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SHORT NOTE

THE NESTING BEHAVIOUR OF A KIWI

A number of studies have focused on the nesting behaviour of birds, particularly gulls. Experiments by Tinbergen (1953) on egg recognition have shown that birds will brood surrogate objects and that some of these objects, especially larger ones, will act as hyper-natural releasers of incubating behaviour.

A recent field trip to a coastal property in Northland yielded some unexpected results in that a party observed a North Island Brown Kiwi (*Apteryx australis mantelli*) apparently happily incubating a beer bottle.

The party consisted of staff from the Department of Lands and Survey and the Commission for the Environment and a private consultant. The purpose of the trip was to investigate a proposal for a marine park at Mimiwhangata, situated on the east coast about halfway between Whangarei and Cape Brett. The property at Mimiwhangata, which consists of an attractive assemblage of forested hills, farmlands, marsh areas, coastal margins and offshore islands, has been transformed into a farm park by the owners. The owners are Lion Breweries Ltd.

A previous ecological study of the farm park by Darby & Darby (1973) had given an indication that up to five pairs of kiwis are resident in the area. One of the highlights of the field trip was a hike to a hill-top viewing platform, perched high in a puriri tree. While marvelling at the view, a member of the party happened to glance down at an object in a relatively open area of the bush near the base of the tree. After a discussion about the identity of the object, someone clambered down the bank to identify it. Initially it was identified as a dead "kiwi," recognisable as a rather spread-out mound of feathers. Further careful examination revealed, however, that the kiwi was in fact very much alive but sleeping soundly. What also

became evident was that the bird was straddling a partially buried 750 ml beer bottle.

Concern for the condition of the kiwi prompted the party to examine the bird more closely. The bird was encouraged to remain relatively calm during this process by someone holding a covering over its eyes. The kiwi was a male, its beak being 8-12 cm long, and hence could be expected to be nesting in October (breeding season, July-February in Northland — R. Kleinpaste, pers. comm.). The area in the vicinity of the bottle was littered with about two dozen feathers, indicating that the bird may have nested there for some time. Kiwis have been observed nesting at the Waitangi State Forest (Kleinpaste, pers. comm.) in a variety of situations, ranging from highly camouflaged nests to open casual sites. Interestingly, the bird was also facing north while sitting on the bottle, which conforms to observations made by Robson (1947).

The bottle itself was partly buried along its length and was about two-thirds full of liquid. The rounded contours of the bottle that were exposed did not appear to be unlike the familiar shape of an egg. The kiwi was straddling the bottle lengthwise with the tip of the bottle just visible in front of the bird. Studies by Tinbergen (1953) have identified that size, and to some extent shape, rather than colouring or marking, stimulate incubating behaviour. His experiments with larger than normal eggs demonstrated that the bird's incubation drive was highly stimulated by the extra size.

It is impossible to determine how the kiwi was originally attracted to the bottle. It may have lost its own egg, or it may have found the bottle more attractive. One imponderable question remains; the label on the bottle was missing and hence we may never learn which brand of beer kiwis really prefer.

The original sighting of the kiwi occurred in October and since that time there have been a number of subsequent sightings of the bird, always in the same position straddling the beer bottle. The bird appears to sleep quite soundly and is undisturbed by visitors using the viewing platform directly above it.

It seems that the kiwi is now reaching the end of the normal incubation period and it will be interesting to see how long it perseveres. Perhaps the bird will experience some difficulty in giving up the bottle.

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