

News and Notes

ABOUT MEMBERS

Dr. A. J. Marshall, formerly of Sydney, and now Reader in Zoology and Comparative Anatomy at St. Bartholomew's Medical College, London, has been elected a Corresponding Fellow of the American Ornithologists' Union.

Mr. L. Glauert, Director of the Western Australian Museum, who has been in charge of that institution since Mr. W. B. Alexander left Western Australia in 1920, will retire at the end of this year. Mr. Alexander, owing to illness, retired last year from the post of librarian at the Edward Grey Institute of Field Ornithology, Oxford, and now lives at Swanage, Dorset.

M. A. INGRAM TRUST GRANT

The cost of publishing the paper by Mr. John McNally on the Food of the Stubble Quail, in this part (pp. 367-400), was met by a grant from the Trustees of the M. A. Ingram Trust.

FOR SALE

A full set, uniformly bound, of Mathews' *Birds of Australia* is available for sale. Write K. A. Hindwood, Wingello House, Angel Place, Sydney, for details.

Reviews

Manual of Ornithology.—A third edition of 'A Laboratory and Field Manual of Ornithology', by Olin Sewell Pettingill, Jr., first published nearly 20 years ago, has appeared. It is intended as an aid to ornithological study at college or university level. It is stated in the preface that it does not pretend to cover the ornithological field: it appears to this reviewer, however, to be particularly comprehensive in its scope.

It is patent that a synoptic account will best illustrate the merits of the work, and reference to the contents indicates the wide extent. Bird topography, feathers, anatomy and physiology, systematics, plumages and coloration, distribution, migration, field identification, ecology, communities, territory, song, mating, nests and nest-building, eggs and incubation, young and their development, parental care, and bird populations—these, in brief, are the main contents. There are seven appendices, dealing with field methods and, principally, bibliographies and literature.

Detail of the foregoing naturally cannot be included within a review's restricted form, but as an exemplary indicium, the chapter on feathers and feather tracts deals with the structure of the living feather, the feathers of adult birds, and of newly-hatched birds, feather development, coloration, feather tracts, and the numbers of contour feathers. (Counts by Brodtkorb show over 15,000 for the Pied-billed Grebe and just under that number for the Pintail). Corresponding subdivision occurs under most headings.

That a number of examples are North American, particularly, perhaps, regarding migration, is entirely immaterial. The whole concept of the book is ornithologically-universal and based on general principles. To say that it is 'elementary' could be misconstrued because of the secondary meaning to that word, but the presentation, in succinct

form, of the 'elementals' of bird lore is precisely the object of this work. There is much included that it would be difficult to find elsewhere and there are few reference works that present so much between the covers. The references at the end of each chapter are extensive and add further value to the author's remarks, whether they be his own observations or collations.—C.E.B.

Common Australian Birds.—Any bird book that is of pocket size, that presents its data succinctly, and that fosters an interest in ornithology is deserving of commendation. Alan and Shirley Bell's *Some Common Australian Birds*, Oxford University Press, 1956, 35/-, qualifies. There are two groupings—birds under 10 inches and those over. The first paragraph for each species indicates range and type of habitat, with pertinent recognition marks. There follows a short description and then some general notes of diverse content. Often these highlight characteristics, sometimes a personal impression retained in memory; the references to the shooters of hawks, and of ducks out of season, leave no doubt as to where Mr. Bell stands as a protectionist. Divided, as stated, into two main size groups, the book presents its birds in a system unrelated to systematic classification.

Alan Bell is responsible for the text; Shirley for the accompanying sketches (each species dealt with—100-plus—is figured in colour). While some may be better than others, some are definitely worse. Experiments with colour may be permissible in wall pictures of, say, 'The Marsh at Sunset', but not in ornithological illustration. The Red-browed Finch, for example, suggests a new *Erythrura*; the colours of the Straw-necked Ibis and some others are startling, to say the least. Colour aside, many liberties are taken with form. The Swamp-hen is far too stocky, the Crimson Rosella hump-backed, the Fairy Martin's feet too large. The Spotted Diamond-bird is definitely a 'hopper', with wren legs. Bills are often inadequate—Pied Currawong, Silver Gull. The crest of the White Cockatoo is without character. The Frogmouth looks like a Pallid Cuckoo with a moustache. It is stated that a number of authorities have scrutinized the illustrations (and text). Perhaps the wrong authorities were consulted.—C.E.B.

