

## Atmospheric Transport Reveals Grass Pollen Dispersion Distances

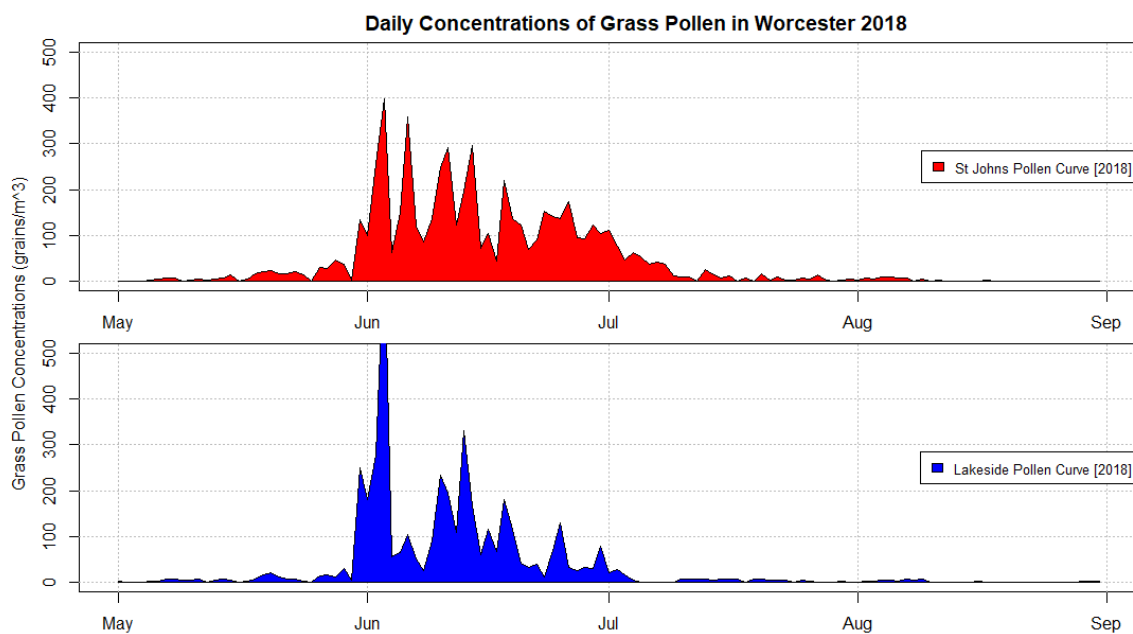
**Carl A. Frisk<sup>ab\*</sup>, Godfrey P. Apangu<sup>ac</sup>, Geoffrey M. Petch<sup>a</sup>, Beverley Adams-Groom<sup>a</sup> & Carsten A. Skjøth<sup>a</sup>**

<sup>a</sup> National Pollen and Aerobiological Research Unit, School of Science and the Environment, University of Worcester, Henwick Grove, WR2 6AJ, Worcester, UK.

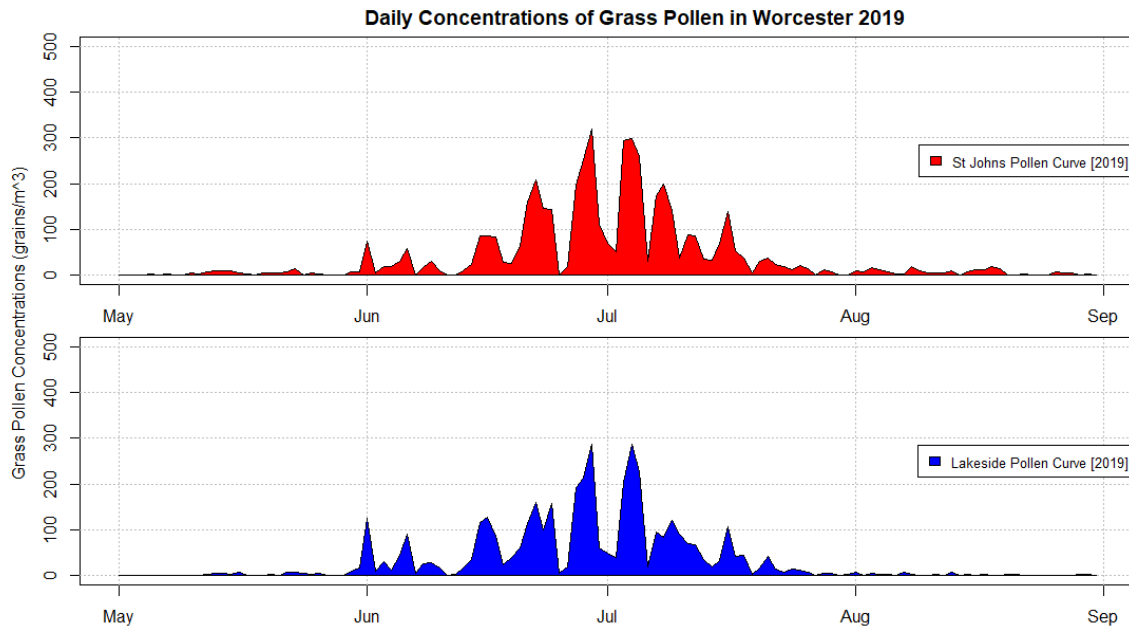
<sup>b</sup> Current Address: School of Biology and Environmental Sciences, University College Dublin, Belfield, Dublin 4, Ireland

