

TERRESTRIAL ARTHROPOD MONITORING PROGRAM

METABARCODING REPORT – POTHoles PROVINCIAL PARK

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Results

A total of 2,746 different BINs (Barcode Index Numbers; a proxy for species) were encountered at Potholes 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).

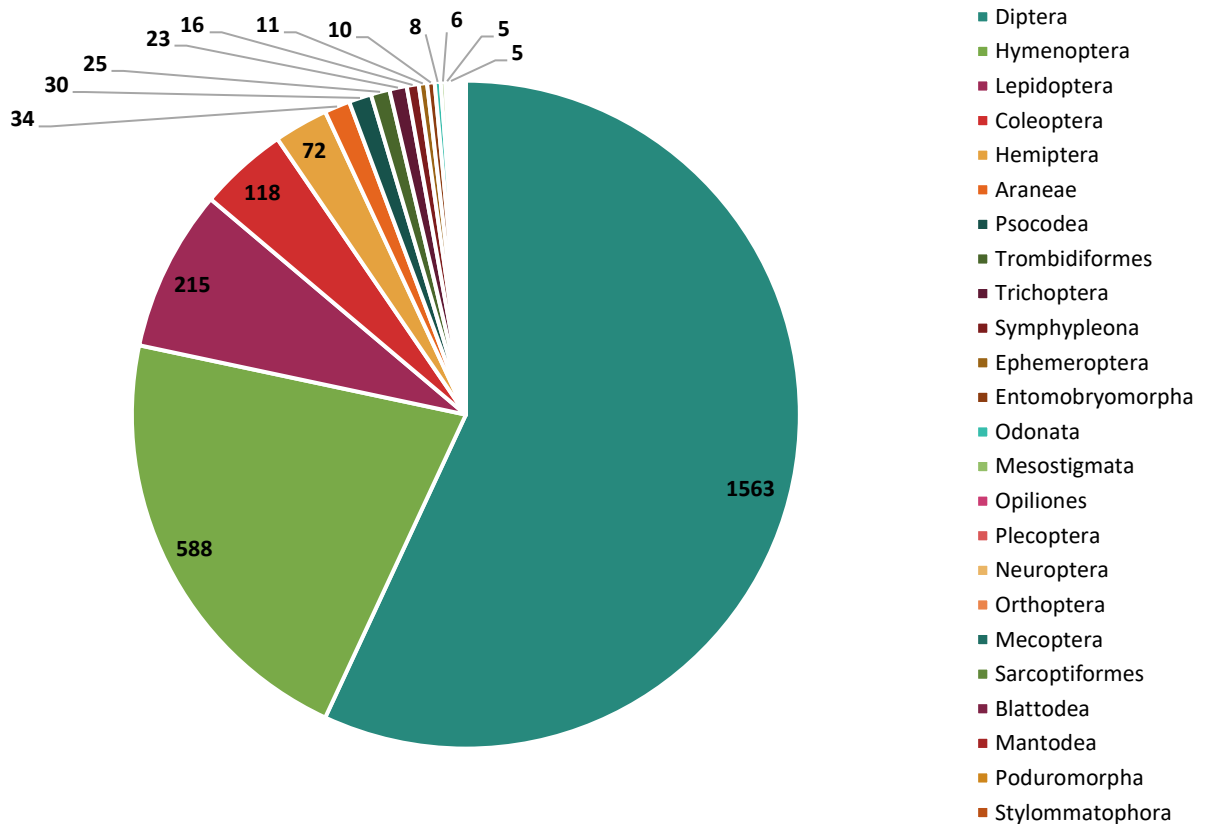


Figure 1. Taxonomic breakdown of BINs captured in the Malaise trap at Potholes Provincial Park.

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 at the beginning of July.

In total, 657 species were named, representing 25% of the BINs. All BINs were assigned at least to family and 69% of the BINs were assigned to a genus. Specimens collected from this site represent 233 different families and 822 genera. A complete species list is attached separately.

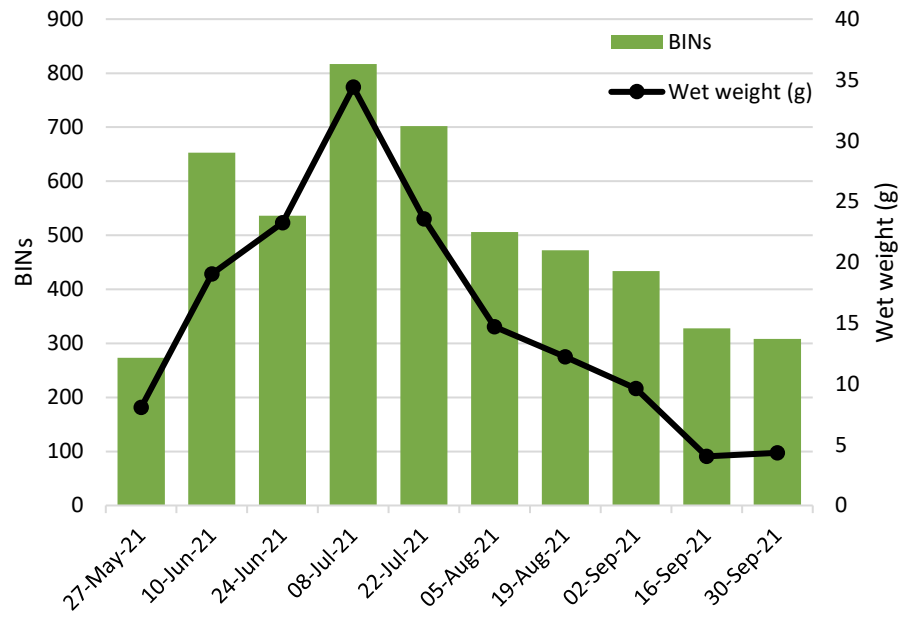


Figure 2. Species diversity (measured by BINs) and approximate insect abundance (measured by wet weight of sample) captured at the trap over the 2021 collecting period.