New Guinea Birds.—A further report—the third in recent years—on the birds of the central highlands of New Guinea is published by R. W. Sims in *Bull. Brit. Mus. (Nat. Hist.)*, Zoology, vol. 3, no. 10, 1956, pp. 389-438. The report is based on a series of 272 skins, representing 88 species and races, collected by Mr. F. Shaw-Mayer in the Wahgi region. A summary of 'new' information is given, i.e. additional to that contained in the papers by Mayr and Gilliard (*Bull. Amer. Mus. Nat. Hist.*, vol. 103, 1954, pp. 317-374) and Gyldenstolpe (*Ark f. Zool.*, vol. 8, 1955, pp. 1-181); collecting stations are listed; and there is a map of the area under review. Field notes and two excellent photographs by W. T. Loke are included. A new race of *Turnix maculosa* (*T.m.giluensis*) is included (original description in *Bull. Brit. Orn. Club*, vol. 74, p. 37) and discussed.—W.B.H.

Nesting of the Grey Swiftlet.—In the issue of the *North Queensland Naturalist* for September 1956 John Busst records the discovery of a breeding colony of Grey Swiftlets (*Collocalia francica*) on Bedarra Island, North Queensland. Previously the only known nesting-place of the species was on Dunk Island (which lies close to Bedarra), but there has never been any doubt that numbers of colonies of this small moth-like bird existed in various rock-strewn spots, both on islands and the mainland. It is mentioned by Busst that a man who was living for a time on little Timana Island (between Bedarra and Dunk) saw a small group of the birds nesting there, some eight years ago, on a rock-face that has since collapsed.

The Bedarra colony was first observed on October 20, 1955, when a count was made of 38 completed nests and 39 in process of construction.

On November 24 there were 197 completed nests, 6 incomplete, and 67 eggs, including 2 in the same nest, the only instance of the kind noted. The greatest number of eggs seen at one time was 91, on December 9 (when 204 nests were counted), and the greatest number of nests recorded was 224, these being present in February-March. By the beginning of April all the nests were empty. It is noted that the severe cyclone ('Agnes') which ravaged North Queensland on March 6 left the colony undamaged, the 45-degree angle of the wall providing shelter from both wind and rain. All of the nests were composed of the fine fluted stems of the beach she-oak and small feathers, all cemented together and to the wall of the cave by a secretion from the birds' mouths.

These observations agree generally with what has been recorded in regard to the colony breeding on Dunk Island. As noted in the *Emu* for 1936 (vol. 35, p. 317), that colony nested on a sloping and well-sheltered rock, and in November 1921 there were approximately 220 nests, about 100 of which each contained an egg and about 50 of which each contained a young one. It now appears obvious that there is a curious lack of uniformity in the egg-laying times of various pairs in the one colony, and that the breeding-season of a single colony may extend from September to March.—A.H.C.

Western Australian Ornithology.—A detailed account of the irruption into south-western Australia of White-winged Black Terns (*Chlidonias leucoptera*) in March 1956 is given in the *Western Australian Naturalist*, vol. 5, no. 6, September 1956, pp. 121-125. The birds arrived with a remarkable tropical cyclone which is described in detail in the same issue by Dr. J. Gentili, of the University Geography Department. Shorter items include a report of the second Western Australian occurrence of the Fluttering Shearwater (*Puffinus gavia huttoni*) (J. A. L. Watson); a discussion of the cannibalistic habits of the Grey Butcher-bird (*Cracticus torquatus*) (Angus Robinson); unusual cuckoo combinations (P. J. Fuller), and new bird records for the south-west (Eric Lindgren).—D.L.S.

