

A NEW SPECIES OF PALM CIVET FROM ORISSA, INDIA

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INTRODUCTION

Faunal survey of the Tiger Reserves in India were taken up by the Wildlife & Conservation Division of the Zoological Survey of India since 1983. In this connection a team of scientists visited the Simlipal Tiger Reserve, Mayurbhanj district, Orissa from January 23 to February 10, 1986. During the survey several species of mammals were collected. Of which a Palm Civet was found to be interesting. On examination, it proved to be a new species which is being described below.

***Paradoxurus jorandensis* sp. nov.**

(Plate I, Figs. 1-6)

Material examined : Holotype, ZSI, Reg. No. 21496, subadult male, Joranda (Lat. 20°45'N Long. 85°40'E, Alt. 440m), Simlipal, Mayurbhanj, Orissa, India ; 30 Jan 1986 ; collector *S. M. Ali* ; study-skin and skull.

External measurements (mm) : Head and body 463 ; tail 518 ; hind-foot 70 ; ear 50. Weight 4.8 kg.

Cranial measurements (mm) : Greatest length 96 ; condylobasal 95.2 ; occipitonasal 89.1 ; palate 43.3 ; Zygomatic width 48.3 ; interorbital width 15.3 ; postorbital width 13.8 ; maxillary width 14.7 ; cranial width 31.8 ; bulla 15.2 ; nasal 20.3 ; anterior palatal foramina 4.35 ; pm⁴ 7.2 ; m₁ 8.7 ; mandibular length 69.1.

Medium-sized, head and body smaller than tail ; latter about seven and a half times longer than hindfoot.

Head broad, muzzle narrow, without white patch on either side ; facial vibrissae black ; rhinal sulcate ; ears large and erect ; preaural white patch absent ; eyes greenish black, with a continuous subcircular thin white patch beneath and one superciliary above them ; upper eyelids, each with three long hairs, identical to facial vibrissae in length and colour.

Digits of hindfoot five in number, evenly spaced except third and fourth which have their pads joined proximally ; plantar pads white and naked ; claws white, protected with sheaths and full retractile.

Scent gland simple in structure, represented by a fold of skin ; space between anus and posterior edge of fraenum of penis hairy.

Coat : Luxuriant ; dorsal surface of body grey, grizzled black and white. Pelage consists of two types of hairs : (a) long and entirely black ; (b) short and tricoloured, grey on basal one-third, white in middle and black at tip ; underwool grey. Body has a distinct white band (50 to 80 mm in width) encircling abdomen ; distal half of tail white ; nearly half of hand, and hindfoot up to heel white.

On ventral surface, white band extends posteriorly along mid-line up to anus and also continues up to inner side of hindlegs to merge with white stockings. A distinct white V-shaped marking on chest present, with its arms extending to elbow.

Skull : Skull not ossified ; in each half of both jaws there are three incisors, one canine and four cheekteeth, presumably three premolars and one molar. First premolar and second molar have not erupted.

Relationship : *Paradoxurus jorandensis* sp. nov. is close to *Paradoxurus hermaphroditus* (Pallas) but differs from it in the following characters :

<i>Paradoxurus jorandensis</i>	<i>Paradoxurus hermaphroditus</i>
1. Stripes and spots over body absent but a broad white band encircling the abdomen present.	1. Longitudinal stripes on back and shoulders and spots on flanks and thighs present.
2. Underwool grey.	2. Underwool whitish or yellowish.
3. Limbs with distinct white markings.	3. Limbs dark brown or black.
4. Space between anus and posterior edge of fraenum of penis hairy.	4. Space between anus and posterior edge of fraenum of penis naked.
5. Preaural white patch absent.	5. A preaural white patch present.

Distribution : This animal is said to be common in southern part of Simlipal Tiger Reserve, Orissa, covering the area south of Joranda, namely, Gorandi, Janabil and upper Barakamra. Animal of similar description is also said to occur in Hazaribagh National Park, Bihar (Per. Comm. Shri A. C. Chatterjee, Field Director, Palamau Tiger Reserve, Bihar).

Ecological notes : The animal was sighted at about 19.30 hrs near a stream c 300 m SW of Joranda Forest Rest House. On being alerted it climbed on a nearby tree from where it was collected.

Its stomach contained boiled rice, potatoes, green peas, besides fragments of spices. It shows that this animal was partially surviving on the food refuges of tourists.

Discussion : Taylor (1891) described a new species of palm civet, namely *Paradoxurus nictitans*, based on an immature specimen collected from Kondmal, Orissa. Pocock (1934) opined that the above specimen in all probability was albinistic. But since it possessed some characters which markedly differed from *P. hermaphroditus* he (loc. cit.) provisionally admitted it as a distinct subspecies of *P. hermaphroditus*, pending the collection of additional material. He also assigned two more male specimens (unmeasured and undated) from the type locality, collected by Taylor, and present in the British Museum, to this subspecies and remarked that all the three are albinistic.

The type specimen of *P. nictitans* had only the head and shoulders normally coloured, the rest being white. The other two skins assigned to this subspecies have a broad white belt encircling the hind body and extending forwards and backwards over the ventral surface ; the feet and the terminal third or more of the tail are white, but the extent of the white varies in the two.

We have no comment on the validity of the species, *P. nictitans*. But our specimen from Simlipal is not albinistic as its eyes were greenish black and the claws white at the time of death. Further, it differs from *P. nictitans* in colour pattern. Our specimen tallies well with the description of the two undated, unnumbered and unmeasured skins present in the British Museum. It appears that Pocock (1934) erroneously assigned those two skins to *nictitans*. Taylor (1891) has neither mentioned nor included those skins in his original description of the species. Since the colour pattern is very distinct in all the three examples including those two skins of British Museum and a population occurs in nature since 1934, if not earlier, hence we accommodate our specimen under a new species, *P. jorandensis*. Further, it is proposed that those two skins of British Museum may also be placed under this new species.

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