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# Unusual feeding behaviour of Himalayan Griffon *(Gyps himalayensis)* on Plant matter \*Anil Kumar Sharma<sup>1</sup>, Narayan Lal Choudhary<sup>2</sup> and Hem Singh Gehlot<sup>3</sup>

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## **ABSTRACT**

Present study documented an unusual feeding behavior observed in the Himalayan Griffon Vulture (*Gyps himalayensis*) in Udaipur district of Rajasthan. Himalayan Griffon Vulture consumed the leaves of Gum Karaya (*Sterculia urens*) and Dandathor (*Euphorbia caducifolia*) for approximately ten minutes. Vultures are predominantly recognized as scavengers that feed on carcasses. This behavior might provide essential nutrients, facilitate digestion, or assist in the excretion of indigestible material.

Figures: 02 References: 23 Table: 00

KEY WORDS: Danda-thor, Feeding behavior, Gum Karaya, Himalayan Griffon Vulture, Udaipur

## Introduction

Himalayan Griffon (*Gyps himalayensis*) predominantly inhabits altitudes above 3000 meter, with distribution ranges spanning from 600 to 6000 meters. This species exhibits diverse distributional ranges throughout the Tibetan Plateau, with ranges also extending in the Himalayan Mountains, Central Asia, and Mongolia<sup>10, 11</sup>. Furthermore, this species distribution has been recorded in high altitudinal ranges of the Indomalayan/Palearctic realms, such as the Central Asian region and Himalayas from Afghanistan, northern Pakistan, northern India, southern Tibet, Nepal, Bhutan and Central China to Singapore<sup>3</sup>.

Post breeding, adults remain for most of the year in the breeding grounds, while juveniles wander, in winter,

into the plains of South and Southeast Asia<sup>13, 14, 16,18</sup>. The species includes the 'Near Threatened' category of IUCN<sup>4</sup>.

Himalayan Griffons feed on carrion and regularly visit carcass dumping sites. As with other *Gyps* vultures, Himalayan Griffons are mainly specialists on large mammal (including livestock) carrions and their food is found visually while soaring, either directly or by monitoring other scavenging birds, such as other vultures and corvids<sup>10</sup>. Their large body size confers feeding dominance over other vulture species in mixed gatherings on a carcass, except in the presence of Cinereous Vulture<sup>7, 11, 12, 20</sup>. The present observations reveal unusual and interesting feeding behaviour exhibited by Himalayan Griffon Vulture in Kailashpuri



Fig. 1: Himalayan Griffon feed Gum Karaya (Sterculia urens) leaves

Village, Udaipur district, Rajasthan.

## **Material and Methods**

Himalayan Griffon's (*Gyps himalayensis*) unusual feeding observations were observed with the help of binocular Nikon 8x40 and photograph and videography of this interesting behaviour were supported with the help of Nikon P1000 Camera. Plant species were identified using the standard field guide Flora of Rajasthan (south and southeast region)<sup>22</sup>.

## **Results and Discussion**

Vultures are the largest and most impressive bird species, and play a crucial role in the ecosystem by scavenging dead livestock and wild animals<sup>7,8</sup>. Kailashpuri village in the Udaipur district, Rajasthan, consists of breeding habitats for Indian and Egyptian Vultures<sup>6-9</sup>. Four species of vultures were observed in this region: the Indian Vulture, Egyptian Vulture,

Himalayan Griffon and Eurasian Griffon. Among these, the Indian and Egyptian Vultures are resident species, whereas the Himalayan and Eurasian Griffons are winter migrant's species in this region<sup>7</sup>. During an on-going ecological and behavioural survey of vultures in the Udaipur district, we observed an unusual and interesting feeding behaviour exhibited by a Himalayan Griffon vulture (*Gyps himalayensis*) on January 28, 2024, in Kailashpuri village (24.45°N, 73.43°E), Udaipur district Rajasthan, India.

A part of this observation we saw the Himalayan Griffon Vulture perching and sitting on the Gum Karaya (Sterculia urens) tress located on the rocky sloppy area. At approximately 08:55 am, we observed that the Himalayan Griffon feeds on the dry and shaded leaves of Gum Karaya (Sterculia urens) (Sterculiaceae) (Fig. 1) and Danda-thor (Euphorbia caducifolia) (Euphorbiaceae) (Fig. 2). Himalayan Griffon feeding on

