

Anthropogenic Influences on the Scavenging Ecology of Egyptian Vultures in Gonda, Terai region of Uttar Pradesh, India

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INTRODUCTION & AIM

- ❖ The Egyptian Vulture (*Neophron percnopterus*), an endangered scavenger, plays an important role in ecosystem health and corpse decomposition processes.
- ❖ However, populations have been declining throughout the Indian subcontinent, mainly due to anthropogenic influences.
- ❖ The present study explores how human activities affect the scavenging ecology and feeding behavior of Egyptian vultures in Gonda District Fig 1, Terai region of Uttar Pradesh, India.



Fig 1: Egyptian Vulture at Dumping Site

METHOD

- ❖ The observations were conducted from January to June 2025.
- ❖ Systematic field observations were conducted at certain dumping locations.
- ❖ Point count sampling techniques were used to capture information on interspecific interactions, food type, feeding duration, and frequency of foraging.

Study Area

- ❖ The study was conducted in Gonda District (27.13°–27.45° N, 81.75°–82.30° E) in the Terai region of Uttar Pradesh, India Fig 2.
- ❖ The area lies at the foothills of the Himalayas and is characterized by fertile alluvial plains, seasonal wetlands, agricultural fields, and fragmented forest patches.

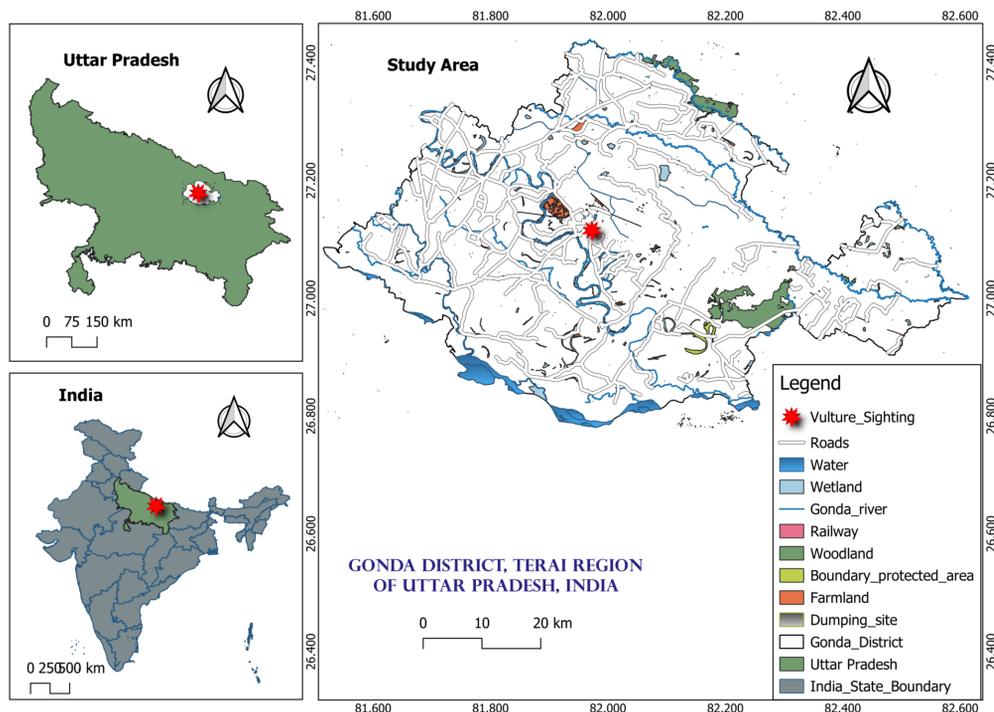


Fig 2: Map of the study area

RESULTS & DISCUSSION

Egyptian Vultures relied predominantly on anthropogenic food sources. Livestock carcasses constituted the majority of feeding records (57%), followed by poultry waste (25%) and market refuse (10%) Fig 3. Natural food sources such as wild animal remains (5%) were comparatively rare.

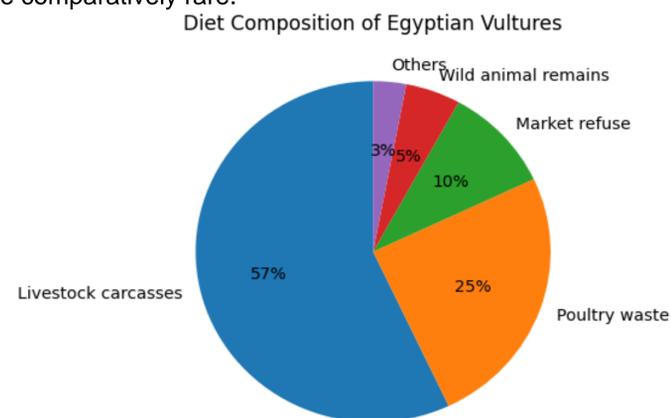


Fig 3: Diet Composition of Egyptian Vulture

Table: Interspecific competition observed during feeding events of Egyptian Vultures

Parameter	Value
Total feeding events observed (%)	100
Feeding events with interspecific competition (%)	62
Primary competitor	Feral dogs (<i>Canis familiaris</i>)
Dominance level of primary competitor	High
Primary effect on vultures	Displacement from carcasses
Secondary competitors	House Crows (<i>Corvus splendens</i>), other scavenging birds
Type of interference	Disturbance, pecking, mobbing
Effect on feeding duration	Reduced
Effect on feeding efficiency	Reduced
Overall outcome for vultures	Interrupted feeding and delayed carcass access

The strong dependence on anthropogenic food sources observed in this study highlights the adaptive foraging behavior of Egyptian Vultures in human-modified landscapes. Similar patterns have been documented in other regions of India, where vultures increasingly exploit dumping grounds and slaughterhouse waste (Prakash et al., 2012; Sinha et al., 2018). However, such reliance may pose significant risks, including exposure to toxic veterinary drugs—particularly non-steroidal anti-inflammatory drugs—and ingestion of non-biodegradable waste, which can negatively affect survival and reproductive success (Oaks et al., 2004; Pain et al., 2008; Green et al., 2016).

CONCLUSION

The study underlines the critical need for better waste management techniques, construction of vulture feeding zones, and public awareness campaigns to support the long-term conservation of Egyptian Vultures in human-modified environments.

FUTURE WORK / REFERENCES

Green, R.E., et al. (2016). *Potential threat to Asian vultures from the veterinary drug nimesulide*. *Bird Conservation International*, 26, 1–13.

Sinha, A., et al. (2018). *Use of anthropogenic food resources by vultures in India*. *Journal of Threatened Taxa*, 10, 11234–11241.