Mortality, interference and injury at Whitehead nests

During the summers of 1983/84, 1984/85, and 1985/86, we investigated breeding of Whiteheads *(Mohoua albicilla)* on Little Barrier Island. We found 78 nests and gathered evidence indicating the existence of 13 further nests. One nest was re-used. Usually, Whiteheads bred in primary pairs with secondary individuals which sometimes fed nestlings and fledglings (terminology after D. Dow, 1980, *Emu* 80: 121-140); we thus refer to breeding "groups" in the following notes on mortality, interference and injury at nests.

Predation

1984/85: On 23 November, nest 11 (height 5 m), which was beside the rubbish pit, was apparently preyed on by kiore *(Rattus exulans)* on the day the two eggs were due to hatch. One broken egg with rat tooth marks and identical to the egg left in the nest was on the ground 10 m away. The other egg was retrieved from the nest after several days when it was clear that the nest had been abandoned. The full-term embryo from it is in the Auckland Museum (reg. no. B2144). The rubbish pit attracted many rats, making this nest a likely contender for kiore predation. No other nests were known to be preyed on by kiore.

On 26 November, nest 34 (height 30 m) contained large chicks (judged by their calling). As we walked away an uproar of Whitehead calling broke out overhead, and the Whiteheads chased a Long-tailed Cuckoo *(Eudynamys taitensis)* from the vicinity of the nest. When checked 24 h later this nest had failed. This was the only time that we saw Whiteheads chasing a cuckoo and the cuckoo may have preyed on the nest.

1985/86: On 30 October, a Tui *(Prosthemadera novaeseelandiae)* was probing into nest 7 when the female returned to continue incubation. The Tui pulled out the nest lining and, on being attacked by the Whitehead, flew off. The female settled on the nest but several hours later had abandoned it, presumably as a result of this incident.

Interference at nests

One definite case of interference by other Whiteheads was observed in 1984/85. At nest 24, the male of a neighbouring nest (44 m away) was twice seen to prevent the incubating female from returning to the nest, on one occasion for 12 min. Her mate was present and although agitated did not attempt to drive off the neighbour. This female had five unsuccessful nests, the most recorded during the study.

Evidence from nest 24 and other groups indicated that some groups contained two breeding pairs. Our data are anecdotal, but we suggest that dominance relationships within a group may result in decreased breeding success for one pair (which is presumably subordinate). A similar result was noted for the Splendid Wren *(Malurua slendens)* by R. B. Payne, L. L. Payne & I. Rowley (1985, *Behaviour* 94: 108-127).

Tui and Bellbirds *(Anthornis melanura)* often approached Whitehead nests and peered at the incubating female. Females either crouched into the nest

or gave alarm calls, but they never left, and were not attacked by the intruders.

On 30 December 1984, at nest 41 (height 10 m), the 1-year-old male Saddleback *(Philesturnus carunculatus)* which lived in the general area of the bunkhouse persistently approached the nest despite being mobbed by the Whiteheads. After about 10 min it plucked a chick from the nest (weight 7.0 g, age 4-5 days), carried it to a nearby branch, and dropped it. We returned the uninjured chick to the nest, which contained two other nestlings, and one chick was eventually reared successfully. This Saddleback was an unusually tame bird which often followed us to nests. He pecked at chicks in two other nests, but his behaviour was probably not typical. He had a mate in 1985/86 and did not interfere with Whitehead nests, to our knowledge.

Early fledging

On 17 November 1984, a Tui feeding in pohutukawa *(Metrosideros excelsa)* flowers around nest 3 caused the two chicks to leave the nest at 16 days (about two days early). The adult Whiteheads often attacked Tui and Bellbirds feeding in these flowers. We rescued the chicks from the ground and placed them in the tree, but next day a Tui attacked the chicks, mortally injuring one of them. The other survived.

During several windy days in mid-December 1984, three newly fledged chicks from three different nests were found on the ground. One was in a dry creekbed, and the parents could not find another which was hidden under a log. These two were unlikely to have survived if we had not rescued them. A dead chick was found beneath one of these nests two days before the live chick was found. A dead chick found by A. and M. Dobbins on 6 January 1986 came from a nest which chicks were due to leave about four days later. It appears that Whitehead chicks will leave the nest early if there is disturbance nearby. Such chicks are unlikely to survive because the parents continue to feed any chicks left in the nest. Mortality of chicks was high during the last week of the nesting period, and we believe that much of this mortality is related to some chicks leaving the nest early.

Starvation

Two healthy chicks were banded in nest 32 on 12 December 1984, before a 3 day storm (the only major storm of the season). Both chicks apparently starved to death during the storm because, when checked on 17 December, they had been dead at least 24 h. Both were emaciated and had developed little since banding. Three adults were feeding the chicks in this nest.

Injury

Both tarsometatarsi of one of three chicks in nest 32 were found to be broken when the chicks were removed for banding on 12 December 1984. We "splinted" one leg with a band. Both legs healed and the chick was reared successfully.

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LETTER

The Editor, 10 June 1986

Sir,

The correct name of *Rallus hodgeni*

I am sorry to see that Dr Olson (*Notornis* 33: 32) wants to return to the early 19th century habit of correcting scientific names because they were considered to have been "incorrectly formed". In the present case the author (R. C. Scarlett) named the new fossil species for the owners of Pyramid Valley Swamp, but chose the family name of the brothers as the dedication name *(hodgeni)*. There is no unequivocal indication that this was an error for *hodgenorum*. For all we know, the wives of the Messrs Hodgen are co-owners of the swamp, and what ending would then be appropriate?

Even though Art. 31c suggests renaming incorrectly formed dedication names, ornithologists generally have placed stability and convenience higher than adherence to Latin grammar. For instance, Frank M. Chapman described in 1931 a South American bird as *Brachygalba lugubris naumburgi*, dedicating it to Elsie Naumburg. In order not to disturb stability, no one in the 55 years since then has "corrected" it to *naumburgae*.

Rallus hodgeni has not only priority, but is also a simpler and shorter dedication name. Why then abandon it owing to application of the anachronistic article 31c?

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