

The Great-winged Petrel in Western Australia

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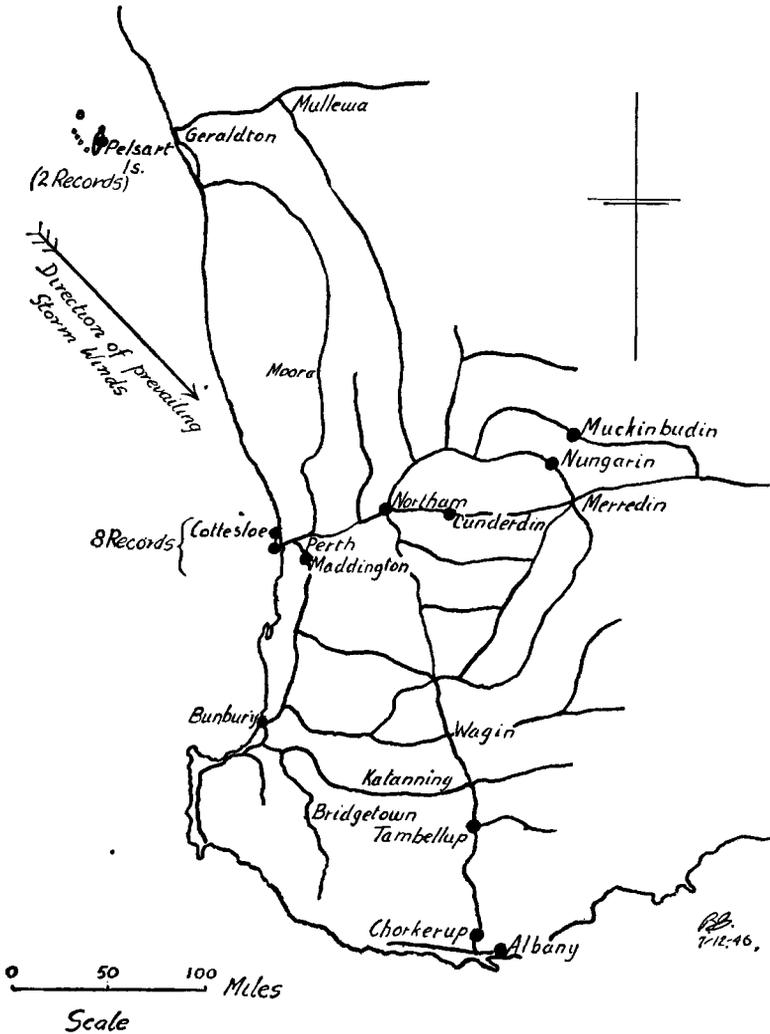
Western Australia is the only state in the Commonwealth that possesses breeding stations of the Great-winged Petrel (*Pterodroma macroptera*), though the species visits the east Australian coast from New Zealand nesting colonies. In Western Australia the known breeding area, until just lately, was believed to be extraordinarily circumscribed, and to be confined to islands along a small section of the south coast—about 22 miles west to east—in the vicinity of Albany. Those known to be nesting sites of the species were the following—Eclipse, Rabbit, Gull and Coffin Islands. However, J. M. Thomson and B. Shipway have recently discovered an additional nesting ground on Goose Island, off Cape Arid, in the Recherche Archipelago, some 380 miles to the eastward. It seems likely, also, that nesting takes place on nearby Pasley Island.

This, more than any other petrel species, is liable to be blown inland by winter storms, and, in the past twenty years or so, about eight such records are known, in addition to a number of beach recoveries. In reviewing this data recently I have been struck by the remarkable distribution of these occurrences, which are plotted on the accompanying map.

On the Perth metropolitan beaches this petrel was not recorded until 1928, when, on July 9, a specimen was found at Cottesloe. Since then seven others have been found there and on contiguous beaches, from Leighton northwards to Waterman's Bay, during the months of June, July, August and October. On November 10, 1944, I found two mummified specimens at Pelsart Island in the Abrolhos group—thus far the northernmost record for the species. Strangely only two specimens have been reported from Bunbury, where Mr. F. Lawson Whitlock has combed the beaches assiduously since 1928.

The inland records, based mainly on specimens received at the Western Australian Museum, fall into two groups, a northern and a southern. From the southern localities, all within close range of known nesting islands, only three specimens have been forwarded to the Museum—one from Chorkerup (October, 1932), another from "inland 6 miles east of Albany" (June, 1937), and the third from Tambellup (November 27, 1946). From the northern area the following occurrences are known; namely Maddington (October, 1932), Northam (November, 1929), Cunderdin (1924), Nungarin (1937), and Muckinbudin where a bird was found alive with a broken wing in October, 1941.

The Great-winged Petrel is one of the 'sedentary' species, i.e. not given to extensive migrations during the non-



Map showing localities from which inland (wind-blown) specimens and beach recoveries of the Great-winged Petrel have been collected.

breeding season such as characterize some of our other petrel species. The nesting period is in the winter.

The absence of records of storm-blown birds in the well-settled inland country between the south coast and the Great Eastern railway and their relative scarcity on the beaches

between Fremantle and Albany, is explicable, in my opinion, only on the hypothesis that the northern birds originate from an altogether different breeding ground from the Albany and south coast area. I think that an additional nesting location remains to be discovered somewhere on the west coast and most probably in the Abrolhos Islands. Otherwise it is very difficult to account for the northern records, which all fall in the winter and spring months, when the direction of the prevailing storm winds at those seasons is taken into consideration. The severe winter 'blows' are due to southern low-pressure systems which pass from west to east. The direction of the wind during the height of the storm is, however, from the north-west and it blows with violence from that quarter until the gale begins to subside, when it 'backs' to the west and eventually to the south-west. Assuming a nesting station at the Abrolhos, records from such far inland localities as Nun-garin and Muckinbudin (160 miles north-eastward of Fremantle) become understandable, but they cannot be easily explained on the basis of a southern nesting stronghold only.

The comparatively small series of skins available for comparison does not suggest that there is any marked physical difference between the two groups. All the Western Australian birds (belonging to the race *albani*) differ conspicuously from the New Zealand population (*gouldi*) in being almost uniformly dark on the head and in lacking the very light forehead, side of face and chin of the eastern birds.

If this second, more northern, nesting station for the Great-winged Petrel in Western Australia is proved, it would be an interesting parallel to the nesting distribution of the Little Shearwater (*Puffinus assimilis*), which nests from the Abrolhos to the Recherche Archipelago (*The Emu*, vol. 43, 1943, p. 113), and this species is also a winter-breeding non-migratory one.

None of the other local nesting petrels shares the vulnerability of the Great-winged Petrel for being carried so deeply into the hinterland of a lee shore. The Wedge-tailed Shearwater (*Puffinus pacificus*), which nests on islands along the west coast as far south as Carnac, is very rarely blown ashore, and the only inland record I know is of a bird found on the Welshpool Road, 10 miles from Perth in May, 1931. Of *Puffinus assimilis* the only inland record I have is from Katanning—in July, 1931.

Members are asked to interest others in the Union and to endeavour to increase the membership.