TERRESTRIAL ARTHROPOD MONITORING PROGRAM METABARCODING REPORT – W.J.B. GREENWOOD PROVINCIAL PARK

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Results

A total of 3,053 different BINs (Barcode Index Numbers; a proxy for species) were encountered at W.J.B. Greenwood 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).

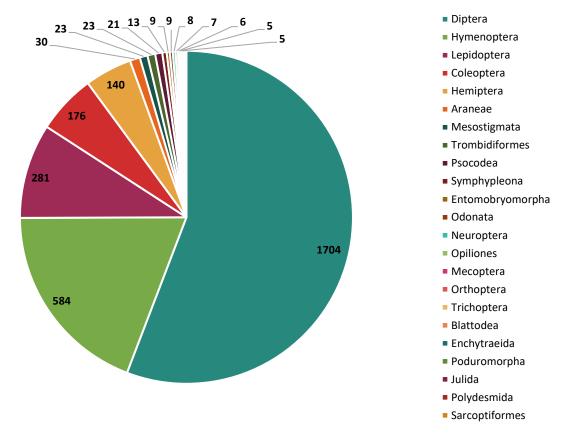


Figure 1. Taxonomic breakdown of BINs captured in the Malaise trap at W.J.B. Greenwood Provincial Park.

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 end of June.

In total, 864 species were named, representing 30% of the BINs. All but one of the BINs were assigned at least to family and 71% of the BINs were assigned to a genus. Specimens collected from this site represent 255 different families and 967 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.