

TERRESTRIAL ARTHROPOD MONITORING PROGRAM

METABARCODING REPORT – OPÉMICAN

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

Results

A total of 2,027 different BINs (Barcode Index Numbers; a proxy for species) were encountered at Opémican National Park. Over half the BINs captured were flies (Diptera), followed by bees, ants and wasps (Hymenoptera), beetles (Coleoptera), and moths and butterflies (Lepidoptera; Figure 1).

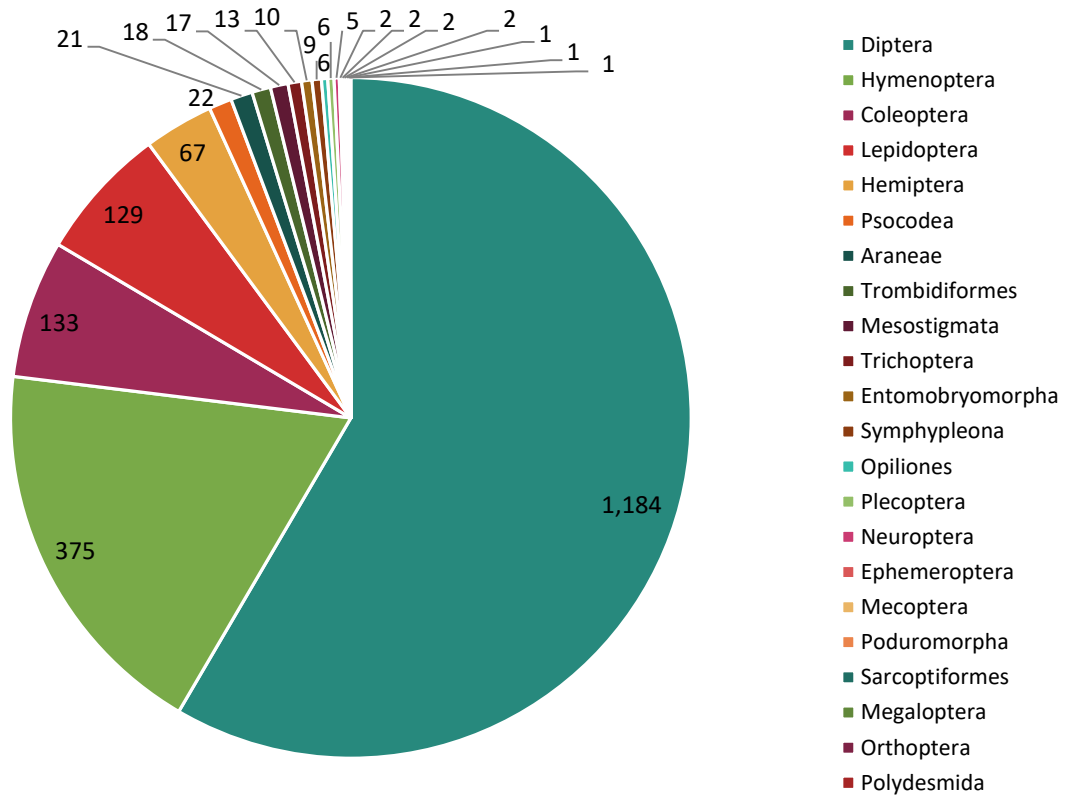


Figure 1. Taxonomic breakdown of BINs captured in the Malaise trap at Opémican National Park.

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 beginning of June.

In total, 833 species were named, representing 41% of the BINs. All but one of the BINs were assigned at least to family and 62% of the BINs were assigned to a genus. Specimens collected from this site represent 212 different families and 706 genera. A complete species list is attached separately.

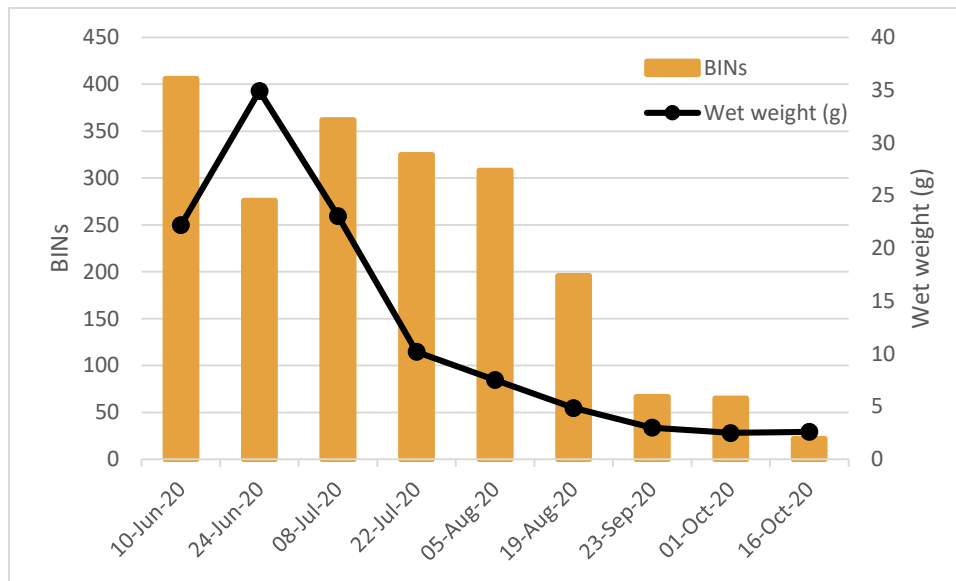


Figure 2. Species diversity (measured by BINs) and approximate insect abundance (measured by wet weight of sample) captured at the trap over the 2020 collecting period.

Contact Information

Jeremy deWaard, PhD
Director - Collections
dewaardj@uoguelph.ca

Kristen McCabe, BSc
Research Technician – Collections
kmccabe@uoguelph.ca



University of Guelph
50 Stone Road East, Guelph, ON,
Canada N1G 2W1
www.biodiversitygenomics.net