

## Short Communication

# New Locality For Near Threatened Cinerous Vulture *Aegypius monachus* Linnaeus, 1766, In Arunachal Pradesh, India

Daniel Mize\*<sup>1</sup>, Ripin Taba<sup>1</sup>, Rajat Chetry<sup>1</sup> and Hirendra Nath Sarma<sup>2</sup>

<sup>1</sup>Ecology & Wildlife Biology Unit, Rajiv Gandhi University, Rono Hills, Doimukh, Arunachal Pradesh, India

<sup>2</sup>Molecular Endocrinology and Reproductive Biology Laboratory, Rajiv Gandhi University, Rono Hills, Doimukh, Arunachal Pradesh, India

\*Corresponding author: mizezoology@yahoo.co.in

Received: April 10, 2016; revised: May 5, 2016; accepted: May 13, 2016

**Abstract:** The survey of vulture at D'Ering Wildlife Sanctuary located in East Siang, result in the record of a Cinereous Vulture *Aegypius monachus* for the first time in the sanctuary. The record of the Cinereous Vulture *Aegypius monachus* in the sanctuary is a new information on the distribution range for the species. It is mainly a Eurasian species but has also been reported from different parts of India. Previously, it was reported from eastern part of Arunachal Pradesh but not yet confirm any record from D'Ering Memorial Wildlife Sanctuary and adjacent region. The recent documentation from D'Ering Memorial Wildlife Sanctuary presents the sanctuary as a new locality for Cinereous Vulture *Aegypius monachus* in India. However, more observation is required to conclude whether Cinereous Vulture *Aegypius monachus* is a winter, resident or vagrant species in D'Ering Wildlife Sanctuary of the state.

**Key words:** Cinereous Vulture, D'Ering Wildlife Sanctuary, New locality, Vulture

## Introduction

Cinereous Vulture *Aegypius monachus* or Monk Vulture or Black Vulture or Eurasian Black Vulture of family Accipitridae of order falconiformes under old world vulture, is a heavy and large bird with 100- 120 cm in length, wingspan of 250-300 cm short and slightly wedge shaped tail and weight range of 7- 14 kg. It is the heaviest and largest among old world vultures and raptor (Ferguson and Christie, 2001; Ali, 2002; Ali and Ripley, 2007; Meyburg *et al.*, 2015). Cinereous Vulture has broad head covered with blackish down and the bare skin on the head is pale blue-grey in colour. Brownish ruff of feather is present around hind neck. The ruff becomes paler in old individual, which resemble a monk's hood, thus, get the alternative name Monk Vulture. It has massive and powerful beak which upper mandible slightly curved over the lower mandible. The beak is mostly dark with lighter/paler area at base. The bare skin around the base of the beak is

pale blue-grey in colour. The eye ring is black, the eye orbital is pale blue- grey and with reddish brown eye which is dark brown in juvenile. Adult possess dark brown plumage all over the body but juvenile is darker than adult and look almost black. The thigh is covered with dark brown plumage and tarsus and claws are pale dark (Ferguson-lees and Christie 2001; Ali and Ripley, 2007).

Cinereous Vulture *Aegypius monachus* is mainly a Eurasian species which is widely distributed in Spain (Hernandez and Margalida, 2008; Moreno-Opo and Margalida, 2013), Romania, Bulgaria, Greece (Gunner *et al.*, 2011), Turkey (Mcgrady and Gavashelishvili, 2006; Yamac and Gunyel, 2010), Armenia (Mcgrady and Gavashelishvili, 2006), Azerbaijan (Mcgrady and Gavashelishvili, 2006), Georgia ( Mcgrady and Gavashelishvili, 2006), Ukraine, Russia (Mcgrady and Gavashelishvili, 2006), Uzbekistan, Kazakhastan,

Tajikistan, Turkmenistan, Kyrgyzstan, Iran (Mcgrady and Gavashelishvili, 2006), Afghanistan, North Pakistan (Richard *et al.*, 2014) and North India, Phillipines (Ploeg and Minter, 2004), Mongolia (Meyburg *et al.*, 2015) and China (Xiao-Ti, 1991; Meyburg *et al.*, 2015) with small reintroduced population in France (Heredia *et al.*, 1997; Ferguson-Lees and Christie, 2001; Terrasse, 2005). It may occasionally breed in Portugal (Ali and Ripley, 1978), Macedonia and Albania. Cinereous Vultures *Aegypius monachus* usually seen during winters in Sudan, Saudi Arabia (Mcgrady Xiao-Ti, 1991; Gavashelishvili, 2006), Iran (Mcgrady and Gavashelishvili, 2006) and Pakistan, north-west India, Nepal, Bhutan, Myanmar, Lao People's Democratic Republic, North Korea and South Korea.

