

1 **Supporting Information**

2 Title: A phenology model for tropical species that flower multiple times each year

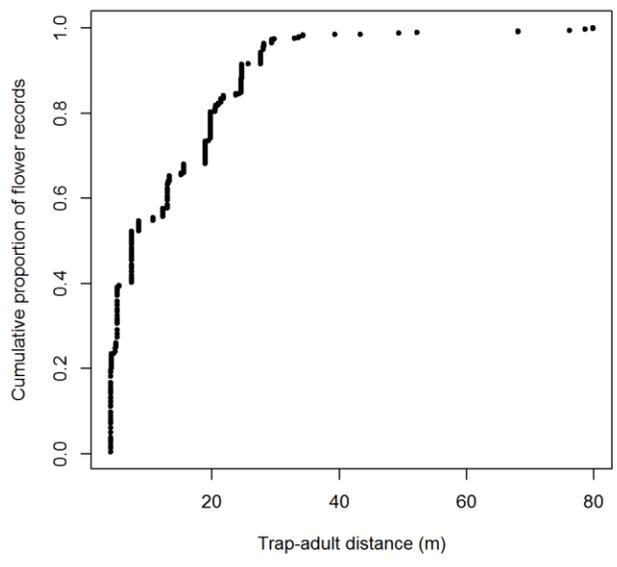
3 Authors: S. Joseph Wright, Osvaldo Calderón and Helene C. Muller-Landau

4 Affiliation of all authors: Smithsonian Tropical Research Institute, Apartado 0843–03092,

5 Balboa, Republic of Panama

6 Email corresponding author: S. Joseph Wright wrightj@si.edu

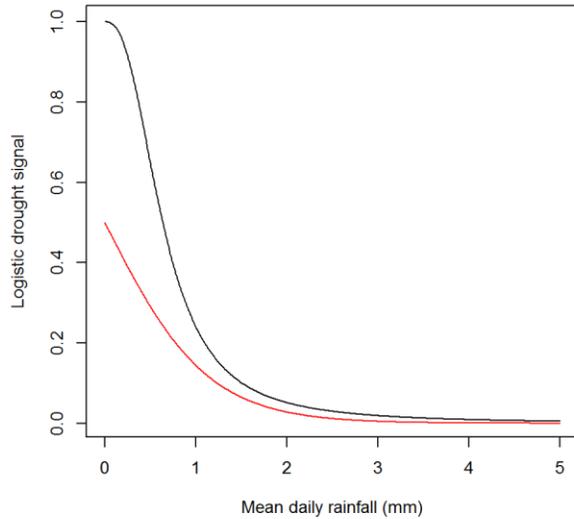
7 **Figure S1**



8

9 Figure S1. The cumulative proportion of *Handroanthus* flower records captured in traps at increasing
10 distances from the nearest reproductively sized conspecific tree based on a 30-cm diameter
11 reproductive size threshold and assuming trees died midway between and grew at a constant rate
12 between censuses conducted every five years.

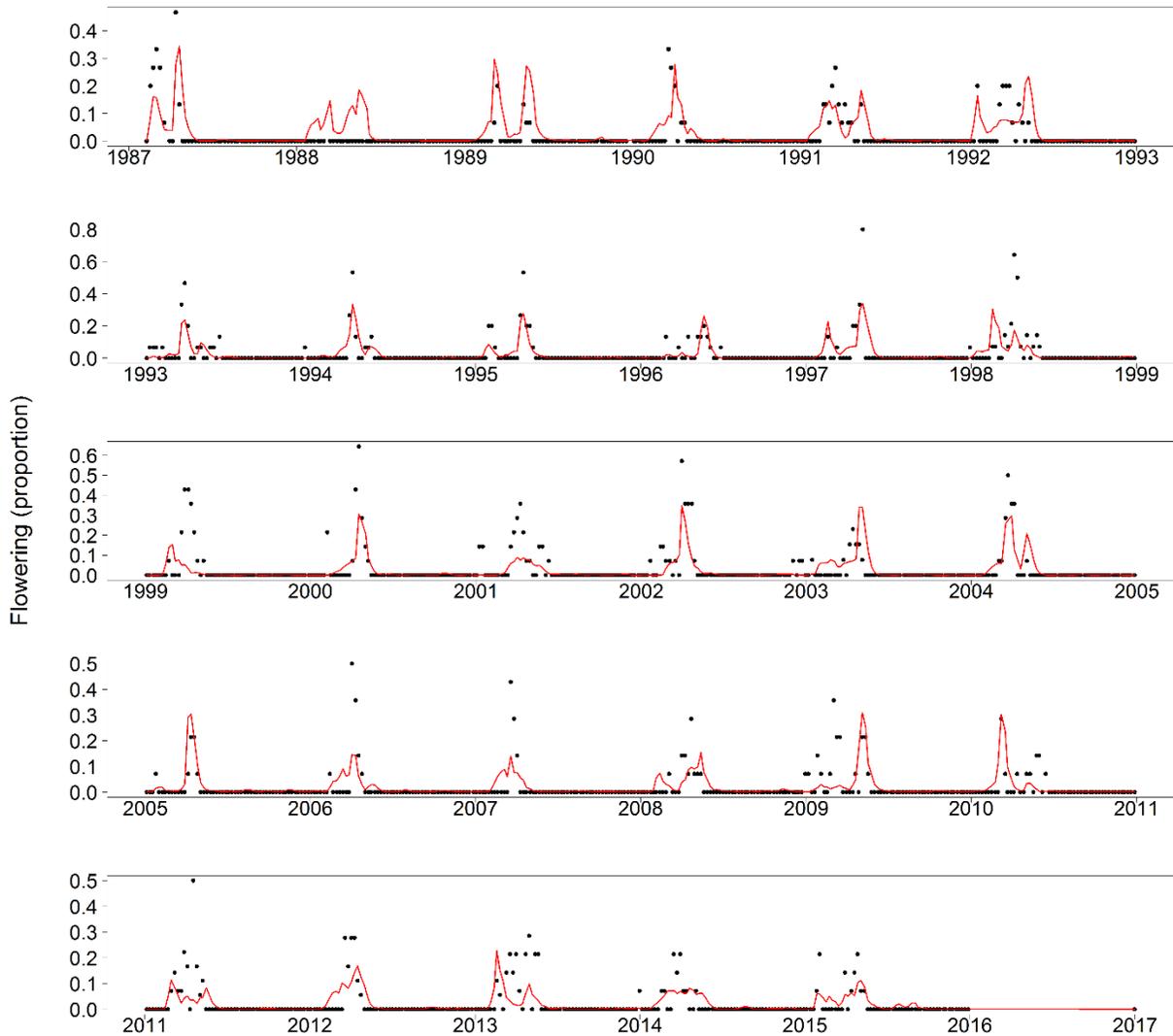
13 **Figure S2**



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15 Figure S2. The logistic function for the drought signal parameterized for the model that incorporated a
16 linear drought signal (red line, see text Eq. 2a) and for the model that incorporated a logarithmic
17 drought signal (black line, Eq. 2b) for *Hydroanthus*. Both models incorporated a skew normal distribution
18 of flowering lag times. The model represented by the red line maximized the log likelihood even though
19 the value of the drought signal never exceeds 0.5.

20 **Figure S3**



21

22 Figure S3. The proportion of traps that captured *Handroanthus* flowers (black circles) in 1,505 weekly
23 censuses of 200 traps conducted on Barro Colorado Island, Panama. The red line is the predicted
24 proportion for the model with a logarithmic drought signal and a skew normal lag time distribution. Tick
25 marks and years are located at 1 January.