CONTRIBUTIONS TO THE GANNET CENSUS.

XI.—WHITE ISLAND GANNETRIES; JANUARY 8-14, 1947.

By Rev. F. H. Robertson and Kazimierz Wodzicki.

The following account summaries observations made during the visit of a scientific expedition of the Department of Scientific and Industrial Research, January 8 to 14, 1947.

Gannets **(Moris serrator)** now nest in three places (Fig. 1).* The gannetries marked Nos. I. and II. are readily accessible by land through the track leading from the old factory in Crater Bay to the site of the workers' camp. These were visited several times. The access by land to gannetry No. III. is much more difficult and this colony was visited only once by Messrs. C. A. Fleming and Dr. W. M. Hamilton, to whom we are indebted for a sketch plan and a count of the birds. The predominant vegetation of the island is a forest of pohutukawa but in some places round the gannetries there is thick growing taupata **(Coprosma retusa)**. Where, however, the scrub has been killed by the gannets there occurs a **mesembryanthemum** association succeeded in some places by rank growing masses of **Poa anceps**.

A.—Gannetry I.

There are two nesting areas separated by a ravine. Counting in sub-colony 1a was rendered difficult by its large size and the great shyness of the gannets. The most satisfactory counts were made with the help of field glasses from the slopes above the gannetry. No count was made of eggs here. There were only 21 chicks, the majority of which were in the naked or down stage. The total of gannets counted was 1,280 pairs. In this colony there were quite large areas of guano-covered ground without nest mounds in addition to a considerable number of unoccupied mounds.

Sub-colony 1b was smaller in area and there was not such a large area of unoccupied ground. The count gave 465 pairs, 158 eggs and eight chicks.

B.—Gannetry No. II.

This gannetry consists of four sub-colonies of which sub-colony C consists of two distinct parts separated by a depression. Here, too, there was unoccupied ground. Sub-colony D was not noticed by the writers and in aerial photographs appears to be a roosting place with three or four birds present.

The following table gives the results of the counting:—

	Sub-colony			Total for
	a	b	c	Gannetry II.
Gannet pairs	245	40	322	607
Eggs	98	18	111	227
Chicks	5	2	11	18
Empty mounds	178	70	553	801

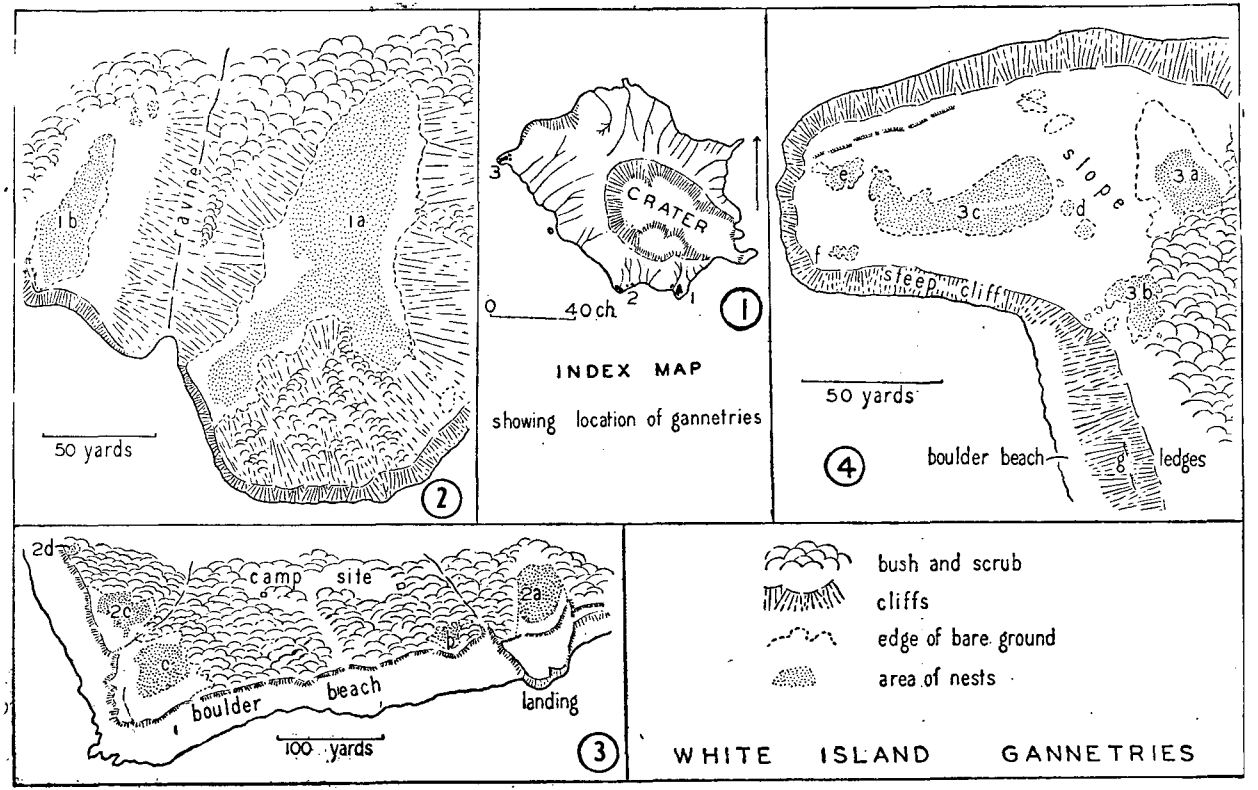
C—Gannetry No. III.

