A record of a white-coated Brown Palm Civet *Paradoxurus jerdoni*

H. CHUNEKAR

Abstract

Brown Palm Civet *Paradoxurus jerdoni* is endemic to the Western Ghats of India. An entirely white-coated individual sighted at Amboli hill station, Maharashtra, is evidently the first record of this pelage aberration. Based on the dark nose and slight dark pigmentation in the fur behind the ears, this animal is probably an example of dilution. Although at first sight all white, it is certainly not an albino.

Keywords: albinism, Amboli, dilution, endemic, leucism, pelage aberration

On 13 September 2013, at around 23h30, I sighted an unusual-looking civet while we were walking on a road in Amboli hill station at 15°57′30.72″N, 73°59′50.72″E (datum WGS84; recorded elevation 749 m). It was resting on a tree about 5 m above the ground, in an area of semi-evergreen and moist deciduous forest. The sighting lasted 20 minutes and the animal was photographed with a digital SLR camera (Nikon D800). The individual (Figs 1–2) had almost completely white fur all over, a prominently black nose, and dark pink ear skin. It appeared to be fully grown.

Among the mammals known from this part of India, the animal's general size and structure allow its confident identification as a *Paradoxurus* palm civet. Two species of this genus occur in this part of India. Brown Palm Civet *P. jerdoni* is endemic to the Western Ghats, where it occurs in wet evergreen forests and adjacent coffee estates at altitudes of 500–2,000 m asl (Rajamani *et al*. 2002). Bhosale *et al*. (2013) recorded Brown Palm Civet in Amboli and in Chandoli National Park, extending its known range north by about 200 km. Common Palm Civet *P. hermaphroditus* occurs widely in India (and elsewhere in tropical Asia) but is usually, in this part of its range, in more deciduous and/or open habitats than wet evergreen forest (e.g. Mudappa *et al*. 2007).

Typical-coloured individuals of the two species are readily identified (Figs 3–4). Brown Palm Civet has a fairly uniformly brown coat, darker towards the extremities (head, neck, tail and legs), with dorsal pelage that may be grizzled at times (Pocock 1933, Hutton 1949, Bhosale *et al*. 2013; Fig. 3). In terms of characters potentially visible on a white-pelted animal, Brown Palm Civet has uniformly shortish fur throughout its body, vibrissae that may appear black or dark brown, rounded ears and an abruptly pointed snout (Blanford 1855, 1888–1891, D. Mudappa *in litt*. 2014). The uniformly rather short fur, the shape of ears, head and snout, and the colour of vibrissae of this white civet resemble Brown Palm Civet rather than Common Palm Civet.

The nomenclature of animals missing part or all their normal pigmentation is confused and inconsistent. van Grouw (2013) reviewed this topic with specific reference to birds, but pointed out that the pigmentation process in mammals is comparable to that in birds. Most aberrantly white animals are casually referred to as 'albino' or 'partial albino', but the former is often incorrect for the animal in question and the latter do not by definition exist, and there are several other forms of white, whitish or partly white animal (van Grouw 2013). This animal's black nose (Figs 1–2) shows that it is not an albino or an ino: albino animals lack melanin pigments entirely (hence, the impossibility of a 'partial albino'; van Grouw 2013), so the nose (and eyes, the colour of which were not visible in this animal) then shows pink; while ino individuals produce normal amounts of melanin, the pigment is incompletely oxidised and so the bare parts are also strongly pinkish (van Grouw 2013).

Fig. 1. White-coated Brown Palm Civet *Paradoxurus jerdoni* resting on a tree in Amboli, Maharashtra, India, on 13 September 2013 (Photo: Kedar Bhat).

Fig. 2. White-coated Brown Palm Civet *Paradoxurus jerdoni* resting on a tree in Amboli, Maharashtra, India, on 13 September 2013. This angle of viewing shows the slightly pigmented fur behind the ears, strongly suggesting that the animal is an example of dilution rather than of any of the other potential causes of pale pelage (Photo: Kedar Bhat).

Fig. 3. Brown Palm Civet *Paradoxurus jerdoni*, Valparai, Tamil Nadu, India, on 31 October 2007, showing pelage typical of the species (Photo: Kalyan Varma).

Fig. 4. Common Palm Civet *Paradoxurus hermaphroditus*, Mulshi, Pune, Maharashtra, India, on 15 September 2009 (Photo: Amod Zambre).

Moreover, the area behind the ears, among the darkest parts in typical Brown Palm Civets, seems to have some pigment (Fig. 2). Thus, this aberrant animal seems likely to be a form of dilution, whereby the animals are brown to whitish through reduction of the amount of melanin (van Grouw 2013). The animal is unlikely to be an example of leucism or of progressive greying, because in both those sorts of animals the aberrant hairs are pure white whilst the pigmented hairs are of normal colour (van Grouw 2013): the hairs behind this animal's ears fit neither category. A 'brown' mutation would be unlikely to appear so nearly uniformly clean white, particularly because 'brown' mutations approaching white in colour result from bleaching by sunlight (van Grouw 2013), a process unlikely in the almost wholly nocturnal palm civets.

Aberrantly pale individuals have been recorded in various other species of the family Viverridae (e.g. Delibes *et al*. 2013, Gaubert & Dufour 2013). Hitherto no records of white Brown Palm Civets have been noted, in contrast to Common Palm Civet (e.g. Sharma 2004, Eaton *et al*. 2010). White-pelted individuals are presumably susceptible to predation because of their conspicuous colour, although this may be less of a problem for these nocturnal animals.

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11+12, Sangeeta society, Vanaz corner, Kothrud, Pune-411038, Maharashtra, India.
Email: hrishi_chunekar@yahoo.com