

The impact of the invasive gastropod *Crepidula fornicata* on the community composition of the macrozoobenthos in Southampton Water was investigated. Using a Van Veen grab, four sites in Southampton Water were sampled. Five replicates per site were collected for macrofauna analysis, plus one sample per site was collected to analyse sediment grain size and organic matter content. Using software PRIMER the data were analysed to investigate differences within and between groups of samples. The aim was to determine whether *C. fornicata* impacts on the macrozoobenthic community composition in the study area. Fewer living *C. fornicata* were found than anticipated, but shells of the species were present in each sample. No significant difference in infauna was observed between samples with living *C. fornicata* and samples containing no living *C. fornicata*. Samples containing a lot of *C. fornicata* shells did have a higher number of epifaunal species than samples with fewer *Crepidula* shells, and were characterised by the high abundance of *Dendrodoa grossularia*. The fauna at Station 1, located at the mouth of Southampton Water, was distinct from the other three sites: the abundance of *C. fornicata* and the number of other species were both the lowest of all four sites. This might be due to bigger sediment grain size and the presence of the seaweed *Saccharina latissima*. Station 4 in the East Solent had the highest abundance of *C. fornicata* and the highest number of species, but no statistical correlation between species diversity or richness and *C. fornicata* abundance could be established. The results suggest that *C. fornicata* alters the habitat by providing shells for epifauna to settle on. However, as *C. fornicata* shells were present in each of the analysed samples, no genuine