# FORAMINIFERA OF THE FAL ESTUARY (CORNWALL, UK), INCLUDING TAXA ASSOCIATED WITH BEDS OF MAERL (RHODOPHYTE ALGAE) 

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The Fal Estuary (Cornwall, UK) contains a nationally important accumulation of calcareous red seaweeds, commonly referred to as maerl. Maerl beds are often associated with high benthic diversity but there has been little research undertaken on the associated microfaunas. This investigation has studied the foraminifera that are found within samples of maerl and the adjacent sediments. Some of our samples were preserved and then stained with rose Bengal, in order to ascertain the 'living' (stained) assemblage of foraminifera associated with the maerl. Only $<1 \%$ of the taxa associated with the maerl appeared to be living at the time of collection in October 2012 and November 2016, and the assemblage of foraminifera was a mixture of taxa that are characteristic of open marine environments and those characteristic of estuarine and sea grass communities. The presence of pelagic ostracods and centric diatoms supports the notion that at least some of the high foraminiferal diversity reported from the maerl assemblages is the result of transported material trapped within the intricate maerl habitat. Foraminifera from other areas of the Fal Estuary are typical of saltmarsh, estuarine and near-shore marine assemblages reported elsewhere in South-West England. The dominant taxa within the samples containing maerl are Elphidium crispum (Linnaeus), Cibicides lobatulus (Walker \& Jacob), Quinqueloculina spp and Asterigerinata mamilla (Williamson).

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