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Cover: Parts of *Vachellia nilotica*, medium - watercolours. © P Kritika



Coprophagy in Egyptian Vulture *Neophron percnopterus* (Accipitriformes: Accipitridae) at Jorbeer carcass dump, Rajasthan

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Coprophagy is a well-known phenomenon in the animal kingdom, where species consume faecal matter to obtain nutrients that might otherwise be difficult to digest or assimilate. It can be categorized into autocoprophagy, which is feeding on one's own faeces and allocoprophagy, which is feeding on faeces of the conspecific or other species (Hirakawa 2001). Coprophagy benefits the feeding animal by providing partially digested food, including carotenoids and calcium, which otherwise take a longer time to collect, digest, and assimilate (Hirakawa 2001; Ranade & Prakash 2014). It rapidly matures the gut bacteria in *Ostriches Struthio camelus* that increase the growth rate and decrease mortality (Videvall et al. 2023).

Among vultures, a few coprophagous species are recorded from the Old World and the New World: Egyptian Vulture *Neophron percnopterus* and Hooded Vulture *Necrosyrtes monachus* from in the Old World; Black Vulture *Coragyps atratus*, Turkey Vulture *Cathartes aura*, and Andean Condor *Vultur gryphus* in the New World (Blanco et al 2013; Reading et al. 2017; González-Jáuregui et al. 2021; de Moura & de Moura 2023).

Egyptian Vultures (EV) are among the most widespread species in India (Botha et al. 2017). The species is a scavenger but is known to feed on insects,

reptiles and birds as well (Hidalgo 2005; Vittorio et al. 2017; Byju & Raveendran 2022). The nutritional benefits of coprophagy include the ingestion of pre-digested nutrients, calcium, and carotenoids, which enhance the yellow pigmentation of their facial skin, a trait associated with mate selection and social hierarchy (Negro et al. 2002; Blanco et al. 2013). This study presents observations of coprophagy in EV at Jorbeer carcass dump, emphasizing its ecological relevance.

The Jorbeer carcass dump (27.9663° N, 73.3769° E) falls within the Jorbeer Conservation Area and is situated on the outskirts of Bikaner City in Rajasthan. The Jorbeer Conservation Reserve covers an area of 57 km² with the carcass dump located on its edge spreading over 2.25 km² (Image 1). The reserve has a typical desert habitat with sand and scattered xerophytic vegetation, mainly consisting of *Capparis decidua*, *Acacia nilotica*, and *Prosopis cineraria*. It is an authorized municipal dump, and the cattle carcasses from all over the city of Bikaner are dumped here. The Municipality auctions the rights of carcass collection. The carcasses collected by the contractors are dumped here after skinning, the numbers varying 30–100 per day. The dump is frequented by four species of genus *Gyps*—Indian Vulture *Gyps indicus*, White-rumped Vulture *Gyps bengalensis*, Griffon Vulture

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Gyps fulvus, and Himalayan Vulture *Gyps himalayensis*. The other three species sighted are Cinereous Vulture *Aegypius monachus*, Egyptian Vulture, and Red-headed Vulture *Aegypius calvus*. Other facultative scavengers such as Steppe Eagle *Aquila nipalensis*, Tawny Eagle *Aquila rapax*, and Punjab Raven *Corvus corax subcorax* are also common. The stray dog *Canis domesticus* is the commonest mammalian species, followed by the Wild Boar *Sus scrofa* on the feeding ground.

Despite being a carcass dump, Jorbeer functions as part of a dynamic grassland ecosystem. The conservation of this area provides a safe habitat for arid land flora and fauna. The abundant carrion supply sustains a large number of raptors, making Jorbeer a critical foraging ground for resident and migratory scavengers.

We have been studying the EV population and behaviour since 2002, and this note covers the data till 2018 (Table 1). The coprophagy was noted opportunistically and photographed in earlier visits ($n = 8$) in 2003–05 (Images 2–4). In the photographs, one can see the small flock of EV waiting and feeding immediately on the scat as the dog moves away. During

an intensive study at Jorbeer ($n = 30$ visits) in 2017–18, 10 more incidences were recorded. During all these observations ($n = 18$), the EV followed the dog, waited for it to excrete and immediately fed on it. On nine occasions, the EV were noted feeding on the dung of Cow *Bos indicus* (Table 1). The dung was from stray cows as well as from the stomach contents of the carcasses. During observations ($n = 28$), 36% of individuals were *N. p. gingianus* while 64% were *N. p. percnopterus*, as both subspecies are reported here. All of the sightings noted were in broad daylight. No agonistic response took place between the dogs and EV, nor did any other species compete in the coprophagy.

