

TERRESTRIAL ARTHROPOD MONITORING PROGRAM

METABARCODING REPORT – TURTLE RIVER PROVINCIAL PARK

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Results

A total of 2,358 different BINs (Barcode Index Numbers; a proxy for species) were encountered at Turtle River 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).

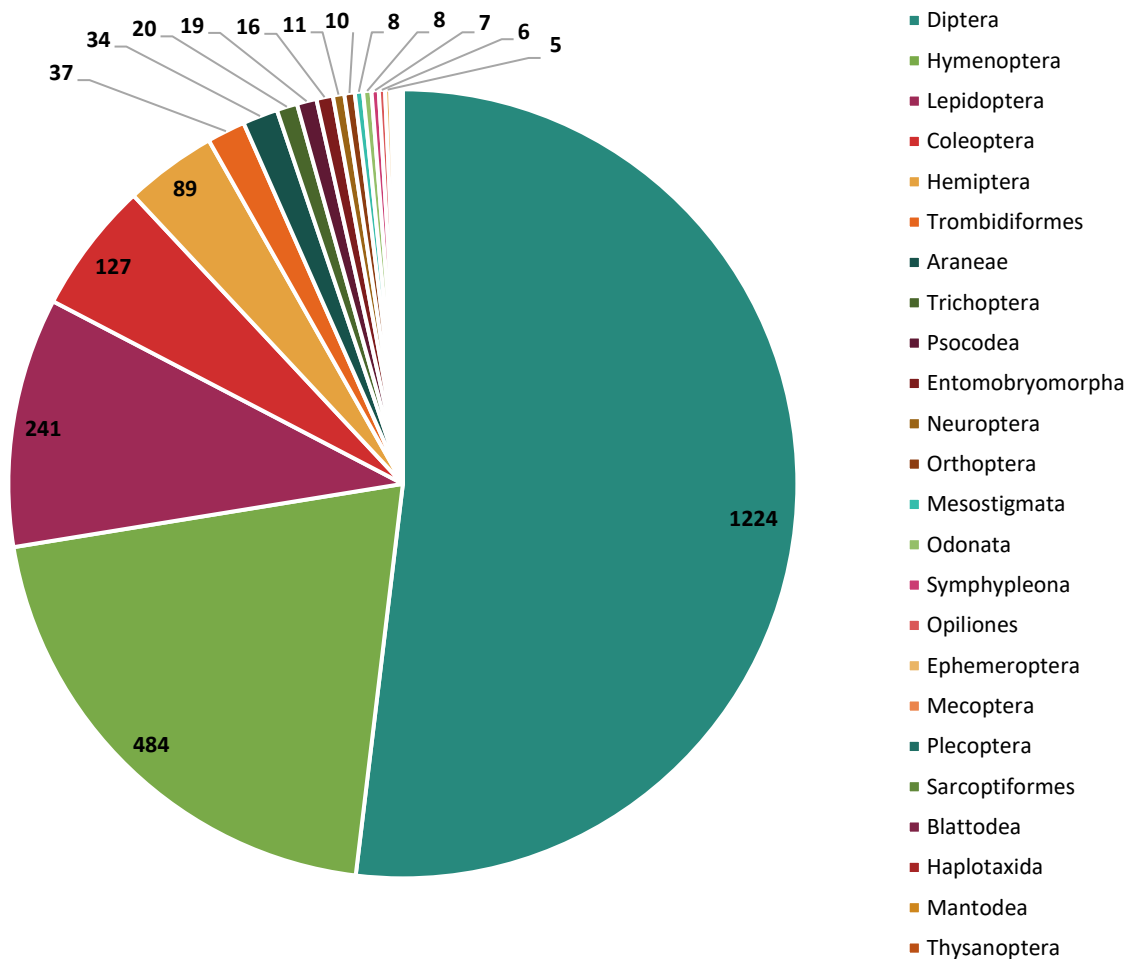


Figure 1. Taxonomic breakdown of BINs captured in the Malaise trap at Turtle River Provincial Park.

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 middle of July.

In total, 613 species were named, representing 28% of the BINs. All BINs were assigned at least to family and 71% of the BINs were assigned to a genus. Specimens collected from this site represent 240 different families and 826 genera. A complete species list is attached separately.

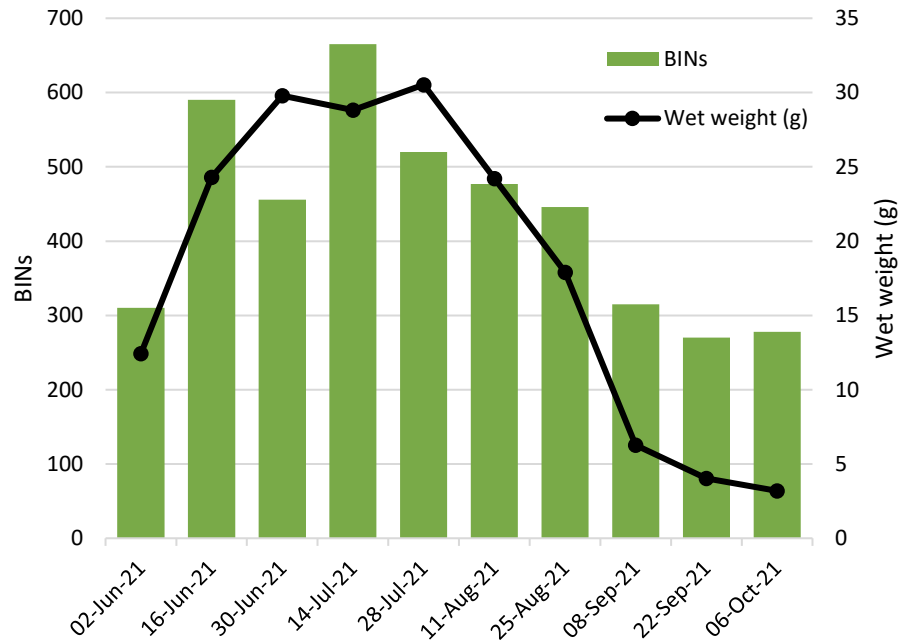


Figure 2. Species diversity (measured by BINs) and approximate insect abundance (measured by wet weight of sample) captured at the trap over the 2021 collecting period.