SHORT COMMUNICATIONS, NOTES AND REPORTS

Record of Cinereous Vulture *Aegypius monachus* from Mukundara Hills Tiger Reserve, Rajasthan, India

Sailaja Nayak\(^1\)*, Sunny Shah\(^2\) and Jimmy Borah\(^2\)

\(^1\)Western India Tiger Landscape, WWF-India, Vigyan Nagar, Ranthambore Road, Sawai Madhopur-322001
\(^2\)WWF-India, 172-B, Block 18, Lodhi Estate, New Delhi-110003
*Corresponding author: nayak.sailaja@gmail.com

http://dx.doi.org/10.4314/vulnew.v71i1.4

Abstract
We report a sighting of Cinereous Vulture *Aegypius monachus* from Mukundara Hills Tiger Reserve in Rajasthan, India. The current observations were made during a two month study on ‘Prey status and abundance in Mukundara Hills Tiger Reserve’ during February-March 2015. Five species of vulture were recorded during this period: Egyptian Vulture *Neophron percnopterus*; Long-billed Vulture *Gyps indicus*; Griffon Vulture *Gyps fulvus*; Red-headed Vulture *Sarcogyps calvus* and Cinereous Vulture. This is an additional record of a Cinereous Vulture sighting in the area. We highlight the need to evaluate the historical and current status of vulture populations in the area and assess the threats posed to vultures from unorganized carcass dumping sites in and around the reserve, as the past studies have been limited only to the north-western part of the reserve.
Cinereous Vulture *Aegypius monachus*, which is also known as Eurasian Black Vulture or Monk Vulture belongs to the family Accipitridae, order Falconiformes. The species is listed as Near Threatened by IUCN (Birdlife International 2013) and Schedule IV under the Indian Wildlife (Protection) Act, 1972. In south Asia, the species is resident in arid to semi-arid mountains of Pakistan and low altitude Himalayas; it is only a winter visitor in north-western parts of India. Within India it has been recorded from Jammu and Kashmir, Punjab, Assam and also along parts of the Himalayan dry temperate zone (Ali & Ripley 2007). It is a rare winter visitor to Sindh and northern India, Kutch, northern Gujarat, the central part of India and also Nepal (Grimmett *et al.* 2013; Ali & Ripley 2007).

Mukundara Hills Tiger Reserve is in the Indian state of Rajasthan and was declared a Tiger Reserve in 2012. It consists of Darra Wildlife Sanctuary, Jawahar Sagar Wildlife Sanctuary and the National Chambal Gharial Sanctuary. The area is highly diverse in terms of both flora and fauna. The faunal diversity ranges from Leopards (*Panthera pardus*), Sloth bears (*Malursus ursinus*) and Otters (*Lutra perspicillata*) to various species of raptors. Floral communities range from small forest patches of riverine species and grasslands to tropical dry deciduous forest.

On March 7th 2015 at around 09h30, on the way back to our campsite following the completion of a line transect survey for prey estimation, we stopped to observe a flock of birds scavenging on a cattle carcass near Golbhao Village (N 24° 44’ 33.33” & E 76° 07’ 37.03”). We photographed the group of birds, which included 10-15 Griffon Vultures and also a Cinereous Vulture (Figure 1). The huge dark-bodied bird was distinguishable from a distance. Uniformly dark blackish plumages, paler on the head running down the neck, dark irises and a blue-greyish cere confirmed it as a juvenile Cinereous Vulture (Grimmett *et al.* 2013). Adults are usually dark brown, with grey-white down on the crown and cheeks, and a mauve to bluish cere.

The habitat of the area was observed to be *Zizyphus* scrubland. Four other species of carrion feeders were also recorded (apart from the Cinereous Vulture) on several occasions near carcass dumping sites and at other times scavenging on wolf kills in the reserve. These species were Egyptian Vulture
Neophron percnopterus, Long-billed Vulture *Gyps indicus*, Griffon Vulture *Gyps fulvus* and Red-headed Vulture *Sarcogyps calvus*. Various potential vulture nesting and roosting sites were also observed in the area during the months of February to March.

Past studies on vultures in the area are limited to Garadia Mahadev and Gipernath and restricted to the north-western part of the Tiger Reserve (Kumar 2013). Although the Cinereous Vulture is a winter visitor to the northern and central parts of India, in the peninsular region it is identified as a vagrant (Rao 2006). Its presence has also been recorded in Andhra Pradesh (Choudhury 1990), Kerala (Kumar 1991) and Karnataka (Subramanya 2001). From the state of Rajasthan, it has been recorded from the districts of Jodhpur, Bikaner, Bharatpur and Jaisalmer (Chhangani 2009, Kushwaha & Kanaujia 2011). Five species, namely, the Long-billed Vulture, the Asian White-backed Vulture *Gyps bengalensis*, the Red-headed Vulture, the Egyptian Vulture and the Cinereous Vulture have been identified from the southern part of Rajasthan (Sharma & Tehsin 1994, Chhangani 2002; Sangha & Devarshi 2006; Koli et al. 2011; Bhatnagar et al. 2011; Shekhawat et al. 2014). In eastern Rajasthan, Vyas (1990) reported the occurrence of Cinereous in the vicinity of Kota city. Therefore, the presence of Cinereous Vulture in the Gagron Range (Figure 2) is a further record of the species in Jhalawar district and a new addition to the bird list of Mukundara Hills Tiger Reserve (bird list under progress with the department).

