

Soil redox potential as a predictor of benthos species composition in an intertidal zone

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Abstract

Soil redox potential measurements can be done without much physical effort in a short amount of time. Measuring benthos species diversity involves more effort and time. This study examines the use of soil redox potential to predict the abundance of benthos species. The measurements were taken at an intertidal zone at Schiermonnikoog along a transect from salt marsh to mudflat. Benthos species and redox values were obtained at two depths, so that the effect of inundation could be estimated. It was found that redox potential alone is a better predictor of species composition than inundation time, allowing these findings to be extended to other ecosystems.