

## Supplementary Material

### **Feral cat predation of the threatened Pilbara leaf-nosed bat – a key threatening process**

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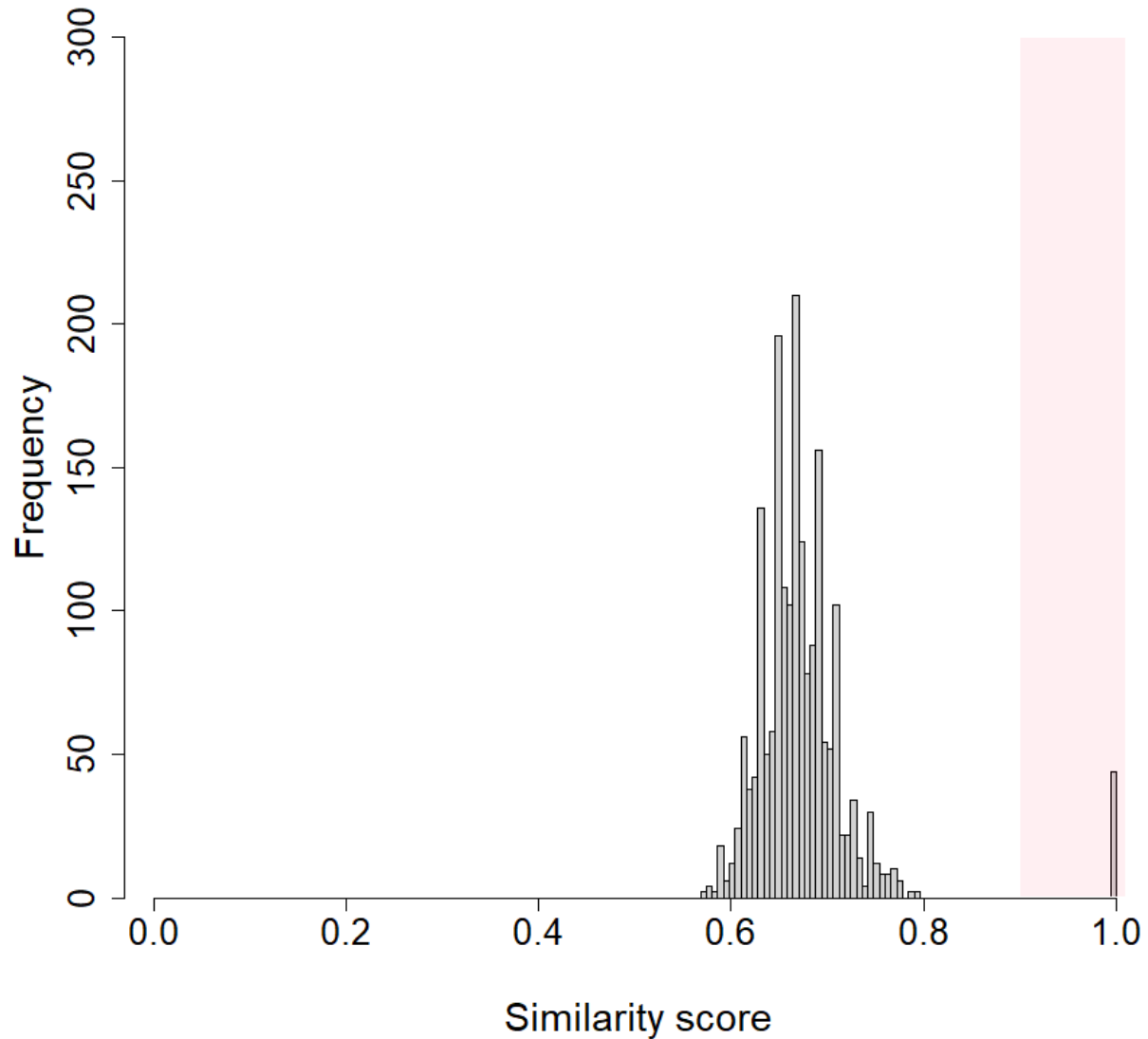
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3 **Supplementary S1 Figure S1.** Frequency distribution of pairwise similarity scores amongst all  
4 31 wing genotypes collected at Roost 2. All comparisons of samples from different individuals  
5 had similarity scores of less than 0.8. Similarity scores of 1.0 in this plot indicate matching of  
6 genotypes from the same sample. We would expect left and right wings from the same  
7 individual to have a similarity score of at least 0.9 (allowing for a low level of amplification or  
8 sequencing error; pink shaded area), and more likely close to 1.0.

10 Supplementary S2 Table S2. Photographs of study *Rhinonictes aurantia* roosts and  
11 photograph examples of cats and cat predation events

DRAFT



S2 a Roost 1



S2 b Roost 2



S2 c Roost 3



S2 d Cat B feeding on *R. aurantia* at Roost 2



S2 e Cat B with *R. aurantia* prey at Roost 2



S2 f Cat C feeding on *R. aurantia* at Roost 2



S2 g Cat C capturing *R. aurantia* prey at Roost 2 from the GHD monitoring study



S2 h Cat C with *R. aurantia* prey in mouth at Roost 2h



S2 i Cat D with prey at Roost 3



S2 j Kitten - Roost 3

12 Supplementary S3

13 Modelling the reduction of a population by an annual rate of 1% can be achieved with an  
14 exponential decay formula:

$$A = P(1 - r)^n$$

15 where

16  $A$  is the population after  $n$  years, (here a population size reduced by 30% would be 14,000  
17 individuals);

18  $P$  is the initial population (here set at 20,000 individuals);

19  $r$  is the rate of reduction per period (expressed as a decimal, so 1% would be 0.01).

20 Rearranging the formula to solve for  $n$ :

$$n = \frac{\log_{10}\left(\frac{A}{P}\right)}{\log_{10}(0.99)}$$