

Sea birds calling. A Treasury of New Zealand bird song. Supplement No. 2. Kiwi Treasury Record. Recordings by the Wildlife Service, Department of Internal Affairs. Introductory quotations read by Gordon R. Williams. Kiwi Record EC-34. Wellington: Kiwi Records (A. H. & A. W. Reed). \$1.75.

This disc, a 45rpm extended play record, presents ten seabirds from the National Sound Library collection and is of a superior quality illustrating the advances made in recording equipment in recent years. The twelve page booklet gives the full names both common and scientific and states where the original recordings were made. This disc, being devoted to seabirds, is perhaps of restricted interest to many ornithologists although it is, to my knowledge, the first commercial disc in the world of seabirds only. The record sells at \$1.75 in most good record shops. The ten species are:

Wandering Albatross	Sooty Shearwater
Australasian Gannet	Fluttering Shearwater
Little Blue Penguin (Northern)	Wedge-tailed Shearwater
White-fronted Tern	Southern Diving Petrel
Caspian Tern	Broad-billed Prion

In most cases the calls presented on this disc are the ones that you would hear if you were in the area when the birds are vocally active. The New Zealand Wildlife Division is to be commended for making this material available for publication. One hopes further discs will be published in due course.

L. B. McP.



W. D. GRAUL. 1973. Possible functions of head and breast markings in Charadriinae. *The Wilson Bulletin* 85 (1): 60-70.

In a review of possible functions of head and breast patterns 37 species of plover and dotterel are compared. An attractive diagram shows 24 breeding adult head and breast patterns, including all the New Zealand species. The patterns disrupt body and eye outlines, which is especially important for the nesting bird, and in some they may enhance sex recognition and reinforce aggressive display. A Primitive *Charadrius*, it is suggested, had breast bands and nested on shingle, and as the genus radiated the markings gained the function of social signals and were modified by selection for new habitats. In Banded Dotterel and Killdeer, the breast bands are enlarged in threat posture and thus reinforce aggressive displays. The theory that dark lore lines in Charadriinae function as sight lines for capturing prey is rejected.

R. E. Phillips is acknowledged for unpublished field observations on New Zealand species. The statement (supplied by the reviewer) that in the Shore Plover the breeding plumage is not brighter than the non-breeding needs checking in the field. *Charadrius* is used for the Shore Plover and *Pluvialis* for the Red-breasted Dotterel.

C. A. F.