

Nesting of Green-billed Coucals *Centropus chlororhynchos* in Sinharaja, Sri Lanka

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[Translated from a Sinhala manuscript by Gehan de Silva Wijeyeratne]

An account of the discovery of a nest of Green-billed Coucals *Centropus chlororhynchos* is presented with some observations made during the nesting period. Observations indicate that bill colour varies from ivory during breeding to pale green in the post-breeding state. Nests observed were in the tree *Wendlandia bicuspidata* (family Rubiaceae), leading to speculation that the coucals may have a preference for nesting in this tree.

The Green-billed Coucal *Centropus chlororhynchos* (see note 1), endemic to Sri Lanka, is slightly smaller than the Greater Coucal *Centropus sinensis parroti*, a familiar bird of garden and field. Its bill is slightly larger than that of the Greater Coucal and has a greenish tinge (see note 2). The male is slightly larger than the female, but otherwise the sexes are similar. The black feathers on the head and neck have a purple iridescence but often the head looks glossy black. The wings are chestnut. The underparts and tail are black and the legs brownish-black. It does not fly far, preferring to make short flights, whereupon it hops about searching for food, which includes fruit, frogs, lizards, skinks, moths, snakes, snails and worms.

The Green-billed Coucal is found in forests such as Sinharaja, Dombagaskanda, Athwelthota, Kelinkanda, Morapitiya, Delwala, Walankanda and Deniyaya, where the bamboo *Ochlandra stridula*, known locally as Bata, is found growing in damp swamp-like areas. I suspect the Sinhala adjective of Bata in the local name Bata Aetikukula (aetikukula = coucal – see note 3) derives from its association with Bata habitats and its use of Bata leaves in the construction of its nest. The bird is active at dawn and around 09h00 it may be seen sunning itself with outstretched wings in an open glade. It betrays its presence by a deep *whoop whoop whoop whoop* and, at times, by a *chowk chowk chowk*. Little has been recorded to date of this scarce and elusive bird. As a keen observer of birds I was privileged to have an opportunity to observe this bird nesting (see note 4).

On 8 October 1997, I left my house (see note 5) and went in the direction of Kudawa to watch birds. I had walked about 100 m from my house when three Green-billed Coucals suddenly flew across the road. Through my binoculars I noticed two had ivory-coloured bills and one had a green-tinged bill. I watched them for a short while. One bird flew into a nearby clump of Bata, collected a dried leaf and flew on to a Wana-idala tree *Wendlandia bicuspidata* and placed it within the wana-idala. Over the next twenty minutes it collected three more dried Bata leaves and inserted them in the same place. Gradually the birds retreated into the distance, foraging as they went. The next day I visited the same location and waited. Two birds, presumably a pair, returned and I observed them placing several dried leaves of Pan (a sedge) and Bata. I surmised that the birds were building a nest and resolved to visit the site

daily. The nest-building was repeated over the next few days. However, from 12 October onwards I failed to see the birds there. Nonetheless, as I could hear them calling in the distance, I suspected they may be nest-building in the area and searched an area of about 20 acres without success. I persisted, and on 28 October, on hearing the birds calling at the earlier site, I hastened across. I discovered the birds constructing a new nest and thereafter visited the location frequently, observing them discreetly.

By 5 November 1997, the nest was completed, roughly in the shape of a rugby ball. It was about 2 feet (60 cm) tall, 1.5 feet (45 cm) wide with an entrance hole on the side. It was placed at a height of 12 feet (3.65 m) above the ground. On 6 November I noticed a bird sitting in the nest at 08h00. It flew away soon after and failed to return in the three hours I waited. The next day I returned at 09h00 and observed a bird in the nest, which was joined two hours later by another one; I recognized this to be the male. It fed the female and from this I concluded that the female was incubating eggs.

The next day I returned at 09h00 and constructed a small hide 20 feet away from the nest, from where I commenced my observation. The male brought a frog for the female and flew out with a white faecal sac. The male visited the nest 12-13 times a day and on each occasion it flew away with a white faecal sac, which it would drop over a stream, about 40 m from the nest. On one occasion it dropped the faecal sac on the ground and I examined it. The faeces were dark and of a soil-like texture wrapped in a white mucus layer. Within it were the small bones of animals such as lizards.

On 23 November the female flew out of the nest and returned four hours later with what I could make out as the flesh of a snail, red in colour. She deposited this in the nest and flew away. On this occasion I noticed that a chick was in the nest. Forty minutes later both parents returned with more of this red-coloured snail flesh and fed the chick with it. They flew out again to return with a third meal.

On the 14-16 occasions that the chick was fed during the day I noticed a varied diet comprising frogs, skinks, moths, worms, snails and plant matter. From 26 November I only noticed the female fetching food. At this point in time, the chick had an ivory-coloured stripe on its bill. This extended from its loreal region along the

upper mandible to the tip of its bill. On its head and neck it had white feathers which looked like individual hairs. The lower mandible was a brownish-black.

On 2 December I heard a loud *chouk chouk* repeated about 20 times. Suddenly the male emerged with a snake about two feet (60 cm) long, which I recognized as a whip snake *Ahaetulla*. It flew with the snake onto a nearby tree and was pursued by two other Green-billed Coucals. About twenty minutes later the male returned to the nest and fed the chick the tail end of the snake.

