

My title*

STA304 Paper 1 Submission

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Another author

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First sentence. Second sentence. Third sentence. Fourth sentence.

1 Introduction

Urban spaces are often void of nature, whether it be grass fields, blooming flowers, or teaming and diverse natural wildlife. One simple way to tackle this is to incorporate nature within the urban landscape, such as with trees. Trees are a vital plant in the world, they take in carbon dioxide and provide oxygen, a key component in the air we breath. Urban areas are known for the excess in carbon dioxide, which only makes it seem natural that trees can live and perhaps thrive in such environments. Trees can also alter the way wind affects pedestrians below (Krayenhoff et al. (2020)). It should be no surprise then, that many cities around the world, including Toronto, have incorporated trees into their landscape, in busy downtown centres, to sleepy suburbs, and everywhere in between.

2 Data

The data comes from OpedData Toronto, an open source portal containng datasets carried out at the municipal level ((**opendata?**)). This particular dataset is called Street Tree Data, and focuses on city-owned trees located on roads. This information would be most likely used by city planners and road maintenance, ensuring snow plows and street dusters don't impede on any trees that line the roads. It is important to not that there may be some privately owned trees listed among the municipal trees, as they may be of interest with regards to road maintenance or other city services.

*Code and data are available at: <https://github.com/Veyasan1/STA3014-Paper1>

And also planes (?@fig-planes). (You can change the height and width, but don't worry about doing that until you have finished every other aspect of the paper - Quarto will try to make it look nice and the defaults usually work well once you have enough text.)

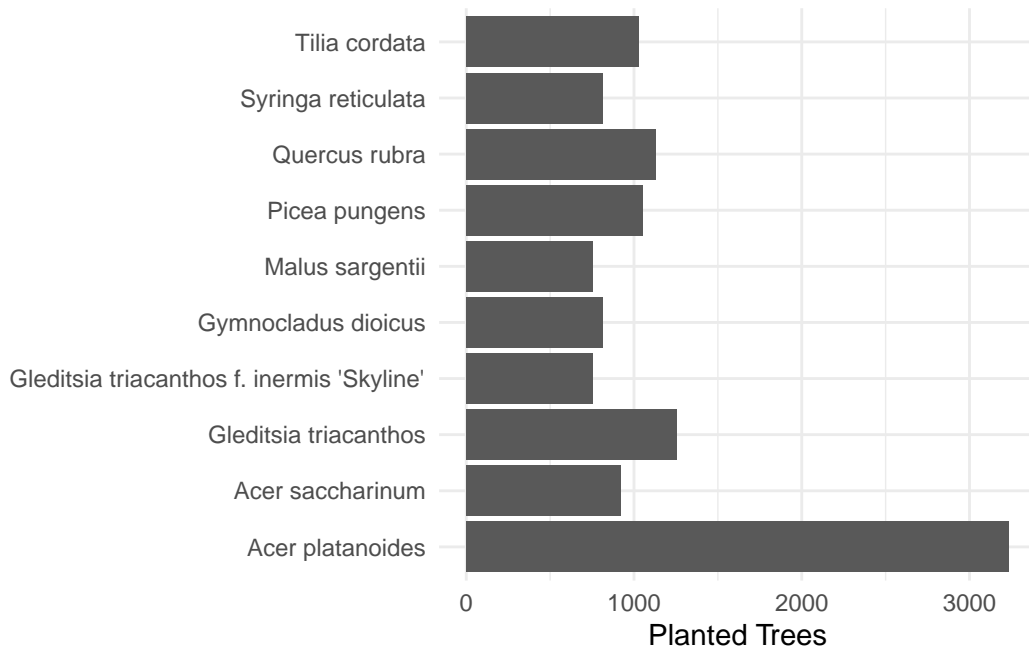


Figure 1: Relationship between wing length and width

Talk way more about it.

```
# A tibble: 1 x 7
  objectid structid address streetname      ward botanical_name dbh_trunk
  <dbl> <chr>      <dbl> <chr>      <chr> <chr>      <dbl>
1     4549 262610      2122 ST CLAIR AVE W 05 Tilia cordata 'Glenl~      815
```

3 Discussion

3.1 First discussion point

If my paper were 10 pages, then should be be at least 2.5 pages. The discussion is a chance to show off what you know and what you learnt from all this.

