

PREFACE

The first Poles to study Antarctica were HENRYK ARCTOWSKI and ANTONI BOLESŁAW DOBROWOLSKI, who took part in ADRIAN de GERLACHE de GOMERY's Belgian Expedition to West Antarctica in the years 1897—1899 on the ship *S. Y. Belgica*. They conducted geological, glaciological, meteorological and oceanographical studies (ARCTOWSKI 1901*a, b*; DOBROWOLSKI 1914, 1923). ARCTOWSKI also made interesting collections of Jurassic volcanic and Tertiary intrusive rocks from the Danco Coast (Antarctic Peninsula) see ADIE (1964), EBERT (1980).

In 1977 a permanent Polish Antarctic Station of the Polish Academy of Sciences was founded at Admiralty Bay, King George Island (fig. 1), see also RAKUSA-SUSZCZEWSKI (1979). The station, named in honour of HENRYK ARCTOWSKI, provided facilities for geological-paleontological studies on the South Shetland Islands archipelago and the Antarctic Peninsula. During four successive Polish Antarctic Expeditions of the Polish Academy of Sciences to the Arctowski Station, which were organized in the years 1977—1981 by the Institute of Ecology of the Academy, groups of geoscientists led by Professor KRZYSZTOF BIRKENMAJER carried out geological mapping and studies in paleontology, stratigraphy, sedimentology, mineralogy, tectonics, Quaternary geology and mineral resources (see BIRKENMAJER 1983 for review). The studies were conducted within Interdisciplinary Projects MR. II. 16 (in the years 1976—1980) and MR. I. 29 (in the years 1981—1985).

Paleontologists of the Institute of Paleobiology of the Polish Academy of Sciences participated in these studies by carrying out field work on King George Island and the Antarctic Peninsula (Hope Bay and Arctowski Peninsula) during austral summers 1978—1979, 1980—1981, and 1985—1986 (see BŁASZYK and GAŹDZICKI 1980, GAŹDZICKI and WRONA 1982*a, b*; 1986). Field work was carried out mainly on King George Island at Low Head — Lions Rump and the Melville Peninsula, along the Bransfield Strait (fig. 1), where Tertiary sequences of glacio-marine sediments with rich and predominantly invertebrate fauna are exposed (BIRKENMAJER 1980, 1982; GAŹDZICKI and WRONA 1982*a, b*; BIRKENMAJER, GAŹDZICKI and WRONA 1983). The studies also covered isolated, known or newly discovered localities of fossil flora and fauna in various parts of King George Island: Fildes Peninsula (Leaf Hill), Potter Cove, Błaszyk Moraine, Cytadela, Point Hennequin, Mount Wawel, Vauréal Peak, Magda Nunatak, Conglomerate Nunatak, Three Sisters Point, Wrona Buttress and Jenny Buttress (BIRKENMAJER 1983, SZANIAWSKI, WRONA and GAŹDZICKI 1983).

Fossils (mostly of plants and invertebrates), collected in the course of the Polish Expeditions have been studied by Polish and foreign paleontologists. The studies are conducted mostly at the Institute of Paleobiology in Warsaw, except for those of fossil plants, which are carried out at the Laboratory of Paleobotany, Institute of Botany of the Polish Academy of Sciences in Cracow. The results of these studies were presented in 24 papers (see the References).

Results of current studies on the Antarctic collections will be published in a new series

