

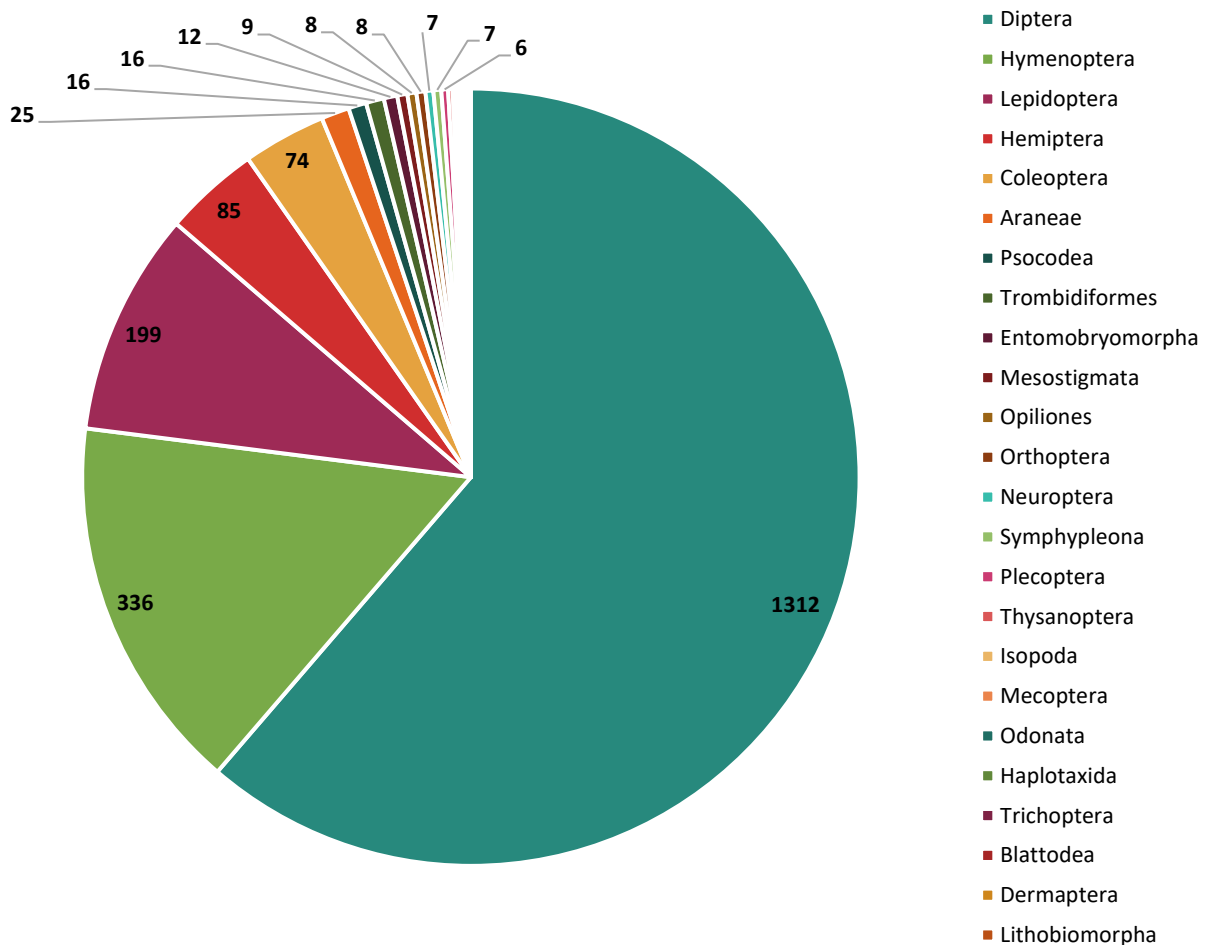
# TERRESTRIAL ARTHROPOD MONITORING PROGRAM

## METABARCODING REPORT – RAINBOW FALLS PROVINCIAL PARK

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

### Results

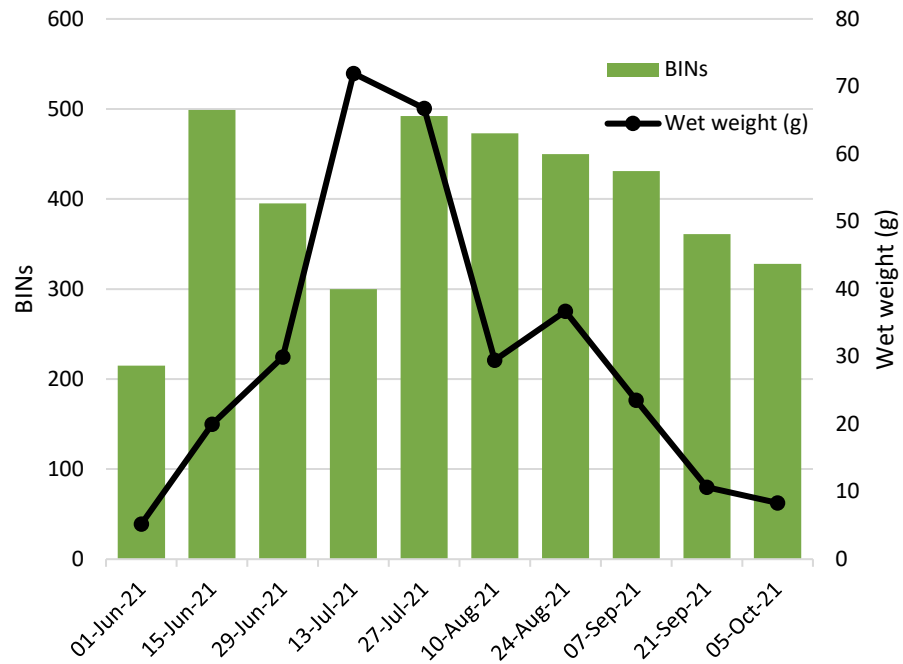
A total of 2,140 different BINs (Barcode Index Numbers; a proxy for species) were encountered at Rainbow Falls Provincial Park. Over half the BINs captured were flies (Diptera), followed by bees, ants and wasps (Hymenoptera), moths and butterflies (Lepidoptera), and true bugs (Hemiptera; Figure 1).



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

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 towards the middle of June.

In total, 587 species were named, representing 29% of the BINs. All but one of the BINs were assigned at least to family and 71% of the BINs were assigned to a genus. Specimens collected from this site represent 221 different families and 749 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.