

## **THE FIRST SYSTEMATIC AND PALEOECOLOGICAL OBSERVATIONS ON CRETACEOUS OSTRACODS OF ANTARCTICA\***

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Although most of the James Ross Basin, Antarctic Peninsula, Antarctica is studied and described in detail and although its Upper Cretaceous strata are judged to be important reference sections for the Southern Hemisphere there are surprisingly few published works that contain information about Cretaceous ostracods of Antarctica, which contain no systematic descriptions at all. During the 1994/95 British Antarctic Survey field expedition to the Admiralty Sound area, bulk samples were collected (by A. L.) from Hamilton Point, James Ross Island. Some of these samples were selected to study ostracods. It turned out that the strata at Hamilton Point contain an association of ostracods that shows a low diversity and low abundance. The association consists of 9 genera and 11 species. Similar characteristics were observed by A. Luther for benthic macrofossils of this area. He suggested that the benthic fauna was influenced by short-term dysaerobic conditions caused by either episodic eutrophic conditions or storm-influenced, short-term oxygenation of dysaerobic stagnant bottom water. It is likely that these conditions also influenced the distribution of benthic ostracods. The present study is an initial attempt to describe and classify ostracods from a short stratigraphical part of the James Ross Basin. It shows that there is a great need for further investigations (in older and younger strata) to obtain more detailed data about the biostratigraphic and palaeoecologic significance of this fossil group within the James Ross Basin. \*This is a contribution to IGCP Project 381 South Atlantic Mesozoic Correlations