

# TERRESTRIAL ARTHROPOD MONITORING PROGRAM

## METABARCODING REPORT – GOLDSTREAM, NATURE HOUSE (GSN)

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

### Results

A total of 1,137 different BINs (Barcode Index Numbers; a proxy for species) were encountered at the Nature House site in Goldstream Provincial Park. GSN-1 captured more BINs than GSN-2 and there was an overlap of 331 BINs between the traps (Figure 1). Species diversity and insect abundance varied throughout the collecting period; the sample that contained the most BINs was the largest collected, and the peaks of species diversity were in mid-June for both traps (Figure 2). In total, 356 species could be named, representing 33% of the BINs. All but two BINs were assigned at least to family and 69% were assigned to a genus. Specimens collected from this park represent 192 different families and 494 genera. A taxonomic reference for all BINs captured and a full species inventory are provided in Supplementary File Tab 5 and 6, respectively.

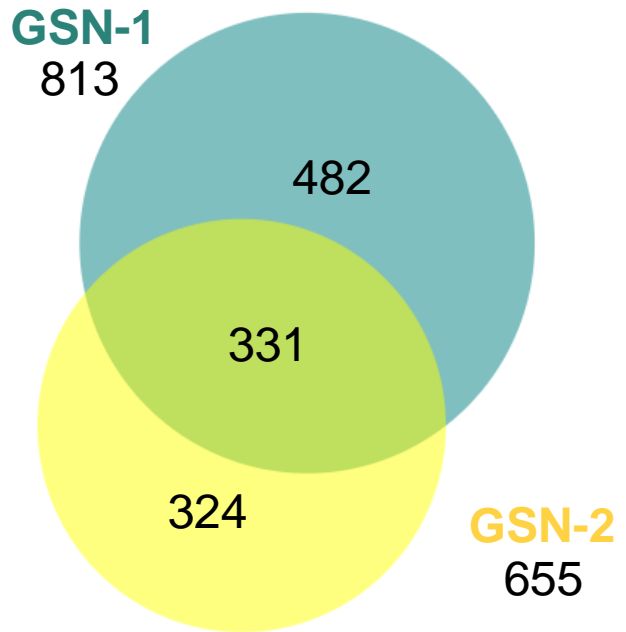


Figure 1. Venn diagram showing the species overlap between the two traps.

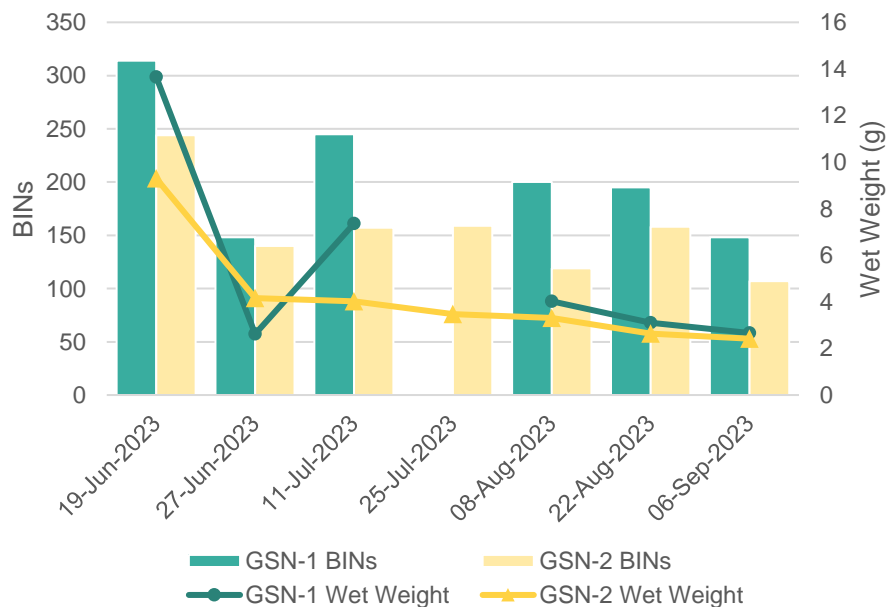


Figure 2. Species diversity (measured by BINs) and insect biomass (measured by wet weight of the sample) captured at the two traps over the 2023 collecting period.