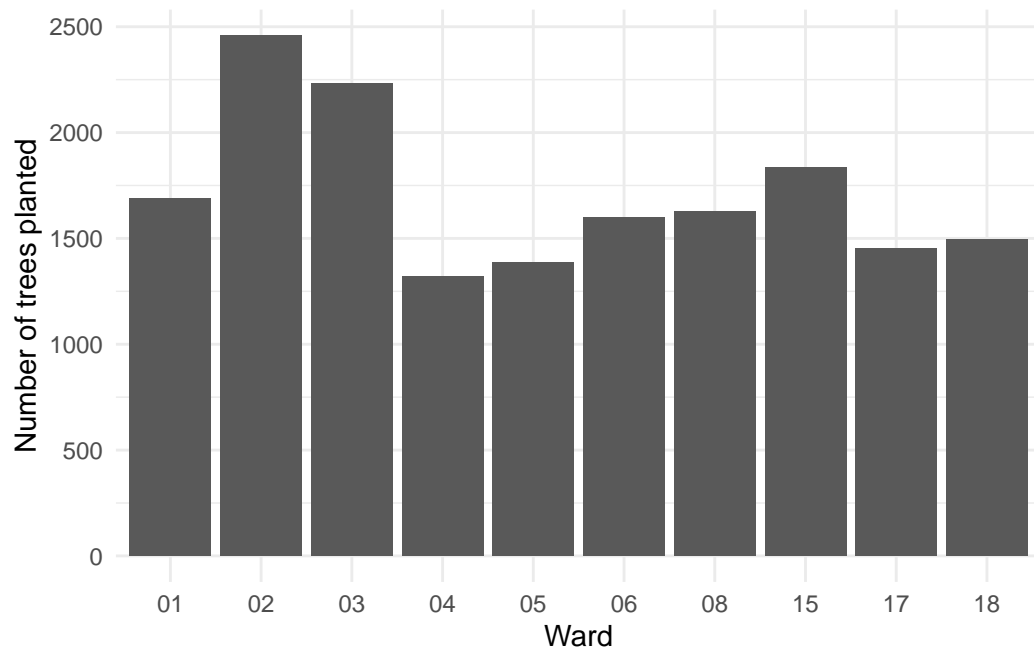


Figure 2: Relationship between wing length and width

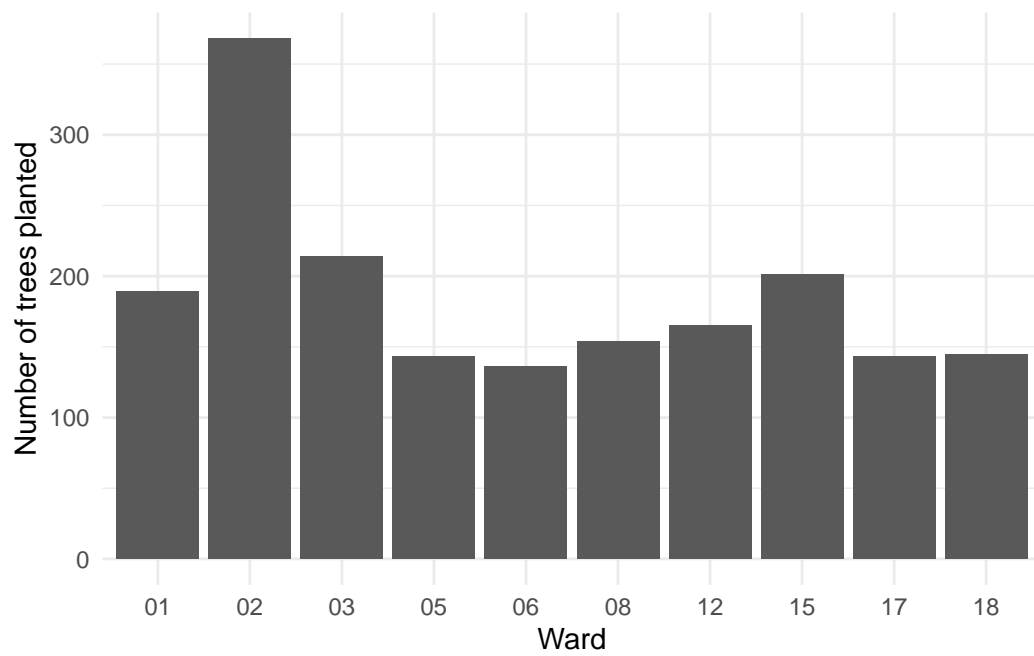


Figure 3: Relationship between wing length and width

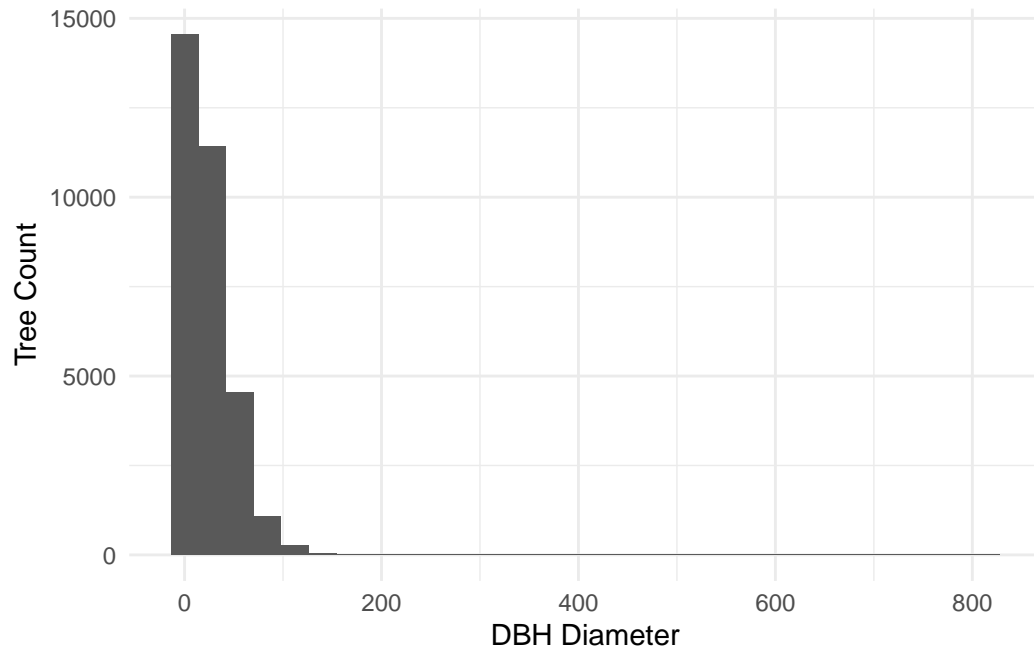


Figure 4: Relationship between wing length and width

3.2 Second discussion point

3.3 Third discussion point

3.4 Weaknesses and next steps

Weaknesses and next steps should also be included.

Appendix

A Additional data details

References

Krayenhoff, E. Scott, Timothy Jiang, Andreas Christen, Alberto Martilli, Timothy R. Oke, Brian N. Bailey, Negin Nazarian, et al. 2020. “A Multi-Layer Urban Canopy Meteorological Model with Trees (BEP-Tree): Street Tree Impacts on Pedestrian-Level Climate.” *Urban Climate* 32: 100590. <https://doi.org/10.1016/j.uclim.2020.100590>.