

It has been known for some time (Stein and Wodzicki, 1955: 61–64; Wodzicki and Stein, 1958: 305) that juvenile gannets when fully fledged migrate to Australia and remain there until two or three years old. Less is known about the movements of adult birds except that from the third year onwards most recoveries are made in New Zealand.

The present study is based on twice as many birds as were available for the first analysis in 1958. In addition recoveries of gannets banded at the Horuhoru, Mahuki, Bush Island and White Island colonies have also been examined, and the movements of these birds compared with those from Kidnappers Plateau.

MATERIAL AND METHODS

Table I shows the numbers of young and adult gannets banded at five gannetries. The history and other aspects of these have been described by Fleming and Wodzicki (1952: 44–45), and Figure 1 shows their location. At the Plateau colony, part of the Cape Kidnappers gannetry, an effort was made to band the whole crop of chicks each year since the 1950–51 nesting season. The 1955–56 and 1964–65 seasons were exceptions when it was not possible to band all the chicks. In all 2,513 chicks and five adults were banded.

No banding was carried out at the two adjacent colonies (the Cape and Black Reef) in an attempt to find out whether any birds banded as chicks at the Plateau colony would settle as adults on one of the other colonies. Also the numbers of chicks at the Cape and Black Reef were too large for all to be banded.

Since the first banding of chicks at Kidnappers Plateau in 1951 regular observations have been made every year at all three Hawke's Bay colonies to identify returning birds. Initially the number of the band was read using binoculars. However, this procedure was time-consuming and since 1955–56 a gannet catcher (made by Mr R. L. Edgar) has been used to lift individual birds from the colony for examination without much disturbance to other birds. A total of 276 birds was sighted or caught, and rebanded if necessary, between 1954–55 and 1964–65.

TABLE I.—Number of Gannets Banded 1950/51–1964/65.

Nesting Season	Plateau		Horuhoru		Bush I.		White I.		Mahuki	Total	
	Chicks	Adults	Chicks	Adults	Chicks	Adults	Chicks	Adults	Chicks	Chicks	Adults
1950/51	142	1	27	—	—	—	—	—	—	169	1
1951/52	106	1	195	3	—	—	—	—	—	301	4
1952/53	144	1	253	6	—	—	—	—	—	397	7
1953/54	142	1	624	9	—	—	—	—	—	766	10
1954/55	116	—	705	2	50	—	—	—	—	871	2
1955/56	80	—	627	11	99	1	—	—	100	906	12
1956/57	126	—	633	—	100	—	—	—	—	859	—
1957/58	108	—	181	48	—	—	—	—	—	289	48
1958/59	214	1	200	77	—	—	—	—	—	414	78
1959/60	281	—	—	77	—	—	98	1	—	379	78
1960/61	134	—	101	1	54	—	211	—	—	500	1
1961/62	249	—	—	30	9	—	7	1	299	564	31
1962/63	228	—	70	1	139	—	19	21	—	456	22
1963/64	266	—	—	—	43	2	29	5	—	338	7
1964/65	177	—	—	3	118	—	132	—	—	427	3
Total	2,513	5	3,616	268	612	3	496	28	399	7,636	304

Throughout the investigation New Zealand Dominion Museum size 8 bands were used, cut to obtain a close fit. Since 1959 ordinary aluminium rings have been replaced by duralumin rings. Any bird recaptured was banded on the other