

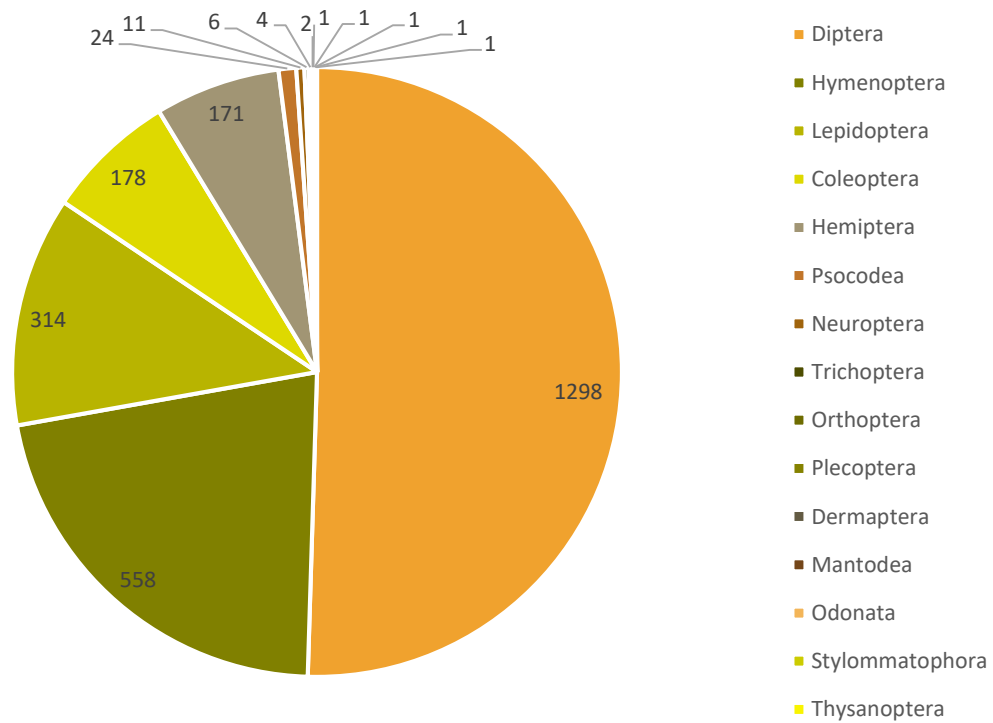
# TERRESTRIAL ARTHROPOD MONITORING PROGRAM

## METABARCODING REPORT – BRONTE CREEK

Collections Unit, Centre for Biodiversity Genomics (CBG), University of Guelph

### Results

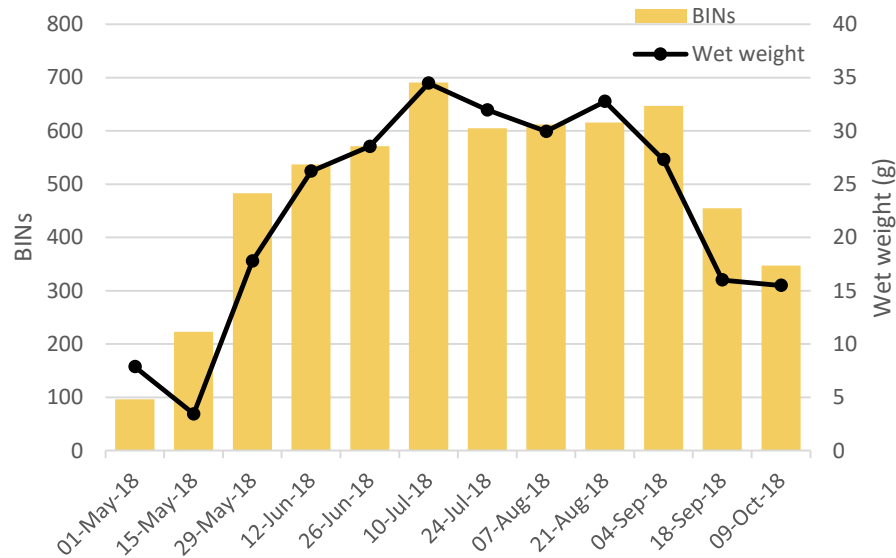
A total of 2,571 different BINs (Barcode Index Numbers; a proxy for species) were encountered at Bronte Creek Provincial Park. About half the BINs captured were flies (Diptera), followed by bees, ants and wasps (Hymenoptera), moths and butterflies (Lepidoptera), and beetles (Coleoptera; Figure 1).



**Figure 1.** Taxonomic breakdown of BINs captured in the Malaise trap at Bronte Creek Provincial Park.

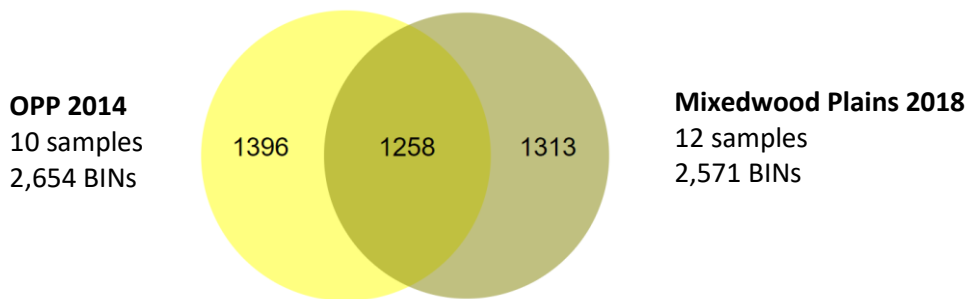
Species diversity and insect abundance varied throughout the collecting period; the period that captured the most BINs was also the largest sample collected (Figure 2). The peak of species diversity was obtained in early July.

In total, 846 species were named, representing 36% of the BINs. All but five of the BINs were assigned at least to family and 70% were assigned to a genus. Specimens collected from this site represent 224 different families and 955 genera. A complete species list is attached separately.



**Figure 2.** Species diversity (measured by BINs) and approximate insect abundance (measured by wet weight of the sample) captured at the trap over the 2018 collecting period.

In combination with the OPP Malaise Program run in 2014, a grand total of 3,967 BINs have been captured from Bronte Creek. There was an overlap of 1,258 BINs between both sampling years and the 2018 Mixedwood Plains trap added 1,313 BINs to the total species pool (Figure 3).



**Figure 3.** Venn diagram showing the species overlap between the 2014 and 2018 Malaise trapping projects.

## Contact Information

Jeremy deWaard, PhD  
 Director - Collections  
[dewaardj@uoguelph.ca](mailto:dewaardj@uoguelph.ca)

Kate Perez, MSc  
 Field Operations Lead – Collections  
[kperez@uoguelph.ca](mailto:kperez@uoguelph.ca)



University of Guelph  
 50 Stone Road East, Guelph, ON,  
 Canada N1G 2W1  
[www.biodiversitygenomics.net](http://www.biodiversitygenomics.net)

Funding provided by:



**FOOD FROM THOUGHT**