<sup>c</sup> Current Address: Department of Biointeractions & Crop Protection, Rothamsted Research, West Common, AL5 2JQ, Harpenden, UK.

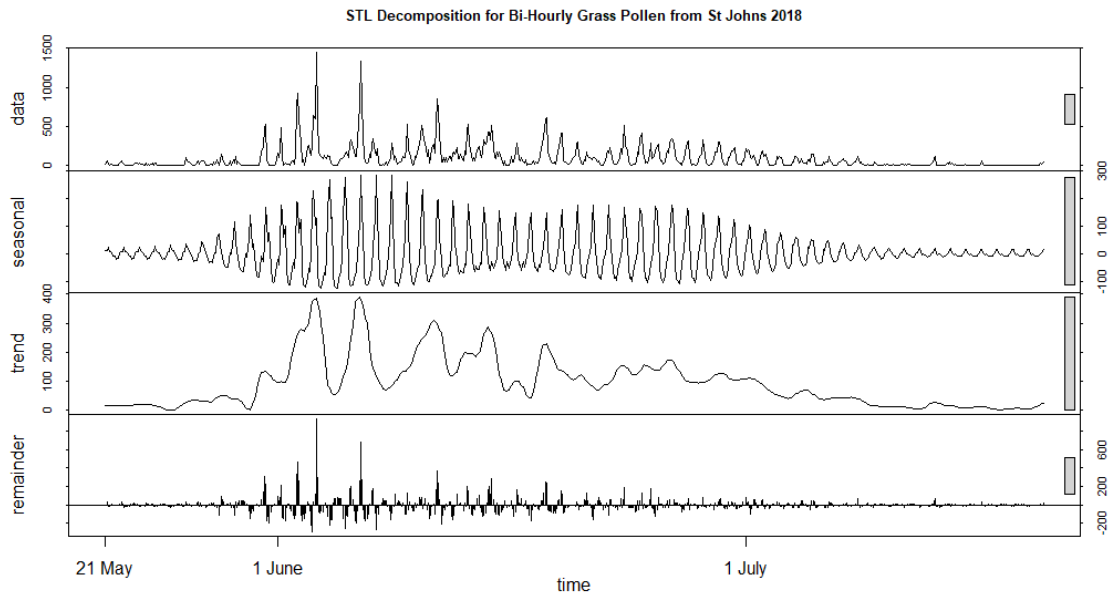
\* Corresponding author. Email: [carl.frisk@ucd.ie](mailto:carl.frisk@ucd.ie)



