IAN G. MCLEAN

SHORT COMMUNICATION

BREEDING STATUS OF CUCKOOS ON OFFSHORE ISLANDS OF NEW ZEALAND: SOME CORRECTIONS

Introduction

Determining the breeding status of small, inconspicuous forest bird species is often difficult. However, in New Zealand, few native forest birds are migratory and breeding can often be inferred from the presence of a reasonable number of individuals throughout the year (Williams, 1981). In compiling his lists of species as present or absent on offshore islands, Williams (1981) appears to have been cautious when determining breeding status for the two species of cuckoo (shining cuckoo, Chrysococcyx lucidus; long-tailed cuckoo, Eudynamis taitensis), perhaps because both are migratory. He listed shining cuckoo as present (and presumably breeding), and long-tailed cuckoo as absent from Little Barrier Island. He also listed longtailed cuckoo as present on Great Barrier Island and both cuckoos as absent from Cuvier Island.

In recent analyses of aspects of the biogeography of New Zealand birds, East and Williams (1984) and Diamond (1984) used Williams' (1981) data on the breeding status of cuckoos on offshore islands. Williams was aware of errors in the 1981 paper at the time that East and Williams (1984) was being prepared, but the 1981 tabulation was accepted as sufficiently accurate for a broad overview (R. East, pers. comm.). I offer the following corrections in the interests of updating available information.

Results

(i) Cuvier Island: I report sightings of shining cuckoo nestlings or fledglings by P. F. Jenkins (pers. comm.) in 1973, by myself in 1971 and 1973, and by T. G. Lovegrove (pers. comm.) in all five breeding seasons from 1980/81 to 1984/85. T. G. Lovegrove (pers. comm.) and I have independently sighted adult long-tailed cuckoos on Cuvier Island, but they were probably vagrants since their whitehead (Mohoua albicilla) host does not occur there.

(ii) Little Barrier Island: Long-tailed cuckoos do

(ii) Little Barrier Island: Long-tailed cuckoos do breed on Little Barrier (McLean, 1982). In that note I reported two cuckoo fledglings being fed by a group of whiteheads. I further report finding ten long-tailed cuckoo chicks in the 1984/85 breeding season, including nine fledglings and one nestling in a whitehead nest. Two fledgling shining cuckoos

(being fed by grey warblers, *Gerygone igata*) were seen by visitors to the island in 1984/85.
(iii) *Great Barrier Island:* Long-tailed cuckoos are now probably vagrants only due to the recent extinctions of whiteheads on Great Barrier and Rakitu (Bellingham et al., 1982). P. C. Harper (pers. comm.) noted thirteen in December 1975 and December 1976; I noted one in January 1985.

Discussion

Shining cuckoos were listed by Williams (1981) as absent or vagrant on all islands below about 4 km' in size, and also absent from or vagrant on several slightly larger islands listed in detail by Diamond (1984, p.50). The grey warbler is the only likely host of the shining cuckoo in New Zealand (Gill, 1983). East and Williams (1984) extended to fourteen Williams' (1981) list of nine islands on which grey warbler is present but shining cuckoo absent, including five islands (Great King, Rakitu, Cavalli, Big South Cape, Mercury) which are larger than the Chetwodes, the smallest island on which shining cuckoos were known to breed. Cuvier Island is about two-thirds the size of the Chetwodes; thus it appears that shining cuckoos can breed on small islands, and it is likely that if grey warblers occur on any island larger than Cuvier, then shining cuckoos also breed there. Suggestions to the contrary may be due more to lack of information than to lack of cuckoos.

Despite the greater abundance of long-tailed cuckoos over shining cuckoos (c. R. Veitch, pers. comm.; pers. obs.) on Little Barrier, T. G. Lovegrove and I appear to be the only people who have seen a long-tailed cuckoo chick on that island. If a species occurs at a site, determining that it does not breed is much more difficult than determining that it does (only one nest or fledgling is required). Long-tailed cuckoos are extraordinarily cryptic birds. Adults are easily located (although not necessarily seen) from their noisy calls, but the calls given by chicks are very quiet and sound like a cricket. These observations, in combination with the cuckoo's migratory habit, probably explain why Williams (1981) listed the species as absent from Little Barrier. Fledgling shining cuckoos are apparently much more easily located, since short-term visitors to the island in 1984/85 saw two.

I believe that Williams' (1981) conservative approach of not listing a species as present on an island unless there was strong evidence otherwise was appropriate, given his analysis. However, attempts to draw inferences from the absence of birds from islands using Williams' data, as did Diamond (1984), must be pursued with caution.

Acknowledgements

I thank P. C. Harper, T. G. Lovegrove, P. F. Jenkins and C. R. Veitch for sharing their unpublished observations with me. I am grateful to R. East, P. C. Harper, B. J. Gill, and P. F. Jenkins for comments on the manuscript, and B. Hoddinott for typing. Part of this work was supported by a grant from the Lottery Board Scientific Research Distribution Committee administered through the Auckland Institute and Museum.

References

- Bellingham, P. J.; Hay, J. R.; Hitchmough, R. A.; McCallum, J. 1982. Birds of Rakitu (Arid) Island. *Tane* 28: 141-7.
- Diamond, J. M. 1984. Distributions of New Zealand birds on real and virtual islands. *New Zealand Journal of Ecology 7*: 37-55.
- East, R.; Williams, G. R. 1984. Island biogeography and the conservation of New Zealand's indigenous forest-dwelling avifauna. *New Zealand Journal of Ecology* 7: 27-35.
- Gill, B. J. 1983. Brood parasitism by the shining cuckoo *Chrysococcyx lucidus* at Kaikoura, New Zealand. *Ibis* 125: 40-55.
- McLean, I. G. 1982. Whitehead breeding, and parasitism by long-tailed cuckoos. *Notornis* 29: 156-58.
- Williams, G. R. 1981. Aspects of avian island biogeography in New Zealand. *Journal of Biogeography* 8: 439-56.