Table S2. Title and description of nodes used in Bayesian network models of Hylurgus ligniperda, H. ater and Arhopalus ferus flight activity. N/A = the node does not pertain to the species model.

| Node title | Node description | Hylurgus <br> ligniperda | States <br> Hylastes ater | Arhopalus <br> ferus |
| :--- | :--- | :--- | :--- | :--- |
| Flight | The occurrence of flight during that hour. | Yes <br> No | Yes <br> No | Yes <br> No |
| Day of year | The day of the year was expressed as a <br> decimal (001-366). | $<344$ | $<41$ | $<14$ |
|  | Because the sampling occurred across <br> three discontinuous periods we incorporate | $>=344$ | $>=41$ | $>14$ to 41 |
|  |  |  |  | $>41$ to 325 |
|  |  |  |  | $>=325$ |

the day of the year as a measure of the time of year to indicate if there are seasonal differences to the flight activity.

| Maximum temperature (C) | The maximum temperature recorded during the hour. Measurements during the hour were taken every minute. | $\begin{aligned} & <12.3 \\ & >12.3 \text { to } 14.6 \\ & >14.6 \text { to } 17.5 \\ & >=17.5 \end{aligned}$ | $\begin{aligned} & <14.0 \\ & >14.0 \end{aligned}$ | $\begin{aligned} & \hline<12.6 \\ & >=12.6 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Photon flux density ( $\mu \mathrm{mol}$ photons $\mathrm{m}^{-2} \mathrm{~s}^{-1}$ ) | Measure of the average photons in the $400-700 \mathrm{~nm}$ range per square metre per second during the sampling hour. The average is of observations taken every minute. | $\begin{aligned} & <0.1 \\ & >0.1 \text { to } 565 \\ & >565 \text { to } 1704 \\ & >1704 \end{aligned}$ | N/A | $\begin{aligned} & <0.23 \\ & >=0.23 \end{aligned}$ |
| Rainfall (mm/hr) | Cumulative rainfall across the sampling hour. | $\begin{aligned} & <0.1 \\ & >=0.1 \end{aligned}$ | N/A | N/A |
| Relative humidity (\%) | The average relative humidity calculated from minute observations during the hour | $\begin{aligned} & <82 \\ & >82 \text { to } 93 \\ & >=93 \end{aligned}$ | N/A | N/A |
| Temperature range (C) | The range (in ${ }^{\circ} \mathrm{C}$ ) between the maximum and minimum temperatures recorded | $\begin{aligned} & <0.91 \\ & >=0.91 \end{aligned}$ | $\begin{aligned} & <0.90 \\ & >=0.90 \end{aligned}$ | $\begin{aligned} & <1.1 \\ & >=1.1 \end{aligned}$ |


| Time since sunrise | The time in minutes since sunrise as | $<19$ | $<33$ | N/A |
| :--- | :--- | :--- | :--- | :--- |
| (mins) | measured from the start of the sampling | $>19$ to 375 | $>33$ to 289 |  |
|  | hour. For example, if sunrise was at | $>375$ to 891 | $>289$ to 735 |  |
|  | 5:50am, the trap hour beginning at 6 am | $>=891$ | $>735$ to 952 |  |
|  | would have a value of -10 minutes, |  | $>=952$ |  |


| Time since sunset (mins) | The time in minutes since sunset as measured from the start of the sampling hour. For example, if sunset was at 8:30pm, the trap hour beginning at 8 pm would have a value of -30 minutes, however the 9pm trap hour would have a value of 30 minutes. | $\begin{aligned} & <11 \\ & >11 \text { to } 498 \\ & >498 \text { to } 589 \\ & >=589 \end{aligned}$ | $\begin{aligned} & <-47 \\ & >-47 \text { to } 1221 \\ & >=1221 \end{aligned}$ | $\begin{aligned} & <-20 \\ & >-20 \text { to } 6 \\ & >6 \text { to } 40 \\ & >40 \text { to } 65 \\ & >65 \text { to } 191 \\ & >191 \\ & >373 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Wind speed (m-1s- <br> 1) | Average wind speed during the hour, calculated from minute observations. | $\begin{aligned} & <0.9 \\ & >0.9 \text { to } 4.1 \\ & >=4.1 \end{aligned}$ | $\begin{aligned} & <3.3 \\ & >=3.3 \end{aligned}$ | $\begin{aligned} & <4.2 \\ & >=4.2 \end{aligned}$ |