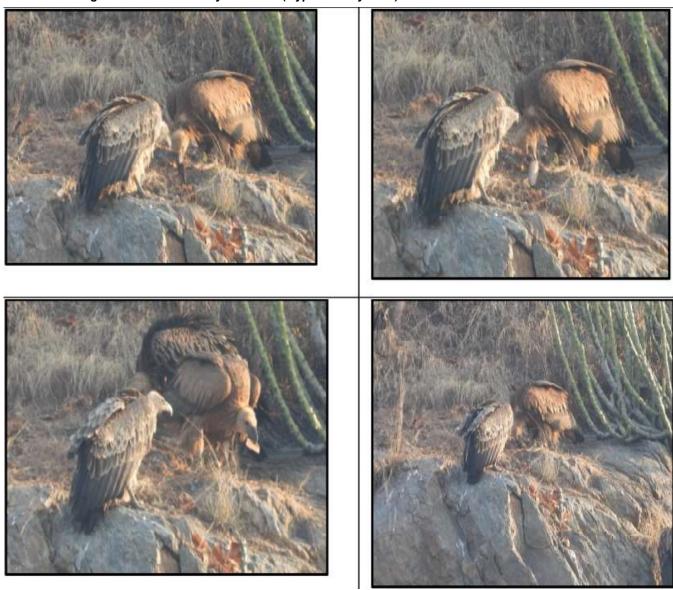


Fig. 2: Himalayan Griffon feed Danda-thor (Euphorbia caducifolia) leaves

leaves of both plant species were observed for approximately ten minutes. During this interval, individuals regularly engulf the leaves of Gum Karaya (Sterculia urens) and Danda-thor (Euphorbia caducifolia). Gum Karaya is a medium-sized tree that exhibits adaptability to sustain deciduous forest habitats. It also exhibits xerophyte species characteristics and has the ability to grow on hilly tops, exposed ridges, rocky cervices, and eroded slopes of rocks<sup>17</sup>. After leaf fall, the trunk of Gum Karaya appeared whitish or pinkish in color. The leaf of Gum Karaya is a long petiole, crowded at the ends of branched and palmately 5- lobed, 20-30 cm in diameter<sup>5</sup>.

Danda-thor (*Euphorbia caducifolia*) is a major xerophyte plant species sustained in the western and southern regions of Rajasthan. This species has the ability to sustain harsh climatic conditions, characterized

by its ability to conserve water and withstand prolonged periods without water availability. *Euohoria caducifolia* exhibits unique morphological characteristics, such as succulent stems and reduced leaf surface area, which allows minimum water loss during transpiration. The hilly train of southern Rajasthan is an integral part of vegetation cover and grows with thorny shrubs <sup>19</sup>.

Vultures are usually known as primary scavengers and preferably feed on different sizes of carrion of domestic and wild animals. Some species of vultures, such as palm-nut vulture (*Gypohiera xangolensis*) and white-backed vultures (*Gyps africanus*), have been observed on plant matter<sup>1,15</sup>.

Earlier scientists<sup>2</sup> also observed Himalayan Griffon vultures feeding on the Chir pine (*Pinus roxburghii*) needles in the western Himalayan region. They observed that the vulture approximately consumed

pine needles. Our observations also reported the consumption of leaves of Gum Karaya (*Sterculia urens*) and Danda-thor (*Euphorbia caducifolia*) by Himalayan Griffon vultures. Usually, vultures known as carrion feeding consume carcasses of domestic and wild animals. This observation provides information on the interesting behaviour of the Himalayan griffon. Feeding of plant material, such as leaves, by vultures could indeed provide essential nutrients or micronutrients.

Furthermore, fibrous plant matter might serve as roughage, aiding in digestion and potentially assisting in the excretion of indigestible matter from carnivore meals<sup>2</sup>. In carnivores, the ingestion of plant material could help in gastrointestinal movement and provide essential fibres<sup>23</sup>. Some workers<sup>21</sup> also observed Whitebacked Vulture (*Gyps africanus*) feeding on *Pseudogaltonia clavata* (*=Lindneria clavata*) (Family-Liliaceae) in Namibia.