The EVs fulfil their requirement of carotenoids from the faeces of mammals (Negro et al. 2002). The carotenoids provide bright yellow colouration of bare skin on the face and legs in EV. Thus, coprophagy is beneficial for EV in partner selection and, ultimately, for the successful proliferation of the species. The high level of carotenoids in plasma correlated to a more colourful appearance and a higher position in the hierarchy in the Andean Condor as well (Blanco et al. 2013) and

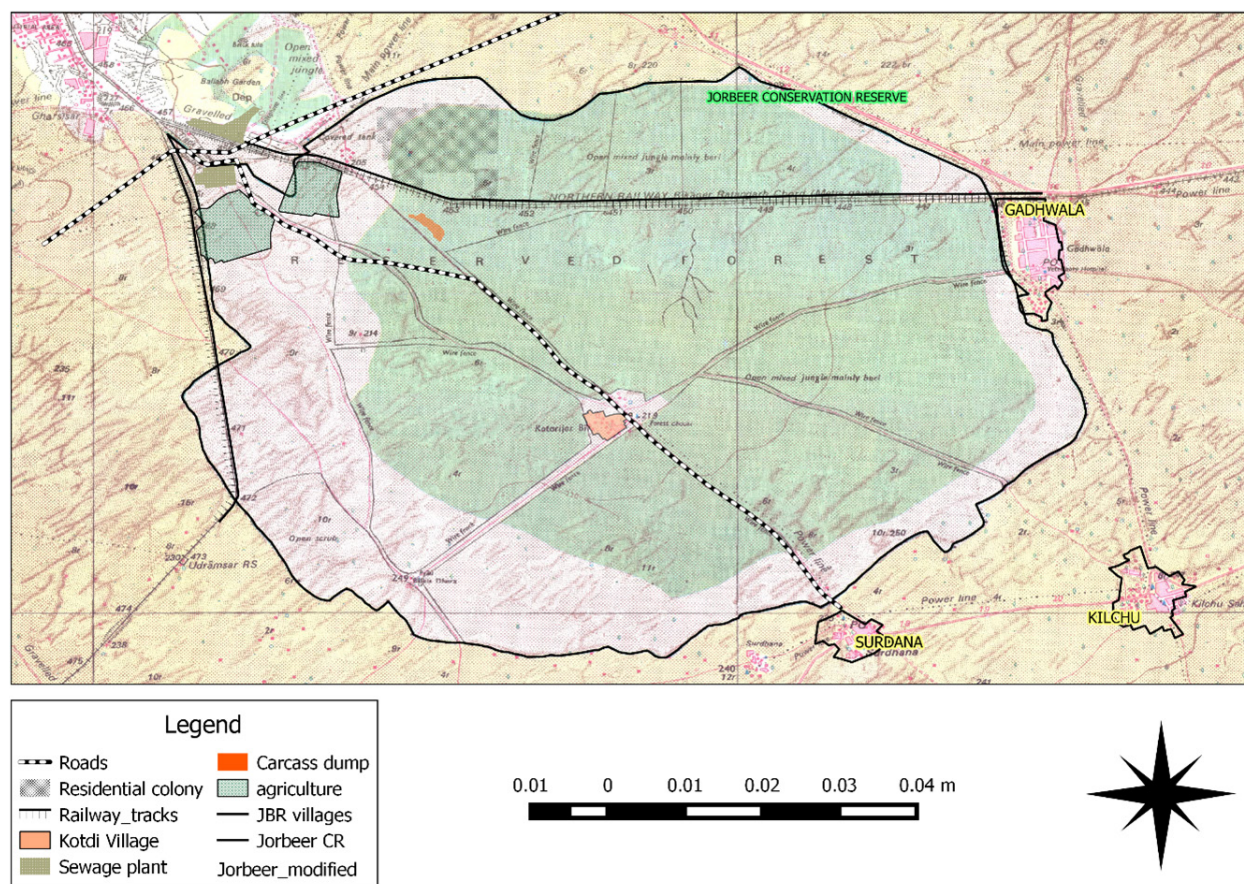


Image 1. Map of Jorbeer Conservation Reserve and its features.



Image 2. The Egyptian Vulture feeding on the scat while the dog defecating (2003). © Sachin Ranade.



Image 3. The flock of Egyptian Vultures waiting next to a defecating dog (2005a). © Sachin Ranade.



Image 4. The flock of Egyptian Vultures feeding on the excreta just after the dog moved away (2005b). © Sachin Ranade.

needs to be confirmed in EV as well. Whitehouse-Tedd et al. (2024) carried out a study on coprophagy by EV, recognizing the dangers of veterinary medicines in the

Table 1. Records of coprophagy by Egyptian Vulture (EV) at Jorbeer carcass dump.

	Date	Time	Feeding on	Number of Egyptian Vulture
1	10.vii.2017	1615	Cow dung	1
2	25.vii.2017	1736	Cow dung	1
3	11.x.2017	1725	Cow dung	3
4	04.xii.2017	1613	Cow dung	2
5	21.i.2018	1115	Cow dung	1
6	29.i.2018	0820	Cow dung	1
1	25.vi.2003	1000	Fresh dog scat	3
2	07.i.2005	1200	Fresh dog scat	5
3	06.iv.2017	0810	Fresh dog scat	2
4	29.iv.2017	0904	Fresh dog scat	1
5	23.x.2017	0955	Fresh dog scat	2
6	20.xii.2017	1000	Fresh dog scat	1
7	13.i.2018	1008	Fresh dog scat	1
8	29.i.2018	1715	Fresh dog scat	1
9	02.iii.2018	1600	Fresh dog scat	1
10	05.iii.2018	0830	Fresh dog scat	1

dump, which may pose a future danger, and a similar study needs to be carried out in India to ensure safety in the local species, especially EV.

