

Overview of PCS Transpiration Dataset 2018-2020
Ana Singh and David Warners
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For the past three years during the months of July and August, Plaster Creek Stewards has been assembling a dataset on the transpiration rates of different plant species growing in our urban curb-cut rain gardens. Data were collected on four separate days in 2018, 6 days in 2019, and 5 days in 2020. On each of these sampling days we measured transpiration rate with a leaf porometer from at least 5 different plants per species in at least 5 gardens. Also, measurements were taken between 10am and 2pm during which times weather conditions were clear and sunny. To date, the data have been compiled and graphed and to that extent are reported below. Statistical analysis will be carried out this fall semester and a final report will be completed in the spring of 2021.

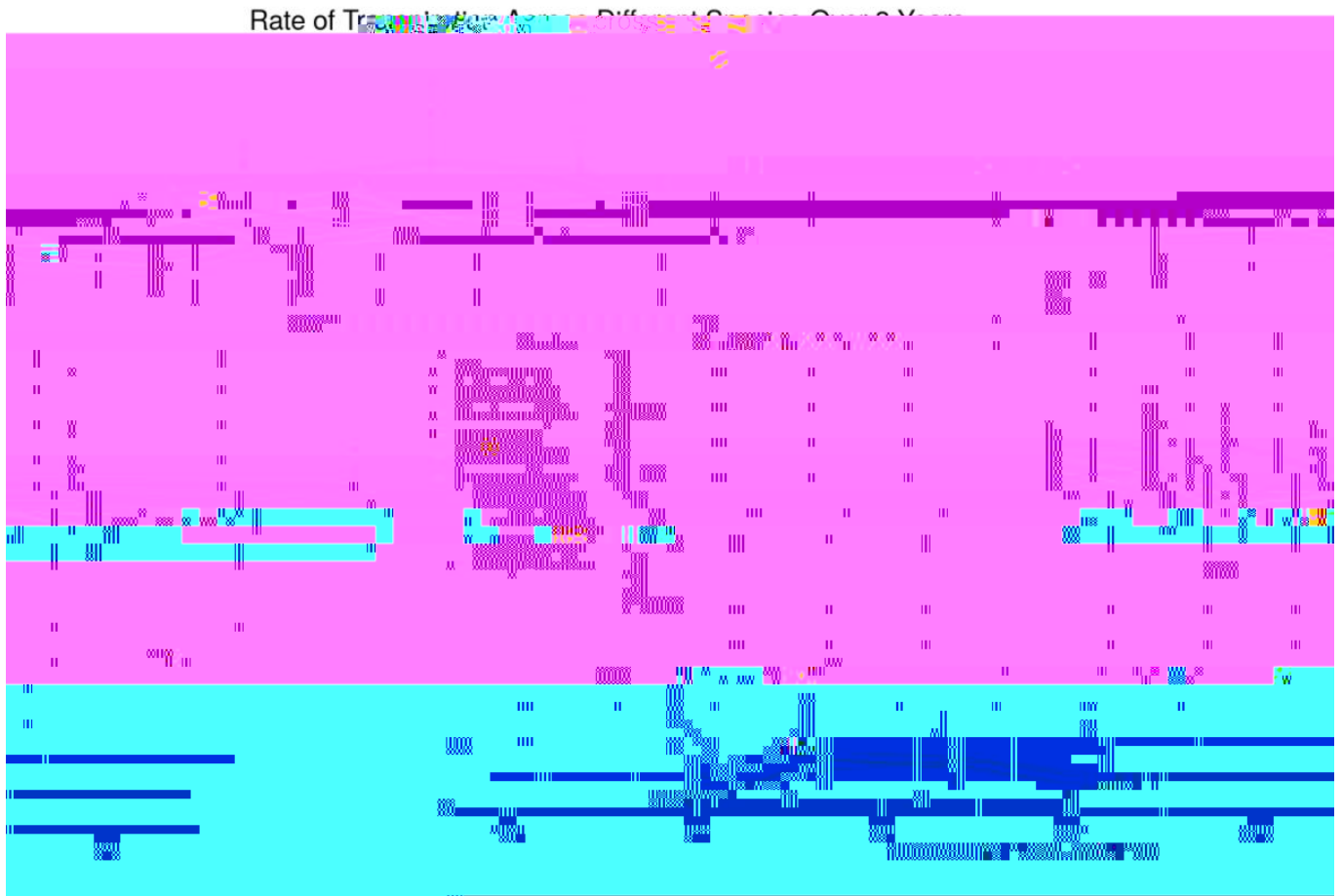


Figure 1. Median transpiration rate for 10 native species growing in urban curb-cut rain gardens during July and August, 2018, 2019, 2020. Lines are connecting median values for each species on different sampling days.

Our results show a relatively consistent ordering of species according to their transpiration rates. This consistency spans sampling dates within a calendar year and is also