

TERRESTRIAL ARTHROPOD MONITORING PROGRAM

METABARCODING REPORT – WASA LAKE (WL)

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Results

A total of 1,314 different BINs (Barcode Index Numbers; a proxy for species) were encountered at Wasa Lake Provincial Park. WL-2 captured more BINs than WL-1 and there was an overlap of 401 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 sample collected, and the peaks of species diversity were in mid-June (WL-1) and early July (WL-2; Figure 2). In total, 337 species could be named, representing 28% of the BINs. All of the BINs were assigned at least to family and 70% were assigned to a genus. Specimens collected from this park represent 166 different families and 471 genera. A taxonomic reference for all BINs captured and a full species inventory are provided in Supplementary File Tab 5 and 6, respectively.

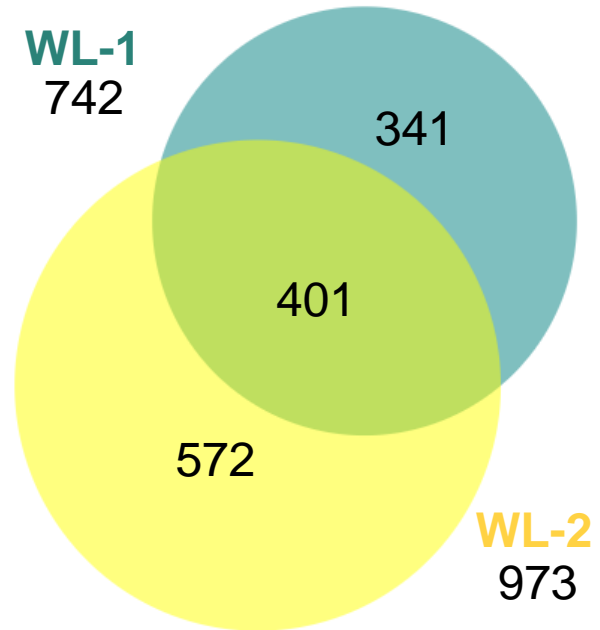


Figure 1. Venn diagram showing the species overlap between the two traps.

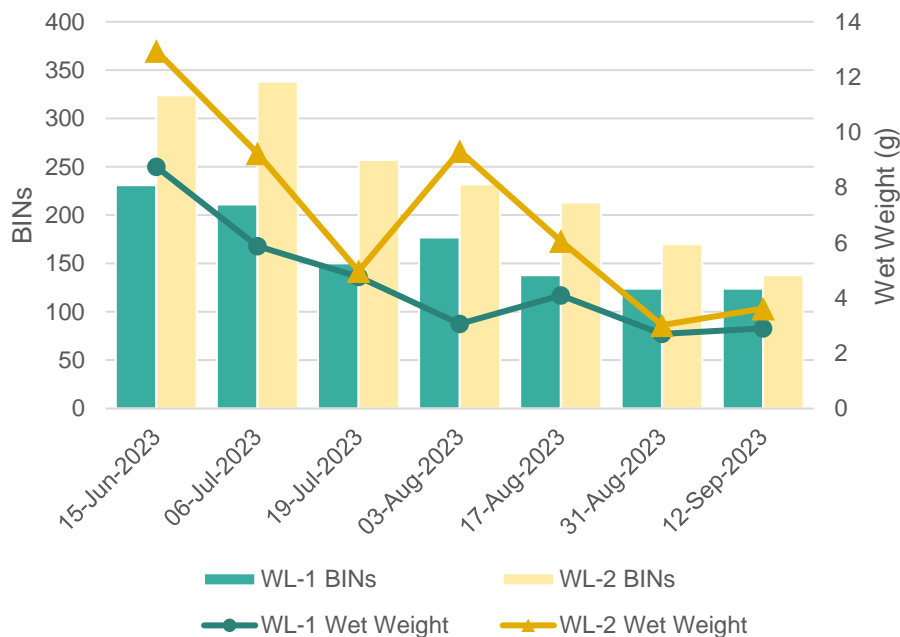


Figure 2. Species diversity (measured by BINs) and insect biomass (measured by wet weight of the sample) captured at the two traps over the 2023 collecting period.