

SHORT NOTE

Spread of Australasian pipit
(*Anthus novaeseelandiae*)
onto Campbell Island following
eradication of Norway rats
(*Rattus norvegicus*)

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Prior to the apparently successful eradication of Norway rats (*Rattus norvegicus*) during the winter of 2001 (McClelland & Tyree 2002), Australasian pipits (*Anthus novaeseelandiae*) were rarely reported from main Campbell Island (52°33'S 169°09'E; Fig. 1). Bailey & Sorensen (1962) reported that members of the Cape Expedition of 1940-45 seldom encountered pipits, visitors noted their absence from the main island in subsequent years (see Foggo & Meurk (1981) for a summary), and pipits were not recorded from Campbell Island during the summer of 2000-01 (DRT pers. obs.). Pye & Bonner (1980) reported that Antarctic pipits (*Anthus antarcticus*) were absent from areas of South Georgia infested with Norway rats, and it seems likely that Australasian pipits were similarly restricted to a relatively small number of rat-free islets within the Campbell archipelago. Robertson (1980) recorded pipits from Dent Island in 1975 and Foggo & Meurk (1981) described pipits as 'obvious and tame' on a visit to Jacquemart Island in 1980. Pipits were present on both Dent and Jacquemart in 1984 (Williams & Robertson 1996) and pipits were breeding on Monowai Island in 1985 (G.A. Taylor pers. comm.: Figs. 1 & 2A). Interestingly, during only the third recorded

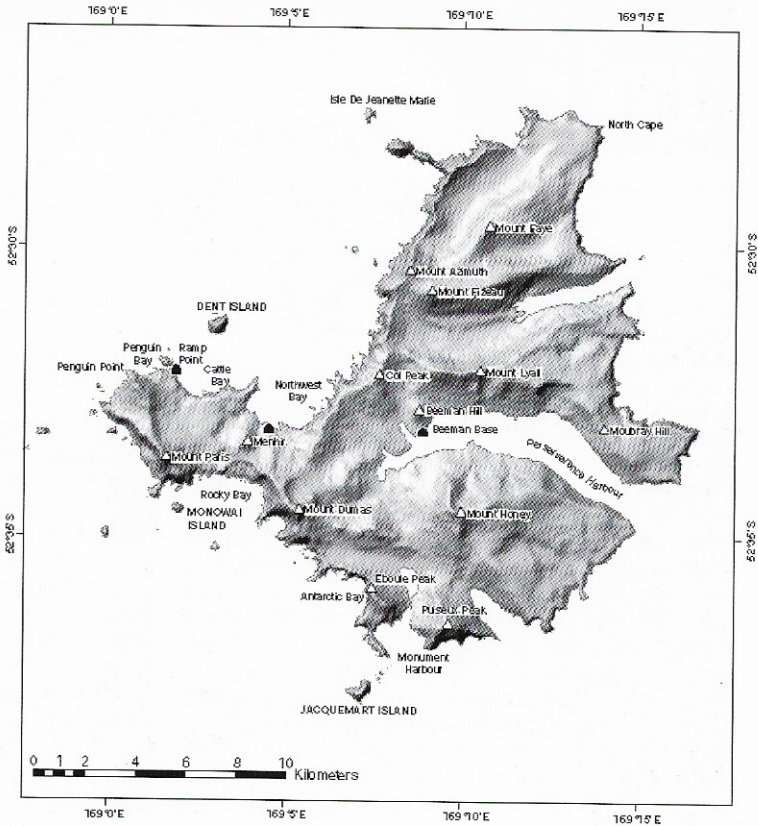


Figure 1 Map of Campbell Island showing main geographic features. Huts mentioned in the text are Beeman Base, Northwest Bay hut to the northeast of Menhir, and Penguin Bay hut adjacent to Ramp Point.

