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SHORT NOTE

An early record of probable Snares Cape Pigeon off southwestern Australia

In 1913 Gregory Mathews described his New Zealand Spotted Petrel as *Daption capense australis* subsp.n. on the basis of a specimen in his own collection said to be from New Zealand, and he gave its range as Australia and New Zealand. He said that it differed from *D.c.capense* in having the dark markings very much darker, almost black, and that the measurements were about the same (Mathews 1913:187). Most of Mathews' supposedly new subspecific Procellariid determinations have not withstood the test of time. However, his *australis* is still accepted (as *australe*) for the darker and slightly smaller Snares Cape Pigeon known to breed only at The Snares and certain other islands south and east of New Zealand. Identification of Snares Cape Pigeons at sea away from the breeding grounds is difficult, but Bartle (1974:147) identified all Cape Pigeons he saw in the Cook Strait area in autumn as *australe* and Robertson & Jenkins (1981:19) similarly identified all those they saw in eastern and southern New Zealand waters between February and June. Bartle (1974:147) claimed that adults of the nominate race always have a much whiter back than *australe* despite varying effects of plumage wear. Biometrics do not show significant differences between the subspecies (Marchant & Higgins 1990:400), but *australe* is slightly smaller (Sagar 1986:261).

Away from its breeding grounds *australe* has been recorded off southern Australia, in the Ross Sea and round New Zealand (Marchant & Higgins 1990:394). There is also a previously unpublished observation from 1791

of probable *australe* off the southwestern coast of Australia by Archibald Menzies who, as surgeon-naturalist, accompanied George Vancouver on his voyage of discovery to the North Pacific Ocean and round the world in 1791-1795. Cape Pigeons (then usually called Pintados) were first met with on the run from England to the Cape of Good Hope in April-July 1791. The Tropic of Capricorn was crossed on 12 June 1791. For 15-19 June 1791, Menzies (1790-1794:f.26) recorded that "A number of oceanic Birds kept flying about us daily such as Pintados Shearwaters & Black Petrels & now & then a struddling Albatross." On 19 June 1791 he shot Procellariiformes of four species, including "*Procellaria capensis*". On 7 July 1791, two days before the Cape, Vancouver (Lamb 1984:I:318) recorded that "After passing the 27° of south latitude, many oceanic birds were our constant companions, consisting of three kinds of albatrosses, the quebrantaheussos, pintadoes, the sooty, the black, and small blue petrels, with some few other small birds of the same tribe."

On 19 September 1791, at 36°45' S, 105°47' E, approaching Australia from the west, Vancouver (Lamb 1984:I:331) noted that "The pintado birds that, for some days past, had nearly disappeared, again visited the ship, accompanied by a great variety of the petrel tribe, with some albatrosses". The same day Menzies (1790-1794:f.37) recorded that they were "surrounded by a numerous flight of Pintados, blue & sooty petrels & several Albatrosses". On 21 September 1791 Menzies (1790-1794:f.38) made the significant observation that "*The Pintados which were now about us appeared smaller & darker color'd than those about the Cape.*" On 23 September 1791, still proceeding eastwards, they were at 35°7' S, 114°14' E. During the morning of 26 September 1791, the day they sighted the southwestern tip of Australia, Menzies (1790-1794:ff.39-40) shot Procellariiformes of three species including "*Procellaria capensis*" but he did not describe the Cape Pigeon collected.

The Cape Pigeons recorded by Menzies on 21 September 1791 were obviously sufficiently different from those he had earlier seen to warrant his recording the fact. The two characteristics he specifically mentioned, apparent smaller size and darker colour, indicate *australe*. The Cape Pigeon is at the northern limit of its range in August-September (see e.g. Cheshire *et al.* 1979). In Australian offshore waters it is nowadays generally common as far north as Perth in the west (Lindsey 1986:170), but it seems that no attempt has yet been made to identify subspecifically the birds seen there.

The Snares group, not confirmed as a breeding place for *australe* until 1947 (Stead 1948:72-3), was itself discovered on 24 November 1791, just two months after Menzies' probable record. As they sailed past the group Menzies (1790-1794:f.99) observed it "appeared to afford secure & inaccessible retreats to vast numbers of oceanic Birds Seals & Penguins with which we were now surrounded".

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SHORT NOTE

Anting by an Orange-fronted Parakeet

Anting is a behaviour in which the fluids from ants, notably formic acid, are applied to the plumage and possibly the skin (Pettingill 1970). Anting can be divided into two categories: (1) true anting, involving the use of ants, and (2) anting with substitutes, involving the use of objects other than ants (Simmonds 1966).

Cyanoramphus spp. have been observed anting with native plants (e.g. manuka *Leptospermum scoparium* and kanuka *Kunzea ericoides*) both in captivity and in the wild (Greene 1989).

In May - June 1991, as part of a polytechnic course, Animal Nursing and Technology, I investigated whether a captive male Orange-fronted Parakeet, captured in North Canterbury in 1981, would be stimulated to ant by six native plant species that are present in its natural habitat. When each plant material was presented, the bird's activities were recorded for 30 minutes (11 a.m. and 2.30 p.m. start on each date).

In this study, I defined anting as beginning when the bird ran its beak through a feather while chewing the plant material and ending when the bird ceased activity. I counted how often the bird anted (incidence) and how long anting lasted (duration) in each of the four 30-minute observation periods per plant species and averaged the results.

Table 1 gives the dates of assessment and the plant species presented.

I included fruits and cones of the plants and beech scale with the leaves because previous unpublished observations by E.G. and E.M. Heatherbell, bird breeders, suggested that the birds preferred fruits and scale to leaves as anting materials. In this study, I presented wineberry both with and without immature berries, but the bird anted only with the immature berries. It also anted with manuka immature seed capsules, not manuka foliage. I therefore believe that immature seed capsules or berries may elicit anting more effectively than foliage alone.

Anting incidence (average of 4 observation periods per plant species): The parakeet anted with material of only two plant species: manuka and immature seed capsules (0.5 times) and wineberry with immature berries (4.2 times). No other fruits or cones or the beech scale were used for anting.