

NOTES ON THE BREEDING OF THE SPOT-EARED HONEYEATER NEAR BEREINA, PAPUA NEW GUINEA

Because almost nothing is known about the breeding of honeyeaters in New Guinea, I decided to study a common, easily observed species, the Spot-eared Honeyeater *Lichmera alboauricularis*, at De La Salle High School near Bereina (see Heron 1974 for map), about three kilometres from the coast. The natural vegetation, outlined by Heyligers (1965), consists mainly of Cane-grass *Saccharum spontaneum* and Kunai *Imperata cylindrica*, which surround the lawns, ornamental trees and shrubs at the High School. Data were collected between 1 September 1973 and 30 April 1976 on nests, which were plentiful and fairly accessible.

THE NEST

The nest is a neat compact cup-shaped structure composed of dead leaves, coconut fibres, small pieces of bark and a little dried grass bound together with spiders' egg-bags and webs. It is usually suspended by its rim from the outer branches of a shrub or tree. The species probably bred usually in Cane-grass before settlement and colonized the man-made environment only recently. It has continued to adapt itself, because one nest contained a piece of newspaper and another plastic threads from a rice bag. Two nests were measured and their outside measurements were 78 x 57 and 70 x 64 millimetres.

Of twenty-one nests, fourteen were in shrubs less than two metres tall, five were in Raintrees (Leguminosae) from two to five metres high, one in a yam *Dioscorea variegata* 1.5 metres high and one in a mango *Mangifera indica* 2.5 metres high; average height 1.7 metres.

During building the birds were nervous but they did not abandon eggs or young even when closely observed. Both sexes built and nests usually took from seven to ten days to complete. One pair, however, began a nest on 23 July 1975 and finished it four days later but this was unusual. Nesting (i.e. the laying of the first egg) was recorded or calculated as follows during the two and a half years:

- 2, 10 March
- 2, 18, 21 April
- 6, 10, 23 June
- 12, 20, 31 July
- 11(2), 15, 19, 20, 24 September
- 2, 12, 15, 20 October.

EGGS AND INCUBATION

The eggs are very pale pinkish-white, sparsely dotted at the larger end with dull reddish-brown. Sometimes one egg is less heavily marked than the other. I recorded only C/2. Three clutches were measured: 17.0–18.0 x

13.4–14.0 millimetres; average 17.5 x 13.7.

The first egg usually appeared the day following completion of the nest. On 10 September 1974 one pair completed their nest and the first egg was present at 06:00 on 11 September. The second egg was laid between 06:00 and 06:50 on 12 September; thus the female lays at intervals of twenty-four hours. Another pair, which took four days to build, waited a further four days before laying.

During incubation, only one bird was seen to sit; no changing over by its mate was observed. The sitting bird was almost hidden when viewed from below but the bill and tail projected a short distance when seen at eye level. In low nests, sitting birds were often in the shade and quite camouflaged. The incubation period was calculated once. The first egg was in the nest at 06:00 on 11 September 1974. The second was laid between 06:00 and 06:50 on 12 September. One egg hatched between 06:00 and 13:00 on 26 September giving an incubation period of 14 days 3 hours \pm 4 hours. The other egg being infertile was removed four days later on 30 September. In seven nests, only one contained two chicks. This was on 19 April 1975. In the others the unhatched eggs were presumably infertile.

THE CHICK

The newly fledged chick is naked and after four days its eyes have opened. No information was collected on rate of growth but seven chicks were banded about the tenth day after hatching when almost fully feathered. One bird left the nest between 06:00 and 09:30 on 8 October 1974. It hatched between 06:00 and 13:00 on 26 September; so the nestling period is about 11 days 20 hours \pm 6 hours. Both parents fed the chick on insects.

NESTING SUCCESS

Disturbance by school-children was particularly high, because many nests were near buildings where pupils worked and played. Six nests did not appear to be interfered with giving a success rate of twenty-nine per cent. Other predators possibly included Brown Goshawk *Accipiter fasciatus*, Black-headed Butcherbird *Cracticus cassicus* and Sacred Kingfisher *Halcyon sancta*, which were often seen near nests in the breeding season.

REFERENCES

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- HEYLIGERS, P. C. 1965. Vegetation and ecology of the Port Moresby – Kairuku area. In *Lands of the Port Moresby – Kairuku area, Papua New Guinea*, III. Land Res. Ser. CSIRO Aust. (14).

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