



Abundance data for invertebrate assemblages from intertidal mussel beds along the Atlantic Canadian coast

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Citation: Scrosati, R. A., L. P. Arribas, and L. Donnarumma. 2020. Abundance data for invertebrate assemblages from intertidal mussel beds along the Atlantic Canadian coast. *Ecology* 101(10):e03137. 10.1002/ecy.3137

Abstract. This data set describes the abundance of 50 invertebrate taxa found in intertidal mussel beds along the Atlantic Canadian coast. This information resulted from a regional-scale study that investigated the effects of wave exposure on the richness and composition of invertebrate assemblages from intertidal mussel beds. Abundance data are provided for taxa representing the Annelida, Arthropoda, Bryozoa, Chordata, Cnidaria, Echinodermata, Mollusca, Nematoda, Nemertea, and Platyhelminthes. The data characterize mussel beds from wave-sheltered and wave-exposed locations spanning 315 km of the coast of Nova Scotia. Univariate and multivariate analyses revealed that the compositional structure of these invertebrate assemblages differed markedly depending on wave exposure. Overall, because of its taxonomic diversity, the inclusion of data for basal, intermediate, and top trophic levels, and the coverage of two extremes of environmental stress, this data set could be useful to test broader aspects of ecological theory. Areas of ecology that could advance using this data set are those concerning environmental stress models of community organization, abundance–occupancy relationships, species co-occurrence, species abundance distributions, dominance and rarity, spatial scales of population and community variation, and distribution of functional and phylogenetic diversity. Use of this data set for academic or educational purposes is allowed as long as the data source is properly cited. When used for academic or educational purposes, this data set should be cited using the title of this Data Paper, the names of the authors, the year of publication, and the corresponding volume and article numbers.

Key words: *Atlantic coast; ecosystem engineer; foundation species; intertidal; mussel; Nova Scotia; wave exposure.*

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