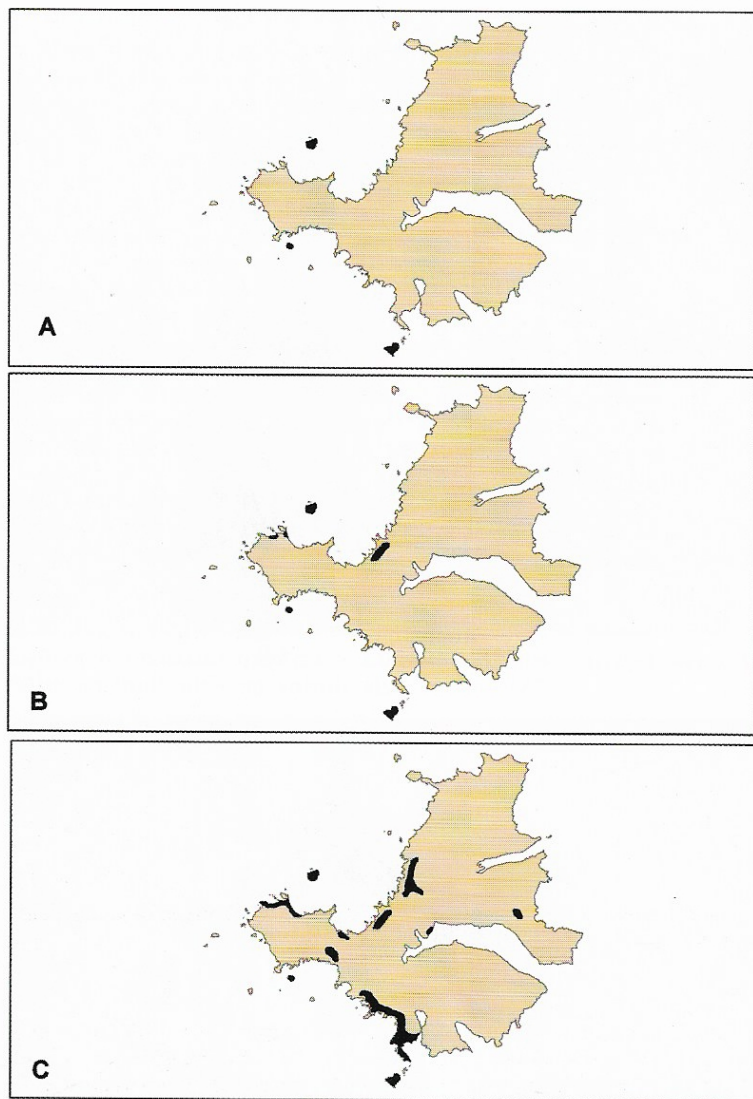


Figure 2 Spread of Australasian pipit onto main Campbell Island. Shaded areas indicate presence of pipits. **A:** known distribution of pipits with Norway rats present on the main island – Dent Island, Monowai Island and Jacquemart Island. **B:** records of pipits on main Campbell Island during January-February 2003. **C:** records of pipits on main Campbell Island during January-February 2004.

and most recent visit to Jacquemart Island in 1997 no pipits were observed (J. Carroll pers. comm.). Nevertheless, it seems reasonable to conclude that up until 2001, pipits were extremely rare visitors to main Campbell Island, and were restricted to just three smaller, offshore islands (Dent, Jacquemart and Monowai).

DRT and SB visited Campbell Island during January-February 2003, and with BR, during January-February 2004. The main purpose of our visits was to investigate rockhopper penguin (*Eudyptes chrysocome*) foraging, based at Penguin Bay (Fig. 1), but we were also able to visit other parts of the island and we recorded all observations of pipits. Those observations described in this note

should be treated as a presence/absence record only as we made no attempt to accurately quantify abundance or density of pipits. However, it was possible to identify specific areas of Campbell Island where pipits appeared more or less plentiful on the second visit and we note these below.

During our visit in 2003, approximately 18 months after the rat eradication programme, pipits were encountered in two general locations: on the ridge running southwest from Col Peak towards Northwest Bay and around the Penguin Bay area, including the area surrounding Penguin Bay hut (Figs. 1 & 2B). Pipits were most numerous at Penguin Bay, but even here we observed no more than 2-4 birds at any time. Although we traversed



Figure 3 Campbell Island form of the Australasian pipit *Anthus novaeseelandiae aucklandicus* (?), Campbell Island January 2004, showing the distinctive lemon-yellow colouration and fine streaking to the breast.

the route between Beeman Base and Penguin Bay most frequently, we also reached North Cape, Moubray Hill and the ridge above Antarctic Bay to the south. We did not observe pipits at any point en route to these locations, and are confident that we would have if pipits were present given their distinctive call and abiding, inquisitive nature.

In 2004 pipits were recorded at all locations at which we observed birds in 2003. Additionally, we recorded pipits more extensively throughout the Penguin Bay area, as far west as Penguin Point (not visited in 2003) and eastwards above Cattle Bay, around the Northwest Bay hut, above Rocky Bay, above Antarctic Bay and southeast over Eboulé Peak and its southern slopes (only the cliffs to the west of Eboulé Peak were visited in 2003), around Beeman Base, on the ridges between Col Peak, Mount Lyall and Mount Azimuth, and to the northwest of Moubray Hill (Figs. 1 & 2C). Pipits were most abundant to the south of Eboulé Peak,

with perhaps ten pairs observed in this area on a single visit, and also along the ridge from Eboulé Peak towards Mount Dumas where we recorded 4–5 pairs (none in 2003). Around Penguin Bay, pipits appeared to be more numerous in 2004 compared to 2003, with a minimum of four pairs present near the rockhopper penguin colonies and two or three individuals seen regularly near Penguin Bay hut.

Although we visited more areas of Campbell Island in 2004 compared to 2003, it was obvious that pipits had extended their range over the island during this period (Figs. 2B & 2C). We are confident that the range extension reported here is genuine and not simply an artifact of increased spatial coverage on our part. There were several areas of the island visited in both years in which birds were not seen in 2003 but were present in 2004 (e.g. Moubray ridge, the ridges around Col Peak and Mounts Azimuth and Lyall and the ridge above Antarctic Bay).

We observed two main centres of pipit abundance during 2004: around Penguin Bay and towards the south around Eboulé Peak. It seems likely that these two regions have been re-populated by birds from Dent Island and Jacquemart Island, respectively. Pipits have been observed flying from Dent to the main island near Ramp Point (G.A. Taylor pers. comm.; Fig. 1). We did not visit the area to the south of Eboulé Peak in 2003, but it would also appear likely that this area would have been re-populated by pipits from Jacquemart Island by 2003 given the number and spatial extent of pipits there in 2004.

Finally, given the unresolved taxonomic status of Australasian pipits at Campbell Island, where birds are considered to belong to the *aucklandicus* subspecies together with pipits from the Auckland Islands (Foggo *et al.* 1997), it was interesting to note that all birds seen on the main island during the course of this study were the fulvous form, confirming the observations of Foggo (1984). Indeed, some individuals were strikingly lemon-yellow on the face and underparts (Fig. 3) in marked contrast to the pale whiteish colouration observed on birds from Enderby Island (Auckland Islands), which we visited briefly on our return from Campbell in 2004, and the New Zealand mainland. Moreover the streaking on the breast and flanks is much finer on the Campbell forms and we believe that further work would be both timely and necessary in order to confirm the taxonomic status of Australasian pipits in New Zealand's sub-Antarctic.

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