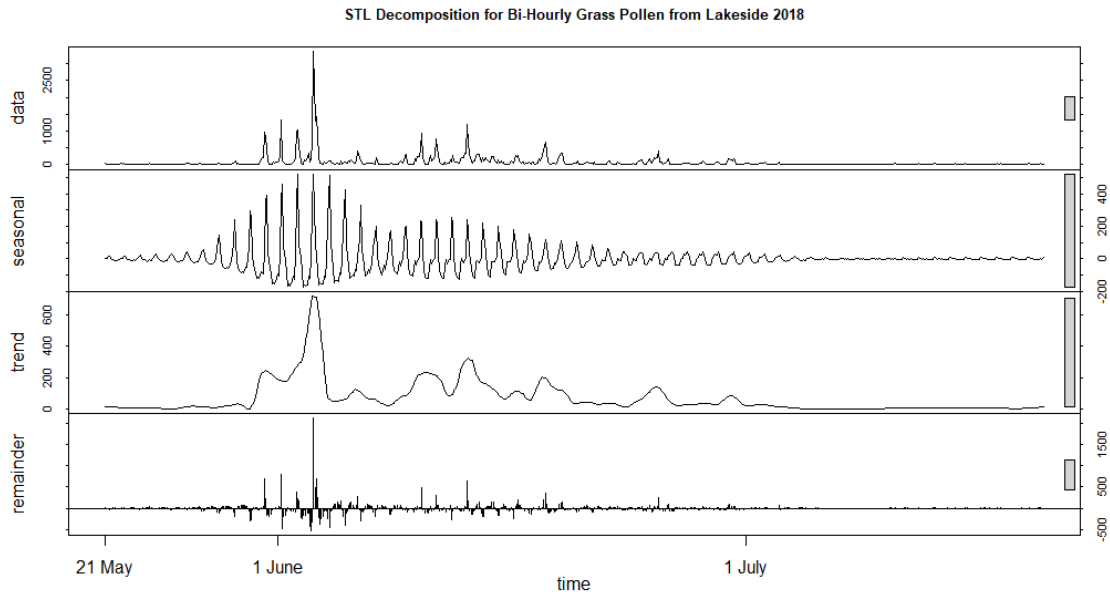
**Supplementary Figure 1.** Daily concentrations of grass pollen from two locations (St Johns and Lakeside) during the 2018 season in Worcester.



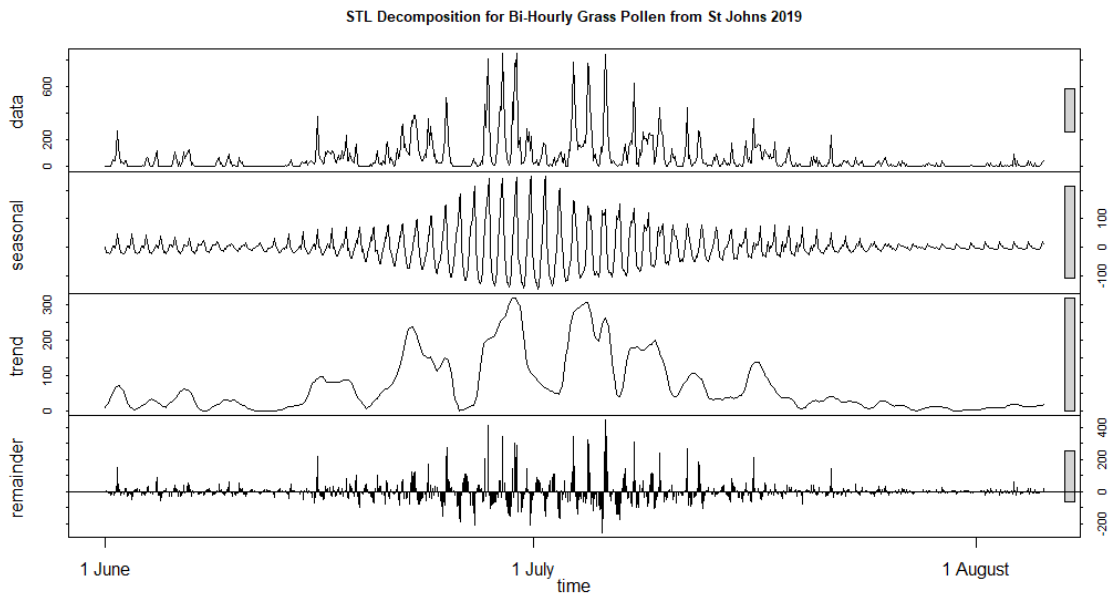
**Supplementary Figure 2.** Daily concentrations of grass pollen from two locations (St Johns and Lakeside) during the 2019 season in Worcester.



