

**RECENT BENTHIC FORAMINIFERA IN ADMIRALTY BAY (KING GEORGE ISLAND, ANTARCTICA)**

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The goal of this study was determine the biodiversity of recent foraminifera at Admiralty Bay, located in King George Island (South Shetland Islands, Antarctica), a transitional environment between the sub-Antarctica and Antarctica region. The material was sampled during three austral summers (2002, 2003 and 2004). It was selected 19 stations all over the bay with a maximum depth of 150 m. For grain size and foraminifera analyses the bottom sediment was sampled with a bottom grab Van Veen. For the foraminifera analyses a small portion (25 cm<sup>3</sup>) was stained with Rose Bengal (1g/l) and formalin 4% and washed with water over a sequence of three sieves (250; 125 and 63 µm). All the specimens were picked up and identified. The 2002 material showed an average abundance of 297 foraminifers for sample, with 106 live specimens (forms stained with Rose Bengal), the 2003 material presented a lesser average abundance, with 167 foraminifers for sample, with 77 live specimens and the 2004 material showed the highest average abundance, with 382 foraminifers for sample, with 179 live specimens. They represent 51 taxa at the species level and the most abundant calcareous species were: *Bolivina pseudopunctata*, *Cassidulinoides parkerianus* and *Globocassidulina bora*. The most abundant agglutinated species were: *Adercotryma glomerata*, *Miliammina areanacea*, *Portotrochammina antarctica*, *Psammosphaera fusca*, *Pseudobolivina antarctica*, *Reophax subfusimormis* and *Spiroplectammina biformis*. The temperatures in 2002 and 2004 were higher than those registered in 2003 and it caused some changes at the environment parameters that influenced directly the an higher abundance of the foraminiferal assemblages. In 2003, the sample period with lower temperatures and abundance, the species *Cassidulinoides parkerianus*, *Globocassidulina bora*, *Miliammina areanacea*, *Psammosphaera fusca*, *Reophax subfusimormis* and *Spiroplectammina biformis* were favored by the increase of silt concentrations in the bottom sediment even tough. The analyses of the foraminiferal assemblages collected during three austral summer showed that they were affected by annual temperature variations and by its consequences over other environment parameters. This preliminary analysis revealed how important recent foraminifers are as potential as modern climatic biomarkers, indicating new possibilities to monitor world environmental changes.