

# TERRESTRIAL ARTHROPOD MONITORING PROGRAM

## METABARCODING REPORT – E.C. MANNING (ECM)

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### Results

A total of 2,098 different BINs (Barcode Index Numbers; a proxy for species) were encountered at E.C. Manning Provincial Park. ECM-1 captured more BINs than ECM-2 and there was an overlap of 725 BINs between both 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-August (ECM-1) and mid-July (ECM-2; Figure 2). In total, 529 species could be named, representing 27% of the BINs. All but three BINs were assigned at least to family and 68% were assigned to a genus. Specimens collected from this park represent 197 different families and 707 genera. A taxonomic reference for all BINs captured and a full species inventory are provided in Supplementary File Tab 5 and 6, respectively.

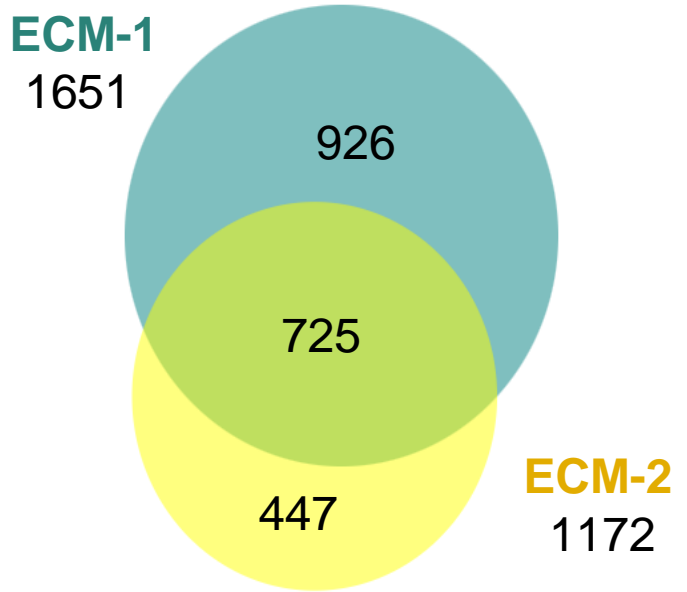


Figure 1. Venn diagram showing the species overlap between the two traps.

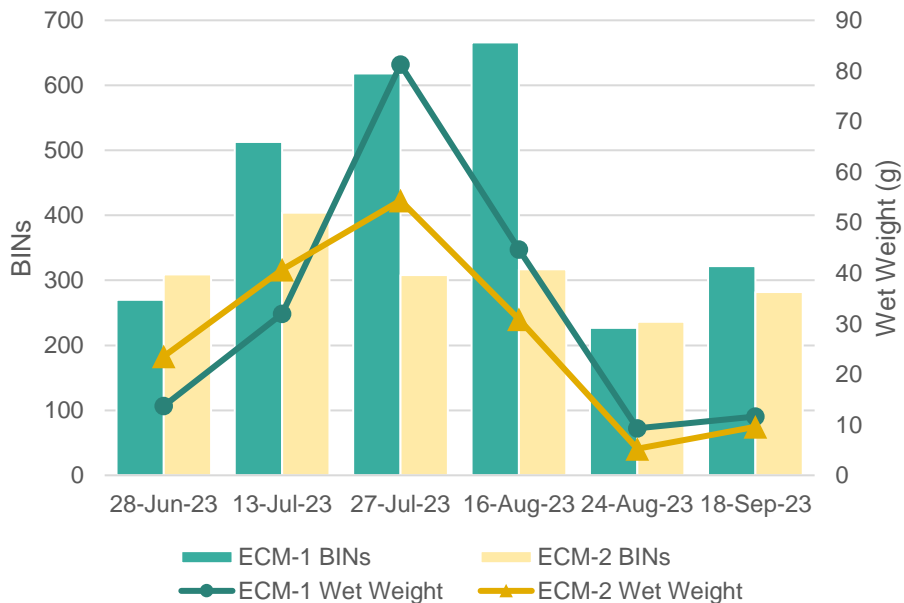


Figure 2. Species diversity (measured by BINs) and insect biomass (measured by wet weight of the sample) captured at the two traps over the 2023 collecting period.