

Distribution patterns for both these species were strikingly echoed by records in the Tongariro National Park mapping scheme. Karioi and Erua State Forests adjacent to the Park have a vital role to play in the conservation of these two species in the region. This is an interesting illustration that the Park is not a self-contained ecosystem and that the Park boundaries do not necessarily delimit an area of relevance to the movements of its wildlife.

Robins were mapped from the eastern edge of beech forest in Karioi State Forest; from Erua State Forest east of the Ohakune/National Park road; from a tiny (about 2 ha) forest remnant south-west of Lake Otamangakau; from Mt Pihanga and from two locations just inside Park northern boundaries. Seemingly small populations in scattered localities is a typical pattern for this species in other parts of the North Island. Park records show that the Robin is also present in the Chateau area and near Ohakune.

ACKNOWLEDGEMENTS

We wish to thank staff of Tongariro National Park for their encouragement, especially Senior Ranger Bill Cooper, who gave the survey much help. We thank also the other 44 members of the OSNZ field study week, whose work is described here.

LITERATURE CITED

- BULL, P. C.; GAZE, P. D.; ROBERTSON, C. J. R. 1973. Bird distribution in New Zealand. A provisional atlas. OSNZ.
 GARRICK, D. P. 1980. Fauna survey report No. 25. Wildlife Service.
 OLIVER, W. R. B. 1955. New Zealand birds. Reed.
 SIBSON, R. B. 1958. Notes on the height reached by some species of birds on the mountains of the North Island. *Notornis* 7 (8): 213-219.

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SHORT NOTE

A NEW BREEDING SPECIES FOR CENTRAL OTAGO: BLACK-FRONTED DOTTEREL

On 19 July 1980, my wife and I saw the first Black-fronted Dotterel (*Charadrius melanops*) for the Central Otago region at the confluence of the Clutha and Manuherikia Rivers, Alexandra. It was still there on 27 July.

On 11 November 1980, during one of our usual surveys of stretches of the Manuherikia River in the Galloway district (a few kilometres upstream from Alexandra), we found one bird feeding on the water's edge near breeding Pied Stilts (*Himantopus h. leucocephalus*), South Island Pied Oystercatchers (*Haematopus ostralegus finschi*) and Black-billed Gulls (*Larus bulleri*). We thought then that it was probably the same bird as that of July but later realised it probably was not.

In a rather hasty walk down this 4-km stretch of the river on 13 November I saw four of the dotterels and so decided to investigate more thoroughly next year.

On 18 October 1981, Margaret and I found three pairs and a single bird. The nest of one pair was on a shingle bank 23 metres from the river and 5 metres from a likely feeding area of muddy shallows. It contained a full clutch of three, measuring 29.5 x 21.1, 28.2 x 21.5, and 28.7 x 21.4. Egg colouring agreed with descriptions in Frith (1969) and elsewhere. Next day, in a further 5-km stretch above this, we found two more pairs, and on the 29th, one of these was seen with a one-day-old chick.

Later on the 29th we found one of the original pairs with a chick about 3 days old, and on 5 November the third pair with a nest and full clutch. These eggs measured slightly smaller: 28.2 x 20.9, 27.6 x 21.4, and 28.5 x 21.5. Their colouring was almost identical to that of the first clutch. On 22 November, this pair was found 100 metres downstream with two chicks about a week old. Their third egg, evidently infertile, was still in the nest.

On 11 November, in a 5-km stretch near Omakau, one further pair was seen with a chick. The full total was thus 13 adults, two pairs with nests, and three other pairs with chicks.

Later we covered other likely stretches of the river upstream from Becks as well as closer to Alexandra, with negative results. In all, about 31 km of the river have been examined.

On 15 November, we walked about 16 km of the Kyeburn River from Dansey's Pass Road bridge to the Kyeburn confluence with the Taieri River. We considered this a possible site because of its being more or less in a direct line between the South Canterbury rivers (Opihi and Orari) where these dotterels occur and the Manuherikia. However, although some of the habitat looked good, we found no Black-fronted Dotterels.

Since both of our nests had full clutches when located, we were unable to determine the incubation period; the literature references seem conflicting: Frith (1969) gives "about 18 days"; Hadden (1973) gives 25-26 days for one nest in the Wairarapa; none of the 18 cards in the OSNZ Nest Record Scheme gives a complete observation; and the *New Guide* and other references that I have ignore the topic.

Our limited observations so far show that the breeding site of each pair seemed to be associated, perhaps by favouring a similar breeding habitat on the river, with Pied Stilts — either within or adjacent to scattered stilt colonies of 2-10 pairs.

LITERATURE CITED

- FRITH, H. J. (ed.) 1969. *Birds in the Australian high country*. Reed.
HADDEEN, D. 1973. Observations at a Black-fronted Dotterel nest. *Notornis* 20: 276.

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