

## Maintenance of tent and female defence during the breeding season by the harem polygynous bat, *Cynopterus sphinx*

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*Cynopterus sphinx* is a harem-forming bat in which one male roost with several females. The male bat constructs the tent like enclosure by severing the stems and leaves of *Polyalthia longifolia* to recruit females and protect them from the intruders. Some male bats do not construct the tents and roosts solitarily are called satellite males. These satellite males may later attain the dominant status and usurp or construct tent and recruit females or occupy the vacant tent and recruit or oust the harem male from its position. The present study was carried out by observing bats in foliage roosts (*P. longifolia*; n = 20 tents) during night hours using red-filtered lights with aid of night vision camera. Here we reported that the harem males were involved in the social grooming by marking female bats and tent maintenance activity by cleansing the tent area using saliva and pasting of masticated plant parts. They have also modified their tents by removing the leaves and branches. In addition, harem male bats were observed to spend longer time in the tent and consumed fruits from the tent itself. Hence harem males were vigilant in the tent during the entire breeding season were the competition for tents and mates are high. We have further observed postpartum copulation with female bats carrying pups while they retain in their tents at night hours. Further observations are needed to confirm whether these social activities enhance social bonding and help the long term social relationship between the groups.

### KEY WORDS:

*Cynopterus sphinx*, polygyny, harem, tent defence