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Research Article

A REPORT ON SUCCESSFUL RESCUE OF EURASSION GRIFFON VULTURE *GYPS FULVUS* AT JODHPUR, RAJASTHAN

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ABSTRACT

The population of Eurasian Griffon vulture is decreasing rapidly day-by-day. The main cause of mortality of *Gyps fulvus* is due to electrocution and habitat loss. Most of deaths due to electrocution were observed at Keru dumping site. In this area both sides have road track parallel to which there is a high voltage electricity line. Various reasons have been given for their rapid and unanticipated decline. A study was carried out on a Eurasian Griffon vulture *Gyps fulvus* at Arna Jarna nesting site, near dumping station, Jodhpur, Rajasthan in January, 2014. The vulture was restless, breathing heavily, and showed stressed and neck dropping symptom. It was very weak, unable to stand for long. This vulture was rescued from Arna hill and brought to rescue center at Jodhpur Zoo for necessary treatment and rehabilitation. The *Gyps fulvus* was dull and depressed, immediately antibiotic drug Fortivir and Malonax pain Killer were provided. After 22 days of nursing with treatment of antibiotic, water and proper food, finally the bird recovered. This vulture has been kept an exhibit in rescue center at Jodhpur Zoo. The present paper is an effort to describe study of rescue and rehabilitation of *Gyps fulvus.*

Keywords: Electrocution, *Gyps fulvus*, Allometric scaling, Rehabilitation.

INTRODUCTION

Vultures are large birds Carrion eaters and divided into two groups -The New World Vultures and Old World Vultures. New World vultures come under the order *Falconiformes* of family *Cathartidae* and Old World vultures belongs to the family *Accipitridae*. The New World vultures are distributed from Southern Canada to the Falkland Islands and the Old World vultures are widely distributed in Asia, Africa and Europe. The subfamily *Aegypinae* of *Accipitridae* contains 15 species of Old World vultures. Nine species of Vulture have been reported by Ali and Reply (1987) in India. Out of them seven species were reported in Thar Desert, Rajasthan by Chhangani (2002a). The Vulture population has been drastic decline in Indian sub-continent over last two decades (Prakash *et al.*, 2003; Chhangani, 2005; Rahmani, 1998; Prakash, 1999; Prakash and Rahmani, 1999; Virani *et al.*, 2001; Gilbert *et al.*, 2006; Saran and Purohit, 2012). Breeding ecology and Vulture population has been study since 1996 in and around Jodhpur. The study have been examined by monitoring the nesting site, making censuses, recording predation, observing inter-species interaction and locating seasonal migration by Chhangani and Mohnot (2004),

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Chhangani (2002b, c, d and 2005), Saran and Purohit (2014) and Purohit and Saran (2013).

During the surveys, of different sites, intensive study was carried out at Arna, Keru, Barli and dumpling site of Jodhpur every year from October to March to know the population fluctuation and ecological specificities of the Vulture species. Thirteen dead vultures Nine *Gyps fulvus* and four *Neophron percnopterus* were reported in January 2014. At that time of survey, one *Gyps Fulvus* was found near Arna Jarna nesting site in injured and stress condition. The reason for selecting this site, were maximum availability of Vulture population because daily carcasses availability in this area and Vulture spend their maximum time in searching and feeding activity of food material. Moreover, there are three small water bodies present and at 2-3 km distance presence of Kailana canal which provide drinking water throughout year.

Case study observation

During the survey of Arna hill, on 6 January 2014 one adult Eurasian Griffon vulture *G. fulvus* was found under the rock. It was in sick condition that may be fallen down from its nest Time: 12.30 pm (Figure 1). After half an hour of close examination of behaviour of bird, it was decided that bird required medical treatment as soon as possible. So, with the help of one villager bird was captured and transported on bike to Zoo Rescue centre Jodhpur which was 22 km (Figure 2) far from capture site. In zoo rescue centre, bird was kept in the shade, provided drinking water with ORS (Figure 3). During close examination, bird was unable to fly and found injury on wing and a small wound mark was seen on the front part of neck. During this time, it dropped its neck very often and closed its eyes. The behaviour of neck dropping was may be a sign of illness. The body weight adult bird was about 8.2 kg on first day. Dr. Hemant Joshi started treatment. The doses were calculated on the basis of allometric scaling. Inj Fortivir 7mg/kg B.wt i/m was repeated after 51 hrs interval. Then Inj Zeet 3mg/ kg B wt i/m was repeated after 8 hrs intervals and Inj Melonex 1 mg/kg B wt i/m was repeated after 24 hrs interval administered (Figure 4).

Figure 1. Hostile *G. fulvus* at Arna hill.

Figure 2. Transportation from field to rescue centre.

