

TERRESTRIAL ARTHROPOD MONITORING PROGRAM

METABARCODING REPORT – GREAT LAKES FORESTRY CENTRE

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Results

A total of 1,792 different BINs (Barcode Index Numbers; a proxy for species) were encountered at Great Lakes Forestry Centre (GLFC). Over half the BINs captured were flies (Diptera), followed by bees, ants and wasps (Hymenoptera), moths and butterflies (Lepidoptera), and beetles (Coleoptera; Figure 1).

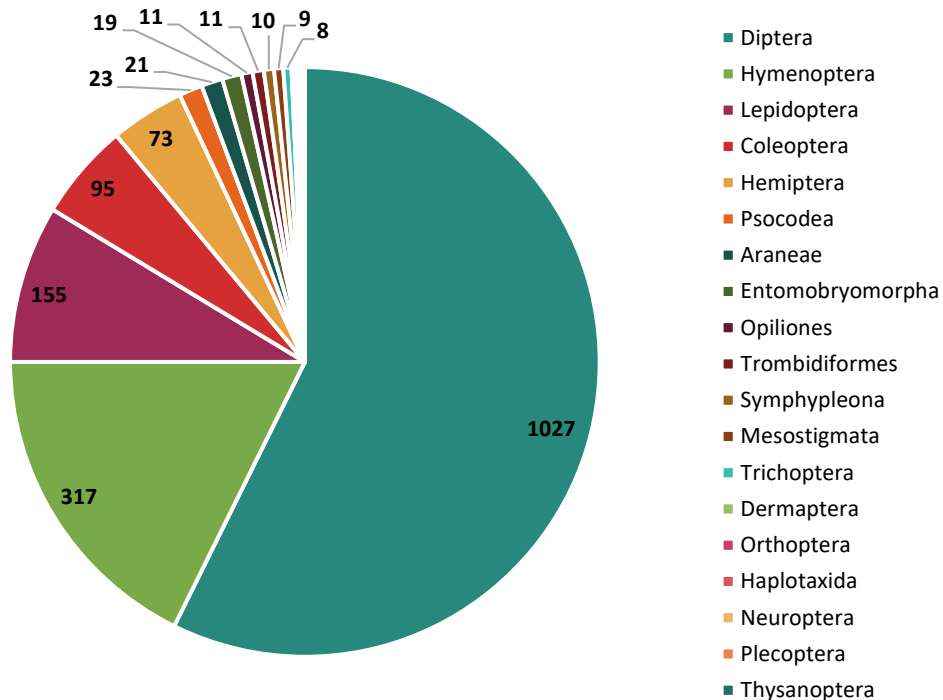


Figure 1. Taxonomic breakdown of BINs captured in the Malaise trap at GLFC.

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, 574 species were named, representing 32% of the BINs. All but one of the BINs were assigned at least to family and 76% of the BINs were assigned to a genus. Specimens collected from this site represent 206 different families and 688 genera. A complete species list is attached separately.

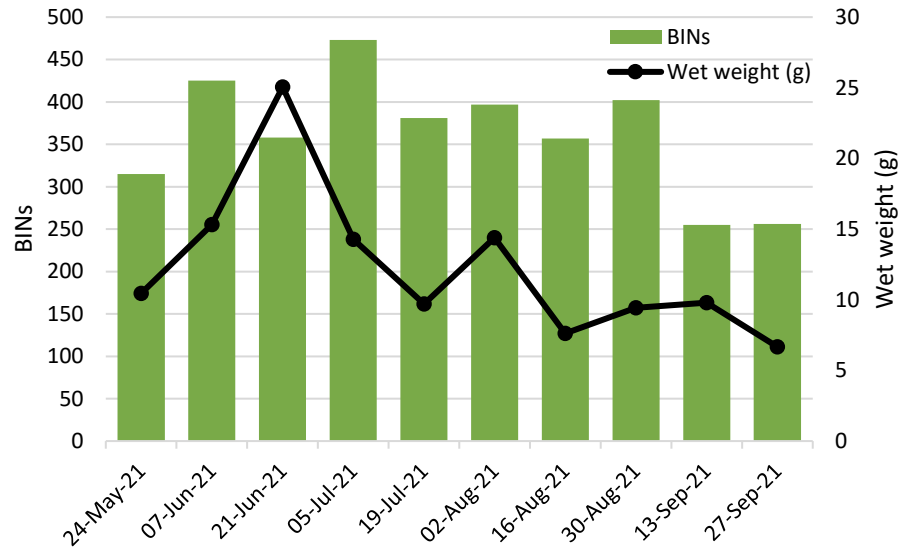


Figure 2. Species diversity (measured by BINs) and approximate insect abundance (measured by wet weight of sample) captured at the trap over the 2021 collecting period.