

Full Length Research Paper

Sighting of Eurasian griffon, *Gyps fulvus* and conservation of vultures in North Madhya Pradesh, India

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Vultures, nature's most efficient scavengers, are on the verge of extinction. Nine species of vultures were recorded from the Indian sub-continent, of which, five belong to the genus *Gyps* while the others are monotypic. Historically, and until recently, the White-backed vulture *Gyps bengalensis*, Long-billed vulture *Gyps indicus* and Slender-billed *Gyps tenuirostris* vultures were by far the most populous species in India. Over the last decade, however, there has been a drastic crash in the populations of these vultures over most parts of the country. Eurasian Griffon was recorded for the first time on 21 February, 2008 in Kuno Wildlife Sanctuary, Madhya Pradesh. Study carried out from March, 2003 - December, 2008 has claimed, sightings and nesting sites of vultures in (Sheopur, Morena Datia, Gwalior and Tikamgarh district) north Madhya Pradesh, India were recorded.

Key words: Vulture, *Gyps* spp., kuno, sanctuary, scavenger.

INTRODUCTION

Vulture is a popular name for few species of birds that are basically carrion feeders. Vultures come under two families, namely, Cathartidae comprising new world vultures, and Accipitridae (sub-familydegypiinae) comprising the old world vultures. Though, the new world vultures (Condor) are distantly related to the old world vultures, yet they are similar in appearance and habits. Both feed on the flesh of large mammal carcasses. Though many birds and mammals feed on carrion, yet a few of them compete with vultures for badly decomposed remains. Such type of food cannot be carried back to the nest in beak or feet as eagles do with a fresh kill but must be swallowed and later regurgitated and half-digested for the young ones. It has been reported that vultures can, without ill effect, digest most of the diseased organisms from carcasses which may harm other animals and man (Singh, 1999).

Eight vulture species of the genus *Gyps* are widely distributed across Europe, Asia and Africa. They are all obligate scavengers, feeding primarily on the carcasses of large ungulates and nesting and roosting, often colonially, on cliffs or in trees. They use energetically economical soaring flight to travel long distances from nests and roosts in search of ungulate carcasses (Houston, 1974; Ruxton and Houston, 2004). *Gyps* vultures are believed to have evolved in parallel with large herds of migratory ungulates, feeding on the remains of sick, injured and

depredated individuals (Mundy et al., 1992; Deborah et al., 2008). These herds have disappeared from most of the world range of *Gyps* vultures, remaining only in some of the larger protected areas. However, the food supply formerly provided by wild ungulates is replaced by traditional farming practices in some areas. For example, in the Spanish Pyrenees, transhumance pastoralism, in which herds of domestic ungulates graze the high mountain pastures in the summer and are shepherded to the lowlands in the winter, provided a food supply for Eurasian Griffon Vultures *Gyps fulvus* from the 18th to mid 20th centuries, although these practices have recently declined dramatically across Europe (Pain and Pienkowski, 1997).

Knowledge of the ecological factors affecting the large-scale distribution and abundance of endangered species is an important tool for defining management, recommendations, and understanding population dynamics (Verner et al., 1986; Sutherland and Green, 2004). Nine species of vultures are recorded from India of which five belong to the genus *Gyps* (Prakash, 1999). Three *Gyps* vultures, namely the Oriental White-rumped Vulture (OWRV) *Gyps bengalensis*, Long-billed Vulture (LBV) *Gyps indicus* and Slender-billed Vulture (SBV) *Gyps tenuirostris* are residents, and the remaining two, the Eurasian Griffon *Gyps fulvus* and Himalayan Griffon *Gyps himalayensis* are largely wintering species (Prakash et al., 2003, Prakash et al., 2007).

Table 1. Vulture sightings and their nest sites in North Madhya Pradesh, India.

S/No.	Locality	Species	No. of sightings	Habitat/Tree sp.	No. of nest	Status of conservation sites
1	Jawadeshwar,(Sheopur)	Long-billed Vulture	36	Ficus species tree	1 (LBV)	UPA
2	Goras, Sheopur	Long-billed Vulture and White-backed Vulture	32 + 34	Carcass of dead animal	-	RF
3	Nayagoan, Sheopur	Long-billed Vulture	23	Ficus species tree	-	UPA
4	Daljit ka Pura (NCS)	Indian Scavenger Vulture	12	Sand banks	-	PA
5	Dhobini, Sheopur	Long-billed Vulture	3	Carcass of dead animal	-	UPA
6	Gwalior Fort	Long-billed Vulture	4	Flying	-	UPA
7	Dinara, Datia	Long-billed Vulture and White-backed Vulture	12 + 24	Ficus tree	4(LBV)	UPA
8	Orchha, Tikamgarh	Long-billed Vulture	11	Flying and rocky clips of temple	3(LBV)	PA
9	Gidha Dah (KWS)	Long-billed Vulture and White-backed Vulture	62 + 13	Rocky clips	11(LBV and WBV)	PA
10	Paira Ghat (KWS)	Long-billed Vulture	4	Rocky clips	-	PA
11	Senta Khera (KWS)	Long-billed Vulture and White-backed Vulture	3 + 8	Salai Tree	1 (WBA)	PA
12	Chuna Konda (KWS)	Long-billed Vulture	3	Salai tree	-	PA
13	Padari Ghat (KWS)	Long-billed Vulture	24	Rocky clips	-	PA
14	Parond Village (KWS)	Long-billed Vulture and White-backed Vulture	63 + 22	Carcass of dead animal	-	PA
15	Silpura Dam (KWS)	Long-billed Vulture	2	Ficus tree	-	PA
16	Machar ki bagad (KWS)	Long-billed Vulture	1	Salai tree	1 (LBV)	PA
17	Palpur (KWS)	Eurasian griffon, Long-billed Vulture and Kind Vulture	2 + 6 + 2	Rocks of mid Kuno river	1	PA
	Parichha Village	Long-billed Vulture	43	Flying and feeding	-	UPA
18	Kudi khera Nala (KWS)	Long-billed Vulture	12	Flying	-	PA