Figure 3. Drining water with ORS.

Figure 4. Treatment at rescue centre.

Figure 5. Forcefully chopped meat feeding.

Figure 6. Blood sample collection.

Figure 7. Trimming of wing.

Next day on 7 January, 2014 bird seen in same position, was given a chopped meat piece forcefully with the help of Dr. Joshi and anti allergic drug *Zeet* and *Malonax* were continued (Figure 5). On 3rd and 4th day force feeding and treatment was continued. Bird *G. fulvus* was seen with the progress of recovery. On 10 January 2014, bird feed piece of chopped meat first time itself and tried to walk and rested at intervals with neck dropping behaviour. ORS was mixed in water bowl for drinking.

During the treatment blood sample was taken for RFT and LFT examination and all parameters were found in normal range. On 28th January, 2014 left side wings lower strata which have a deep wound was trimmed for recovery and flight (Figure 6 and 7). After this, bird was shifted in

big rehabilitation chamber for more space and short flight. At the time of writing this report *G. fulvus* was in good condition and started to short flight.

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REFERENCES

Ali, S. and Ripley, S.D., 1987. Compact handbook of the birds of India and Pakistan. Oxford University Press, Delhi, 296-314.

Chhangani, A.K., 2002a. Avifavna in and around Jodhpur city, Rajasthan, India, *Newsletter for Birdwatchers*, 422: 24-26.

Chhangani, A.K., 2002b. Vultures the most eco-friendly birds. *Sci. Reporter*. 3910: 56-59.

Chhangani, A.K., 2002c. Successful rescue and rearing of India long billed Vulture at Jodhpur zoo. India. *Zoos Prints.* 177:20-22.

Chhangani, A.K., 2002d. Ecology of Vulture of different species and an around Jodhpur Rajasthan, India. *Tiger Paper*. 292:28-32.

Chhangani, A.K., 2005. Population ecology of Vultures in the western Rajasthan, India. *Indian forester*. 131(10): 1373-1382.

Chhangani, A.K., Mohnot, S. M. 2004: Is diclophenac the only cause of Vultures decline? *Cur. Sci.,* 87(11): 1496-1497.

Gilbert, M., Watson, R.T. Virani, M.Z., Oaks, J. L., Ahmad, S, Jamshed, M., Choudhary, I., Arshad, M., Mahmood, S., Ali, A., and Khan, A.A., 2006: Rapid population declines and mortality clusters in three Oriental White Backed Vulture Gyps bengalensis colonies in Pakistan due to diclophenac poisoning. *Oryx*, 404: 388-399.

Prakash, V., 1999. Status of Vulture in Keoladeo National Park, Bharatpur, Rajasthan, with special reference to population crash in Gyps species. J. *Bombay Nat. Hist. Soc.*, 963: 365-368.

Prakash, V. and Rahmani, A., 1999: Notes about the decline of Indian Vultures, with particular reference to Keoladeo National Park. *Vulture's News*, 41: 6-13.

Prakash, V.D. Pain, J., Chunningham, A.A., Donald, P.F., Prakash, N., Verma, A., Gargi, R., Kumar, S.S. and Rahmani, A.R., 2003. Catastrophic collapse of Indian white backed Gyps bengalensis and long billed *Gyps indicus* vulture population. *Biol. Conserv.*, 109: 381-390.

Rahmani, A. R. 1998: Decline of Vultures in India newsletter. *Birdwatchers.* 385: 80-81.

Saran, R.P., and Purohit, A., 2014. Population status, nesting sites and seasonal fluctuation of Egyptian vultures *Neophron percnopterus*: Dynamics and implications for the species conservation in and around Jodhpur. *Int. J. Biodiv. Conserv.,* 61: 100-107.

Purohit, A., and Saran, R.P., 2013: Population status and feeding behaviour of cinereous vulture *Aegypus monachus*: dynamics and implications for the species conservation in and around Jodhpur. *World J. Zool.,* 83: 312-318.

Saran, R.P. and Purohit, A., 2012. Eco-transformation and electrocution. A major concern for the decline in Vulture population in and around Jodhpur. *Int. J. Conserv. Sci.,* 3(2): 111-118.

Virani, M., Gilbert, M., Watson, R., Oaks, L., Benson, P., Khan, A.A., Baral, H.S. and Giri, J.B., 2001. Asian Vulture crisis project: field results from Pakistan and Nepal for the 2000-2001 field season. T. Katzner and J. Parry Jones (Eds.) Reports from the workshop on Indian Gyps Vultures, 4th Eurasian congress on raptors, Sevilla, Spain, September 2001. Seville, Spain: Estacion. Biologica Donana Raptor Research Foundation, 7-9.