

# What's Under your Feet? Analysis of Leaf Litter Invertebrate Diversity Using an Updated On-line Key

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Invertebrates are ubiquitous inhabitants of leaf litter in forests. Because of their abundance and diversity, they are an excellent resource for answering open-ended questions about how different attributes in our environment impact animal diversity. However, visual identification of invertebrates to standard taxonomic species requires considerable knowledge of morphological traits that only entomological experts possess. Mastery of these taxonomic characters associated with each species is not practical for undergraduate courses. We present an updated electronic key that identifies invertebrate specimens to morphospecies, which are classified from other related organisms by visual appearance. Participants in this workshop examined samples of invertebrates collected from leaf litter using dissecting microscopes and then use pictures and answer basic questions in the electronic key to identify the specimens to morphospecies. The online key presented is an updated version published by Murray et al. 2002 in ABLE. The key can be assessed and used on smartphones and computers via the link: <https://sites.google.com/hope.edu/leafitterinvertebrates/home>.

**Keywords:** invertebrate diversity, leaf litter, on-line invertebrate key

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