

Bibliography of N.Z.A.R.P. Publications 1956-1972. Compiled by Patricia N. Coates. 70 pp. [Christchurch]: Antarctic Division, [N.Z.] Department of Scientific and Industrial Research, 1973.

From the very beginning of the new era of Antarctic exploration and research, from the time of the IGY and the dash to the Pole, New Zealand has played a leading role in the Far South. As political owner of the Ross Dependency, New Zealand has been host to the innumerable United States servicemen and scientists who have based themselves over the years at McMurdo Sound and whose doings are well chronicled in the *Bulletin of the Antarctic Projects Officer* and the *NSF Antarctic Record* now merged as the *Antarctic Journal of the United States*. The enquirer, accordingly, has little difficulty in finding out what research is being done under United States' auspices in the Antarctic. The *Antarctic Bibliography*, prepared by the Library of Congress, completes the picture and gives classified lists of what research has been published and where. Now we have a fine summary of the New Zealand contribution to Man's knowledge of the Antarctic.

The late Mr Les Quartermain, the noted Antarctic historian, compiled on several occasions a bibliographical gathering of research done by New Zealanders in the Antarctic under the title "Publications resulting from work done under the aegis of the New Zealand Antarctic Research Programme" and these lists were published in the *N.Z. Journal of Geology and Geophysics* from 1963 to 1968. The present publication by the Antarctic Division of the D.S.I.R. gives a list, arranged chronologically, under wide subject headings, of all publications resulting from New Zealand activity in the Antarctic from 1956 to 1972 and will have supplements added on an annual basis. The Bibliography includes biology, cartography, expedition reports and narratives, geology, ice and snow, logistics, medicine and physiology, meteorology, oceanography, physics, political geography and general topics. The diversity of the less easily classified topics is shown by the inclusion of articles on bread making in the Antarctic (in the *N.Z. Baker & Confectioner*), climbing techniques (*N.Z. Alpine Club Bulletin*), Antarctic photography (*Canterbury Mountaineer*) and adventures (*Boys' Brigade News*). Most of the items listed, however, have been published in scientific journals.

Ornithologists interested in the Antarctic fauna will find this a handy reference work since not only will they have a listing of all the papers resulting from New Zealand work on birds but they will also have available the background information on the expeditions and field parties concerned. Maps of the Antarctic published by New Zealand are listed and quite an amount of ancillary reference material can be found.

In the section entitled "Biology" 69 articles dealing with birds are listed, the first (in 1959) being an article in *Notornis* by Dr H. J. Harrington on a newly-discovered Emperor Penguin rookery at Coulman Island. The particular value of this new Antarctic Division publication is that it gathers together references to articles in widely scattered journals, although, admittedly, many of them would be known already to any well-read New Zealand ornithologist. Of the 69 items on birds, places of publication include: *Antarctic* (the publication of the N.Z. Antarctic Society), 17; *Notornis*, 8; *Ibis*, 7; *Records of the Dominion Museum*, 5; *N.Z. Journal of Science*, 5; *Condor*, 2; *Emu*, 2;

Nature, 2; *Tuatara* (Biological Society of Victoria University of Wellington), 2; *Ardea*, 1; *Journal of Natural History*, 1; and so on. Not only does this Bibliography bring together the publications of some (e.g. Ian Spellerberg) who have spread their papers, often on a single species (e.g. MacCormick's Skua), over many journals (e.g. Spellerberg in *Antarctic*, *Ardea*, *Condor*, *Emu*, *Ibis*, *Notornis* and *American Veterinary Medicine Association*), but it also draws attention to some obscurely published papers, e.g. "Observations at an Adelie Penguin rookery" by R. H. Taylor in *Zool. Rev. Przegl. Zool.* 4: 303-6, 1961, written in Polish! Others, such as that entitled "Terrestrial Biology" by C. J. R. Robertson in *Antarctic* 4: 76-7, 1965, and dealing with birds and mammals seen during the Ross Sea-Balleny Islands Expedition of 1965, might otherwise be difficult to find because of their generalised titles. Similarly "The Long Hot Summer" (*Antarctic* 4: 440-3, 1967) and "Strange doings at Cape Bird" (*Antarctic* 5: 456-8, 1970) might not suggest any relevance to ornithology. On the other hand, Mr F. C. Kinsky's contribution on birds seen on the Balleny Islands during the 1964 Reconnaissance Expedition, published under the general name of the expedition with two other authors (T. Hatherton and E. W. Dawson) in *N.Z. Journal of Geology and Geophysics* 3: 164-79, 1965) is not listed under "Biology" but under "Expeditions" (entry 361) and there are probably quite a number of similar instances.

Nonetheless, this is a useful compilation and a credit to the Antarctic Division of the D.S.I.R. if only that it shows the taxpayer what he has been getting for his money. Even the most parochial of us could not fail to be impressed by the Antarctic as a field of interest: 796 publications from the N.Z. Antarctic Research Programme of 1956 to 1972, is a good effort by anyone's standards!

E. W. D.



Avian Anatomy — Integument. By Alfred M. Lucas and Peter R. Stettenheim. U.S. Department of Agriculture. Agriculture Handbook 362. Two vols. 750 pp., 422 illus. Washington, D.C. 1972. US\$16.25.

Some 30 years ago the late Professor Edward Percival made pioneer studies on the feathers of New Zealand birds ("The juvenile plumage of some birds and an interpretation of its nature." *Trans. Roy. Soc. N.Z.* 72 (1): 6-20, 1942) but, despite the interest of his work and his continued stress on feather study in his own teaching, this field has been neglected locally until the very welcome examination of the filloplumes of seabirds by M. J. Imber (*N.Z. Jl mar. freshwat. Res.* 5 (3 & 4): 396-403, 1971). With the increasing introduction of ornithological topics into graduate research in New Zealand universities, attention ought to be drawn to feathers and feathering of birds as a field of study which could be developed particularly well under New Zealand conditions. With the quite necessary restrictions on collecting of live specimens and the controlled retention of Beach Patrol remains, feathers form a distinctive and peculiar material for study.

This monumental, two-volume work, expensively produced but made available at cost by the U.S. Government, may not become as well known as it deserves to be simply because it appears as one of those drab covered North American government serials often relegated