New Zealand Birds: A Sound Guide. Volume 4 Banded Rail to Turnstone, Volume 5 Chatham Island Snipe to Kea, Volume 6 Crimson Rosella to Auckland Island Tit, Volume 7 North Island Robin to Blue Duck.

The last four cassettes in Les McPherson's complete sound guide to New Zealand birds are now available. This series aims to present recordings of all the species and subspecies of birds on the 1970 New Zealand checklist. Cassettes and booklets of the present volumes keep to a format similar to previous volumes (Volumes 1-3 were reviewed in *Notornis* 36: 79-80 and 37: 153-154).

Volume 4 presents recordings of the rails and many of the waders. Although the Sound Guide is based on the 1970 Checklist (and Amendments and Additions), one species is included that has been seen more recently. This is the Painted Snipe Rostratula benghalensis, first seen in NZ in 1986. The bird seen was not identified subspecifically, but it seems most likely to have been of the Australian race australis. The two recordings of this species in the Sound Guide are almost certainly of different subspecies, as one was made in Australia and the other in South Africa, where the nominate race benghalensis occurs. At least two other wader species that have also occurred since 1980 (Ruff in 1984, Asiatic Dowitcher in 1985) are not included.

Volume 5 contains the rest of the waders, the skuas, gulls and terns, the pigeons and some of the parrots. One feature here is the good selection of recordings of the Kakapo, displaying the remarkable variety of calls given by the species.

Volume 6 contains the rest of the parrots, the cuckoos, owls, swifts, kingfishers, NZ wrens and some of the Passeriformes. The NZ wrens present some technical difficulties with their thin, high-pitched calls; here the recording of North Island Rifleman is rather noisy but those of South Island Rifleman and Rock Wren are admirable.

In Volume 7, side one and part of side two contain the remainder of the Passeriformes. Two recordings of some interest here are the human imitations of the calls of the Huia and the NI Thrush, both now presumed extinct. There may be some confusion on side one, where both Poor Knights Bellbird and the nominate race are introduced simply as 'Bellbird' on the tape. The rest of side 2 contains supplementary material, mostly of species or subspecies missing from earlier volumes (e.g. five *Pterodroma* petrels, Auckland Island Banded Dotterel and Fairy Tern). There are two species recently seen in NZ for the first time (Pink-eared Duck and Bridled Tern), and several recordings that improve on those in earlier volumes in some way (e.g. Macquarie Island Shag, Blue Duck). There is also a correction – a recording of a Wandering Albatross is included because that in Volume 1 is now thought to be of a Southern Royal Albatross.

In most cases, the recordings are clear and featured species are obvious; there is, however, inevitably background sound in many of them. Where this is wind, surf, or even traffic or domestic stock, there is little room for confusion. Where the sounds are those of other bird species, however,

problems may arise, especially for listeners who are not already familiar with a species and are using the tape to identify or learn its call. For many rare or difficult species, this cannot be helped, as the recordings used are probably the only ones available; however, for one or two common species it should have been possible to obtain recordings without other prominent bird sounds. One example is the recording of South Island Pied Oystercatchers, where Pied Stilts are obvious throughout.

As in previous volumes, there are a few idiosyncracies in the spoken introductions; for example, the pronunciation of 'plover' in Volume 4. In addition, the female voice is often hesitant. The booklets accompanying the tapes contain a few spelling mistakes, particularly of place names, e.g. Scully's for Scollay's, Mapra for Mapara, etc. These are all minor points that do not detract significantly from the overall value of the series, but they might have been avoided.

Tracking down recordings of rare and difficult species has obviously been difficult and time-consuming. It says much for Mr McPherson's application that of the more than 350 birds in the 1970 Checklist, only 15 species or subspecies are missing from the Sound Guide. A list of these is given at the end of the Volume 7 booklet. (Note that NZ Dabchick is incorrectly named *Podiceps cristatus* in this list.) Two species (NZ Little Bittern and South Island Thrush) are probably extinct and eight are pelagic seabirds. The most surprising omissions are probably Little Black Shag and Arctic Tern.

Presenting recordings of all the waders on the New Zealand list is no mean feat, as most of the rarer arctic migrants have not yet been recorded in New Zealand. Ten of the recordings used (most of them excellent) were made on the breeding grounds in Siberia and have been obtained from the Soviet Academy of Sciences.

There is no doubt that Mr McPherson's Sound Guide is a highly significant achievement and he is to be congratulated on the completion of an ambitious project. This is the first comprehensive set of recordings of New Zealand birds available, and will doubtless be used by a wide range of people for many purposes. In particular, the guide should be a work of reference held in public libraries and schools.

Now that the hard work of collecting material is largely completed, one possible development of the Sound Guide might be the production of a shorter version, featuring the 100-150 species most likely to be encountered in New Zealand. This would probably omit rare vagrants, most of the pelagic seabirds, species confined to Antarctica and the outlying islands, and subspecies with similar calls. Such a short version would, I suspect, find wide use in schools and among birdwatchers.

The price for each cassette in the series is still NZ\$15-00 post-paid within New Zealand, with overseas postage extra at cost. All volumes are available from McPherson Natural History Unit, PO Box 21-083, Edgeware, Christchurch.