

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

rock about 100 yards in diameter and 150 feet in height, with little or no vegetation. It is somewhat broken at the western end and in reasonable weather a landing could easily be made, and an ascent to about half way up would not be difficult, but there appears to be no possibility of getting beyond that to the numerous ledges on which the gannets are nesting, and an aerial photograph is the only means of obtaining an accurate count. There appear to be few if any red-billed gulls nesting, so that complete accuracy could be secured by this means. We estimated the population to be 1,200-1,500 birds, but as the top plateau is not visible, this would be a rough guess only.

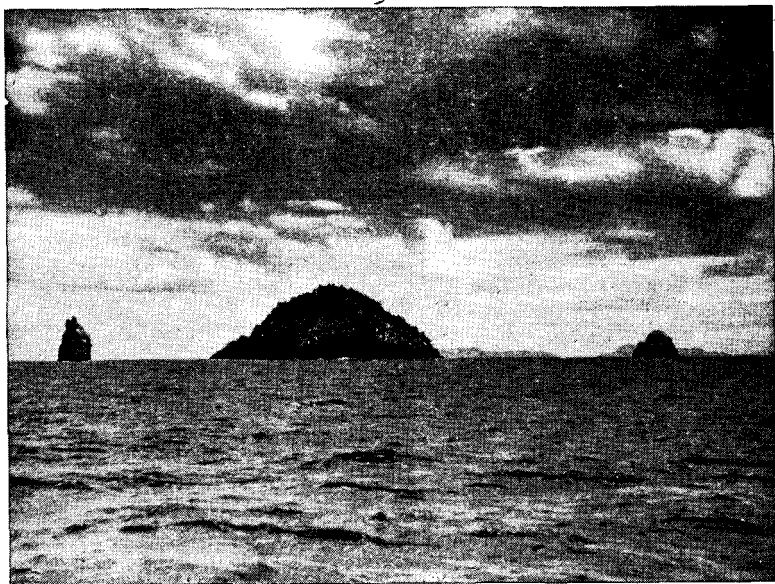


Photo: G. A. Buddle.

THE POOR KNIGHTS ROCKS.—Gannets nest on the two stacks on left and right, but not on centre. Estimated population: 100-150 birds on the left; 1200-1500 birds on the right (The Sugarloaf).

Karaka Point (Cape Kare-Kare). (12/47.)

The small nesting colony reported last year (N.Z. Bird Notes, Vol 2, No. 6, p. 128) as having been established on two outlying rocks was evidently not satisfactory, as it is not in use this season. Very few gannets were seen in the locality.

Three Kings. (1/1/48.)

Owing to adverse weather conditions no landings were possible this year, but a fuller examination from the sea was made.

South-West King.—Some of the smaller isolated colonies had definitely increased in size, and there appeared to be more birds moving in the vicinity of the main colony.

Princes Islands.—The same remarks apply to the Princes Island colonies, particularly to the two outer colonies in the chain of four occupied rocks. Several areas that were bare or were occupied by red-billed gulls are now in use by gannets. The closer and more detailed observation from the sea which was possible on this occasion showed to what a great extent the gannets and red-billed gulls were intermingled in the nesting areas, and the overlapping of the colonies was much

greater than I had realised last year. However, on the whole I am of the opinion that my estimate last year of 3,750 birds (N.Z. Bird Notes, Vol. 2, No. 6, p. 130) was very conservative, and I would now consider 5,500 nearer the mark.

XIII.—WINTER COUNTS IN HAURAKI GULF.

By Magnus Johnson, Auckland.

The following notes on gannets in winter may be of interest. I have visited all (I think) gannetries from White Island to the Three Kings and have for the past seven years taken a keen interest in their increase and decrease. On May 8, 1948, I set out for a week's cruise to Colville Peninsula and the Great Barrier.

On May 9 I visited Horuhoru Rock, just north of Thumb Point, off Waiheke, and counted between 70 to 80 gannets thereon. The birds were very still and not flying about.

On May 11 I visited gannetries on the Colville Group and counted 25 gannets on Motu Takapu (Gannet Rock) and between 40 and 50 on the larger island close by.

Between Auckland and Colville I saw only two gannets at sea and during the week's cruise I did not see more than 12 gannets at sea.

The birds I saw on the gannetries were mostly sleeping, with head under wing. As this was just before a severe S.E. gale, I suggest that the gannets sensed the coming of the gale and had taken refuge on the islands.

SEABIRDS NESTING ON THE SUGARLOAF ROCKS, NEW PLYMOUTH.

By Eric H. Sedgwick, Caron, Western Australia.

While in New Plymouth during January last, I paid some attention to the seabirds at Paritutu Beach and on the adjacent Sugarloaf Rocks.

My observations led me to postulate nesting colonies of white-fronted tern (*Sterna striata*) on Pararaki and on Motu-o-tamatea, and a possible colony of black-backed gulls (*Larus dominicanus*) on Motumahanga. Silver or red-billed gulls (*Larus novaehollandiae*) were nesting on Pararaki.

Unfortunately, I was unable to set foot on Pararaki and had to content myself with watching through binoculars from the adjacent Mataora. From this vantage point I could clearly discern the red-billed gulls covering nests on the exposed summit of the rock. Their nests impressed me as being unusually substantial: perhaps a concession to the rocky site. Evidence of the terns nesting was more circumstantial, but nevertheless strong. A number of birds were apparently brooding in the niches in the mesembryanthemum-covered cliffs comprising the side of the rock. Several terns were seen carrying fish towards the island, and one, at least, appeared to feed a young bird with a fish that it had just brought in its bill.

I thought that a few terns might be breeding on Motu-o-tamatea, so on January 10th I examined the cliffs of that island for nests of the white-fronted tern but found none occupied, though adult terns behaved aggressively, diving to within a few inches of my head. Old nests and eggshells probably attributable to this species were located. The cliffs examined were rocky in parts, but elsewhere comprised steep slopes covered by a small species of *mesembryanthemum*. These cliffs resemble those of the nearby Pararaki, already referred to as a nesting place for terns and gulls.

Large seabirds, probably black-backed gulls, were to be seen over Motumahanga but at too great a distance to enable any definite conclusions to be drawn.