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The Gannets at Cape Kidnappers. 2. Dispersal and Movements

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Abstract

A total of 7,940 gannet chicks was banded between 1951 and 1964 at the following New Zealand gannetries: Kidnappers Plateau, Hawke's Bay; Horuhoru, off Waiheke Island; Mahuki, off Great Barrier Island; Bush Island, Hauraki Gulf; and White Island, Bay of Plenty; an attempt was also made to recapture or identify all gannets banded as chicks at Kidnappers Plateau on their return to breed at this colony.

Of the recoveries of banded birds at Horuhoru 79% were less than one year old, demonstrating a very high mortality in the first year: the corresponding figure for Plateau birds was 88%. At the four northern gannetries the juvenile birds disperse earlier than at the Plateau. Kidnappers Plateau juvenile gannets on their dispersal follow three routes of decreasing importance round North Cape, through Cook Strait, and south via Foveaux Strait. Most gannets banded at the four northern gannetries take the northern route and few disperse to the south. The Australian recoveries of birds less than a year old from all five gannetries range from Northern Queensland to Tasmania in the south and Western Australia in the west. The distances travelled up to 6,700km, are greater than those travelled by South African and North Atlantic Gannets. However, most juvenile birds are recovered on the Australia east coast between 31° and 37° S where landfall is made after crossing the Tasman.

Contrary to previous findings evidence is advanced that some of the chicks spend their first year in New Zealand waters; and that some adult birds which were recorded breeding upon their return to their gannetry showed a strong dispersal urge as they were subsequently recovered in Australia.

The return of young gannets to the colony is gradual: the sighting of two-year-olds is exceptional and most return when five years old. They show a remarkable attachment to their gannetry which they have seen from the sea only once during their initial flight. Of 276 recaptures only six birds (2.1%) banded as chicks at Kidnappers Plateau were found nesting at one of the two adjacent colonies, and most returned to the same cluster of nests where they were hatched.

INTRODUCTION

A long-term ecological study of gannets (*Sula bassana serrator*†) at Cape Kidnappers, New Zealand, was carried out between the 1945-46 and 1964-65

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† Following the New Zealand Check List (Fleming, 1953: 28) Australian gannets are considered conspecific with the North Atlantic and South African gannets.

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