962—Apologies! Essential for a South Australan bird student.

Dr. D. L. Serventy (C.S.I.R.O., W.A.)—Under the conditions set out I would make the following selection of six books as the nucleus of a bird library. (1) A general book setting out how to become an effective ornithologist. Of several excellent treatises on the market, such as J. J. Hickey's, Stuart Emith's, and Van Tyne & Berger's, I would select a local work: P. A. Bourke, 1955, *A Handbook of Elementary Bird Study*. (2) A good identification book covering the whole of Australia. Neville W. Cayley, 1966, *What bird is that?* (Latest revised edition). (3) This should be supplemented by a local book, if available. For my own State and Central Australia, and those interested in sea-birds and waders, I would select D. L. Serventy & H. M. Whittell. 1967. *Birds of Western Australia*. (4th revised edition.) (4) For a more detailed work Mathews' *Birds of Australia* is too costly and I would favour A. J. North. 1901-1914. *Nests and Eggs of Birds found Breeding in Australia and Tasmania*. 4 vols. (5) An essential reference work to other publications is H. M. Whittell. 1954. *The Literature of Australian Birds*. (6) A good general reference book, on a world basis, and dealing comprehensively with a variety of ornithological subjects, is A. Landsborough Thomas (Editor). 1964. *A New Dictionary of Birds*.