

TERRESTRIAL ARTHROPOD MONITORING PROGRAM METABARCODING REPORT – NORTH CHANNEL ISLANDS PROVINCIAL PARK

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Results

A total of 3,441 different BINs (Barcode Index Numbers; a proxy for species) were encountered at North Channel Islands Provincial Park. Over half the BINs captured were flies (Diptera), followed by bees, ants and wasps (Hymenoptera), moths and butterflies (Lepidoptera), and beetles (Coleoptera; Figure 1).

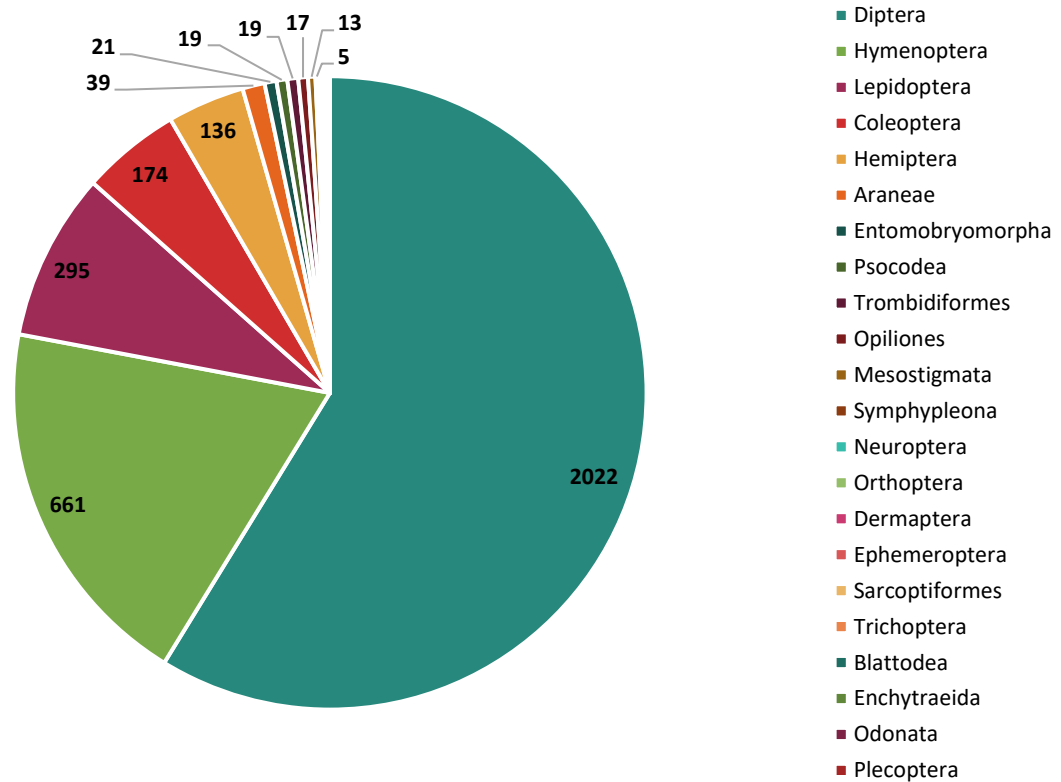


Figure 1. Taxonomic breakdown of BINs captured in the Malaise trap at North Channel Islands Provincial Park.

Species diversity and insect abundance varied throughout the collecting period; the period that captured the most BINs was not necessarily the largest sample collected (Figure 2). The peak of species diversity was obtained at the beginning of August.

In total, 1,002 species were named, representing 31% of the BINs. All but four BINs were assigned at least to family and 75% of the BINs were assigned to a genus. Specimens collected from this site represent 250 different families and 1,107 genera. A complete species list is attached separately.

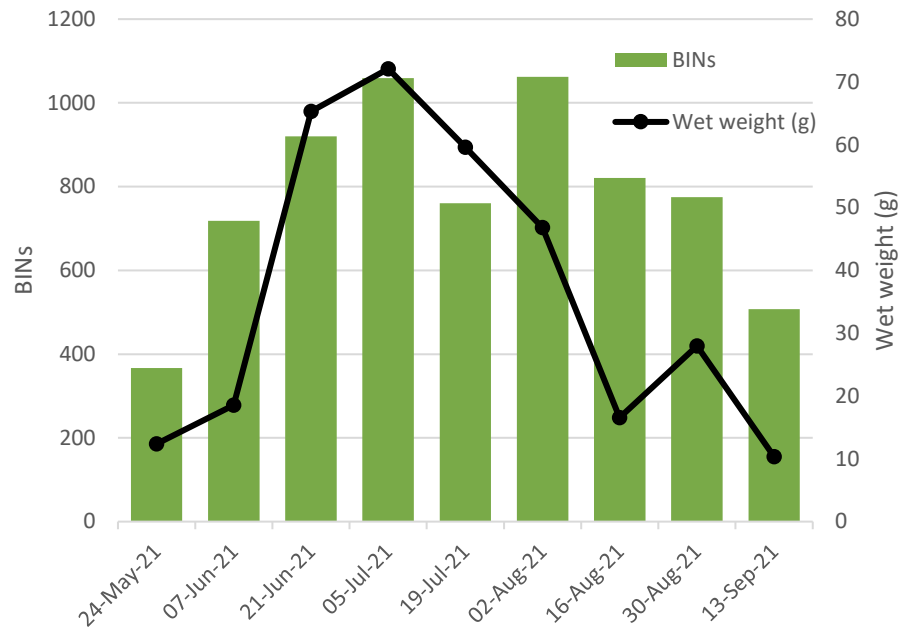


Figure 2. Species diversity (measured by BINs) and approximate insect abundance (measured by wet weight of sample) captured at the trap over the 2021 collecting period.