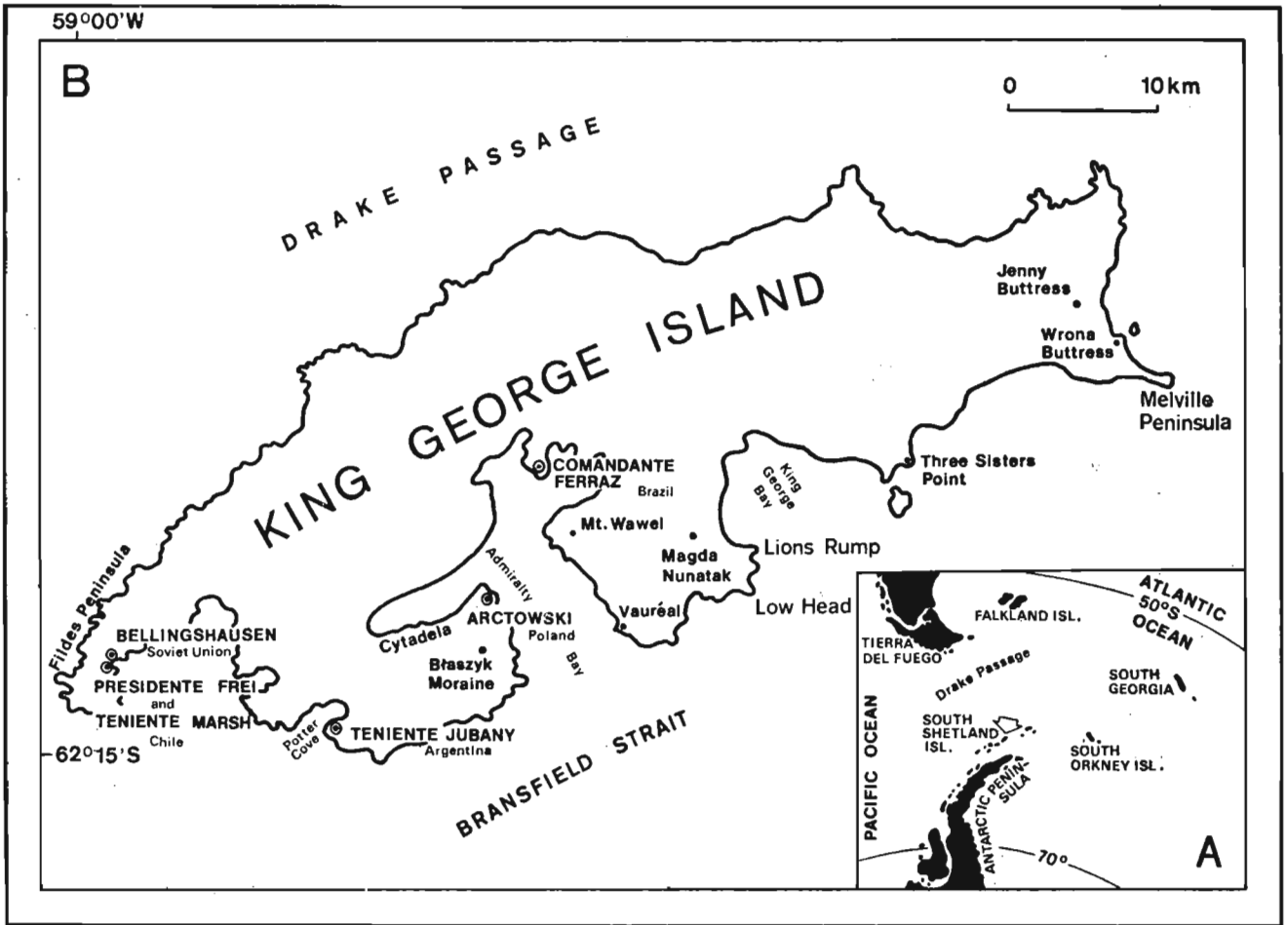


Fig. 1

Localities of the paleontological investigations in King George Island during the Polish Antarctic Expeditions in austral summers 1978–1979, 1980–1981, 1985–1986 (B). Inset shows position of King George Island in South Shetland Islands archipelago (A).

of *Palaeontologia Polonica* — „*Palaeontological Results of the Polish Antarctic Expeditions*” of which this book is the first volume. It comprises nine papers on the invertebrate paleontology, biostratigraphy and facies of the Oligocene-Miocene glacio-marine strata of King George Island, as well as comments on the discovered Tertiary glacial events in West Antarctica.

The studies presented in this volume were carried out within the Interdisciplinary Project of the Polish Academy of Sciences MR. I. 29 — „*Studies of marine and land polar ecosystems as the basis for environment protection and rational exploitation of natural resources*”.

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