TERRESTRIAL ARTHROPOD MONITORING PROGRAM METABARCODING REPORT – ISLAND LAKE

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Results

A total of 2,132 different BINs (Barcode Index Numbers; a proxy for species) were encountered at Island Lake. 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).

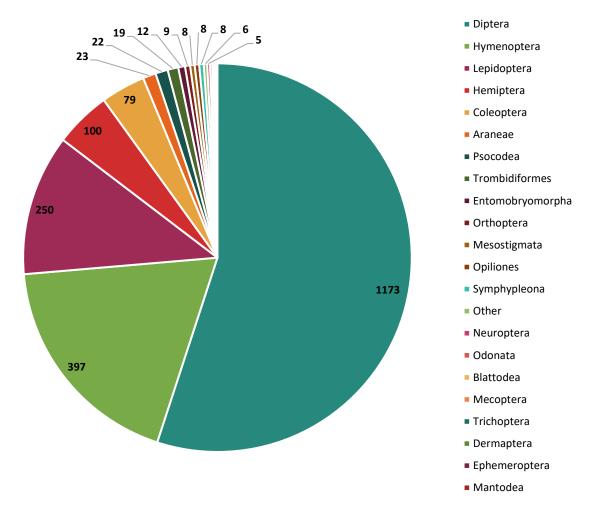


Figure 1. Taxonomic breakdown of BINs captured in the Malaise trap at Island Lake.

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 August.

In total, 554 species were named, representing 27% of the BINs. All but three BINs were assigned at least to family and 72% of the BINs were assigned to a genus. Specimens collected from this site represent 215 different families and 701 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.