The EV is known to consume large crickets, termites, frogs, Checkered Keelback *Xenochrophis piscator*, and Ostrich eggs, as well as flamingos' eggs and nestlings. In Israel and Europe, they are known to feed on lizards, skinks, snakes, and rabbits; in Africa, nestlings of pelicans and Rock dove (Hidalgo 2005; Naorji 2006; Vittorio et al. 2017). The niche-scavenging as well as taking advantage of such a varied diet, must have made this small vulture successful in the competition for survival among the vultures.

References

- Blanco, G., D. Hornero-Me'ndez, S.A. Lambertucci, L.M. Bautista, G. Wiemeyer, J.A. Sanchez-Zapata, J.A. Garrido-Ferna'ndez, F. Hiraldo & J.A. Dona'zar (2013). Need and seek for dietary micronutrients: Endogenous regulation, external signalling and food sources of carotenoids in New World Vultures. *PLoS ONE* 8(6): e65562. <https://doi.org/10.1371/journal.pone.0065562>
- Botha, A.J., J. Andevski, C.G.R. Bowden, M. Gudka, R.J. Safford, J. Tavares & N.P. Williams (2017). Multi-species Action Plan to Conserve African-Eurasian Vultures. CMS Raptors MOU Technical Publication No. 4. CMS Technical Series No. 33. Coordinating Unit of the CMS Raptors MOU, Abu Dhabi, United Arab Emirates.
- Byju, H. & N. Raveendran (2022). Egyptian Vultures extending to new landscapes in southern Tamil Nadu: need for measures. *Zoo's Print* 37(6): 37–40.
- de Moura, G.W. & A.S. de Moura (2023). Heterospecific coprophagy of *Coragyps atratus* (Cathartiformes: Cathartidae) with *Jabiru*

- mycteria (Ciconiiformes: Ciconiidae) in Curvelo, Minas Gerais, Brazil. *Ornithology Research* 31: 315–317. <https://doi.org/10.1007/s43388-023-00154-0>
- González-Jáuregui, M., J.P. Esparza-Carlos & M.F.B. Mir (2021). Heterospecific Coprophagy: Turkey Vulture (*Cathartes aura*) Feeding on Cougar (*Puma concolor*) feces. *Western North American Naturalist* 81(4): 626–629. <https://doi.org/10.3398/064.081.0415>
- Hidalgo S., J. Zabala, I. Zuberogoitia, A. Azkona & I. Castillo (2005). Food of the Egyptian Vulture (*Neophron percnopterus*) in Biscay. *BUTEO* 14: 23–29.
- Hirakawa, H. (2001). Coprophagy in leporids and other mammalian herbivores. *Mammal Review* 31(1): 61–80. <https://doi.org/10.1046/j.1365-2907.2001.00079.x>
- Naoroji, R. (2006). *Birds of Prey of the Indian Subcontinent*. Om Books International, 692 pp.
- Negro, J.J., J.M. Grande, J.L. Tella, J. Garrido, D. Hornero, J.A. Donazar, J.A. Sanchez-Zapata, J.R. Benítez & M. Barcell (2002). Coprophagy: an unusual source of essential carotenoids. *Nature* 416(6883): 807–808. <https://doi.org/10.1038/416807a>
- Ranade S. & V. Prakash (2014). Coprophagy by Barking Deer *Muntiacus vaginalis* (Mammalia: Cetartiodactyla: Cervidae) in Buxa Tiger Reserve, West Bengal, India. *Journal of Threatened Taxa* 7(11): 7825–7826. <https://doi.org/10.11609/JOTT.o4367.7825-6>
- Reading, R.P., B. Tshimologo & G. Maude (2017). Coprophagy of African Wild Dog faeces by Hooded Vultures in Botswana. *Vulture News* 72: 34–37.
- Videvall, E., H.M. Bensch, A. Engelbrecht, S. Cloete & C.K. Cornwallis (2023). Coprophagy rapidly matures juvenile gut microbiota in a precocial bird. *Evolution Letters* 7(4): 240–251.
- Vittorio, D.M., P. López-López, G. Cortone & I. Luiselli (2017). The diet of the Egyptian vulture (*Neophron percnopterus*) in Sicily: Temporal variation and conservation implications. *Vie et Milieu - Life and Environment* 67(1): 7–14.
- Whitehouse-Tedd, K., J. Thomas, M. Duckenfield, N.L. Richards, S. Upton, G. Whitehouse-Tedd, L. Phipps, H. Cale & S. Hall (2024). First assessment of coprophagic feeding behaviour in captive Egyptian Vultures *Neophron percnopterus* and Hooded Vultures *Necrosyrtes monachus*: implications for wild vulture health in agricultural landscapes. *Sandgrouse* 46: 30–52.



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