

**CORPSE CARRYING BY A FEMALE RHESUS MACAQUE (*MACACA MULATTA*)  
IN MADHUPUR NATIONAL PARK, BANGLADESH**

Atikul Islam Mithu<sup>1</sup> and Tanvir Ahmed<sup>2\*</sup>

*Department of Zoology, Jagannath University, Dhaka 1100, Bangladesh*

Thanatology is the scientific study of death and the processes, including physiological, behavioral, psychological, and social aspects, associated with it (Fashing et al. 2011, Anderson 2017, Carter et al. 2020). In recent decades, several studies have described how animals, particularly primates, respond to the death of offspring or conspecifics, including behaviors such as maternal grooming, vocalizing, swatting away flies, dead-infant carrying, protective actions towards deceased individuals, and filial cannibalism (Botting and Waal 2020, Watson and Matsuzawa 2018). The carrying of deceased individuals by conspecific group members has been documented in at least 34 non-human primate species (Gonçalves and Carvalho 2019). In macaques (*Macaca* spp.), the carrying of non-mature deceased individuals has been observed in several species, including the Japanese macaque (*Macaca fuscata*) (Sugiyama et al. 2009), Tonkean macaque (*M. tonkeana*) (Tian et al. 2017), Bonnet macaque (*M. radiata*) (De Marco et al. 2018), Lion-tailed macaque (*M. silenus*) (Das et al. 2019), and Taihangshan macaque (*M. mulatta tcheliensis*) (Arlet et al. 2023). Despite extensive research, there has been a limited understanding of corpse-carrying behavior in the South Asian subspecies of the rhesus macaque (*M. m. mulatta*), at least in the wild populations. Here, we present an opportunistic observation of a female rhesus macaque carrying a corpse in Madhupur National Park, an 8436-ha moist deciduous Sal (*Shorea robusta*) forest in north-central Bangladesh (Ahmed and Rupom 2021, Monirujjaman and Khan 2018, Naher et al. 2016).

On 27 October 2023, at 1130 h, a rhesus macaque troop was spotted at the Lohoria Deer Breeding Center Road (24°41'50.1" N, 90°06'14.1" E). While collecting data on the age-sex composition of the troop, we observed an adult female macaque carrying a young individual of unknown sex. The young individual was not moving and its arms were unusually hanging. Using a pair of binoculars, we identified it as a corpse of a juvenile rhesus macaque. While moving on the road-side wall, the corpse was somehow dropped from her arm to the ground. The approximate height of the wall was two meters. The female

\*Author for correspondence: <tahmed@dpz.eu>; <sup>2</sup>Primate Genetics Laboratory, German Primate Center, Leibniz Institute for Primate Research, Göttingen, Germany

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looked at the corpse from the wall for about a minute and then climbed a nearby tree (Figure 1). The other members of the troop were foraging closely but had no physical contact with the corpse during our observation. About 10 minutes after dropping the corpse, the adult female came down to the corpse, groomed it for a few seconds, and swatted the flies away. While a visitor's three-wheeler passed by the corpse, the female macaque climbed another tree leaving the corpse on the ground but constantly looking at the corpse (Figure 1). The female also vocalized twice. At 1209 h, the female followed the other troop members and left the corpse on the ground.



Fig. 1: The female rhesus monkey who carried the corpse before is looking at it after she dropped it on the floor near a road (left). A closer view of the corpse– a juvenile rhesus macaque of ca. 7 months (right).

We waited for about two hours to see whether any individual of the macaque troop returned to the corpse but there were no signs of any macaque nearby. Then, we had a closer look at the corpse, maintaining a safe distance. It started decomposing and a bad smell was emitting. The facial colour of the corpse had become reddish, while the eyelids and their surroundings turned white. The bones had come out from the right arm, and the flies were flying around the corpse (Figure 1). We left the corpse after taking some photos with a digital camera. However, we did not see the corpse while surveying other primates in the next few days. To gather information on the cause of death and how long the adult macaque was carrying the corpse, we informally interviewed three staff of the local forest department office. The interviews revealed that the adult macaque had been carrying the corpse for the past two days. However, the cause of the death was unclear and predicted to be an unnatural death due to electrocution or a road accident.

We were able to observe the macaques for a short time. The behavior demonstrated by the adult female towards the corpse resembled that reported by

mothers of other primate species who carry dead infants (Botting and Waal 2020, Marco et al. 2018, Sugiyama et al. 2009). This may suggest that the female was the mother of the deceased individual. The duration of corpse carrying in primates ranges from a few minutes to several months, with the highest duration observed in great apes (Gonçalves and Carvalho 2019). Although macaques are known to carry corpses for one to three days under wild conditions, the longest recorded period was 26 days for Taihangshan macaques (a subspecies of the rhesus macaque, Buhl et al. 2012, Gonçalves and Carvalho 2019). Our short-term observation may indicate that the presumed mother carried the corpse for about three days, until it was disturbed by vehicle movement. However, as a rare and often opportunistic occurrence in the wild, uncovering the factors behind corpse carrying and gaining insights into primate thanatology remains challenging.

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