Reproduction in Australian Desert Birds.—An examination of the many papers published on the bird life of desert areas in central Australia gives the impression that species typical of that region will breed during any month of the year following rain and mid-winter nesting, despite low night temperatures, is not uncommon. However, few reliable data are available on the sexual cycle leading up to such phenomena. An interesting article, made possible by specimen collecting in certain areas before and after the breaking of a drought, has been published by J. A. Keast and A. J. Marshall ('The Influence of Drought and Rainfall on Reproduction in Australian Desert Birds', *Proc. Zool. Soc. London*, vol. 124, pt. 3, pp. 493-499, November 1954). During the Australian Museum Expedition to central and north-western Australia in 1952, when one of the authors (Keast) was among the personnel, it was resolved that gonads of birds be collected in drought-stricken areas and compared, if possible, with others taken where rain may have recently fallen. Collections were made at Ayers' Rock (a) in May during severe drought and these fortunately were able to be compared with a collection made by John Lawson at the same place during September, after at least two inches of rain had fallen; also at Alexandria Downs (b) where "little rain had fallen for three years", whilst 120 miles distant, at Camooweal (c), chance rainfall of one and one-half inches occurred two months previously. At Alexandria all specimens "exhibited an inactive gonad condition", similar to that found during May at Ayers' Rock, while at Camooweal bird-song was present, some pairing had taken place, and "a remarkable variety of interesting testis conditions" were noticeable in the eight species dissected. It is believed that low rainfall followed by relatively beneficial conditions has a more stimulating effect on the male than on the female cycle.

A few errors have escaped proof-reading, such as the 91° south location for Alexandria Downs and the scientific names of about half-a-dozen species. It is also strange that *Smicromis flavescens* is referred to as a 'Fly-catcher' instead of a warbler, unless, of course, the term is used loosely for the greatly-expanded Muscicapidae family.—A.R.M.

The Migrations of Birds.—Several general works on bird migration have been published in recent years, and one of the best is the latest French one, *Les Migrations des Oiseaux*, by Jean Dorst, sub-director of the Museum of Natural History, Paris (1955, price approximately £A2). The first part of the book gives a comprehensive account of bird migration in action, including a brief review of the situation in Australia and New Zealand, illustrated by a wealth of maps, probably the most informative ever assembled in a single volume. The balance of the book consists of general chapters reviewing the physiological aspects of migration and the modern theories on migratory stimuli, the remarkable modern work on orientation and homing, hibernation and the origin and evolution of migration. A curious *lapsus* has crept into the Australia-New Zealand section, where the trans-Tasman movements of the Double-banded Dotterel are attributed to the 'New Zealand Pigeon (*Columba bicincta*)'. There are other minor blemishes, such as the omission of south-western Australia in the map of the migrations of the Golden Bronze-Cuckoo (through following the work of H. B. Fell), but taken all in all this is a book which every keen ornithologist should possess.—D.L.S.

Moult Adaptation in Relation to Long-distance Migration in Petrels.—This is the title of a short paper by A. J. Marshall and D. L. Serventy in *Nature*, vol. 177, May 19, 1956, p. 943. From a study of *Puffinus tenuirostris* in its breeding grounds and from published accounts of its moulting while wintering in the North Pacific, they conclude that "moult in all adult shearwaters probably begins during the nesting period; but in trans-equatorial migrants there is a hiatus that allows the retention of the wing- and tail-feathers until after the completion of their post-nuptial journey."—G.M.S.

The Origin of Nest-cement in Edible-Nest Swiftlets.—Under this title A. J. Marshall and S. J. Folley (*Proc. Zool. Soc., London*, vol. 126, 1956, pp. 383-389) finally settle a problem which had recently again become a matter of controversy. In 1817 Sir Everard Home attributed the gelatinous nests of the swiftlets to a secretion from the gastric glands. Bernstein in 1859 held that the substance originated from salivary glands, which waxed and waned in size with the seasons. This theory has been generally accepted ever since. Latterly Joseph Needham and others have suggested the possibility that the gelatinous nest-cement may be a crop-gland secretion akin to that of pigeon's 'milk'. The present investigation confirms Bernstein's hypothesis. Illustrations are given of the glands. An Australian Welcome Swallow (*Hirundo neoxena*), dissected for comparison, showed minute salivary glands compared with their enormous development in *Collocalia*.—D.L.S.

