

NOTES

Occurrence of *Taphozous mauritianus* (Emballonuridae) in Maintirano, western Madagascar

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Available data on the occurrence of *Taphozous mauritianus* on Madagascar are limited to a few localities (Goodman & Ramasindrazana, 2013). This species, shared with the continental Africa and the other islands within the south western Indian Ocean islands (SWIO) (Cheke & Dahl, 1981; Peterson *et al.*, 1995; Simmons, 2005; Ramasindrazana *et al.*, 2015), is one of the eight bat species not endemic to Madagascar (Goodman, 2011; Goodman & Ramasindrazana, 2013). Little information is available

on its ecology on the island, which is the principal focus of this note.

From 26 to 29 August 2016, in the city of Maintirano (18.061°S, 44.027°E), we observed in six coconut trees (*Cocos nucifera*) day roosting sites of *T. mauritianus* (Figure 1). These sites were in urban areas, specifically bordering roads passing through the city. We observed two individuals of *T. mauritianus* hanging upside down on the trunk of a palm tree, about 6 m from the ground, and under dried dropping fronds. Other groups of up to 20 individuals were found on the upper portion of the same tree, also hidden under dried fronds (Figure 2).

At this locality, *T. mauritianus* selected palm trees for roosting sites between 7 and 20 m off the ground and benefited from the shadow provided by dead and attached fronds. On no occasion did we find a palm tree without old fronds occupied by this species. The nests of birds, such as *Acridotheres tristis*, were observed among the trees used as roosting sites by *T.*



Figure 1. Roosting sites of *Taphozous mauritianus* in the city of Maintirano, Madagascar. (Source: Google Earth, adapted by C. F. Rakotondramanana, 2017.)



Figure 2. A colony of *Taphozous mauritanus* under dried dropping *Cocos nucifera* fronds. (Photograph by Claude F. Rakotondramanana.)

mauritanus. On Madagascar, Mauritius, and Mayotte, *T. mauritanus* also used vertical surfaces (rocks, trees, and walls) during the day (Cheke & Dahl, 1981; Goodman & Ramasindrazana, 2013).

Identified roosting sites at Maintirano revealed the presence of groups of *T. mauritanus* ranging from one to 20 individuals, generally separated into two or three small groups per roost, and often one separated individual. The first bat was recorded to leave the

roost site at 18h30 or about 30 mn after sunset, soon following the return of the birds to their nest. The other members of the colony left the day roost site two to five minutes after the first individual. During the day, the colony shifts their position as the sun changes position to remain constantly in the shade. On 27 August, two individuals were observed mating around 17h00.

The capacity of this species to use urban areas, as well as forested habitats, provides a good model for future ecological niche studies.

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