

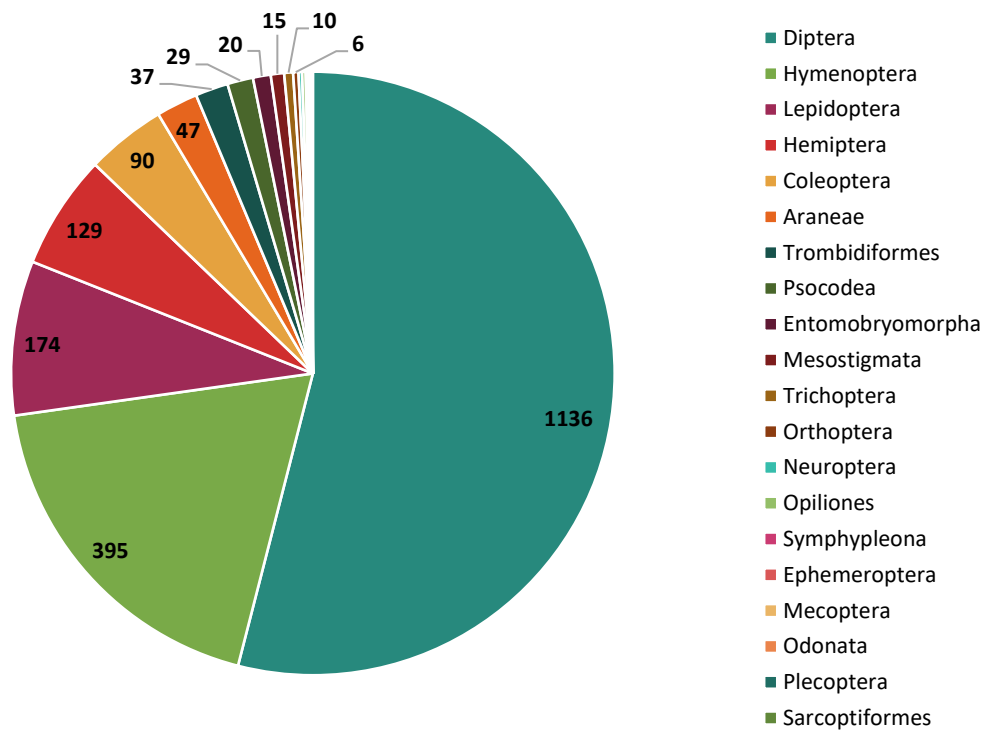
# TERRESTRIAL ARTHROPOD MONITORING PROGRAM

## METABARCODING REPORT – POINTE-TAILLON

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

### Results

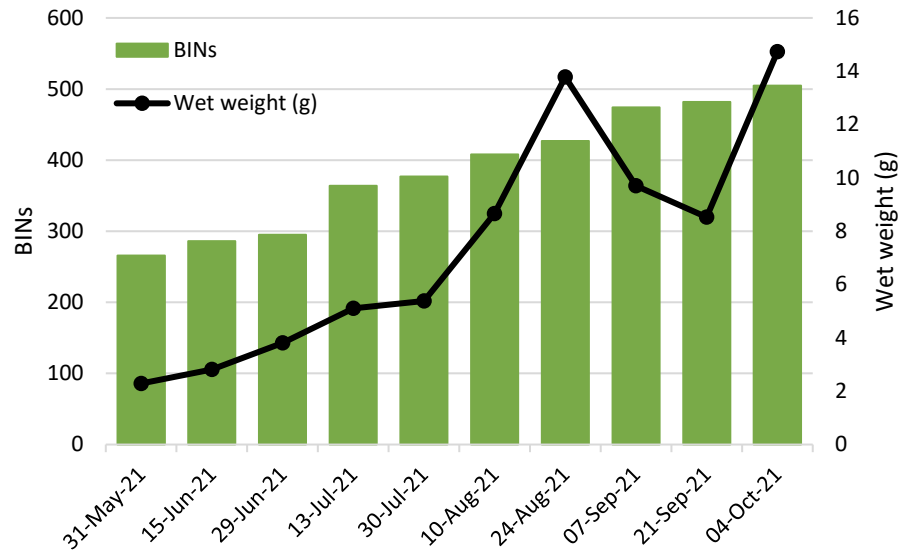
A total of 2,104 different BINs (Barcode Index Numbers; a proxy for species) were encountered at Pointe-Taillon National Park. Over half the BINs captured were flies (Diptera), followed by bees, ants and wasps (Hymenoptera), moths and butterflies (Lepidoptera), and true bugs (Hemiptera; Figure 1).



**Figure 1.** Taxonomic breakdown of BINs captured in the Malaise trap at Pointe-Taillon National 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 at the beginning of October.

In total, 527 species were named, representing 25% of the BINs. All but one of the BINs were assigned at least to family and 67% of the BINs were assigned to a genus. Specimens collected from this site represent 204 different families and 678 genera. A complete species list is attached separately.



**Figure 2.** Species diversity (measured by BINs) and approximate insect abundance (measured by wet weight of sample) captured at the trap over the 2021 collecting period.

In combination with the metabarcoding results from the 2020 sampling, a grand total of 2,797 BINs have been captured from Pointe-Taillon National Park. There was an overlap of 813 BINs between both sampling years and the 2021 trap added 1,291 BINs to the total species pool (Figure 3).



**Figure 3.** Venn diagram showing the species overlap between the 2020 and 2021 traps.