By this time the ivory-coloured bills of the parents had turned a pale green. On 2 December both parents were feeding the chick. By the 5 December the chick was sticking its head out of the nest and looking around. The white hair-like feathers on the head and neck had now been replaced by black feathers. The chick was being fed less frequently and it spent more time examining its surroundings. On 7 December, at 10h00, the female arrived and alighted about a foot away from the nest and uttered a soft *whoop whoop*. It stuck its head inside the nest and fed the chick and flew away. Five minutes later the chick clambered out of the nest, spent a short time outside and retreated in again. Half an hour later the chick again came out of the nest and clambered onto the surrounding foliage. It spread and fluttered its wings and tail and was fed by the mother. The chick returned to the nest only at nightfall.

Throughout the period of feeding the parents never approached the nest directly. They would fly onto the lower parts of the tree and work their way up into the nest.

The renowned bird photographer Dr T. S. U. De Zylva, a medical practitioner from Kurunegala, was able to photographically record much of the activity. Ismeth Raheem and Lester Perera, two accomplished artists, were also able to take photographs and make notes of my observations. Professor Lakdas D. Fernando of the University of Moratuwa also took photographs.

Folklore has it that the chicks of birds emerge from the nest on a Poya or full-moon day (see note 6). Almost as if to confirm the myth, the chick emerged from the nest on 7 December, a full-moon day. On 8 December the fledgling left the nest at 09h00 and gradually worked its way away from the nest and receded into the distance, with its parents close by. That night the fledgling roosted in a nearby Bata clump about 20 m away from the nest.

Earlier, on 20 September 1997, I had in fact come across another fledgling Green-billed Coucal. Looking around, I noticed the nest on a Wana-idala tree. I suspect the coucal has a preference for nesting in this tree as both nests found have been in trees of this species. I was able to show this earlier nest and the fledgling to the experienced field ornithologist Deepal Warakagoda.

It is clear that there is still much to be learnt about this elusive and endangered bird.

TRANSLATOR'S NOTES

1. Many of the standard works, including Henry (1998), Inskipp *et al.* (1996) and Phillips (1978), give the specific epithet as *chlororhynchus*. Priyantha Wijesinghe (1994) spelt it *chlororhynchos* and has pointed out: 'Regarding the spelling *chlororhynchos*, this is the way the name was originally spelt by

Edward Blyth in 1849. According to Article 32 of the *International Code of Zoological Nomenclature* (3rd edition, 1985) the original spelling must be preserved unaltered unless there is evidence in the original publication itself of an unintentional error. Unfortunately Blyth himself used *chlororhynchus* in a later paper (1867) and that is probably one of the reasons most authors have used the latter spelling; nevertheless, the original spelling must remain as the correct spelling.'

2. The colour of the Green-billed Coucal's bill has been a cause of speculation. Birds have been observed with ivory-coloured bills as well as green-tinged bills. Thilo Hoffmann (1989), was the first to draw attention to ivory-coloured bills, based on his observations of a pair of birds in Kitulgala. This seemed to conflict with the name Green-billed Coucal. In his paper he stated 'Ali and Ripley call it the Ceylon Coucal and so do Wait and Fleming, which seems more appropriate than Greenbilled. One could well name it the Ivorybilled Coucal or the Palebilled.'

Deepal Warakagoda, commenting on Martin Wijesinghe's observations, states 'The Green-billed Coucal is a very familiar bird to me. I have noticed the difference in bill colour, i.e. ivory or pale green (greenish), over several years. Pairs have been noted where one had an ivory bill and the other had a greenish bill. I thought that the reason for that could be a function of maturity of the bird, with the old birds having ivory bills. However, birds with bills of either colour were seen almost throughout the year and not in a particular period. Martin's observation of a pair now indicates that it is more likely that bill colour is related to breeding. The Green-billed Coucal is now known to breed outside the period given in the literature (i.e. the first half of the year).'

Changes in bill colour with breeding condition are known in many birds, e.g. Common Starling *Sturnus vulgaris*.

3. The English transcription of the Sinhala name for Coucal of Aetikukula, is based on the spelling in a new list of Sinhala bird names published by the Ceylon Bird Club in 1998.

4. Neither Vincent Legge, who wrote the monumental *A history of the birds of Ceylon* (1878-1880) nor G. M. Henry, author of the classic *A guide to the birds of Ceylon* (First edition 1955), appear to have had first-hand observations of breeding Green-billed Coucals. Thanks to Martin Wijesinghe a number of birdwatchers were able to observe the birds at the nest. It is likely that this was the first occasion on which the Green-billed Coucal has been photographed at a nest.

5. Martin Wijesinghe's house is located 100 m from the Sinharaja boundary and is 3 km away from the Forest Department facility at Kudawa.

6. In Sri Lanka, full-moon (Poya) days are of particular religious significance to the Buddhist majority as the Buddha was born, attained enlightenment (Nirvana) and passed away (Nibbana) on a full-moon day. On

account of the religious significance, the monthly full-moon (Poya) days are public holidays.

7. Sri Lanka Thilaka is a national honour bestowed upon Martin Wijesinghe for his contribution to the natural sciences. Martin's mentor was the late P. B. Karunaratne, a great field naturalist who has been an inspiration to a generation of Sri Lankan naturalists. Martin has earned a reputation as an excellent field botanist and many new species of plants from the Sinharaja area have been described from specimens and information supplied by him.

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