PA = Protected area, UPA = Un Protected area. NCS = National Chambal Sanctuary. KWS = Kuno Wildlife Sanctuary Sheopur. LBA = Long billed Vulture. WBA = White backed vulture. RF = Reserve Forest.

Oriental White-rumped Vulture and Long-billed Vulture were abundant across large parts of India until the 1990s. Gyps vulture densities were so high in some areas that they were considered a hazard to aircraft (Grubh et al., 1990). This abundance was the result of plentiful food supply, in the form of the carcasses of domesticated ungulates due to unplanned urbanization as well as inefficient carcass disposal system prevalent in the 90's in Indian cities. Concentrations of vultures were a nightmare to civil and military aviation causing costly bird aircraft collisions and air

crashes.

METHODS

The North Madhya Pradesh is covered 6 districts namely Bhind, Datia, Gwalior, Morena, Sheopur and Shivpuri. During field work, regular visits were made to different places of North Madhya Pradesh, when records were made of locality, name of species, numbers, habitats, and details of nests of Vultures. Geographical locations of sites were also noted in field note books. Vulture species were identified with the help of Binoculars and existing

identification key (Ali and Ripley, 2002).

Recent observations in north MP

During the field survey in north Madhya Pradesh White-backed Vulture *G. bengalensis*, Indian King Vulture *G. calvus*, Indian Long-billed Vulture *G. indicus*, White Indian Scavenger or Egyptian Vulture *Neophron percnopterus* and Eurasian Griffon, *G. fulvus* were recorded in the north Madhya Pradesh. Eurasian Griffon, *G. fulvus* was recorded in Kuno Wildlife sanctuary, Sheopur on 21 February, 2008. During the field days, vulture congregations and nest sites were recorded in north Madhya Pradesh shown in Table 1, Figures 1 and 2.

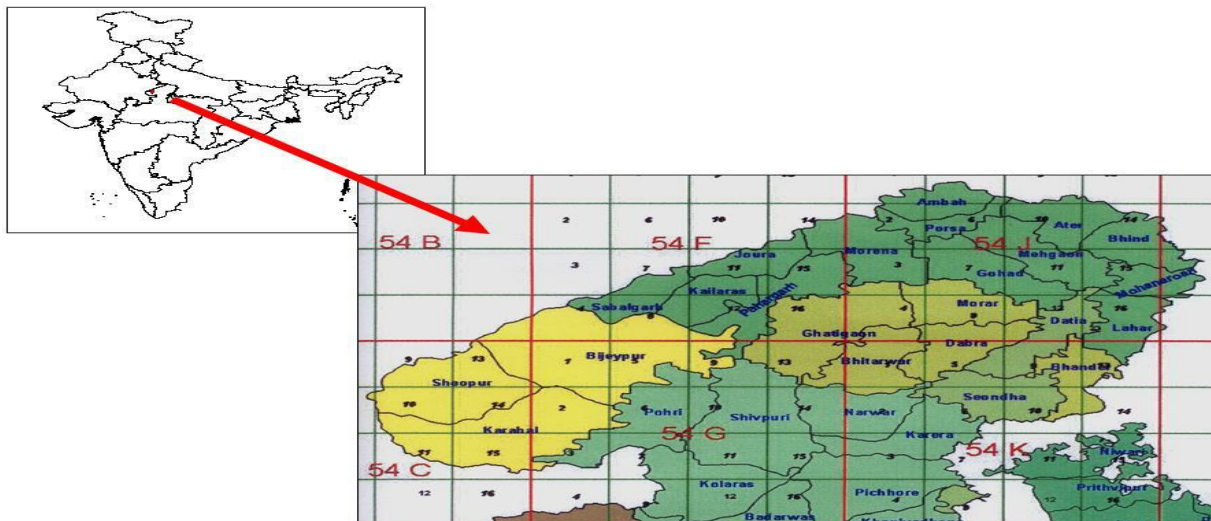


Figure 1. Showing the location of north Madhya Pradesh, India.



Figure 2. Sightings of Vulture species in the north Madhya Pradesh, India.

Conclusion

The ecological, social and cultural significance of vultures in India may be summed up as: scavenging on animal carcasses and thereby helping keep the environment clean; and the disposal of dead bodies as per the religious practices of the Parsi community. Vultures are the primary consumers of carrion in India and elsewhere. Removal of a major scavenger from the ecosystem will affect the equilibrium between populations of other

scavenging species and/or result in increase of putrefying carcasses causing outbreak of infectious diseases. North Madhya Pradesh Vultures need a long term study in future to facilitate their conservation and management.

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