

TERRESTRIAL ARTHROPOD MONITORING PROGRAM

METABARCODING REPORT – BURNT LANDS

Collections Unit, Centre for Biodiversity Genomics (CBG), University of Guelph

Results

A total of 2,147 different BINs (Barcode Index Numbers; a proxy for species) were encountered Burnt Lands Provincial Nature Reserve (PNR). Nearly half the BINs captured were flies (Diptera), followed by bees, ants and wasps (Hymenoptera), moths and butterflies (Lepidoptera), and beetles (Coleoptera; Figure 1).

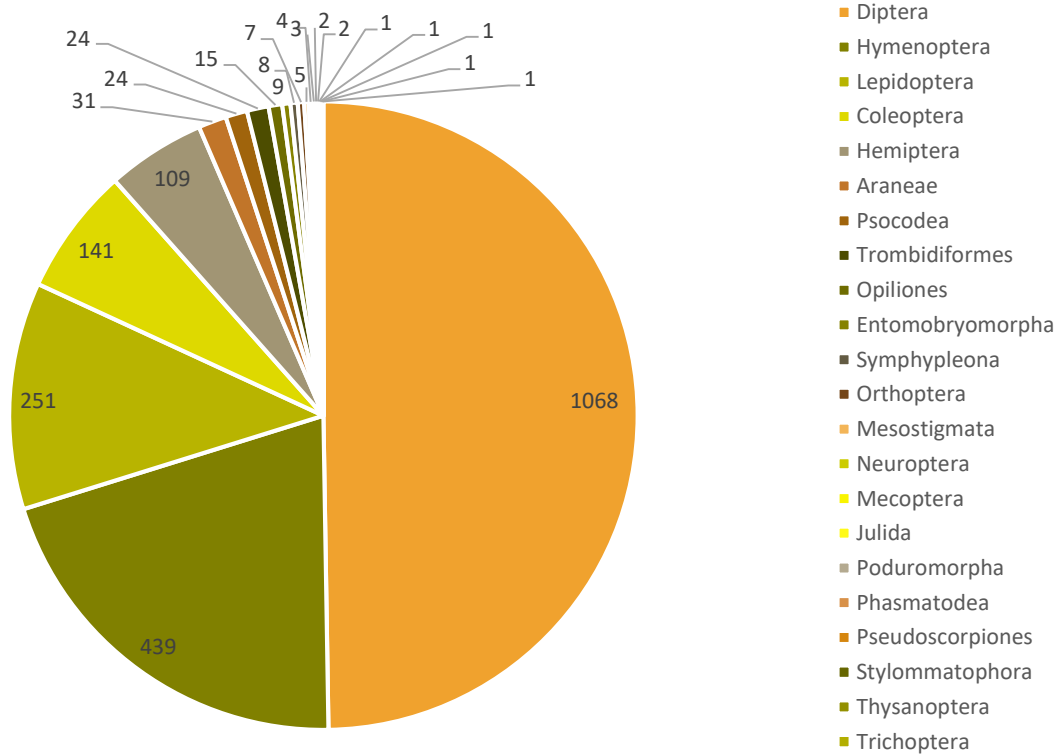


Figure 1. Taxonomic breakdown of BINs captured in the Malaise trap at Burnt Lands PNR.

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 in June.

In total, 651 species were named, representing 33% of the BINs. All but eight of the BINs were assigned at least to family and 71% were assigned to a genus. Specimens collected from this site represent 247 different families and 809 genera. A complete species list is attached separately.

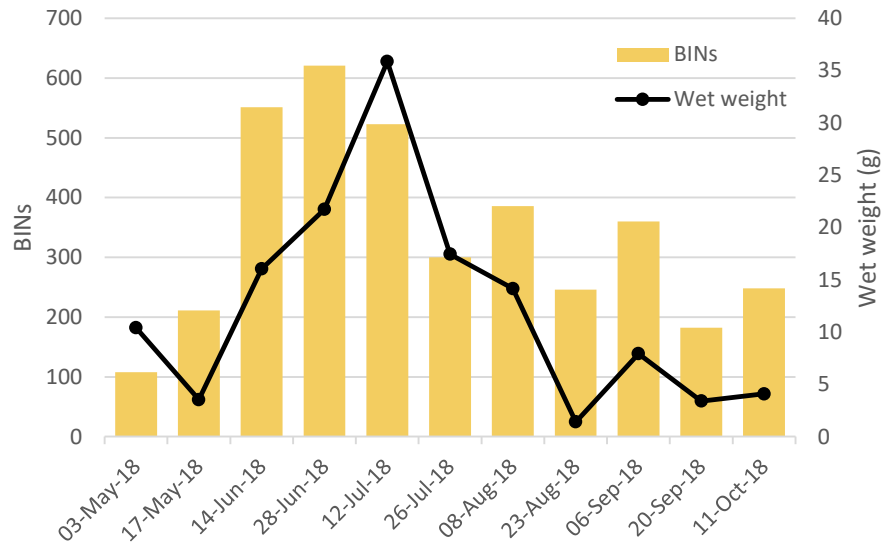


Figure 2. Species diversity (measured by BINs) and approximate insect abundance (measured by wet weight of the sample) captured at the trap over the 2018 collecting period.

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