

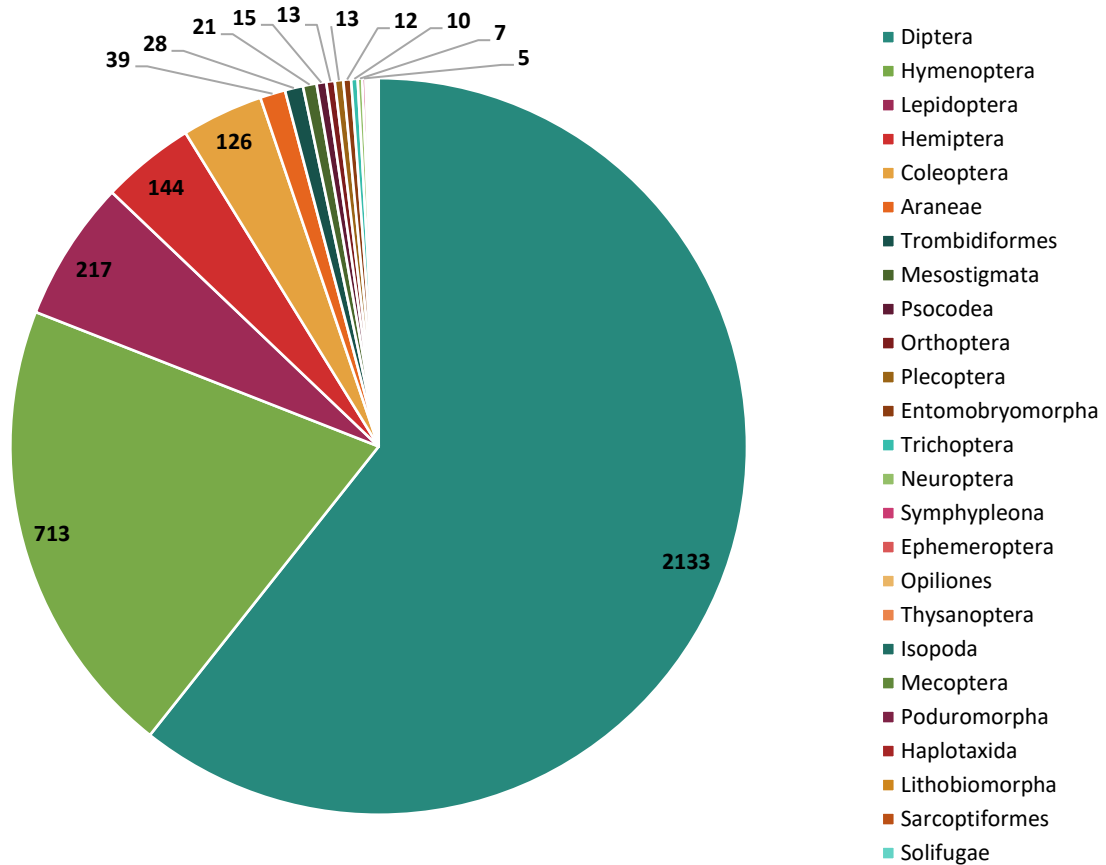
# TERRESTRIAL ARTHROPOD MONITORING PROGRAM

