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## OBSERVATIONS ON BREEDING YELLOW-EYED CUCKOO-SHRIKES *Coracina lineata*

On 3 January 1983 I observed an adult Yellow-eyed Cuckoo-shrike *Coracina lineata* perched in a wattle *Acacia* sp. at Macquarie Nature Reserve, Port Macquarie, New South Wales. The vegetation of the Reserve is comprised of wet sclerophyll forest, rainforest, and a eucalypt plantation developed as a Koala sanctuary. A limited number of exotic species occur in close proximity to the historic homestead 'Roto'. An adult Cuckoo-shrike was also present at the Reserve on 7 January and 8 January 1983. On the latter date the bird was perched in a Camphor Laurel *Cinnamomum camphora* and held an orange-yellow fruit, probably a Port Jackson Fig *Ficus rubiginosa*, in its bill. It flew to another Camphor Laurel, still carrying the fruit, and from its rather secretive behaviour I suspected that it may have been feeding a young bird there. The following day two Cuckoo-shrikes were perched in a Lilly Pilly *Acmena smithii* in the same general area. One was an adult, but the other was partly obscured, and its age could not be determined. One was making a churring call somewhat like the typical call of the Black-faced Cuckoo-shrike *C. novaehollandiae*. Later that morning an adult was observed feeding in a Port Jackson Fig. An adult and a juvenile were present in a Camphor Laurel in the afternoon, the latter being fed by the adult. The juvenile had a short tail, a dark line through the eye and lacked barring on its ventral surface. Single adult Yellow-eyed Cuckoo-shrikes were present at the Reserve between 10 and 24 January. On 4 February an adult was observed feeding an immature bird in a eucalypt. The immature was distinguished from the adult by whiter underparts with incomplete barring. An adult seen flying from a Pink Bloodwood *Eucalyptus intermedia* to a Port Jackson Fig on 6 February was the last observation of the species at that location for 1983.

An adult Cuckoo-shrike was observed at the same location at 1350 hrs on 14 December 1985. It was perched in a Brush Box *Lophostemon confertus*, from which it flew to a nearby Camphor Laurel. This tree, which was between 15 and 18 m tall, contained a nest.

The nest was a flat structure, apparently of small sticks, bound on its outer edges with cobwebs. It was on a sloping (c. 40°) fork between 10 and 12 m above the ground, which prevented a detailed assessment of the nesting material and lining. It was in the north-east section of the tree, placed about 2 m inside the outermost foliage of the branch.

The bird flew to the nest and fed a solitary nestling with a green object, presumably an insect. The nestling then moved to the edge of the nest and commenced preening. The adult perched alongside the nestling, which had opened its bill, apparently to cool itself. It kept its bill open for a few minutes. The adult took a white faecal sac from either the nest or directly from the nestling, and ate it.

The nestling was slightly smaller than the adults, having a short, partly emerged tail, although the primaries and secondaries were well emerged. It was generally grey, paler below with darker grey mottling or spotting on the back, rump and breast. There was an indistinct banding pattern under the tail, and the primaries, secondaries and primary and secondary coverts were pale edged. The nest was empty the following day (1634 h) when an adult Cuckoo-shrike landed nearby with a ripe (orange coloured) Port Jackson fig in its bill, and quickly moved into thick foliage above the nest. At 1638 h, an adult (possibly a second bird) flew to the nest carrying a brown stick insect (phasmid) in its bill. It hopped to where the fledgling was perched, on a branch about one metre above the nest, and fed the insect to the young bird. The fledgling defaecated, and the adult took the white sac and ate it. The adult Cuckoo-shrikes appeared to be using the nest as a guide to the location of the fledgling.

No birds were located on 16 December despite a search of about one hour; however, ten body feathers from an adult Cuckoo-shrike were found on the ground under a pine tree *Pinus* sp. At

0834 h on 17 December two adults were located in a dead pine tree. They subsequently flew to various other trees, and at 0840 h were both perched on a dead branch in a Tallow-wood *E. microcorys*. One bird, presumed to be the male, was darker than the other (presumed female), especially under the tail. The former sidled up to the other bird with its head bobbing and tail slightly raised while the latter sat low with its head held very low, quivering its wings slightly. It caught an insect and flew to a pine tree where this was fed to a fledgling/juvenal, which then excreted. The adult flew down and caught the sac in mid air. At the same time the first bird was flying around either being chased by or chasing a male Cicadabird *C. tenuirostris*. At 0900 h both adults were perched in a Blackbutt *E. pilularis*, the male with an insect (?beetle) in its bill. Both birds flew to the apex of a pine tree, where the female appeared to be begging for food by quivering its wings. The male ignored this begging behaviour and flew to the young bird, which was also perched in the pine tree, and fed it the insect. The young bird excreted while the male was present, but he ignored the faecal sac which fell to the ground. Observations of these birds ceased shortly afterwards.

Marchant (1989) stated with respect to the White-bellied Cuckoo-shrike *C. papuensis*, "the adults swallowed the faecal sacs, even catching them in the air if they fell over the side of the nest." This implies that both sexes ate the sacs, whereas my limited observations suggest that only the female Yellow-eyed Cuckoo-shrike may do so.

My observations constitute the first confirmed breeding records for the state since 1909 and the first breeding records south of Alstonville.

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