

TERRESTRIAL ARTHROPOD MONITORING PROGRAM METABARCODING REPORT – OBATANGA PROVINCIAL PARK

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

Results

A total of 3,254 different BINs (Barcode Index Numbers; a proxy for species) were encountered at Obatanga 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).

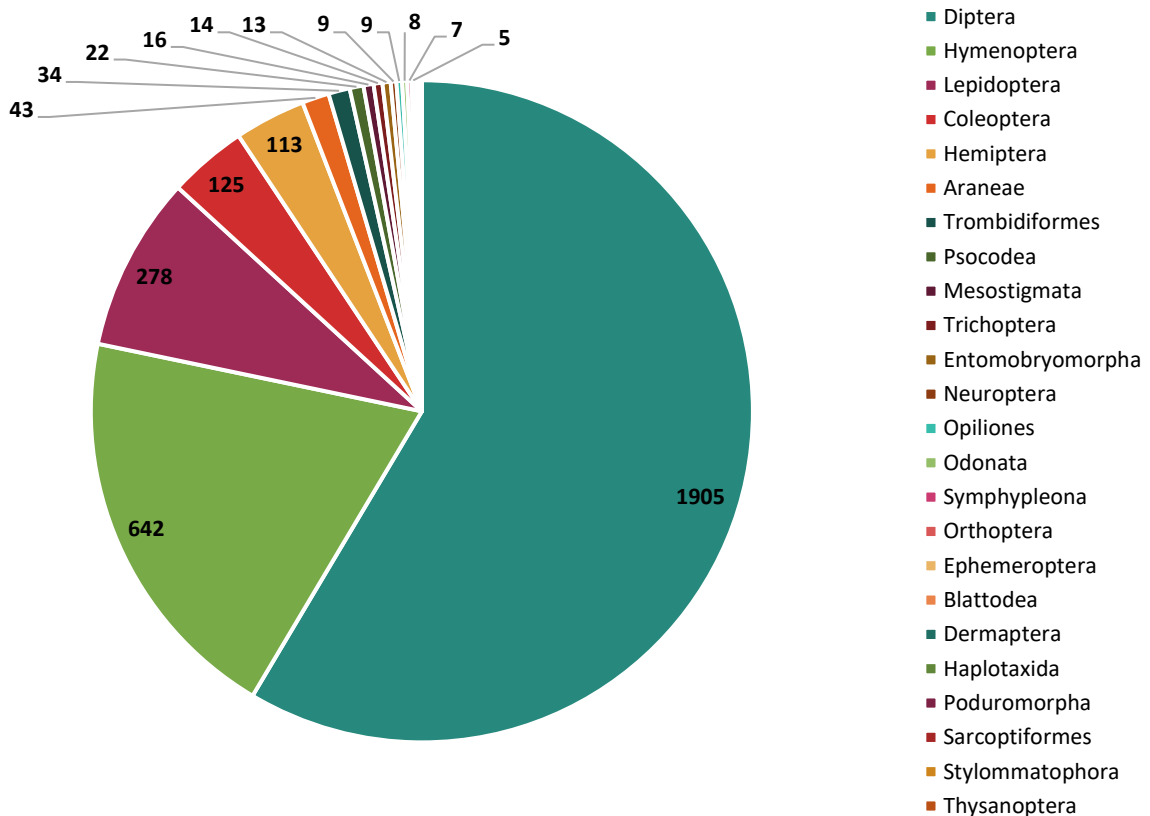


Figure 1. Taxonomic breakdown of BINs captured in the Malaise trap at Obatanga Provincial Park.

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, 818 species were named, representing 27% of the BINs. All but one of the BINs were assigned at least to family and 70% of the BINs were assigned to a genus. Specimens collected from this site represent 254 different families and 941 genera. A complete species list is attached separately.

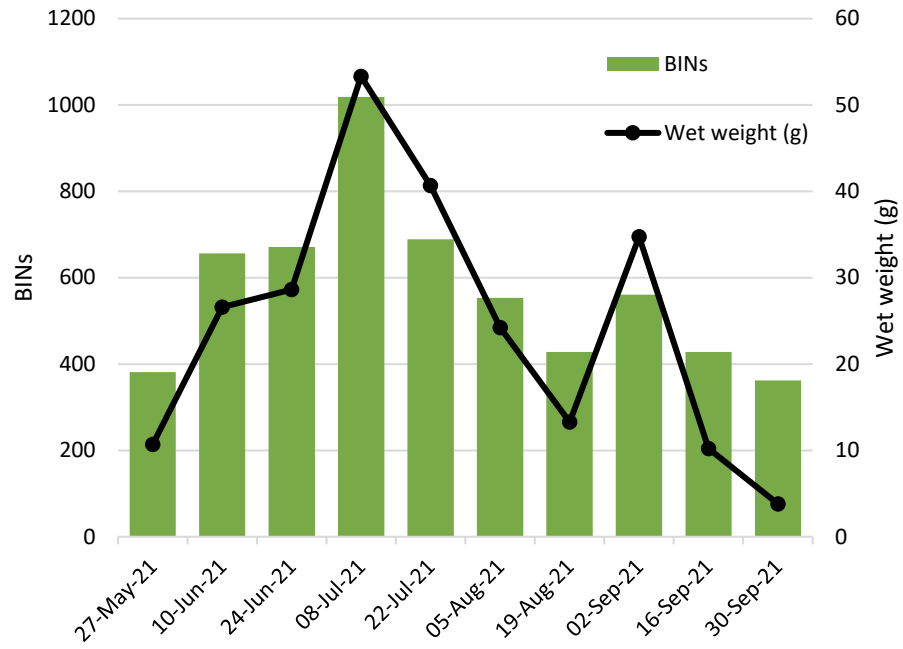


Figure 2. Species diversity (measured by BINs) and approximate insect abundance (measured by wet weight of sample) captured at the trap over the 2021 collecting period.