Cinereous Vulture is among the nine species of vultures that are recorded in the wild from India. It is recorded from Similipal Biosphere Reserve of Kutch and Saurashtra in Gujarat (Ali, 2002); Lahul in Punjab (Sekhawat *et al.*, 2014), Haryana (Leepage, 2015), Uttar Pradesh (Ansari, 2015), Uttarakhand (Ansari, 2015), Maharashtra (Wadatkar, 2013), Dibru-Saikowa National Park, Orang National Park, Kaziranga National Park and Manas National Park in Assam (Choudhury, 2000 and 2006), Kerala (Sreekumar, 1991; Sasikumar *et al.*, 2011), Nellore, Rangareddi and Karimnagar district in Andhra Pradesh (Perennou and Santharam, 1990; Rao, 2006); Mayurbhanj district in Odisha (Palei, 2015); Bikaner and Jodhpur, Rajasthan (Chander, 2013; Purohit and Saran, 2013); Melghat Tiger Reserve, Maharashtra (Ali, 2002; Wadatkar, 2013); Mysore and Coorg district in Karnataka (Subramanya, 2001; Shivanand, 2004). Study of available literature showed that Cinereous Vulture *Aegypius monachus* is recorded only from Namdhapa National Park in Arunachal Pradesh (Choudhury, 2006). While survey to determine population status of vultures in D'Ering Memorial Wildlife Sanctuary at East Siang, Arunachal Pradesh, India, on 6<sup>th</sup> December, 2012 at around 0600 hours in the morning, a lone, black and large bird was located on Semal *Bombax cieba* tree at coordinate 27° 56' 16'' N, 95° 26' 45'' E. Careful observation of the bird with field binocular showed that it has comparatively short, very strong bill with arching from the

cere, nostril was almost square and oblique. Head was broad and covers with down-short on crown and longer on nape and neck was naked with moderate ruff at base reaching up to its back. These field characters specified bird being member of genus *Aegypius*. Further observation with 8-16x40 DPSI Olympus binocular showed morpho-characteristics features of uniformly black or dark brown plumage, broad and short wings without whitish stripe and slightly wedge-shaped tail. Partially naked head with neck, crown, occipital, lore and cheek covered with black fur-like feathers and down. It had large pale bluish grey cere and bill with black tip and grey scaly legs. Therefore, bird was identified as Cinereous Vulture *Aegypius monachus* at the site on the basis of physical characters as the characteristic feature observed matched the already described keys morpho-features of Cinereous Vultures, later confirmed as Cinereous Vulture *Aegypius monachus* using field guide available (Ali and Ripley, 2007; Grimmet *et al.*, 2014). The photographic documentation of the bird was done using Canon EOS 60D with 300mm zoom lens.



Fig. 1. A Cinereous Vulture spotted at D'Ering Memorial Wildlife Sanctuary.

Hitherto, there is no report of Cinereous vulture from D'Ering Memorial Wildlife Sanctuary and adjacent areas. Therefore, D'Ering Memorial Wildlife Sanctuary is a new locality for near threatened Cinereous Vulture *Aegypius monachus* in Arunachal Pradesh, a north eastern state of India. The record of Cinereous Vulture *Aegypius monachus* in D'Ering Memorial Wildlife Sanctuary provides a new information on

distribution and locality of Cinereous Vulture *Aegyptus monachus* to ornitho-scientific world. However, more continuous observation is required to understand whether Cinereous Vulture *Aegyptus monachus* is a winter, resident or vagrant species in D'Ering Wildlife Sanctuary.

### Acknowledgements

The authors are thankful to University Grants Commission (UGC), New Delhi, for financial support; Center with Potential for Excellence in Biodiversity (CPEB), Rajiv Gandhi University, Itanagar for providing necessary facilities and Ministry of Environment, Forest & Climate Change, Govt. of Arunachal Pradesh for permission for survey inside D'Ering Memorial Wildlife Sanctuary.

