

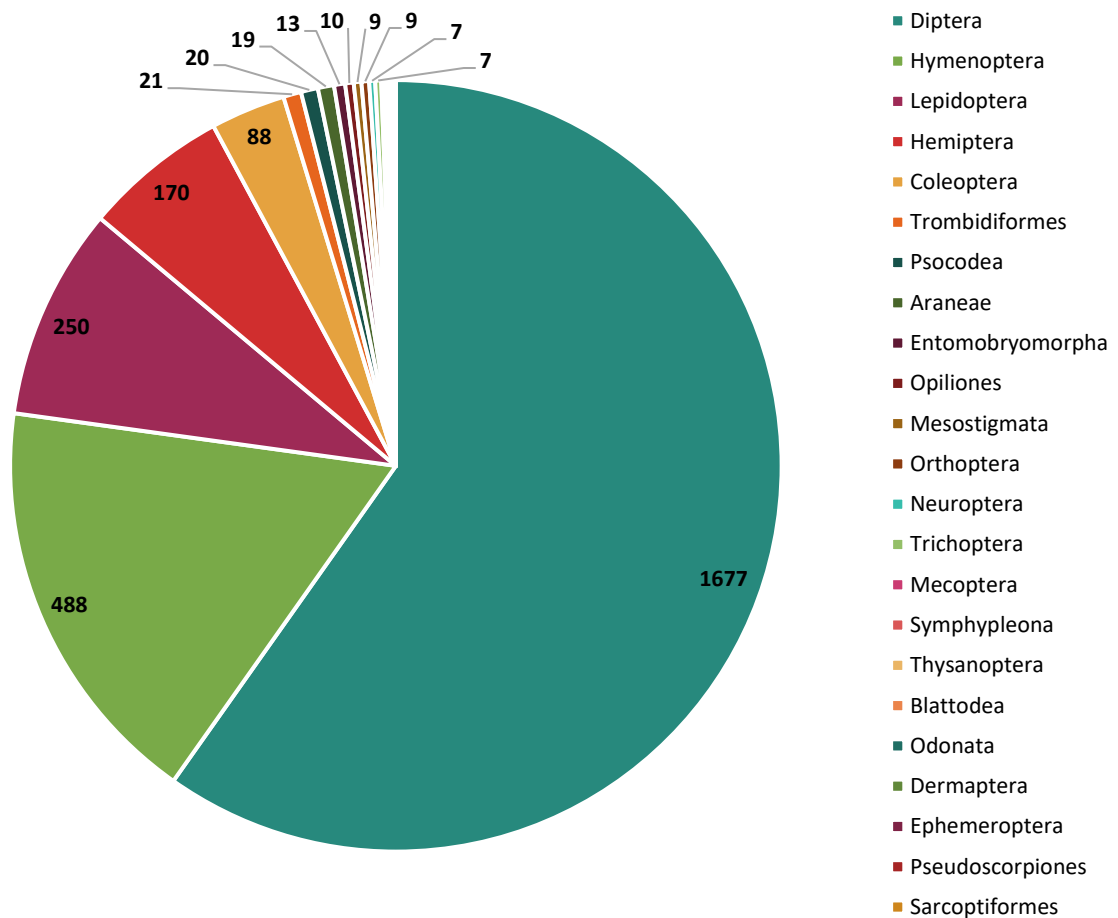
# TERRESTRIAL ARTHROPOD MONITORING PROGRAM

## METABARCODING REPORT – FUSHIMI LAKE PROVINCIAL PARK

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

### Results

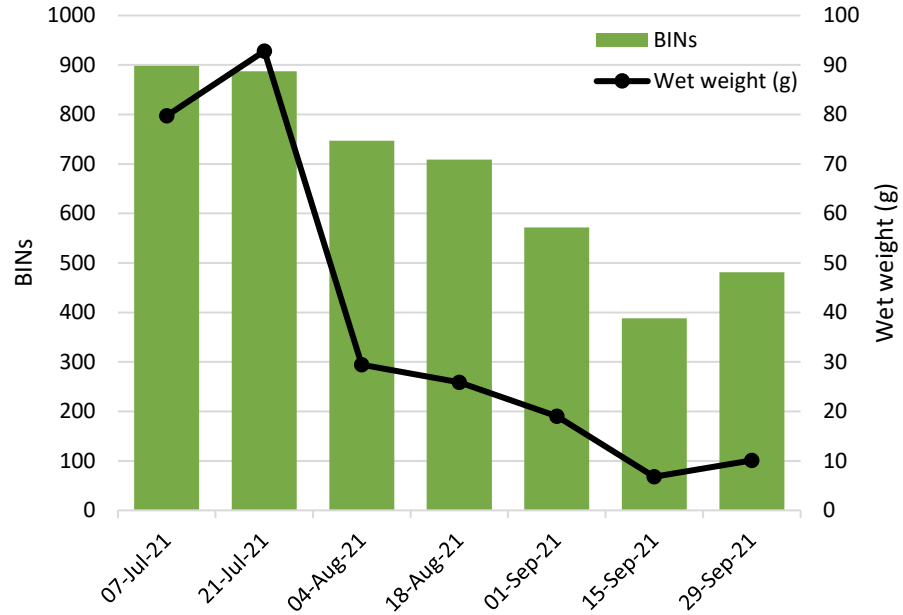
A total of 2,805 different BINs (Barcode Index Numbers; a proxy for species) were encountered at Fushimi Lake Provincial Park. Over half the BINs captured were flies (Diptera), followed by bees, ants and wasps (Hymenoptera), moths and butterflies (Lepidoptera), and true bugs (Hemiptera; Figure 1).



**Figure 1.** Taxonomic breakdown of BINs captured in the Malaise trap at Fushimi Lake 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 at the beginning of July.

In total, 689 species were named, representing 26% of the BINs. All BINs were assigned at least to family and 68% of the BINs were assigned to a genus. Specimens collected from this site represent 223 different families and 857 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.