A COMPARISON OF THE MACRO-INVERTEBRATE FAUNA OF MUD FLATS VEGETATED BY *SPARTINA ANGLICA* AND *SALICORNIA* SPP. AT NORTH BULL ISLAND, DUBLIN BAY

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ABSTRACT

A *Salicornia* flat, with substantial numbers of *S. anglica* clumps scattered across it, is present at North Bull Island. This study compared the macro-invertebrate fauna and some physical parameters of sediments beneath clumps of *S. anglica* and the surrounding *Salicornia* spp.

The study found that overall, the species assemblage beneath *S. anglica* and *Salicornia* spp was quite similar. The fauna beneath *S. anglica* usually had a greater mean abundance of individuals and a greater mean diversity of species except in a number of cases where samples from *Salicornia* had greater mean abundances and diversity, though there were few statistically significant differences. The sediment beneath *S. anglica* clumps had a much greater root density than beneath *Salicornia*, though the amount of organic detritus collected from the samples of both *S. anglica* and *Salicornia* were quite similar. There were few differences in water content and organic matter content of the sediment (%LOI) between *S. anglica* and *Salicornia*, though bulk density was significantly greater in the sediment samples from *Salicornia*.

It was concluded that even though *S. anglica* forms tussocks with dense stem densities and much greater biomass (reflected by the root density) relative to *Salicornia* spp., it has not substantially affected the macro-invertebrate fauna of the sediments in this area.