SHORT COMMUNICATIONS

EGG PREDATION AND POSSIBLE USURPTION OF AN AUSTRALIAN MAGPIE-LARK'S NEST BY APOSTLEBIRDS

There are few published accounts of interactions between Apostlebirds *Struthidea cinerea* and Australian Magpie-larks *Grallina cyanoleuca*, although their ranges overlap extensively in eastern Australia. Birds of both species cooperatively mob predators (Baldwin 1974) and may nest in close proximity with little antagonism (Mack 1967) but I report a different interaction.

On 23 November 1979 I witnessed predation by Apostlebirds at a nest of Magpie-larks near Meandarra, Queensland (27°22'S, 149°55'E). At 07:44 a raucous chatter in a tall brigalow *Acacia harpophylla* drew my attention. Two Apostlebirds were perched one metre from each other and two metres from a nest that had been attended by Magpie-larks during the previous three days. Both Apostlebirds called loudly and persistently, as did several others nearby. Suddenly, the noise ceased and one of the pair approached the nest and disappeared into the foliage concealing it. It emerged seven seconds later holding an egg in its bill. Its companion moved close to it and resumed chattering. The bird slowly lowered the egg and set it by a knob on a small limb. The egg was broken almost immediately; whether by design or accident, I could not say. Part fell to earth but a small cup-like fragment remained on the limb and the bird probed inside this for three seconds before dropping it. At 07:47 the two flew away and joined other Apostlebirds. I examined the two bits of egg; there was no evidence of an embryo. Reference to the Queensland Museum's egg collection verified that the egg was typical of *G. cyanoleuca*.

At 08:07 I watched from a better vantage point as a lone chattering Apostlebird approached the same nest and perched one metre from it. A male Magpie-lark immediately left a tree six metres away and flew directly toward the intruder. He gave a two-syllable call en route and, with wings raised slightly and held away from the body, he supplanted the Apostlebird and called rapidly (see Tingay 1974). The displaced bird chattered briefly and was quickly joined by another; both perched three metres from the nest. The Magpie-lark perched between its nest and the Apostlebirds. These two made no further advance and flew south at 08:10. The Magpie-lark remained until 08:17, when he flew away, giving the same two-syllable call.

Once again (at 08:48) a single chattering Apostlebird approached the nest. It silently looked inside and perched on the rim for thirty-five seconds, then moved two metres away and called loudly. At 08:50 two others joined it. This trio immediately encountered (seemingly by accident) a Tawny Frogmouth *Podargus strigoides* on a nest three metres from the Magpie-lark's nest. Much calling ensued as the Apostlebirds clustered round it but the Frogmouth maintained its cryptic posture. At 08:52 one Apostlebird backed off and, still calling and followed by another, approached the Magpie-lark's nest. It stood on the rim and stuck its head into the cup while its companion perched by the nest and watched. The third Apostlebird joined them at the nest. One bird sat in the nest, shuffled (a movement commonly seen as birds settle on eggs) and softly but swiftly pecked the rim of the nest. When it left, another bird moved into the nest and pecked the rim. Using its feet as a pivot and keeping the head and tail aligned in the same plane, it repeatedly changed its orientation in the nest. The third bird did not sit in the nest and moved two metres away at 08:54. The remaining birds continued to take turns sitting in the nest and even sat in it together for several periods of about five seconds. Occasionally, each pecked the inner, lower portion of the nest.

At 08:57 this pair joined the third bird perched nearby. The male Magpie-lark appeared forty seconds later and again positioned himself between the nest and the intruders. The Apostlebirds flew away at 08:58, continuing the sporadic chatter that had accompanied their visit to the nest, and joined one or two others. The Magpie-lark did not go to the nest but remained one metre from it until 09:02, when he flew away.

The nest was thirteen metres high and I could not inspect its contents. I never saw Magpie-larks or Apostlebirds at the nest during my re-

gular visits to the site over the following three months but a group of four Apostlebirds was conspicuous in the area in January and February 1980.

My observations may have significance beyond describing nest predation by Apostlebirds and could be interpreted as evidence supporting interspecific use of nests by these two species, although the Apostlebirds did not immediately use the Magpie-lark's nest. Sides (1971) reported such interspecific use of a nest. He watched an Apostlebird dismantle a nest being built by Magpie-larks. It used the material to repair an old nest, which was then used by the Magpie-larks. The Apostlebird incubated the eggs and also fed the fledglings.

Some birds have highly specialized nesting habits and these may preclude the use of their nests by birds of other species but the use of one nest by Apostlebirds and Magpie-larks at different times may be more likely for several reasons. First, although Baldwin (1974) stated that nests of the two species differ in structure, both use mud and plant fibre in varying amounts and line their nests with grass or other soft matter (Chapman *in* Anon. 1976). Secondly, both species build nests of approximately equal diameters. Thirdly, mud nests unlike some other types may remain intact for several years (Rowley 1978). If competition between species for nests occurs, ownership during one breeding attempt may not guarantee possession of the nest for the next attempt. Magpie-larks often rear more than one brood during a season but usually construct a new nest for each brood. North (1902) reported that their deserted nests may be used by Ground Cuckoo-shrikes *Coracina maxima*, Black-faced Cuckoo-shrikes *Coracina novaehollandiae*, White-breasted Woodswallows *Artamus leucorhynchus* and Willie Wagtails *Rhipidura leucophrys*.

Nest-building is demanding energetically. Apostlebirds may spend parts of six to eight days constructing their nests when mud is plentiful (Baldwin 1975). Perhaps birds gain an advantage by obtaining a nest that is completed, or nearly so, particularly when mud is available for only short periods.

On three other occasions, I have observed antagonistic interactions of Apostlebirds and Magpie-larks at nests. Such encounters may not be as rare as the literature suggests and would be worthy of study.

Douglas D. Dow and Neil L. Bruce critically read a preliminary draft of this manuscript.

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MARY J. WHITMORE, *Department of Zoology, University of Queensland, St Lucia, Q 4067.*
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ANTING BY GOLDEN BOWERBIRD PRIONODURA NEWTONIANA

Anting by wild birds is infrequently observed. Active anting involves the use of live ants, which are held in the beak and used to anoint the feathers. Most likely the ant's secretions (e.g. formic acid) help to rid the birds of parasites (Simmons 1966). Because this behaviour is not often seen, it is difficult to make detailed studies (Potter 1970). Therefore, most reports are anecdotal and fragmentary but are nevertheless vital to increase our knowledge and understanding of this phenomenon. Here, we report what we believe to be the first record of anting in the Golden Bowerbird *Prionodura newtoniana* and possibly the third record for the bowerbird family as a whole (Simmons [1966] lists in Appendix I records of anting in two unspecified species of bowerbird without references).