

TERRESTRIAL ARTHROPOD MONITORING PROGRAM

METABARCODING REPORT – ENGLISHMAN RIVER FALLS (ERF)

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Results

A total of 589 different BINs (Barcode Index Numbers; a proxy for species) were encountered at Englishman River Falls Provincial Park. ERF-2 captured more BINs than ERF-1 and there was an overlap of 176 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 early August for both traps (Figure 2). In total, 151 species could be named, representing 28% of the BINs. All but one of the BINs were assigned at least to family and 62% were assigned to a genus. Specimens collected from this park represent 146 different families and 245 genera. A taxonomic reference for all BINs captured and a full species inventory are provided in Supplementary File Tab 5 and 6, respectively.

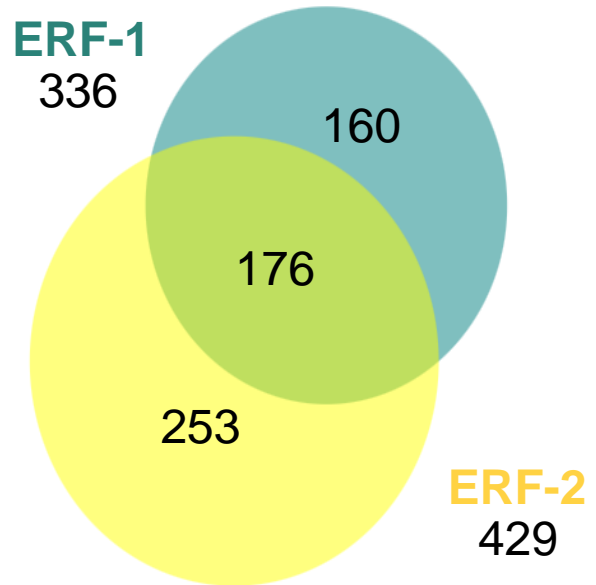


Figure 1. Venn diagram showing the species overlap between the two traps.

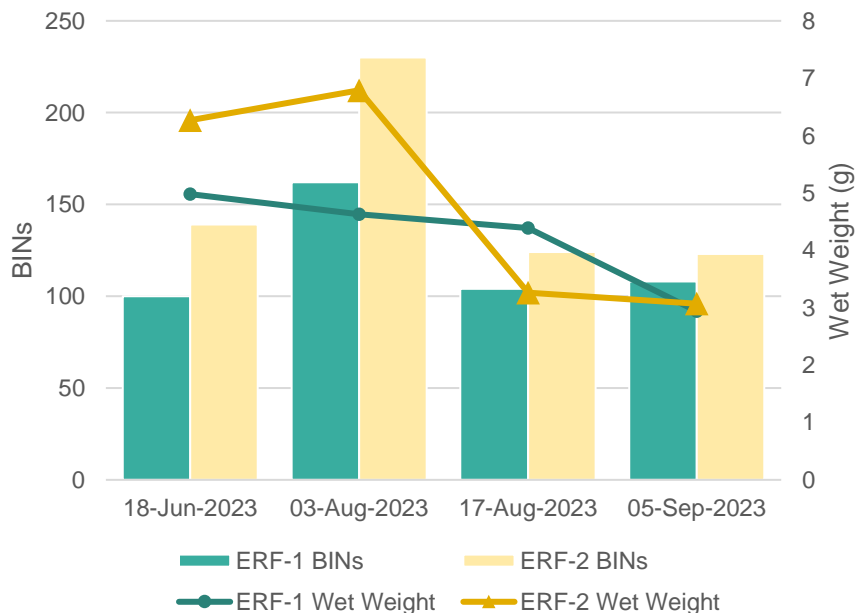


Figure 2. Species diversity (measured by BINs) and insect biomass (measured by wet weight of the sample) captured at the two traps over the 2023 collecting period.