

Sighting of critically endangered Red-headed vulture *Sarcogyps calvus* (Scopoli, 1786) in Palamau Tiger Reserve, Jharkhand, India

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Introduction

Palamau Tiger Reserve (23° 25' to 23° 55' N and 83° 50' to 84° 36' E), was notified in 1973 as one of India's first nine tiger reserves established under Project Tiger. It is located under the western part of the Chhotanagpur plateau and is part of the Central India landscape (Anon, 2013). The vegetation types are broadly categorised as dry moist forest, dry Sal forest, moist Sal forest, high level plateau Sal forest and moist forest (Champion and Seth 1968).

Vultures play an important role as natural scavengers in the ecosystem and help prevent hazardous infectious disease like anthrax and rabies (Ogada *et al.* 2012). However, the widespread use of non-steroidal anti-inflammatory drugs (NSAIDs), mainly diclofenac,

caused serious declines of vultures across south Asia (Oaks *et al.* 2004). Globally, there are 16 species of Old World vulture and nine of these are found within the Indian subcontinental region (Ali & Ripley 1987). Four species: White-rumped vulture *Gyps bengalensis*, Slender-billed vulture *Gyps tenuirostris*, Long-billed Vulture *Gyps indicus* and Red-headed Vulture *Sarcogyps calvus* are listed as critically endangered and Egyptian Vulture *Neophron percnopterus* is listed as endangered under the International Union for Conservation of Nature (IUCN) Red List (Birdlife International 2013).

Historical records of Red-headed Vulture exist for Lohardagga in Jharkhand and Manbhum in West Bengal (Dutta *et al.* 2004), during

the systematic ornithological survey was carried out by Zoological Survey of India (Fig. 1), but no

recent records are reported for the area around Palamu Tiger Reserve.

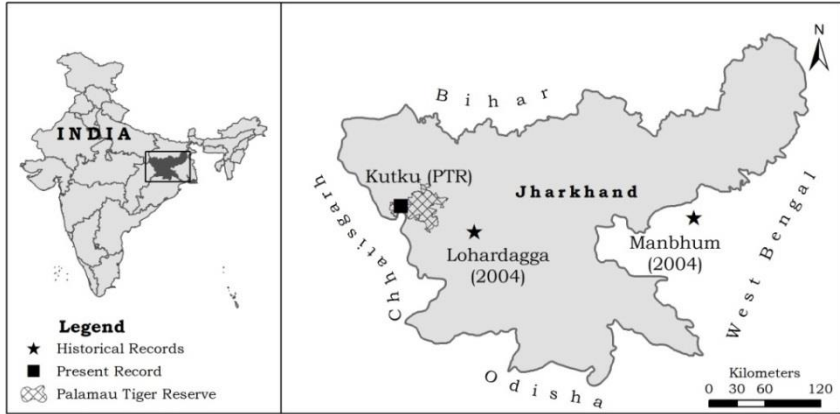


Figure 1: Map showing the historical and present record of *Sarcogyps calvus* in Jharkhand.

Observation

A Red-headed Vulture, also known as the Pondicherry Vulture, was sighted on 17th April, 2014 at 10.30 am, soaring about 30 meters above the ground in clear skies near Kutku village (23°40'47.37"N and 83° 58'13.86"E), within the Daltonganj Core area of Project Tiger. In flight, diagnostic features include a white band on the underside of the wing, and white patches on the thigh and base of the neck are seen through

binoculars (Baker 1928); we took photographs for further identification of the species (Fig. 2). The linear distance from historical records is about 77.7 km and 289 km away from Lohardagga and Manbhum respectively (Fig. 1). We discussed with local communities and forest staff about the presence of vulture species found in this region. They replied that after the 1999 cyclone they have never seen Red-headed Vulture in PTR.



Figure 2: *Sarcogyps calvus* near Kutku village in Palamau Tiger Reserve.

Conservation

In Palamau Tiger Reserve, the shrinkage of breeding habitat, shortage of food, urbanisation, changes in agricultural patterns, livestock rearing and the use of chemical contaminated foods are serious causes of population decline. Ornithologists suggested that between 1999 and 2003 the

population of *Sarcogyps calvus* decreased by 41-44% (Cuthbert *et al.* 2006). A systematic vulture census needs to be carried out to understand the actual population size and roosting places of *Sarcogyps calvus* for long term conservation of this critically endangered species in the Palamu Tiger Reserve before its extinction from world.

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