

# TERRESTRIAL ARTHROPOD MONITORING PROGRAM

## METABARCODING REPORT – MIRACLE BEACH (MB)

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

### Results

A total of 827 different BINs (Barcode Index Numbers; a proxy for species) were encountered at Miracle Beach Provincial Park. Both traps captured a similar number of BINs and there was an overlap of 291 BINs between the traps (Figure 1). Species diversity and insect abundance varied throughout the collecting period; the sample that contained the most BINs was not necessarily the largest collected, and the peaks of species diversity were in mid-June (MB-1) and late July (MB-2; Figure 2). In total, 240 species could be named, representing 31% of the BINs. All but one of the BINs were assigned at least to family and 68% were assigned to a genus. Specimens collected from this park represent 164 different families and 372 genera. A taxonomic reference for all BINs captured and a full species inventory are provided in Supplementary File Tab 5 and 6, respectively.

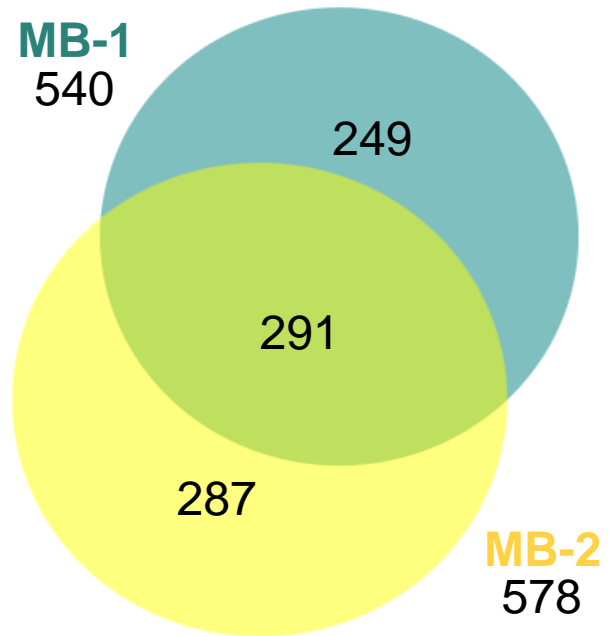


Figure 1. Venn diagram showing the species overlap between the two traps.

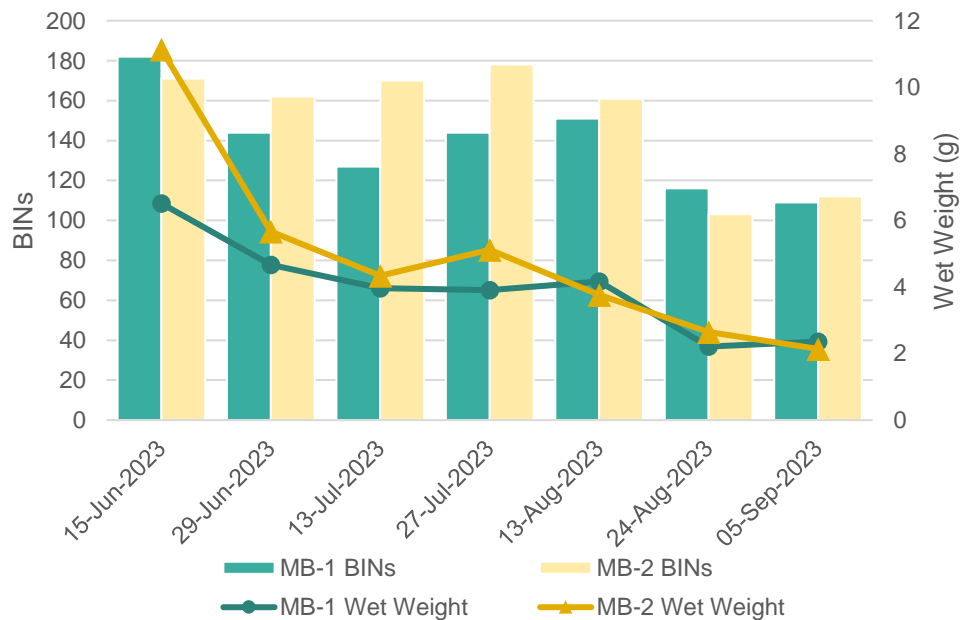


Figure 2. Species diversity (measured by BINs) and insect biomass (measured by wet weight of the sample) captured at the two traps over the 2023 collecting period.