## References

- 1. Anderson TA. Do Vultures eat Plants? Vulture News. 1997; **36**: 29-32.
- 2. Atkore VM, Dasgupta S. Himalayan Griffon *Gyps himalayensis* feeding on chir pine *Pinus roxburghii* needles. *Indian Birds*. 2006; **2**(6):172.
- 3. Bhusal KP. Population status and breeding success of Himalayan griffon, Egyptian vulture and Lammergeier in Gherabhir, Arghakhanchi, Nepal. *Master Thesis. Tribhuvan University Kirtipur, Kathmandu.* 2011.
- 4. BirdLife International. Species factsheet: Himalayan Griffon *Gyps himalayensis*. https://datazone.birdlife.org/species/factsheet/himalayan-griffon-gyps-himalayensis on 03/07/2025.
- 5. Chacko KC, Pandalai RC, Seethalakshmi, KK, Mohana C, Gorge M, Sasidharan, N. Manual of seeds of forest trees, bamboos and rattans. *Kerala Forest Research Institute,* Peechi, Kerala. 2002; 212-213.
- 6. Chishty N, Choudhary NL. Successful Breeding rate and Population Status of Indian Vulture (*Gyps indicus*) at Kailashpuri, Udaipur District, Rajasthan. *Environment and Ecology*, 2020; **38**(4): 929-936.
- 7. Choudhary NL, Chishty N. Habitat and Biology of Indian vulture (*Gyps indicus*) in selective region of Udaipur division, Rajasthan India. *Lambert Academic Publishing House*. ISBN: 978-620-3-02772-3. 2020; 1-160.
- 8. Choudhary NL, Chishty N, Bano H. Eco-Biology, Threats and Conservation Problems of Indian Vulture in Southern Rajasthan, India. *Bulletin of Pure and Applied Sciences-Zoology*. 2021; **40A**(1): 45-56.
- 9. Choudhary NL, Chishty N, Sharma AK. Breeding success status of the 'critically endangered' Indian vulture (*Gyps indicus*) in selective microhabitats of Southern Rajasthan. *Flora and Fauna*. 2024; **30**(2): 361-366. https://doi.org/10.33451/florafauna.v30i2pp361-366.
- 10. Del Hoyo J, Elliott A, Sargatal J. Handbook of Birds of the World (Volume 2): New World vultures to Guineafowl. *Lynx Editions, Barcelona, Spain.* 1994; 638.
- 11. Ferguson-Lees J, Christie DA. Raptors of the World. Christopher Helm, London. 2001; 992.
- 12. Grimmett R, Inskipp C, Inskipp T. Birds of the Indian Subcontinent. Oxford University Press & Christopher Helm. 2011; 528.
- 13. McClure CJ, Westrip JR, Johnson JA, Schulwitz SE, ViraniMZ, Davies R, Symes A, Wheatley H, Thorstrom R, Amar A, Buij R, Jones VR, Williams NP, Buechley ER, Butchart SH. State of the world's raptors: Distributions, threats, and conservation recommendations. *Biological Conservation*. 2018; **227**: 390-402.
- 14. McClure CJ, Anderson DL, Buij R, Dunn L, Henderson MT, McCabe J, Rolek BW, Schulwitz SE, Spurling, DP, Vargas FH, ViraniMZ, Watson TR, Méndez D, Reyes CM, Miranda EBP, Glowka L, Hinchliffe S, Robinson BW, Belthoff JR, Heath JA, Botha A, Davies RAG, Rayner AP, Trice SR, Goodrich L, TherrienJF, Oleyar MD, Slater SJ, Buechley ER, Gurung S, SubediTR, Sumasgutner P, Sutton LJ, Loercher F, Phipps WL, Tavares J. Commentary: The past, present, and future of the Global Raptor Impact Network. *Journal of Raptor Research*. 2021; 55(4): 605-618.
- 15. Mundy P, Butchart D, Ledger J, Piper S. The Vultures of Africa. *Acorn Books and Russel Friedman Books in association with the Vulture Study Group*. 1992.

- 16. Naoroji R. Birds of prey of the Indian Subcontinent. *Om Books International, New Delhi.* 2006.
- 17. Orwa C, Mutua A, Kindt R, Jamnadass R, Anthony S. Agroforestry Database: a tree reference and selection guide, version 4.0. *World Agroforestry Centre, Kenya*. 2009.
- 18. Rasmussen PC, Anderton JC. Birds of South Asia: the Ripley guide. Washington D.C., Michigan & Barcelona: *Smithsonian Institution, Michigan State University & Lynx Edicions.* 2012; 1072.
- 19. Sharma BK, Kulshreshtha S, Rahmani AR. Faunal Heritage of Rajasthan, India: Conservation and Management of Vertebrates. Springer Science and Business Media. 2013; 661.
- 20. Thiollay JM. Handbook of the birds of the world. J. delHoyo, A. Elliott and J. Sargatal, eds. Barcelona: Lynx Edicions. 1994.
- 21. Thomson N, Stehn H, Bridgeford P. Observations of White-backed Vultures eating plant material in Namibia. *Vulture News*, 2013; **64**: 61-65.
- 22. Tiagi YD, Aery NC. Flora of Rajasthan (South & South-East Region). *Himanshu Publication Udaipur-New Delhi*. 2007.
- 23. Yoshimura H, Hirata S, Kinoshita K. Plant eating carnivores: Multispecies analysis on factors influencing the frequency of plant occurrence in obligate carnivores. *Ecology and Evolution*, 2021; **11**(16): 10968-10983.