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Pacific Conservation Biology

Overheating turns a bat box into a death trap

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SUPPLEMENTARY MATERIAL

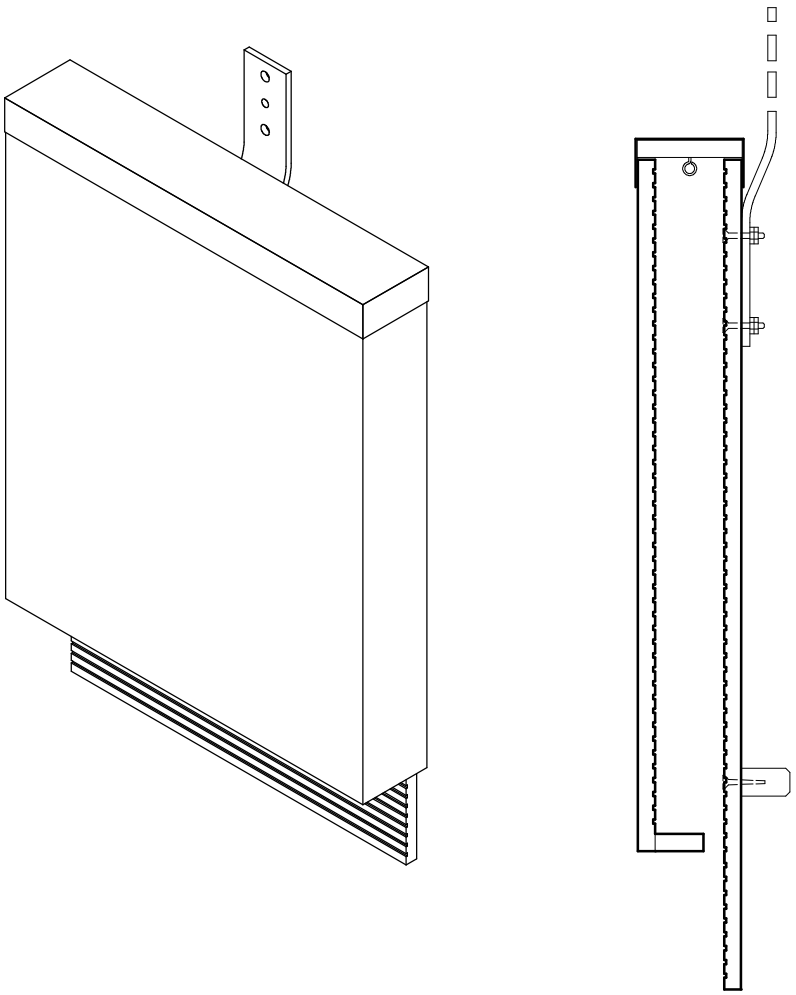

Fig. S1. Diagram of the single-chamber "fissure-type" bat box constructed with 12 mm marine plywood: width × height × depth, 43 × 50 × 7.5 cm; internal volume, 9,555 cm^3; entrance width, 1.5 cm (design adapted from Tuttle *et al.* 2013). The box was painted dark green and attached to the trunk of a live sugar gum (*Eucalyptus cladocalyx*) facing east, 5 m above the ground (trunk diameter at 5 m = 49.5 cm). The 'percent canopy cover' (i.e. canopy shade) recorded above the box was 71.1% (see Griffiths *et al.* 2017).

