

We suspect that a chick was produced. The egg could have been laid up to 28 days before we found it, and it would therefore have been incubated for 59 to 87 days when the female was last seen on 2 December. She alone incubated it for at least 30 days, assuming that she was in the nest on all days between our visits. Incubation takes about 70 days in captivity (Eason 1988).

Our results show that female Great Spotted Kiwis do incubate, and indeed may be able to hatch eggs successfully with little or no help from their mates. Even in normal circumstances, when both members of a pair are present, the female spends most of the night incubating the egg.

We do not know why the incubation behaviour of Great Spotted Kiwis should differ so markedly from that of the other kiwi species. It is unusual to find such variation within the same genus.

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Forbes' Parakeet on Chatham Island

The Chatham Island Yellow-crowned Parakeet or Forbes' Parakeet (*Cyanoramphus auriceps forbesi*) is found only on the Chatham Island group. Formerly on Mangere, Little Mangere and Pitt Islands (Oliver 1955), this subspecies is now confined to Mangere and Little Mangere Islands in much reduced numbers, largely as a result of deforestation and associated hybridisation with Chatham Island Red-crowned Parakeets (*C. novaezelandiae chathamensis*) (Taylor 1985). Since the early 1980s there have been several sightings of parakeets with yellow crowns in the southern, forested part of Chatham Island – an area where they had not previously been recorded.

The first of the known sightings was provided by L. Hutchison, who recalled seeing "a bright green bird with a yellow and red head" foraging in a bed of "Chatham Island lilies" while living in Waitangi during 1975 and 1976. This bird was later identified as a Forbes' Parakeet (R. Taylor, pers. comm.). Several years later D. Melville saw a yellow-crowned parakeet in the vicinity of the Tukuatamatea River during December 1982 (Melville 1984). More sightings have followed over the last two years during intensive searches for the breeding burrows of the Chatham Island Taiko (*Pterodroma magentae*) in the Tuku Reserve.

During the 1987 Taiko expedition, a parakeet with a yellow crown was seen on the edge of the *Dracophyllum* forest north of the Tukuatamatea River (NZMS 260 (2) 419446) (B. Simpkin, pers. comm.). Several photographs were taken of this bird, which on the basis of this evidence was tentatively identified as a Forbes' Parakeet.

Members of the 1988 Taiko expedition (October-December) also saw a parakeet with a yellow crown on several occasions in the vicinity of the 1987 sighting. Close observation was possible as the parakeet was attracted by imitations of its chatter or by other unfamiliar noises in the area the bird frequented. The morphological and behavioural characteristics of this parakeet can be summarised as follows:

Size equivalent to that of male Chatham Island Red-crowned Parakeets in the vicinity;

A pronounced yellow crown;

A narrow crimson frontal band which did not appear to reach the eyes; No red on the ear coverts;

Prolonged chases, accompanied by vigorous chattering, of Chatham Island Red-crowned Parakeets that flew near it; and

Seen to feed on spittle-bug larvae (*Philaena trimaculata*) in *Coprosma chathamica* trees.

The highly territorial nature of the bird, its eating insects and its appearance seem to agree with much that has been written about Forbes' Parakeet (Taylor 1975, 1985 and Nixon 1982) and would appear to confirm its identity.

However, several questions remain. The most obvious of these are how and when this bird (or birds) arrived on Chatham Island. The most likely explanation is that a bird was blown north from Mangere or Little Mangere Island by strong winds, a feature for which the region is noted. Less likely is that Forbes' Parakeets have always been in the forested areas of Chatham Island and a remnant population has been "discovered" as ornithologists have entered the forest north of the Tukuatamatea River.

The little evidence suggests that a very small number of Forbes' Parakeets is on Chatham Island. Observations in 1988 were almost certainly of the same male bird, but other birds may be in the area. Fleeting glimpses were caught of what was thought to be a parakeet with a yellow crown following a Chatham Island Red-crowned Parakeet, and several Forbes'-like calls were heard in the area. In a short visit to the same area for two weeks in April 1989, R. Colbourne (pers. comm.) saw no sign of this parakeet.

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