

SHORT NOTE

Discovery of a second natural wild population of the New Zealand shore plover (*Thinornis novaeseelandiae*)

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The shore plover (*Thinornis novaeseelandiae*) is endemic to New Zealand where it was formerly widespread throughout the archipelago. During the nineteenth century its range contracted until it was restricted to South East Island in the Chatham Islands (Fig. 1) (Davis 1994). The shore plover is listed as endangered (Collar *et al.* 1994) and is considered a Category B priority species for conservation action by the New Zealand Department of Conservation (Molloy & Davis 1994). At present it is the focus of a captive breeding programme with releases on islands in New Zealand within its former range (Aikman 1999). In this paper, we record the discovery of a population of shore plover on the Western Reef, Chatham Islands.

The Western Reef (43.52°S, 176.56°W) is a small (c.6 ha), low-lying schist reef, lying 5 km south-west of Point Somes at the northwestern extremity of Chatham Island (Fig. 1). The reef is about 10 m above sea level at the highest point. In the centre of the island there is a small gravel basin, sparsely vegetated with button daisy (*Lepitinella featherstonii*), Cook's scurvy grass (*Lepidium oleraceum*), and *Einadia triandra*. It seems likely that shore plover breeding may be restricted to this basin, as shelter for nests elsewhere on the island is minimal. The basin is surrounded by a ridge of bare rock, which slopes towards the sea and forms large areas of intertidal wave platform that provides excellent foraging sites for shore plover. The island has a large breeding population of New Zealand fur seals (*Arctocephalus forsteri*, c.2000-4000 pupping females). The large population means that seals haul out onto every part of the island.

On 19 February 1999, DB was put ashore on the Western Reef to make a general survey. While on the island, he discovered a population of shore plover. During

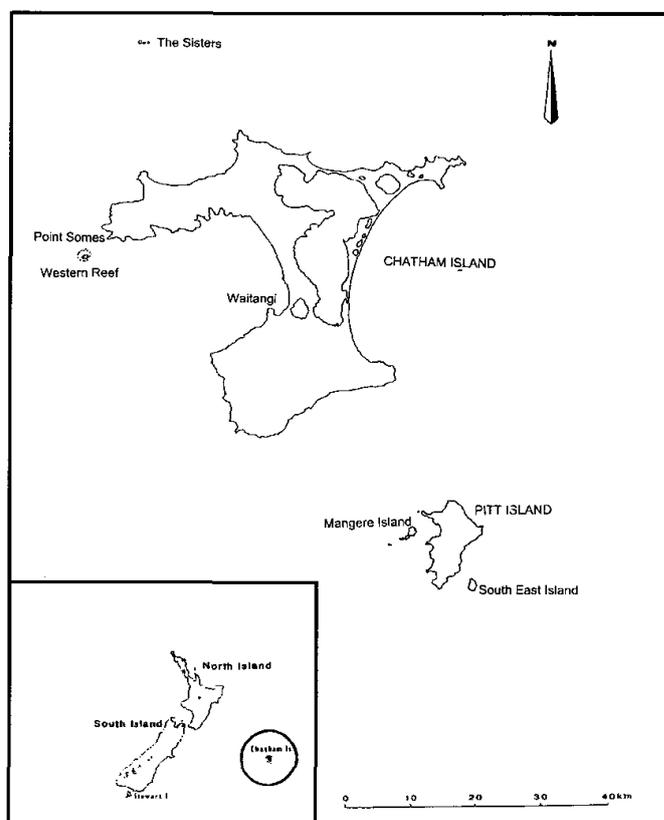


Fig. 1 The Chatham Islands showing location of South East Island and Western Reef.

40 min ashore, he counted 12 birds, including males, females, and at least one juvenile.

The following day, DB, MB and a small party went ashore to more accurately assess the population. During a 2-h visit, a complete population census was undertaken traversing the entire length of the reef in 1 sweep, in line abreast across the island. By using this method, we believe that no birds were missed or counted twice. The population consisted of 15 males, 5 females and 1 juvenile. None of the birds were banded. The presence of

a juvenile with the adults confirms that, although small, the Western Reef population is a resident self-sustaining population, which is likely to be another relict of a formerly large population on Chatham Island.

Fleming (1939) assumed that shore plover must once have been found on all islands in the Chathams. However, by 1872 they were restricted to Pitt, Mangere, and South East Islands (Travers & Travers 1872). The Travers's was the last historical Pitt Island record, and shore plover were last seen on Mangere in 1898 (Fleming 1939), after which they were exterminated by cats (*Felis catus*) introduced to the island to control rabbits. Since then the shore plover has been thought to be confined largely to South East Island.

The newly-discovered population would probably have been isolated on the Western Reef during the early 1800s when mammalian predators (rats and cats) exterminated the Chatham Island population. It seems less likely that shore plover would have colonised the Western Reef from South East Island, which is over 80 km away. Dispersing birds would have to pass over or around both Pitt and Chatham Islands to reach the Western Reef. Both Pitt and Chatham Islands have favourable habitats to entice birds to colonise. Juvenile shore plover have been recorded on Pitt Island (pers. obs.; S. King, pers. comm.), along with storm-blown adults (Fleming 1939). Cats on Pitt Island prevented these birds from establishing.

The only recent sight record of shore plover on Chatham Island itself is a single adult male seen at the airport in December 1995 (K. Oates, pers. comm.). It is likely that, especially with the surplus of males on Western Reef, this was a bird dispersing from there rather than from South East Island.

This discovery lends credence to reports of shore plover being present on The Sisters in the latter part of the nineteenth century. Potts (1885) recorded shore plover breeding on the Sisters, and provided an accurate description of their eggs and also gave a detailed, if romantic, account of The Sisters. Forbes (1893) recorded shore plover from The Sisters in his list of birds from the Chathams. There is a specimen in Cambridge Museum (Cat. no. 16/Cha/28/a/3., collector unknown) of an adult male shore plover collected from The Sisters in January 1898 (Benson 1972). Given that the Western Reef is smaller than the combined size of The Sisters and is botanically similar to that group, it is possible that shore plover could survive on The Sisters. However, despite being predator-free, The Sisters no longer support shore plover.

Because the South East Island population of shore plover is stable at 120-140 birds and further growth is restricted by insufficient habitat (Davis 1994), conservation managers may wish to establish new populations on suitable islands within the Chathams. With the knowledge that small shore plover populations such as that on the Western Reef, can remain viable for more than a century, then islands such as Mangere and the Star Keys appear suitable for such transfers. Both have sufficient areas of feeding and breeding habitat to support a shore plover population and are free of introduced predators.

The discovery of Shore Plover is a major boost for the conservation of this endangered species. The Western Reef population increases the known wild shore plover population by about 16 % and the 2 separate breeding populations provide additional protection from its extinction in the wild.

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