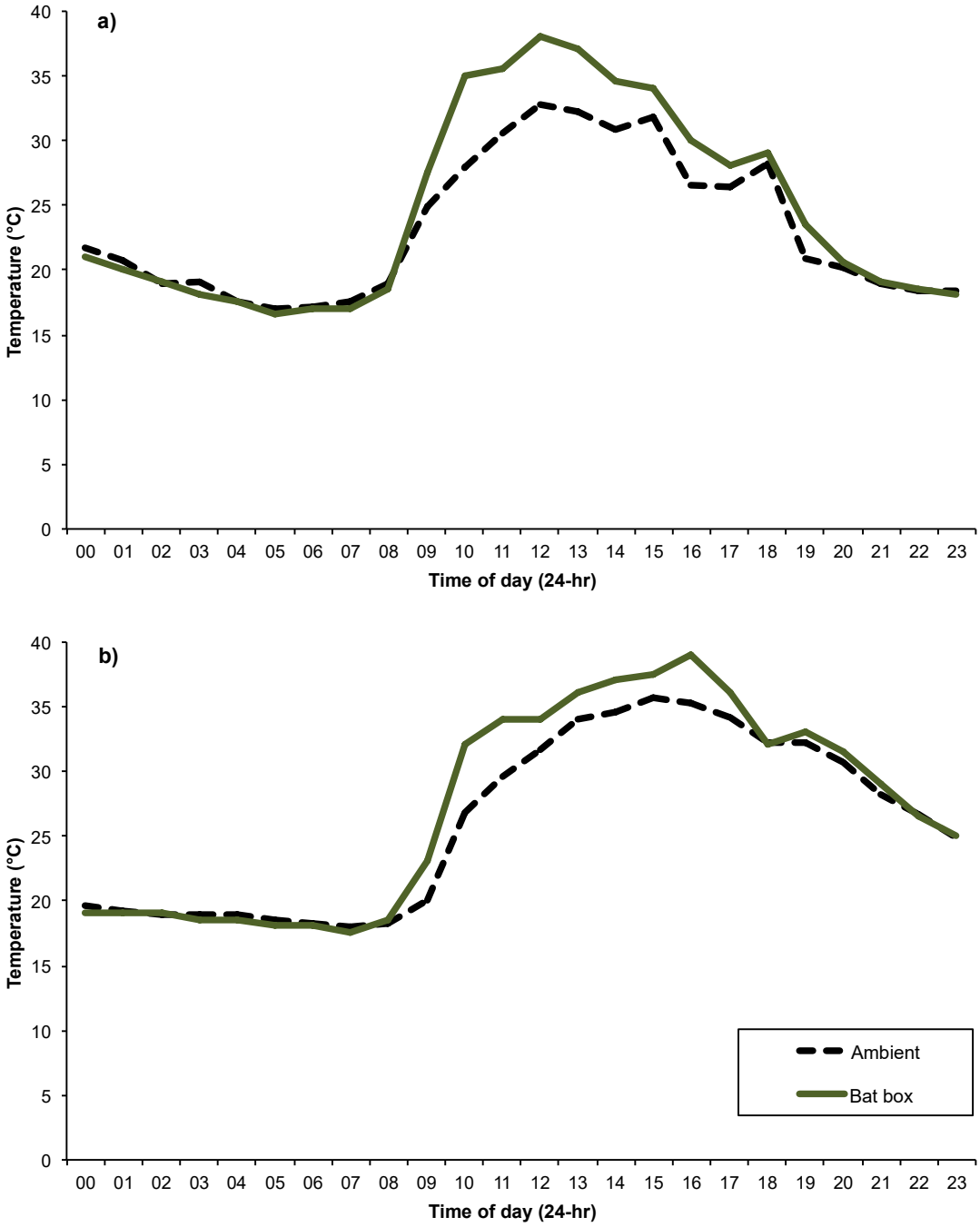

Fig. S2. Hourly temperatures (°C) recorded inside the east-facing, dark-green bat box at Woodlands Historic Park, Melbourne, on two summer days in 2015 when maximum ambient temperatures were >30°C: a) 11 February, b) 21 February (adapted from Griffiths *et al.* 2017). A temperature data logger (Thermochron DS1922L iButton, Maxim Integrated Products 2015) was suspended from an eye hook attached to the bottom of the lid (the logger hung 10 cm below the lid) to record internal box temperatures (see Fig. A1). A data logger was also attached to a nearby tree to record hourly ambient temperatures; this logger was suspended behind a south-facing bat box (same box design as shown in Fig. A1) between the back of the box and the tree trunk,

to ensure the logger was not exposed directly to sunlight or wind. During temperature recordings, the box entrance was blocked with wire mesh, facilitating natural airflow while excluding bats from occupying and potentially altering internal temperatures. For detailed description of the survey methodology see Griffiths *et al.* (2017).

References

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Maxim Integrated Products (2015). DS1922L/ DS1922T: Temperature Logger iButton with 8KB Data-Log Memory. 19-4990, Rev 13.

Tuttle, M. D., Kiser, M., and Kiser, S. (2013). 'The Bat House Builder's Hand-book'. (Bat Conservation International: Texas, USA.)