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NOTE

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An observation of homosexual fellatio in the Indian Flying Fox *Pteropus medius* (Temminck, 1825) (Mammalia: Chiroptera: Pteropodidae)

K.S. Gopi Sundar¹ & Swati Kittur²

^{1,2} Nature Conservation Foundation, 1311, “Amritha”, 12th A Main, Vijaynagar, 1st Stage, Mysore 570017, Karnataka, India.

¹gopi@ncf-india.org (corresponding author), ²swatikittur@ncf-india.org

Apart from a small number of primate species, bats appear to be unique in the animal world in practising oral sex. These acts include fellatio (Tan et al. 2009; Sugita 2016) and cunnilingus (Maruthupandian & Marimuthu 2013) with observations suggesting that such behaviours are usually carried out between heterosexual pairs to help improve fertilization. In addition to oral sex, bats are unusual in engaging in homosexual acts, the utility of which appear to have generated considerable discussion with no understanding yet as to why bats might engage in such sexual behaviour (Kunz & Hosken 2009). Homosexual behaviour included mounting and jousting, and observations indicate that genital licking was limited to pairs of subordinate males (Ricucci 2011). Homosexual fellatio has been observed in bats but appears to be rare and has been observed only in one species, the Bonin Flying Fox *Pteropus pselaphon* (Sugita 2016). In Indian bats, oral sex has been observed in heterosexual pairs (Maruthupandian & Marimuthu 2013), and homosexual behaviour with males mounting other males has been observed in captivity (see references in Ricucci 2011). Sexual behaviours are poorly documented in Indian bats owing to the difficulty of observing bats that roost in dark spaces making direct observations challenging. In this note, we describe an observation of homosexual fellatio in the Indian Flying Fox *Pteropus medius* (formerly *P. giganteus*).

On 17 March 2020, we visited Nagawli lake beside the village of Nagawli in Chittaurgarh District of southern Rajasthan. A roosting colony of Indian Flying Foxes used large mango trees that bordered the lake and numbered ~ 300 individuals. One pair of bats roosted away from other bats and attracted our attention by their regular jousting. This included beating each other with their patagium, wrestling with the patagium wrapped around each other, and snapping at each other's faces. Between sessions of jousting, one male bat performed repeated acts of fellatio on the second bat (recipient). This included licking the recipient on the scrotum (Image 1a), licking the shaft and tip of the penis (Image 1b), and twice taking the penis into his mouth between episodes of licking the tip (Image 1c). Both bats also licked their own penises intermittently (Image 1d), and the recipient never performed fellatio on the other male bat. The bat performing the fellatio appeared to get aroused starting with a flaccid penis at the beginning of the interaction (Image 1a) and gained a prominent erection within a few seconds (Image 1d). The recipient had an erect penis when interactions began (not photographed) and a flaccid penis after fellatio began (Image 1), however, the recipient did not do anything to stop the fellatio, instead it kept closing its eyes briefly (Image 1b). The two bats also groomed themselves and each other during the interaction that lasted about three minutes (0959 to 1002 h). Observations were disturbed

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Image 1. Series of photographs showing homosexual fellatio performed by a male Indian Flying Fox in Chittaurgarh District, Rajasthan, India. © K.S. Gopi Sundar.

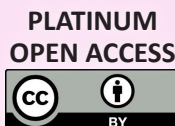
by human activity near the tree that resulted in all the bats taking flight.

Homosexual fellatio has not previously been described in the Indian Flying Fox though a number of published studies are available on the copulatory and other sexual behaviours of this species (Koilaraj et al. 2001; Maruthupandian & Marimuthu 2013; Kumar et al. 2017). Male-male fellatio has been observed and described in the closely related Bonin Flying Fox, where males licked scrota and the erect penis of other males in the colony (Sugita 2016). Our observation had a few novel features in that only one of the bats performed the fellatio and also gained an erection during the act. Taking the penis into the mouth was also exceedingly unusual and has probably not been observed before in bats. Female-male fellatio appears to be correlated to copulation length signifying a clear function (Tan et al. 2009). Homosexual fellatio, on the other hand, is rare and is suspected to help males resolve aggressive relationships within colonies (Sugita 2016). We echo past assertions that many more behavioural studies are needed on Indian and other bats

and will be crucial in enhancing the growing number of suspicions regarding bat socio-biology.

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