

TERRESTRIAL ARTHROPOD MONITORING PROGRAM

METABARCODING REPORT – QUETICO PROVINCIAL PARK

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Results

A total of 2,973 different BINs (Barcode Index Numbers; a proxy for species) were encountered at Quetico 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).

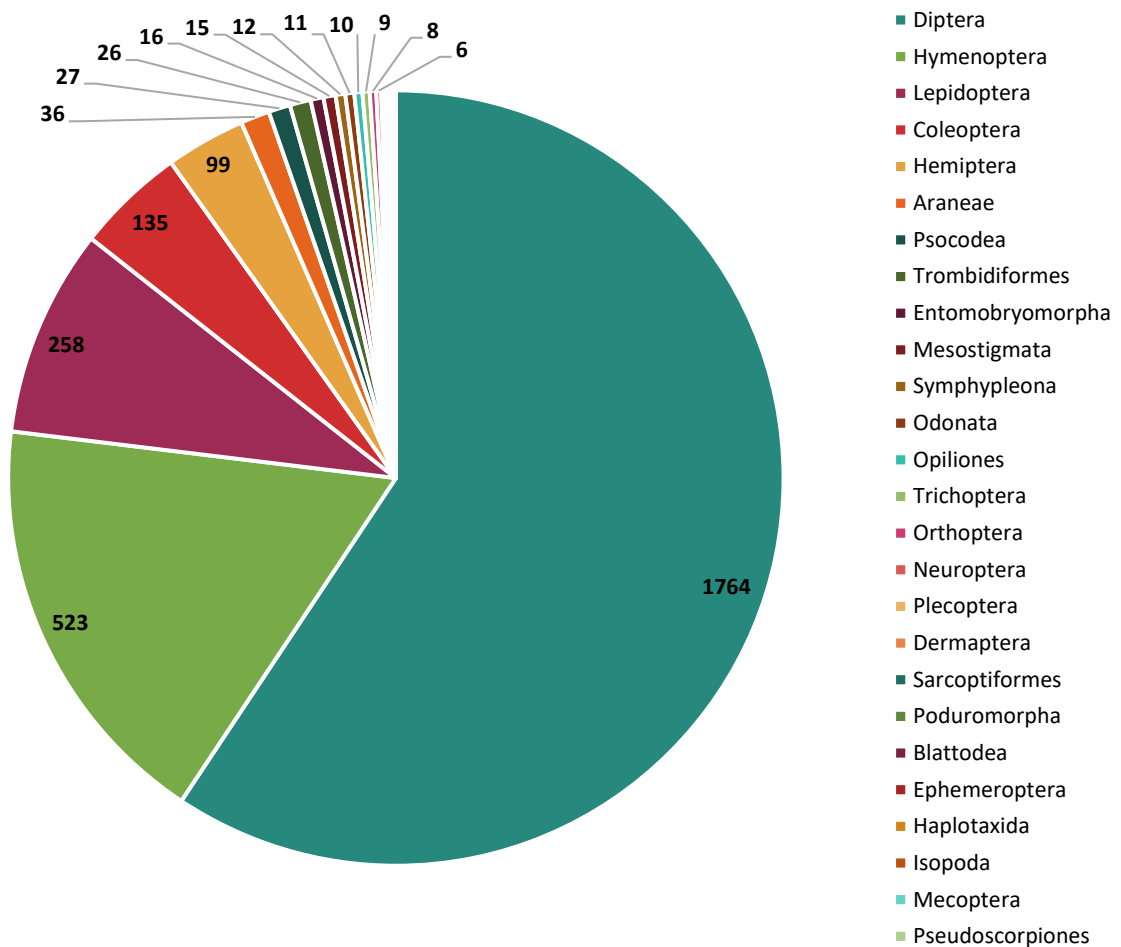


Figure 1. Taxonomic breakdown of BINs captured in the Malaise trap at Quetico Provincial Park.

Species diversity and insect abundance varied throughout the collecting period; the period that captured the most BINs was also the largest sample collected (Figure 2). The peak of species diversity was obtained towards the middle of July.

In total, 773 species were named, representing 28% of the BINs. All but two BINs were assigned at least to family and 69% of the BINs were assigned to a genus. Specimens collected from this site represent 259 different families and 942 genera. A complete species list is attached separately.

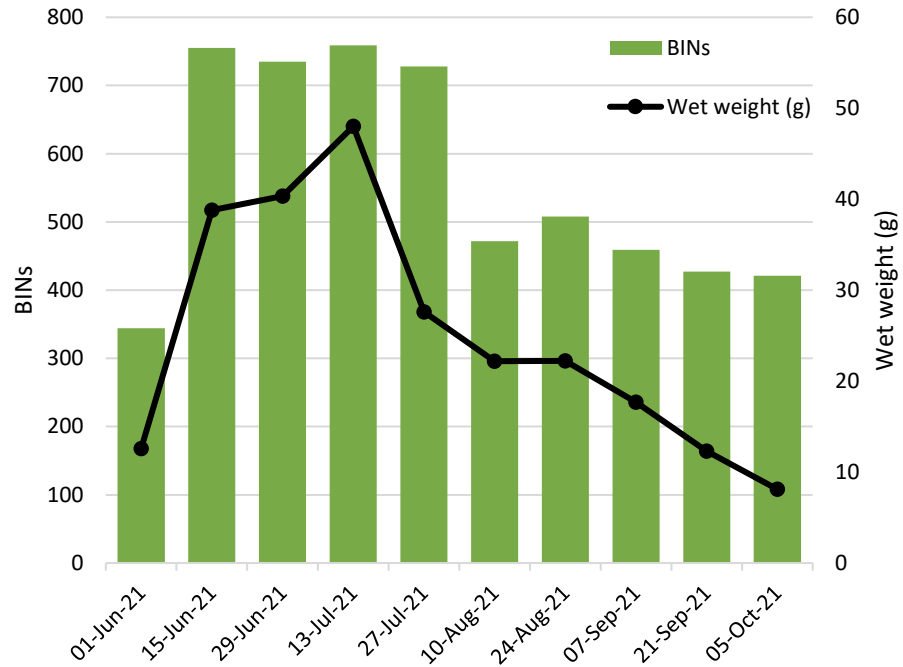


Figure 2. Species diversity (measured by BINs) and approximate insect abundance (measured by wet weight of sample) captured at the trap over the 2021 collecting period.