### References

- Ali, S. 2002.** The books of Indian birds 13<sup>th</sup> ed., Oxford University Press, Mumbai, India. Pp: 15.
- Ali, S. and Ripley, S.D. 2007.** Handbook of the birds of India and Pakistan, Vol. 1. Drivers to Hawk. Oxford University Press, New Delhi. Pp: 298-301.
- Ansari, N.M. 2015.** Status and distribution of vultures in Gautam Budh Nagar district, Uttar Pradesh, India. International Journal of Advanced Research. 3(5): 506-511.
- Chander, K.P. 2013.** The distribution and status of Cinereous Vulture (*Aegyptus monachus*) at Jorbeer, Bikaner, Rajasthan, India: A study of near threatened Monk Vulture. Research Journal of Animal, Veterinary and Fishery Sciences. 1(1): 17-21.
- Choudhury, A.U. 2000.** The birds of Assam, 1<sup>st</sup> ed., Gibbon Books, Guwahati. Pp: 35.
- Choudhury, A.U. 2006.** Birds of Dibru- saikhowa National Park and biosphere reserve, Assam, India. Indian Birds. 2 (4): 95-105.
- Ferguson-lees, J. and Christie, D.A. 2001.** In: Raptors of the world. Christopher Helm, London, UK. Pp: 437-439
- Goutner, V., Skartsi, T., Konstantinou, I.K., Sakellarides, T.M., Albanis, T.A., Vasilakis, D., Elorriaga, J. and Poirazidis, K. 2011.** Organochlorine residues in blood of Cinereous Vultures and Eurasian Griffon Vultures in a northeastern Mediterranean area of nature conservation. Environ Monit Assess. 23(4): 765-772.
- Hernandez, M. and Margalida, A. 2008.** Pesticide abuse in Europe: effects on the Cinereous Vulture (*Aegyptus monachus*) population in Spain. Ecotoxicology. 17: 264-272.
- Leepage, D. 2015.** Checklist of the birds of Haryana. Avibase, the world bird database. Available online at <http://avibase.bsc-eoc.org/checklist>.
- Mcgrady, M.J. and Gavashelishvili, A. 2006.** Tracking Vultures from the Caucasus into Iran. Podoces. 1(1&2): 21-26.
- Meyburg, B.U., Christie, D.A., Kirwan, G.M. and Marks, J.S. 2015.** Cinereous Vulture (*Aegyptus monachus*). In: Handbook of the birds of the World Alive. Available online at <http://www.hbw.com/>.
- Moreno-Opo, R. and Margalida, A. 2013.** Conservation of the Cinereous Vulture *Aegyptus monachus* in Spain (1966-2011): a bibliometric review of threats, research and adaptive management. Bird Conservation International. 24: 178-191.
- Palei, H.S. 2015.** A further record of Cinereous vulture *Aegyptus monachus* (Linnaeus, 1766) in Odisha, Eastern India. Zoos print. XXX (8): 1-2.
- Perennou, C. and Santharam, V. 1990.** Satus of some birds in southeastern India. Journal of Bombay Natural History Society. 87(2): 306-307.
- Ploeg, J.V.D. and Minter, T. 2004.** Cinereous Vulture *Aegyptus monachus* : first record for the Philippines. Forktail. 20: 109.
- Purohit, A. and Saran Ramprakash. 2013.** Population status and feeding behavior of Cinereous Vulture (*Aegyptus monachus*): Dynamics and implications for the species conservation in and around Jodhpur. World Journal of Zoology. 8(3): 312-318.
- Rao, J.P. 2006.** Sighting of a cinereous vulture *Aegyptus monachus* in Rangareddi district, Andhra Pradesh, India. Indian Birds. 2(1): 9-10.
- Sasikumar, C., Praveen, J., Palot, M.J. and Nameer, P.O. 2011.** In: Birds of Kerala: Status and distribution. D.C. Books, Kattayam. Pp: 833.
- Shekawat, D.S., Bhatnagar, C., Koli, V.K. and Agarwal, S. 2014.** First record of cinereous vulture *Aegyptus monachus* (Falconiformes: Accipitridae) from Southern Rajasthan, India. Journal of threatened Taxa. 6 (4): 5675-5676.

- Shivanand, T. 2004.** A sight record of the cinereous vulture *Aegypius monachus* near Mysore, Karnataka, India. Newsletter for Ornithologist. 1(5): 74.
- Sreekumar, R.S. 1991.** Cinereous vulture *Aegypius monachus* (Linn.) in Pathanamthitta, Kerala. Journal of Bombay Natural History Society. 88(1): 111.
- Subramanya, S. 2001.** Cinereous vulture *Aegypius monachus* (Linn.), family accipitridae, in Karnataka. Journal of Bombay Natural History Society. 98(2): 278.
- Terrasse, M. 2005.** Long-Term reintroduction projects of Griffon *Gyps fulvus* and black vultures *Aegypius monachus* in France. Proceeding of the International Conference on Conservation and management of vultures populations. Pp: 98.
- Wadatkar, J.S. 2013.** First report of cinereous vulture from Melghat Tiger Reserve, Maharashtra. Misnet. 14(1): 16.
- Xiao-Ti, Y. 1991.** Distribution and status of Cinereous vulture *Aegypius monachus* in China. Birds of Prey Bulletin. 4: 51-56.
- Yamac, E. and Gunyel, E. 2010.** Diet of the Eurasian black vulture, *Aegypius monachus* Linnaeus, 1766, in Turkey and implications for its conservation. Zoology in the Middle East. 51: 15-22.