

TERRESTRIAL ARTHROPOD MONITORING PROGRAM

METABARCODING REPORT – RENÉ BRUNELLE PROVINCIAL PARK

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Results

A total of 2,156 different BINs (Barcode Index Numbers; a proxy for species) were encountered at René Brunelle 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).

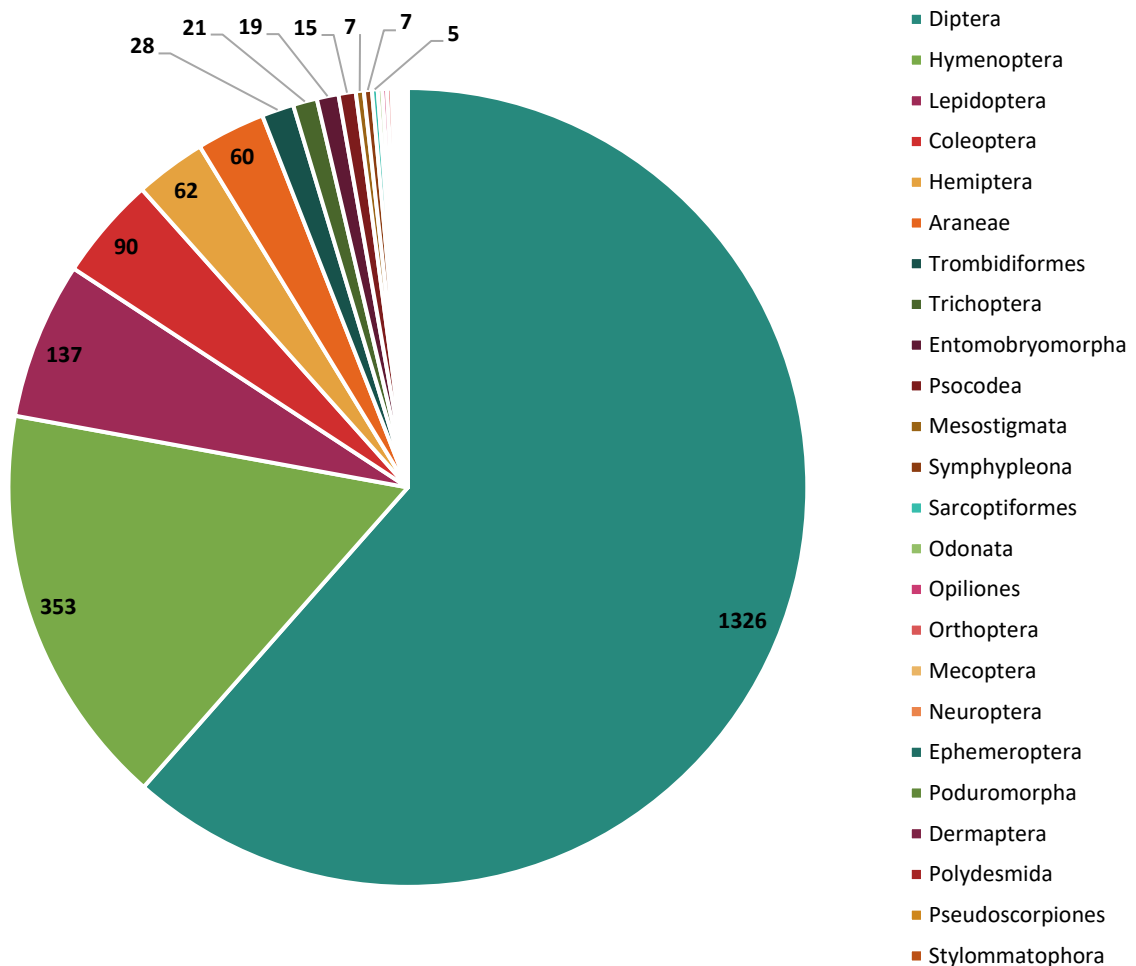


Figure 1. Taxonomic breakdown of BINs captured in the Malaise trap at René Brunelle Provincial Park.

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 towards the end of July.

In total, 516 species were named, representing 26% of the BINs. All BINs were assigned at least to family and 67% of the BINs were assigned to a genus. Specimens collected from this site represent 209 different families and 682 genera. A complete species list is attached separately.

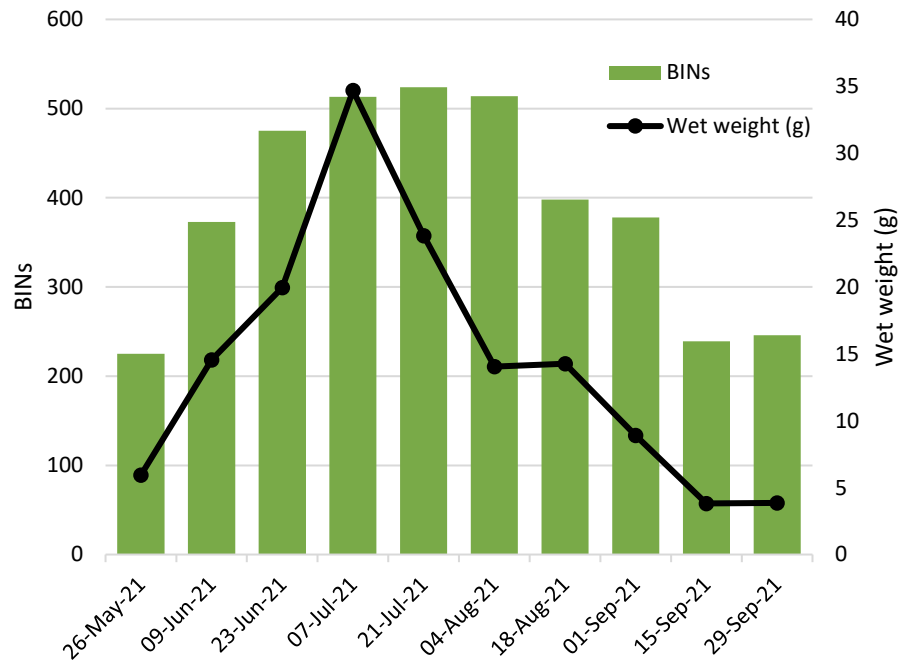


Figure 2. Species diversity (measured by BINs) and approximate insect abundance (measured by wet weight of sample) captured at the trap over the 2021 collecting period.