Preserving the Name *Puffinus assimilis*.—Much has been written in recent years on what is the valid name of Little or Dusky Shearwater, usually known in the literature as *Puffinus assimilis* Gould. Gregory Mathews was the first to discard that name on the ground that it was indeterminable. His proposal that the species should be called *Puffinus baroli* Bonaparte was followed by the British Ornithologists Union List Committee in 1952. D. L. Serventy and C. A. Fleming (in papers in *The Emu*) have contested that, but have drawn attention to the possibility that *munda* Kuhl, 1820, might conceivably qualify as

the oldest valid name of the species. In an endeavour to preserve Gould's long-standing name of *assimilis*, a group of ornithologists consisting of W. B. Alexander, R. A. Falla, C. A. Fleming, Robert Cushman Murphy and D. L. Serventy have asked the International Commission on Zoological Nomenclature that its plenary powers be used to suppress *munda* Kuhl, 1820 and place it on the Official Index of Rejected and Invalid Specific Names in Zoology. The submission appears in *Bull. Zool. Nomenclature*, vol. 12, part 1, June 1956, pp. 16-18.—G.M.S.

Results of Mutton-bird Investigations.—Two items by D. L. Serventy in recent issues of the *Ibis* show interesting developments in the field work on the Short-tailed Shearwater or Tasmanian Mutton-bird (*Puffinus tenuirostris*) in Bass Strait. In the *Ibis*, vol. 98, 1956, p. 316, he reports the recovery in Japan of a fledgeling ringed in the Flinders Island area; the bird was taken in a fishing net off Shikoku Island on May 27, 1955, and, as the bird had probably left its burrow about the end of April, this means it travelled some 5,500 miles in about a month. A second recovery of a similar nature is reported by Serventy in *C.S.I.R.O. Wildlife Research*, vol. 1, no. 1, 1956, p. 72, of a bird which was marked as a fledgeling at the same time as the previous one (March 1955) and was entrapped in a Japanese salmon net in lat. 48°N, long. 170°E (towards the Aleutian Islands) on May 11, 1956. Besides their value in outlining the migration route of the birds these records should finally dispose of the theory of Mathews and Iredale that the north Pacific population of this shearwater is different from the Australian one.

In the *Ibis*, vol. 98, 1956, pp. 532-533, Serventy reports the breeding at six years of age of a shearwater which was originally ringed as a fledgeling. This is the first precise information we have for the period of immaturity in the genus *Puffinus*. The period has not yet been determined in the well-worked European Fulmar, but James Fisher and R. M. Lockley think that it is probably between seven and nine years.—G.M.S.

New Guinea Birds.—Two substantial parts of the *Arkiv for Zoologi*, ser. 2, vol. 8, nos. 1 and 2, 1955, are devoted to comprehensive reports on recent Swedish ornithological expeditions to New Guinea. Both are written by Count Nils Gyldenstolpe, who has recently retired from the State Museum of Natural History, Stockholm. The first paper—'Notes on a Collection of Birds made in the Western Highlands, Central New Guinea, 1951'—deals with Count Gyldenstolpe's own expedition in the Wahgi valley region, which was financed by Sir Edward Hallstrom of Sydney. He and his wife spent three and a half months in the field, and collected nearly 1,200 bird-skins, about 200 mammals, a large number of insects and botanical and ethnographical material. Full taxonomic details are given of the bird specimens obtained, with very readably-presented field notes, and illustrated by fifteen remarkable bird photographs by Loke Wan Tho, of Singapore. The second paper, 'Birds collected by Dr. Sten Bergman during his Expedition to Dutch New Guinea 1948-1949', dealing with 1,334 bird specimens collected at the Vogelkop, is in similar style and again the ample field notes are a feature.—D.L.S.

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