In order to understand the trend in population dynamics, further studies should be taken up on evaluating the current status of vulture populations in the area and also assessing the threats specifically associated with unorganised carcass dumping sites in and around the reserve, every year. Livestock density is high in the reserve (Nayak et al. 2015) and there is a possibility that the use of diclofenac (a vulture-toxic NSAID) occurs illegally or oxytocin injections to increase the milk yield in the cattle and buffaloes, which requires careful monitoring. A yearly study will facilitate an understanding of the historical and current status of the vulture population in the area and also help determine suitable solutions for the conservation management of wide ranging raptors in Mukundara Hills Tiger Reserve.
**Figure 1:** Griffon *Gyps fulvus* and Cinereous Vulture *Aegypius monachus* in Mukandara Hills Tiger Reserve.

**Figure 2:** Location of Cinereous Vulture sighting in Mukandara Hills Tiger Reserve
Acknowledgments
The authors are thankful to the Rajasthan Forest Department for providing necessary permissions and WWF-India (Sect.) for necessary support. Special thanks to Agatha, Shikha, Caroline, Zainab, Vijay, Ritesh, Tejas, Ali and Ajinkya for volunteering in baseline data collection, keeping the spirits up in adverse situations and for making it a success. Comments from an anonymous review improved earlier drafts of this manuscript.

References

Ali, S. & Ripley, S.D. 2007. *Handbook of the Birds of India and Pakistan*. Bombay Natural History Society and Oxford University Press.

Bhatnagar, C., Koli, V. K. & Jani, K. 2011. Study on the distribution and occurrence of some threatened avifauna of Sajjangarh Wildlife Sanctuary, Udaipur, Rajasthan. *Zoo’s Print Journal* 26(6): 25–28.

BirdLife International. 2013. *Aegypius monachus*. The IUCN Red List of Threatened Species 2013: e.T22695231A48120733. http://dx.doi.org/10.2305/IUCN.UK.2013-2. RLTS.T22695231A48120733.en. Accessed 24 February 2016.

Chhangani, A.K. 2002. Avifauna of Kumbhalgarh Wildlife Sanctuary in the Aravalli Hills of Rajasthan. *Zoo’s Print Journal* 17(4): 764–768.

Chhangani, A.K. 2009. Status of vulture population in Rajasthan, India. *Indian Forester* 135(2): 239–251.

Choudhury, B.C. 1990. Capture of Cinereous vulture *Aegypius monachus* in Karimnagar District, Andhra Pradesh. *Mayura* 7&8: 49–50.

Grimmett, R., Inskipp, C. & Inskipp, T. 2013. *Birds of the Indian Subcontinent*. Oxford University Press, New Delhi, India.

Koli, V.K., Bhatnagar, C. & Yaseen, M. 2011. Urban birds of Udaipur City (Rajasthan) and their conservation problems. *Cheetal* 49(2): 33–38.

Kumar, R.S.S. 1991. Cinereous Vulture *Aegypius monachus* (Linn.) in Pathanamthitta, Kerala. *Journal of the Bombay Natural History Society* 88(1): 111.
Kumar, S. 2013. Population estimation of vultures in the hilly area from Geparthath to Garadiya Mahadev near Kota district, Rajasthan. Department of Wildlife Science, University of Kota, Rajasthan.

Kushwaha, S. & Kanaujia, A. 2011. Observations on Migratory and Residential vultures in Jorbeer, Rajasthan, India. *Asian Journal of Experimental Biological Sciences* 2(3): 404–411.

Nayak *et al.* 2015. Prey status and abundance in Mukundara Hills Tiger Reserve. Technical Report, WWF-India.

Rao, J.P. 2006. Sighting of a Cinereous Vulture *Aegypius monachus* in Rangareddi District, Andhra Pradesh, India. *Indian Birds* 2(1):8–9.

Sangha, H.S. & Devarshi, D. 2006. Birds of Mount Abu Wildlife Sanctuary, Rajasthan, India. *Indian Birds* 2(2): 26–32.

Sharma, S.K. & Tehsin, R. 1994. Birds of southern Rajasthan. *Newsletter for Birdwatcher* 34(5): 109–113.

Shekhawat, D.S., Bhatnagar, C., Koli, V.K. & Agarwal, S. 2014. First Record of Cinereous Vulture *Aegypius Monachus* (Falconiformes: Accipitridae) from Southern Rajasthan, India. *Journal of Threatened Taxa* 6(4)

Subramanya, S. 2001. Cinereous Vulture *Aegypius monachus* (Linn.) Family Accipitridae, in Karnataka. *Journal of the Bombay Natural History Society* 98(2): 278.

Vyas, R. 1990. Status of Endangered Resident Species of Waterfowl at Kota in Eastern Rajasthan. *Newsletter for Birdwatcher* 30 9&10.

*****