Juvenile feeding behaviour in Lesser Mouse-tailed Bat

Lesser Mouse-tailed Bat Rhinopoma hardwickii that belongs to the family Rhinopomatidae, suborder Yinpterochiroptera, order Chiroptera in class Mammalia, sub-phylum Vertebrata, phylum Chordata in kingdom Animalia is a small bat known to range from as far east as Thailand westward through Myanmar, India, Pakistan, and Iran. They can also be found in the African Sahara mostly north of 15 °N but have been known to occupy as far as Kenya. Morphologically it is covered with soft fur on the body with greyish to dark brown in colour but not on its face, rear abdomen, and rump. The lower parts are paler in colour, large rhomboidshaped ears have transverse ridges across the pinna and are connected across the forehead with well-developed tragi. The uropatagium is small and envelops less than a fourth part of the tail. It prefers to roost in desert and semi-desert climate conditions in grassland and oases but can occasionally be found in gardens and orchards too. Its preferential roost consist of natural caves, houses, pyramids, manmade tunnels, wells, forts, havelies (bungalows). Pureshwar Mahadev Temple (23.263035 °N & 69.369872 °E) located in the limits of village Lakhadi, tehsil Nakhatrana of district Kachchh in Gujarat part of the Great Indian Desert

(The Thar) is an ancient temple of Lord Shiva, that has become more popular after it remarkably sustained the adverse impact of severe earthquake in 2001, is known to harbour collectively 140–150 individuals of Lesser Mouse-tailed Bat, and Greater Mouse-tailed Bat *Rhinopoma microphyllum* at its dark to semi-dark dilapidated premises that has limited human interference. Both these species of bats are commonly found throughout the Katchchh district of Gujarat in India and known to share the common roosts at many a palace. Morphologically, in the first instance both these species look similar to a common man but can be distinguished well by expert bat biologists based on their prominent morphological features. The tail in *R. microphyllum* is thick and generally smaller than their forearms length whereas its comparatively thin and generally larger than their forearms length in *R. hardwickii*. In overall appearance *R. microphyllum* is comparatively robust and darker in colour than *R. hardwickii* and thus called by their common names.

We have been carrying out a systematic bat diversity survey in Katchchh district of Gujarat since December 2020 and thus have periodically observed this mixed colony of both the bat species. June through July is noted period of parturition in both these species of bats here in this geographical region and we have thus been able to observe their maternity colony at Pureshwar Mahadev Temple roost. On 6

TidBITS that mothers of both these are guite keen to provide easy access of nipple feeding to their pups. Hungry pups were seen to feed for 20-25 seconds from their mother, **Click here** and repeat if hungry. to watch the video Every time the pups attempted to feed, the mother changed her position to enable them easier and better feeding. A few pups were grown enough to hang alongside their mothers while the rest were too small and were still holding on to their mother's body. We observed the feeding pattern for about 30 minutes and documented a video visual wherein a pup of R. hardwickii is seen suckling the nipple of its mother (watch linked Video). Acknowledgements: Being corresponding and first author of this research article I wish to thank my seniors for helping me during this study and giving me the full liberty to carry out this observation; Mr. Mayank Bohra, research mate, from whom I learned many things in the field; and my co-fellow at the Ram Hattikudur Advanced Training in Conservation, Ms. Trisa Bhattacharjee, for assisting me in writing this article. Arpan Joshi¹, Mamta Rawat², K.R. Senacha³, Mayank Bohra⁴ & Sumit Dookia5 1,2,4The ERDS Foundation, 1002, G-2-B Block, Golf Links Residency, Dwarka, New Delhi 110075, India. ³Indian Bat Conservation Foundation, Mumbai 401202, India. ⁵University School of Environment Management, Guru Gobind Singh Indraprastha University, Dwarka, Delhi 110078, India. August 2021 we observed Emails: ¹arpanjoshia8@gmail.com, mothers carrying their pups ²rawatscorner@gmail.com, (juveniles), separated pups senacha@gmail.com, bohra20@gmail.com, 5sumitdookia@gmail.com roosting aside by their mothers and subadults roosting collectively. We noted feeding

behaviour of the pups and found