

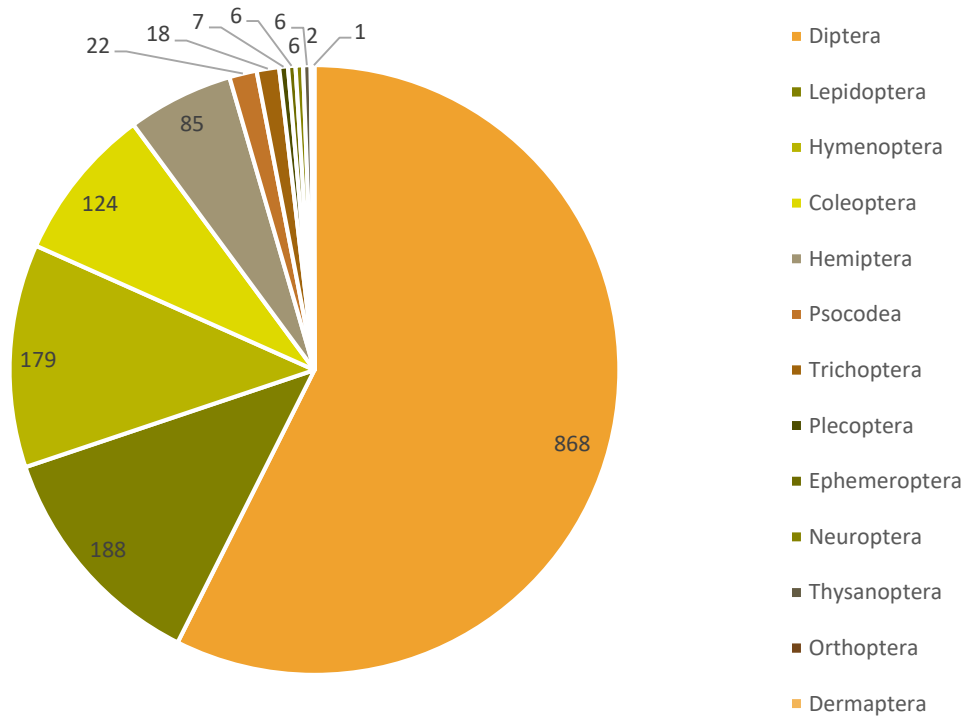
# TERRESTRIAL ARTHROPOD MONITORING PROGRAM

## METABARCODING REPORT – MORRIS TRACT

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

### Results

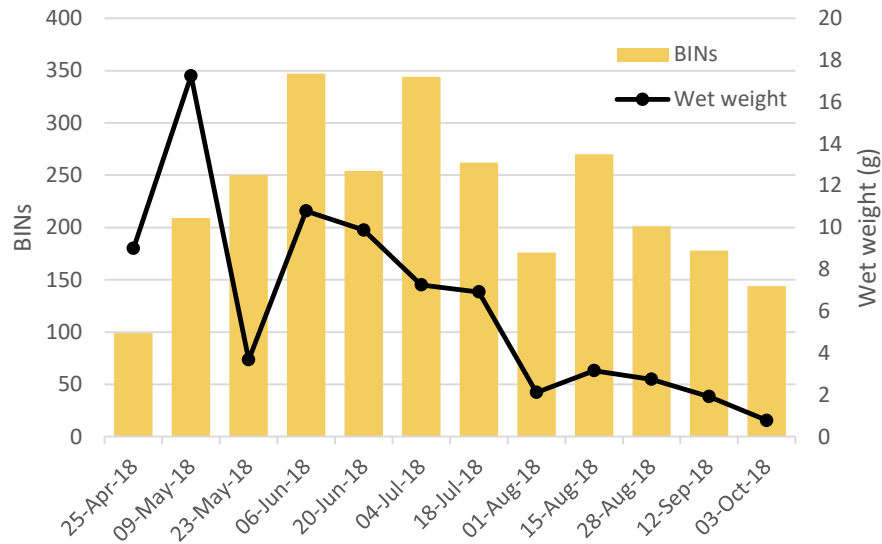
A total of 1,512 different BINs (Barcode Index Numbers; a proxy for species) were encountered at Morris Tract Provincial Nature Reserve (PNR). Over half the BINs captured were flies (Diptera), followed by moths and butterflies (Lepidoptera), bees, ants and wasps (Hymenoptera), and beetles (Coleoptera; Figure 1).



**Figure 1.** Taxonomic breakdown of BINs captured in the Malaise trap at Morris Tract PNR.

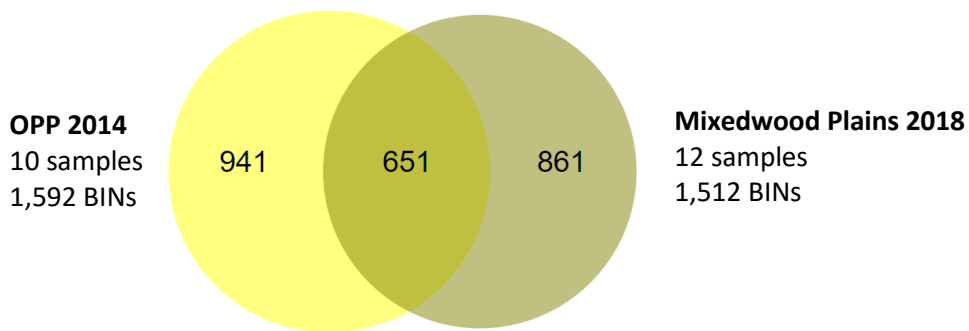
Species diversity and insect abundance varied throughout the collecting period; the period that captured the most BINs was not necessarily the largest sample collected (Figure 2). The peak of species diversity was obtained in early June.

In total, 451 species were named, representing 33% of the BINs. All but two of the BINs were assigned at least to family and 67% were assigned to a genus. Specimens collected from this site represent 183 different families and 558 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 2,453 BINs have been captured from Morris Tract. There was an overlap of 651 BINs between both sampling years and the 2018 Mixedwood Plains trap added 861 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)

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