## METABARCODING REPORT – HAUTES-GORGES

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

### Results

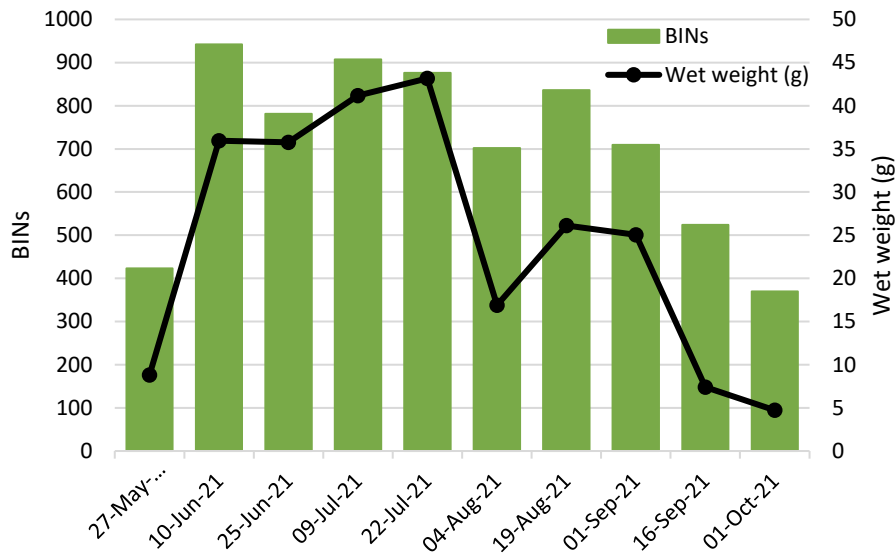
A total of 3,516 different BINs (Barcode Index Numbers; a proxy for species) were encountered at Hautes-Gorges National Park. Over half the BINs captured were flies (Diptera), followed by bees, ants and wasps (Hymenoptera), moths and butterflies (Lepidoptera), and true bugs (Hemiptera; Figure 1).



**Figure 1.** Taxonomic breakdown of BINs captured in the Malaise trap at Hautes-Gorges National Park.

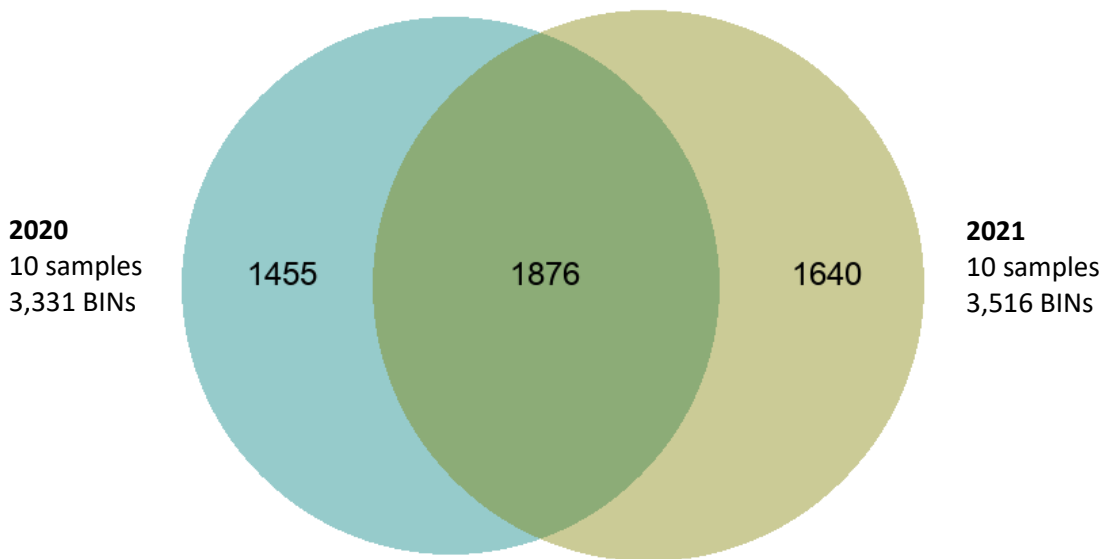
Species diversity and insect abundance varied throughout the collecting period; the period that captured the most BINs was not necessarily the largest sample collected (Figure 2). The peak of species diversity was obtained towards the middle of June.

In total, 916 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 270 different families and 1,030 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 4,971 BINs have been captured from Hautes-Gorges National Park. There was an overlap of 1,876 BINs between both sampling years and the 2021 trap added 1,640 BINs to the total species pool (Figure 3).



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