In addition to the seven sub-colonies in this Group there were about six guano-covered places, apparently roosting places of the gannets (Fig. 4). For reasons stated above only a partial count of the eggs and chicks present was made:—

	Sub-Colony							Total
	a	b	c	d	e	f	g	Gannetry III.
Gannet pairs	161	105	374	25	25	12	8	710
Eggs	–	–	–	–	12	10	–	
Chicks	–	2	5	–	1	0	–	

– No count taken.

* This and the other figures have been very kindly drawn by Mr. C. A. Fleming.


1b
ravine
1a
50 yards
2
CRATER
3
2
1
0 40ch
1
INDEX MAP
showing location of gannetries
slope
3a
e
3c
d
f
steep cliff
3b
50 yards
4
boulder beach
ledges
2d
camp site
2c
2a
c
b
boulder beach
landing
100 yards
3
bush and scrub
cliffs
edge of bare ground
area of nests
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General.

The above figures in the case of the larger sub-colonies are means of several counts made by two observers. Accurate counting was made more difficult by the fact that when the colonies were approached a number of birds, sometimes more than a hundred, which were occupying nesting mounds, took to the air, and some at least did not return before the counting was completed. In colony Ia it was difficult to secure an accurate count, but the counts made are within about 50 pairs of the mean.

The total count for the three gannetries was accordingly 3,076 and the total population can, therefore, be assumed to have been approximately 3,000 pairs. There is some evidence that the gannetries were disturbed earlier in the season and this may account for the extremely small number of chicks found. The small number of chicks, the large number of only slightly incubated eggs and the number of unoccupied gannets and empty mounds made the situation at White Island most perplexing. It is illustrated by the following figures:—

Percentage of	Colony 1b	II.	III.
Pairs with eggs	34	38	—
Pairs with chicks	1.7	2.6	1.6*
Unemployed	64.3	60.4	—

* Only b, c, e, f, examined

On the other hand, somewhat similar conditions were found in some other gannetries visited during the 1946-47 census. It is clear that the gannetries at White Island could accommodate a substantially larger population than was found during our visit.

There were a number of red-billed gulls **(Larus novaehollandiae)** constantly foraging on each of the gannetries. They appeared to subsist largely on food found there but no attempt to break and eat gannet eggs was observed. A total of six dead birds were counted on gannetries I. and II. One of these had been shot and died during our stay.

XII.—GANNETRIES NORTH OF AUCKLAND, SEASON 1947-48.

By G. A. Buddle.

During the course of a trip to the Three Kings at the end of December, 1947, opportunity was taken to inspect the gannet colonies at Poor Knights Rocks, Karaka Point and Three Kings: owing to bad weather conditions no landings were made, and no count of gannets en route as was made last year could be made.

Poor Knights Rocks. (11/1/48.)

A group of four rocky islets lying about four miles to the S.W. of the Poor Knights: three are grouped about 100 yards apart and the fourth and largest about a mile to the westward. The two centre ones are about 100 yards in diameter and 75-100 feet in height, and carry a scanty vegetation of wind-swept scrub which appeared from the sea to be mostly ngaio, taupata, mesembryanthemum, etc. Both could easily be landed on in fine weather. There are no nesting colonies of gannets on either of these, but probably a few petrels nest on them.

The gannetries are on the two outer ones. The easternmost one is a small rock stack with smooth, vertical cliffs on all sides, about 25 yards in diameter and 75 feet in height with a flat top which is closely packed with nesting gannets. We estimated the population at about 150 birds. There is no possibility of either landing on or climbing this stack; an aerial photograph is the only method of obtaining an accurate count. The main colony is on the western rock of the group (often known as the Sugarloaf) about a mile distant. This islet is a pyramidal