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POLYCHAETE AND AMPHIPOD DIVERSITY IN THE MARITIME ANTARCTIC FJORD - THE ADMIRALTY BAY CASE STUDY

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Due to the high scientific activity of Belgium, Brazil, Germany, Poland and USA in the Admiralty Bay area (King George Island, South Shetland Islands) this Antarctic fjord has been designated by SCAR as an *Antarctic Specially Managed Area* (*ASMA*) (Antarctic Treaty Consultative Meeting XX, Utrecht 1996).

The great interest in Antarctic marine diversity is reflected by such initiatives, like: Census of Antarctic Marine Life (CAML), Evolution and Biodiversity in the Antarctic: the Response of Life to Change (EBA), SCAR Marine Biodiversity Information Network (SCAR-MarBIN) and Admiralty Bay Benthos Diversity Data Base (ABBED).

The intensive research conducted by Polish team of the Department of Polar Biology and Oceanobiology (University of Lodz) and Belgian Laboratory of Carcinology (Royal Belgian Institute of Natural Sciences) revealed the high diversity and major role of two animal groups: polychaetes and amphipod crustaceans, in the communities of the Admiralty Bay.

Over 135 polychaete species and about 120 species of amphipod crustaceans have been hitherto recorded in the benthic and pelagic realms of Admiralty Bay, but taking into account some not recognized taxa in the collected materials higher number of species is expected. High species richness and diversity of both polychaetes and amphipods make them useful tool for community analysis. Our presentation is also an attempt to add some data on Admiralty Bay bottom communities classification. Submerged stony beach, phytal zone, shallow sublittoral sandy botoom, muddy bottom of middle sublittoral, deepest parts of the bay, flat bottom in the inner parts of fjord in the vicinity of glaciers, rocky botoom as well as holdfasts of large brown algae, mostly *Phyllogigas grandifolius*, are habitats populated by different assemblages of polychaetes and amphipods, with characteristic dominant species.