

Influence of human disturbance on marine invertebrate biodiversity in Acadia National Park's rocky intertidal community

Within rocky intertidal communities, trampling from human visitation may be an important ecological stressor influencing community biodiversity. Little information is known regarding the biodiversity of macroinvertebrates within the rocky intertidal zone of Acadia National Park (ANP). Three paired sample areas were surveyed for marine invertebrate diversity along the western side of ANP including locations near Bass Harbor Head, Ship Head Harbor and Wonderland located in Southwest Harbor. All macroinvertebrate individuals were identified or noted as unidentified and counted. A total of 26 species and 37,230 individuals were recorded within the quadrats sampled in the study. No significant difference in marine invertebrate diversity was found between high and low visitation or across paired sites although patterns could be identified. Consequently, further studies need to be conducted to effectively determine the severity of human disturbance on the biodiversity of ANPs macroinvertebrates.

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