

SHORT NOTE

Homing of a red-crowned parakeet (*Cyanoramphus novaezelandiae*) from Motuihe Island to Little Barrier Island, New Zealand

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The red-crowned parakeet (*Cyanoramphus novaezelandiae*) is New Zealand's most widespread parakeet species, with a range extending from the Kermadecs Archipelago, across the North and South Is, to the Chatham and Antipodes Is (Higgins 1999; Juniper & Parr 1998). As the species has declined on the main islands of New Zealand, it has been translocated to a number of offshore islands over the last 40 years including Cuvier, Matiu/Somes, Tiritiri Matangi and Whale Is (Dawe 1979; McHalick 1999; Miskelly *et al.* 2005). In May 2008, a group of 31 red-crowned parakeets captured on Little Barrier I was released on Motuihe I as part of an island restoration project. This was followed by an additional flock of 18 parakeets released on Mar 2009 (Ortiz-Catedral & Brunton 2010). Here I report the homing of 1 adult female red-crowned parakeet that was recaptured on Little Barrier I 50 days after its release on Motuihe I.

The female parakeet (band number 189392) was initially captured on Little Barrier I on 2 Mar 2009 in the area known as Te Maraeroa flats. On capture she weighed 67 g and was transferred to an aviary on site together with other parakeets and held in captivity for 1 day. She was then transferred to Motuihe I by helicopter together with 18 other parakeets on 4 Mar 2009. The

parakeets were released by members of the Motuihe Island Trust and the general public in a remnant of coastal bush on the west side of the island. In Apr 2009, I returned to Little Barrier I with a team of volunteers to capture parakeets destined for translocation to Tawharanui Regional Park. Mist netting took place between 21 and 25 Apr in Te Maraeroa flats. On 23 Apr, a banded female was captured and confirmed as one of the parakeets released on Motuihe I the previous month. Thus, this bird had flown a minimum of *ca.* 65 km between Motuihe and Little Barrier Is. On recapture on Little Barrier I, the recaptured female weighed 70.5 g and appeared in good condition.

Sixty days after releasing the 1st flock, 13 individuals were confirmed to be alive on Motuihe I (Ortiz-Catedral & Brunton 2010), but it is unclear if the unsighted parakeets on Motuihe I died on site, dispersed to adjacent islands or returned to Little Barrier I. Despite further mist netting trips to Little Barrier I, the homing of additional parakeets has not been confirmed.

Red-crowned parakeets have successfully colonised many remote islands throughout New Zealand, indicating they have the potential to undertake relatively long dispersal flights. There are also reports of red-crowned parakeets appearing in urban and suburban areas in the Wellington area, possibly as dispersers from Kapiti I (a wild population) or Matiu/Somes I (a translocated

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population) (Miskelly *et al.* 2005), further supporting the conclusion that red-crowned parakeets are able to disperse naturally. Alternatively, these sightings in urban areas might represent occasional avicultural escapees. Information on the homing and dispersal behaviour of other parrot species is limited. A close relative of the red-crowned parakeet, the Ouvea parakeet (*Eunymphicus cornutus uvaensis*) was transferred from Ouvea I to Lifou I, ca. 60 km in distance, and it was suggested that most of the parrots returned to Ouvea (Delacour 1966, cited in Wiley *et al.* 1992).

Prior to the recapture of female 189392 it was unknown whether wild red-crowned parakeets would return to their source population following translocation. In line with other translocation projects, the capture and transfer of red-crowned parakeets on Little Barrier I coincided with the end of the breeding season of the species in the Hauraki Gulf, which usually extends from Oct to Mar (Greene 2003; Ortiz-Catedral 2006). Such timing has been recommended to minimise the likelihood of homing (Oppel & Beaven 2002). Despite taking such precautions, my observations suggest that at least a few individual parakeets may home after translocation. The loss of individuals through homing may necessitate an increase in the number of birds initially translocated to ensure enough individuals remain to form a viable population.

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