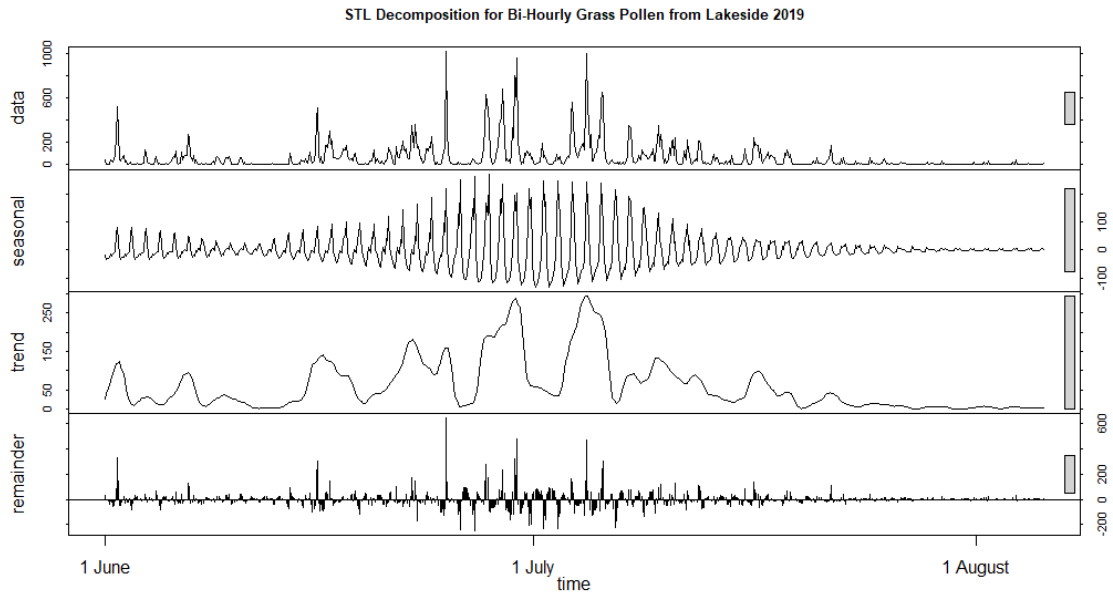
**Supplementary Figure 3.** STL Decomposition for the 95% overlapping period of bi-hourly grass pollen concentrations for St Johns during the 2018 season in Worcester. The x-axis reflects the duration of the 95% overlapping period, which varies between years.



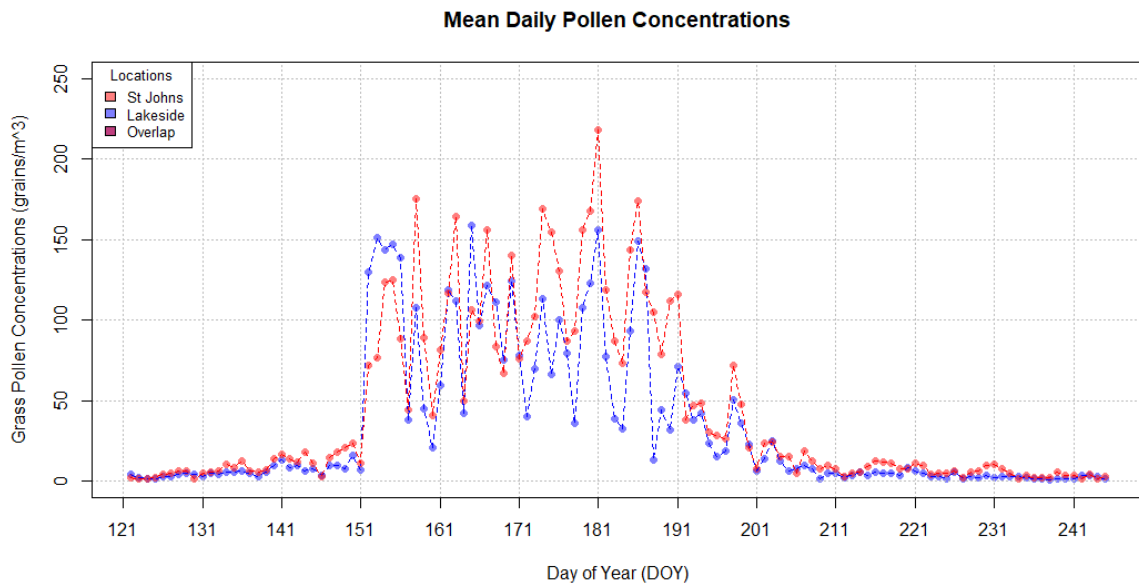
**Supplementary Figure 4.** STL Decomposition for the 95% overlapping period of bi-hourly grass pollen concentrations for Lakeside during the 2018 season in Worcester. The x-axis reflects the duration of the 95% overlapping period, which varies between years.



