

TERRESTRIAL ARTHROPOD MONITORING PROGRAM

METABARCODING REPORT – THUNDER BAY MINISTRY OF NATURAL RESOURCES

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Results

A total of 2,448 different BINs (Barcode Index Numbers; a proxy for species) were encountered at the Thunder Bay Ministry of Natural Resources (MNR) office. 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).

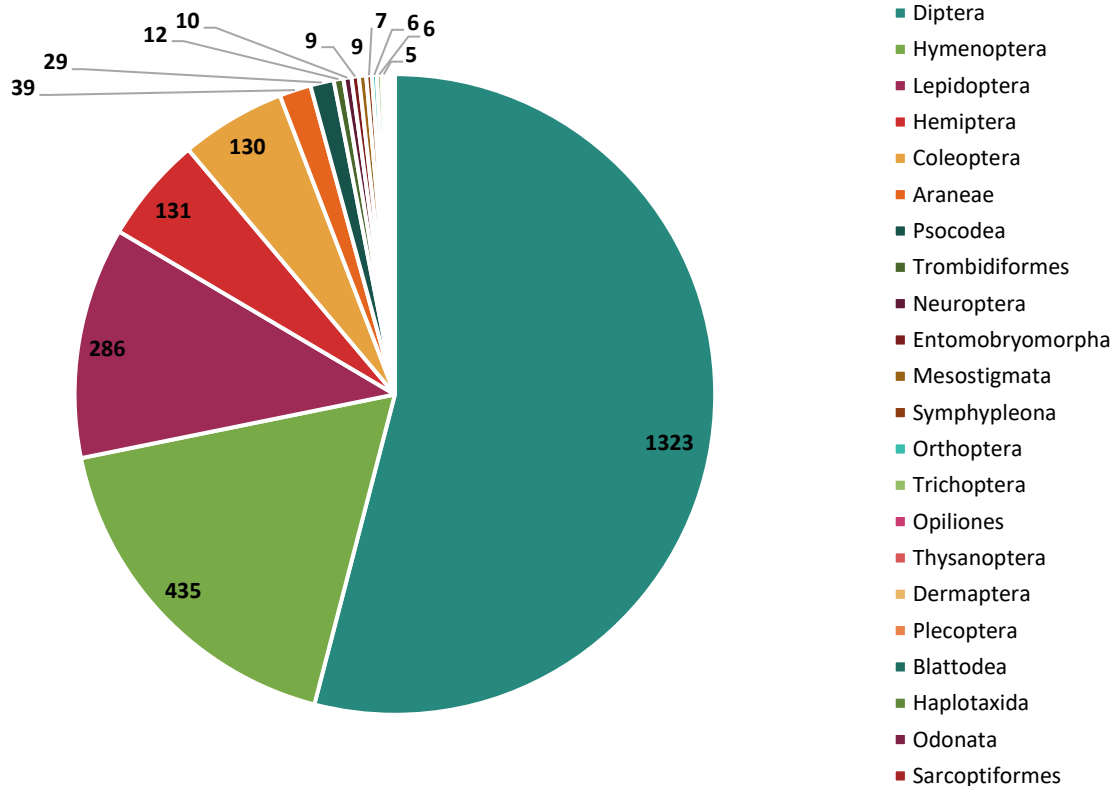


Figure 1. Taxonomic breakdown of BINs captured in the Malaise trap at the Thunder Bay MNR office.

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 end of June.

In total, 755 species were named, representing 33% of the BINs. All BINs were assigned at least to family and 76% of the BINs were assigned to a genus. Specimens collected from this site represent 243 different families and 909 genera. A complete species list is attached separately.

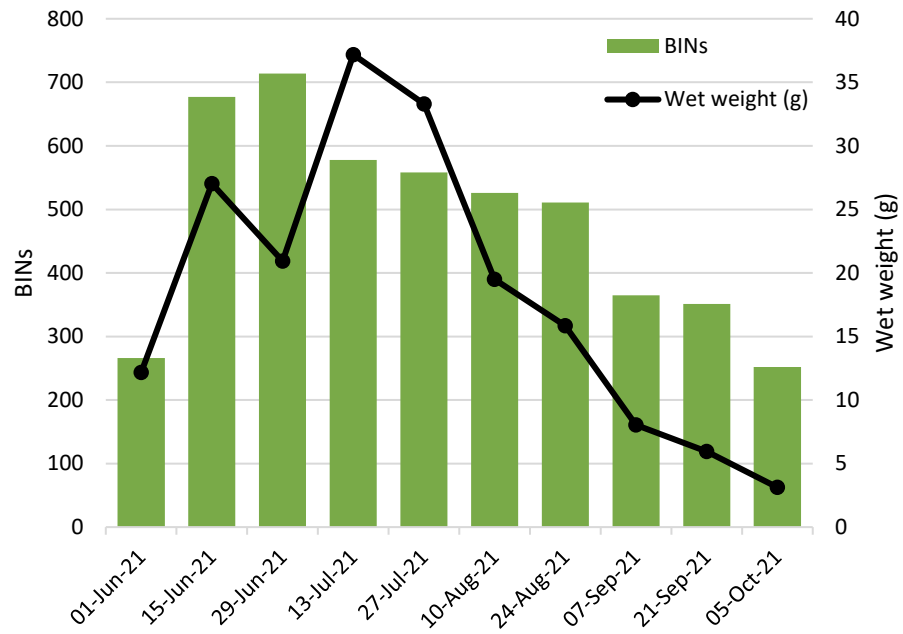


Figure 2. Species diversity (measured by BINs) and approximate insect abundance (measured by wet weight of sample) captured at the trap over the 2021 collecting period.