

# Observations at a nest of the Grey-headed Imperial Pigeon *Ducula radiata*

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The Grey-headed Imperial Pigeon *Ducula radiata* is endemic to the Indonesian island of Sulawesi, where it is widespread in primary hill and montane forest and forest edge at 200–2,400 m, although it is most common at 1,600–2,200 m (Coates and Bishop 1997). The species lays a single white egg; it is known to nest in December and March and nests have been found in sheltered hollows and ledges on cliff faces and rocky outcrops in forests, with one remarkable record of a nest on the ground at 1,700 m (Coates and Bishop 1997, Gibbs *et al.* 2001). Little else is known about the breeding biology of the species, and the juvenile plumage has not been described (Gibbs *et al.* 2001).

On 12 December 2001 I noted an adult Grey-headed Imperial Pigeon fly from a large dead tree on the Anaso logging road in Lore Lindu National Park, Sulawesi. As the bird flew, it dropped a feather, but I did not realise the significance of this at the time. One month later, on 18 January 2002, I was working in the same area and again noted a Grey-headed Imperial Pigeon in the same tree. My curiosity aroused, I decided to climb the tree where I located a nest in a hole containing a single chick. The chick was approximately 2–3 days old and was still weak. It was covered in brown or rufous down and no adult feathers were present. The bill was pale brown with a yellow-brown tip and measured 1.5 cm long. The eye-ring was flesh-coloured and the bird was unable to open its eyes.

The nest was made from small dark twigs and some dark leaves, but there were no feathers inside the nest. During the time of my investigation the adult bird returned and flew from tree to tree, calling in alarm. I left the nest and returned 2.5 hours later but the adult was not seen. The height of the tree was about 5 m and the nest hole was about 3 m above the ground. The tree was located at c. 1,850 m in primary forest with a canopy at 20–30 m.

Eleven days later, on 29 January, I returned to the tree and checked the nest. The chick still had its down but other feathers had begun to show. The greater

coverts were iridescent green and the breast was showing pale brown with a greyer belly. The primaries were just beginning to show but no colour could be determined. The eye-ring appeared pale and the bill appeared yellowish to pale brown with a pale yellow tip.

On 12 February I again checked on the chick. On this visit I had a clearer view of the bird than was possible previously, although the down obscured many of the feather tracts. The following description was taken: mantle, back and wing-coverts: brown with a green iridescence; primaries: iridescent blackish-green; tertials: chestnut; tail: brown with a green iridescence, no band; head and neck: purplish-grey except for the hindneck which was pale reddish-purple; belly and breast: grey; vent: rufous-brown; lores and cheeks: pale brown; bill: dark grey with a dark chestnut-black tip and white cutting edges; bill length: 2.5 cm; iris, eye-ring and claws: black; legs: pale red-brown. Thus the bird at this age resembled the adult but for the buff ear-coverts and lores and the lack of a grey tail-band.

I visited the nest again on 17 February, but as I climbed the tree the juvenile bird flew from its nest hole and landed in a tree 30 m away and could not subsequently be relocated. The flight was not strong and the bird did not appear to be able to gain height. The nest still contained the eggshell.

From these observations it appears that the fledging period of the species is approximately 33 days, although it may be a little longer as the chick may have been older than estimated when found and the bird may have fledged prematurely due to disturbance.

## REFERENCES

- Coates, B. J. and Bishop, K. D. (1997) *A guide to the birds of Wallacea*. Alderley, Australia: Dove Publications.  
Gibbs, D., Barnes, E. and Cox, J. (2001) *Pigeons and doves: a guide to the pigeons and doves of the world*. Mountfield, Sussex, U.K.: Pica Press.