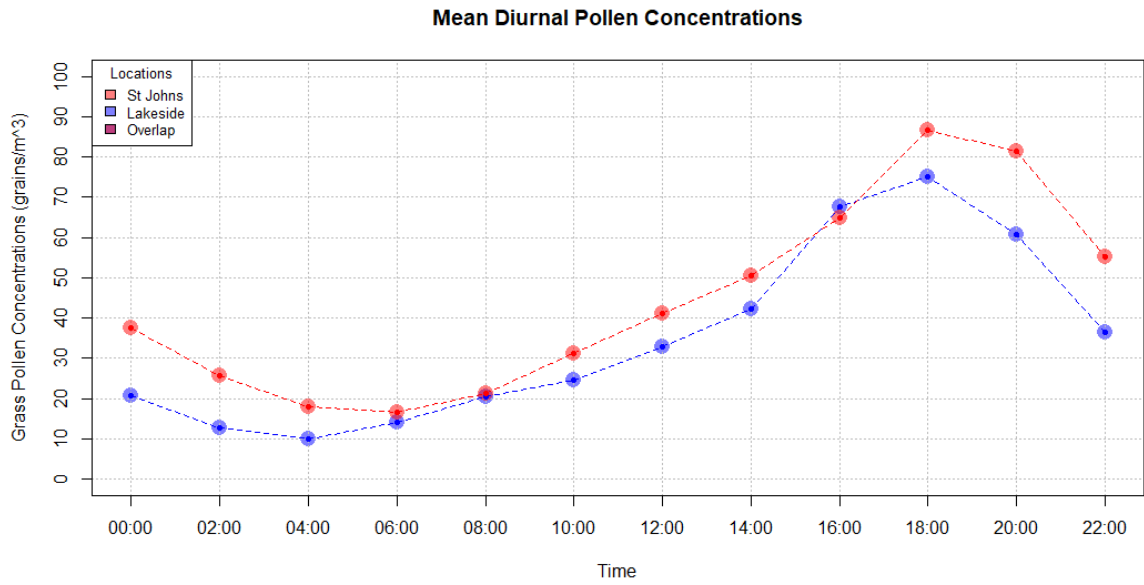
**Supplementary Figure 5.** STL Decomposition for the 95% overlapping period of bi-hourly grass pollen concentrations for St Johns during the 2019 season in Worcester. The x-axis reflects the duration of the 95% overlapping period, which varies between years.



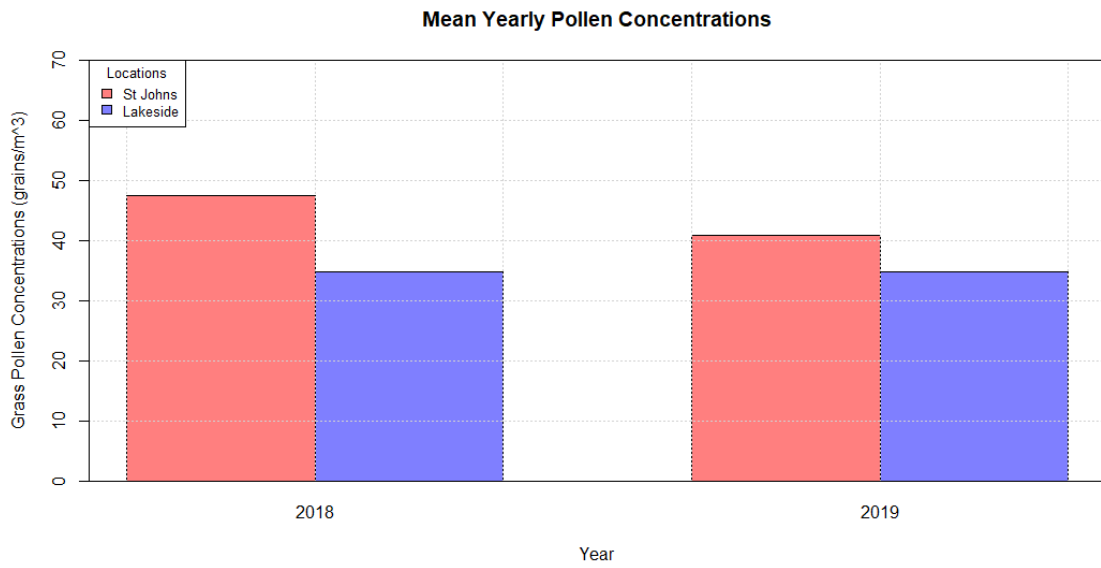
**Supplementary Figure 6.** STL Decomposition for the 95% overlapping period of bi-hourly grass pollen concentrations for Lakeside during the 2019 season in Worcester. The x-axis reflects the duration of the 95% overlapping period, which varies between years.



**Supplementary Figure 7.** Comparison of mean daily grass pollen concentrations for St Johns and Lakeside, averaged between all bi-hourly and years values.



**Supplementary Figure 8.** Comparison of mean diurnal grass pollen concentrations for St Johns and Lakeside, averaged between all daily and yearly values.



**Supplementary Figure 9.** Comparison of mean year grass pollen concentrations for St Johns and Lakeside, averaged between all bi-hourly and daily values.