

# Bugs & All

Invertebrate Conservation & Information Network of South-Asia (ICINSA)

Newsletter of the  
Invertebrate Conservation & Information Network of South-Asia (ICINSA)

## Predatory attack of weaver ants on the pup of Common Palm Civet

The weaver ants of the genus *Oecophylla* (Hymenoptera: Formicidae) are social insects. They are primarily insectivorous, attacking and eating any ants or other insects that invade their nest (Holldobler & Wilson 1977). In southeastern Asia, often, the weaver ants are used as natural biocontrol agents against agricultural pests by indigenous farmers due to their predatory nature (Peng et al. 1997; Van Mele & Cuc 2000). Its defensive behaviours include biting it with their mandibles and spraying formic acid resulting in intense discomfort (Holldobler & Wilson 1977); due to this defensive behaviour, the weaver ants even can attack large animals, passing too close or spending too much time near the host tree of *Oecophylla*; thousands of ants may drop down to attack the intruder for territory as well as for predation (Holldobler &



A pup of Common Palm Civet *Paradoxurus hermaphroditus*.  
© M. Kamalakannan.



The weaver ants attacking the naked parts (ears, snout, feet and ventral side) of the Common Palm Civet pup. © M. Kamalakannan.

# Bugs & ALL

Invertebrate Conservation & Information Network of South Asia (ICINSA)

Newsletter of the



**The sleeping Common Palm Civet pup even while ants attack.**  
© M. Kamalakannan.

Wilson 1990). However, neither information on species/taxa of the intruding larger animals nor recorded based evidence of the predatory attack of weaver ants on larger animals available.

Recently, one of the authors (MK) encountered a live and unaided civet pup having been attacked by hundreds of weaver ants on a walkway at the campus of Forest Research Institute, Dehradun, Uttarakhand, India (30.3457° N, 78.0098° E). The ants were attacking the naked parts of the civet pup such as ears,

snout, feet and ventral side. Further, it was also noted that the civet pup was unable to react from the attack of ants and it was sleeping quietly. The pup was healthy and no injury marks were found. However, it was not clear how the civet pup was abandoned or moved away from its nest, as there were no signs of its nest or presence of its mother civet vicinity. The civet pup was identified as the Common Palm Civet *Paradoxurus hermaphroditus* (Pallas, 1777) based on the morphological features such as spotted and splotched dorsal pelage and long black

tail (Menon 2014). The ant was identified as Weaver Ant genus *Oecophylla* (Smith, 1860) through its relatively larger, reddish, elongated, and three segmented body and presence of developed black eyespots (Bolton 2003).

Though Common Palm Civet is adapted for forest living, it is also adapted for inhabiting near areas of human habitation where they can take rest in, like tree hollows, boulder crevices, a drain, dense foliage or a roof to rest; it is nocturnal, omnivore, solitary and arboreal in behaviour, and very rarely seen during the day (Lekagul & McNeely 1977). This species breeds throughout the year and gives birth to two to five pups in tree hollows or boulder crevices; pups are born with fur covering bodies and eyes are closed; after around 10 days, their eyes are open, about two months they are weaned and after about three months they are considered fully grown, but they reach sexual maturity at about one



# Bugs R All

Invertebrate Conservation & Information Network of South Asia (ICINSA) Newsletter of the

year old (Lekagul & McNeely 1977; Nowak 1999; Grzimek et al. 2004; Duckworth et al. 2016). Further, it is also reported that young civets do not leave the nest until they are weaned; they need care from the mother until their maturity for survival (Duckworth et al. 2016). In the present observation, the pup was found relatively older (determined through its moving ability and developed fur). It could have fallen from the tree hollows (nest) during the night times when its mother civet was absent. And it is assumed that the milk smell of the civet pup might have attracted the weaver ants or the pup might have disturbed the nest of weaver ants while moved away from its nest. As the road had been loaded with the traffic during day time, the mother civet could not have been able to locate and rescue the pup. The civet pup was not found when the author searched in the same spot the next day morning. The present observational evidence that the weaver ants could make predatory attack even larger mammals which have not been recorded so far.

## References

- Bolton, B. (2003).** *Synopsis and Classification of Formicidae*. Memoirs of the American Entomological Institute, Vol. 71. Gainesville, FL, 370 pp.
- Duckworth, J.W., R.J. Timmins, A. Choudhury, W. Chutipong, D.H.A. Willcox, D. Mudappa, H. Rahman, P. Widmann, A. Wilting & W. Xu (2016).** *Paradoxurus hermaphroditus*. The IUCN Red List of Threatened Species 2016: e.T41693A45217835. <https://doi.org/10.2305/IUCN.UK.2016-1.RLTS.T41693A45217835.en>. Downloaded on 2 August 2020
- Grzimek, B., N. Schlager & D. Olendorf (2004).** *Grzimek's Animal Life Encyclopedia*. Detroit: Gale.
- Holldobler, B. & E. Wilson (1977).** Weaver Ants. *Scientific American* 237: 146–154.
- Holldobler, B. & E. Wilson (1990).** *The Ants*. The Belknap Press of Harvard University, Cambridge, 732 pp.
- Lekagul, B. & J.A. McNeely (1977).** *Mammals of Thailand*. Association for the Conservation of Wildlife, 758pp.
- Menon, V. (2014).** *Indian Mammals: A Field Guide*. Hachette Book Publishing India Pvt. Ltd., Gurgaon, India, 528pp.
- Nowak, R. (1999).** *Walker's Mammals of the World*. Baltimore: Johns Hopkins University Press.
- Peng, R.K., K. Christian & K. Gibb (1997).** Distribution of the Green ant, *Oecophylla smaragdina* (F.) (Hymenoptera: Formicidae), in relation to native vegetation and the insect pests in cashew plantations in Australia. *International Journal of Pest Management* 43(3): 203–211.
- Van Mele, P. & N.T.T. Cuc (2000).** Evolution and status of *Oecophylla smaragdina* as a pest control agent in citrus in the Mekong Delta, Vietnam. *International Journal of Pest Management* 46(4): 295–301.
- M. Kamalakannan<sup>1</sup>, C. Venkatraman<sup>2</sup> & Kailash Chandra<sup>3</sup>**  
<sup>1-3</sup> Zoological Survey of India, Prani Vigyan Bhawan, Block M. New Alipore, Kolkata, West Bengal 700053, India.  
 Email: [kamalakannanm1@gmail.com](mailto:kamalakannanm1@gmail.com) (corresponding author)
- Citation:** Kamalakannan, M., C. Venkatraman & K. Chandra (2021). Predatory attack of weaver ants on the pup of Common Palm Civet. *Bugs R All* #201, In: *Zoo's Print* 36(8): 08–10.

Bugs R All is a newsletter of the Invertebrate Conservation and Information Network of South Asia (ICINSA) published with the financial support of Zoological Society of London.  
 For communication, Email: [zp@zooreach.org](mailto:zp@zooreach.org)

