TERRESTRIAL ARTHROPOD MONITORING PROGRAM METABARCODING REPORT – MACLEOD PROVINCIAL PARK

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Results

A total of 2,152 different BINs (Barcode Index Numbers; a proxy for species) were encountered at MacLeod Provincial Park. Over half the BINs captured were flies (Diptera), followed by bees, ants and wasps (Hymenoptera), moths and butterflies (Lepidoptera), and beetles (Coleoptera; Figure 1).

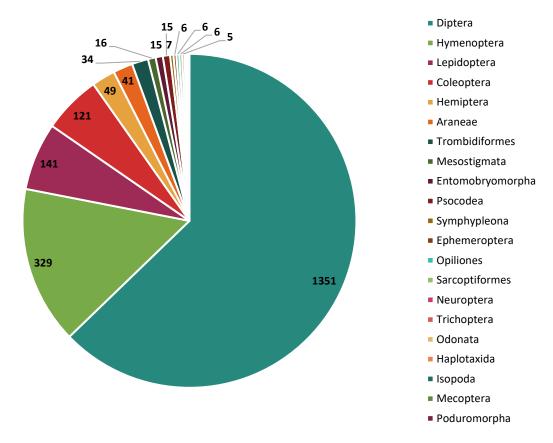


Figure 1. Taxonomic breakdown of BINs captured in the Malaise trap at MacLeod Provincial Park.

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, 482 species were named, representing 24% of the BINs. All but two BINs were assigned at least to family and 64% of the BINs were assigned to a genus. Specimens collected from this site represent 224 different families and 636 genera. A complete species list is attached separately.

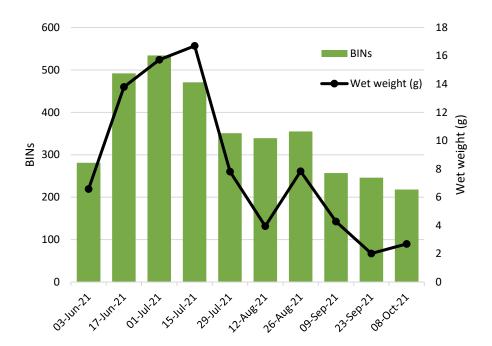


Figure 2. Species diversity (measured by BINs) and approximate insect abundance (measured by wet weight of sample) captured at the trap over the 2021 collecting period.