

the above does show that this species suffers from an unusually high rate of nestling mortality in Australia. It would further appear from our present knowledge that this high nestling mortality rate is sustained or exceeded in New Zealand.

#### REFERENCES.

- Bourke, P. A., 1947—Egg and Nestling Mortality Rates, with Notes on Some Species. *Emu*, 47: 321.  
Ellis, B. A., 1945—The White-faced Heron. *N.Z. Bird Notes* 1 (9): 109-110.  
Falla, R. A., 1942—White Herons in the Okarito District. *Bulletin of the O.S.N.Z.*, No. 2.  
Oliver, W. R. B., 1930—New Zealand Birds, pp. 361-2.  
Stidolph, R. H. D., 1952—White-faced Heron in New Zealand. *Notornis* 5 (1): 18-19.

---

#### A KEA'S NEST.

By L. W. McCaskill, Christchurch.

For a bird that has received so much publicity, it is surprising that we know so little about the nesting habits of the kea (*Nestor notabilis*). With the increasing number of mountaineers and trampers visiting the haunts of the kea we would expect that nests would be more commonly found than is actually the case. A recent experience would suggest that possibly we have been looking in the wrong place.

Potts gave us the following description in "Out in the Open": "It breeds in the deep crevices and fissures which cleave and seam the sheer faces of almost inaccessible cliffs, that in places bound as with massive ramparts the higher mountain spurs. Sometimes, but rarely, the agile musterer, clambering amongst these rocky fastnesses, has found the entrance to the 'run' used by the breeding pair, and has peered with curious glances, tracing the worn track till its course has been lost in the dimness of the obscure recesses, beyond the climber's reach. In these retreats the home or nesting place generally remains inviolate, as its natural defences of intervening rocks defy the efforts of human hands, unless aided by the use of heavy iron implements that no mountaineer would be likely to employ."

Marriner described a nesting site found in 1906 in a gorge of the Rakaia River. It was in a long, narrow tunnel among rocks near the top of a cliff. Young birds had been taken from this nest in August.

In January, 1908, Edgar Stead found a nest at Glenthorne, a station up the Wilberforce River. This nest was in a tunnel in a big rock slip and contained four eggs.

Apart from this record by Stead, it has been assumed that the kea's breeding season commenced about June with the eggs usually laid in July. Until recently, it has also been assumed that the nest always occurred in rocky country usually well above the bush line.

On January 29, 1954, I was inspecting part of the Arthur Pass National Park in company with the ranger, Mr. Ray Cleland. Returning from Lake Minchin to the Poulter River we were surprised to see a kea perch near us in dense beech forest. A few moments after we sighted her, the kea dropped to the ground, landing out of sight behind a bank. We hastened to the spot where she had landed but there was no sign of her except a few stray feathers and a small pile of droppings below the perch where we had first seen her. Further inspection disclosed the entrance to a tunnel with a well-worn track. The tunnel, about two feet long, passed under the arching roots of a beech tree, under some loose rubble disturbed by the fall of a tree long ago, and into a chamber about four square feet in area. In the chamber were the parent bird and three young in the down stage.

A little excavation enabled us to remove the adult bird. On release, she flew to her perch and proceeded to screech almost continuously. The young replied to her with the same harsh screech, the only apparent difference being the lesser volume. The young birds were carefully removed, photographed and returned to the nest. They were so fat that they had difficulty in standing upright for long and soon squatted down or rolled over sideways. One was considerably smaller than the other two but even it was quite fat.

The body of each was covered with long, pale grey down. Six of the wing feathers were quite well-developed in each bird; they were the well-known bright olive-green in colour with an edging of bluish black. The most striking part of the young was the bill and the surrounding tissue, all of which was a bright yellow shade.

After replacing the young birds, the outside of the nesting chamber was restored as nearly as possible to its original condition, and we retired to a distance of a chain. The adult bird, which had been watching events closely, at once landed on the ground, inspected the surroundings minutely and returned to the young.

The nesting chamber was located about thirty yards from the bush edge at a height of about 2200 feet. The bush opened on to a bare face above the valley of the stream which drains Lake Minchin.

As a result of these observations, it is suggested that people interested in nests of the kea might look for them in January and in bush in a situation similar to that described.

---

### ROYAL ALBATROSS A 99. (*Diomedea epomophora epomophora*.)

By J. H. Sorensen, Wellington.

Royal Albatross A. 99 (*Diomedea epomophora epomophora*) was ringed as a fledgling by the writer on Campbell Island on 4th October, 1943, when about seven months old. Several hundred fledgling royal albatrosses, and some adults (apart from the mated pairs studied intensively), were ringed about this date. The rings were home-made ones of aluminium from old pots, copper from an old boiler, and even the alloy from discarded dry battery cases. Each ring was stamped "Return Southland Museum, N.Z.", and carried the serial letter A followed by the number allocated.

In September, 1953, almost ten years later, the Director of the Southland Museum, Mrs. O. Sansom, received a letter from Dr. R. A. Philippi, Director of Ornithology, Natural History Museum, Santiago, Chile, advising that an identification ring No. A.99 had recently been handed to him. Dr. Philippi wrote as follows:—

"In the year 1944 a specimen of Royal albatross (*Diomedea epomophora*) was captured on the beach at El Tabo, Province of Santiago, Chile, with this ring attached. The bird was in an exhausted condition and died soon after." Mr. P. C. Bull, convener of the Ringing Committee of the Ornithological Society, then wrote to Dr. Philippi and told him the bird's ringing record. At the same time he requested further information, especially as to the date in 1944 when the bird was found, what had happened to the body, and whether any photographs were available. On 29th December, 1953, Dr. Philippi replied, and I quote his letter in full:—

"With regard to the ringed specimen of the royal albatross found on the beach at El Tabo at the end of March or beginning of April, 1944, I can give you the following data: The specimen (A-99) is mounted and preserved in a Catholic School of this city. As can be appreciated by the enclosed photographs, it is undoubtedly a very young bird. The discovery has only recently come to light due to the fact that the person who found the dying bird at El Tabo took the ring to the British Embassy, where an official informed him that it would be inadvisable to make any comment or announcement at all as the ring might indicate a message from a German



YOUNG KEAS IN NEST.

Arthur Pass National Park, January 29, 1954.

Photo: R. Cleland.