

sympo = 2473637

INVERTEBRATES FROM THE LOW HEAD MEMBER, POLONEZ COVE FORMATION (EARLY TERTIARY) AT CAPE VAUREAL, KING GEORGE ISLAND, ANTARCTICA *

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Keywords: Invertebrates; Taxonomy; Tertiary; King George Island; Antarctica

Rocks of the Low Head Member, Polonez Cove Formation at Cape Vaureal, King George Island, contains marine macro- and microfossil invertebrates, including nannoplankton, diatoms, foraminifers, polychaetes, worms, bryozoans, brachiopods, gastropods, ostracods and echinoderms (Gazdzicki, 2003), described for the type-area of this member at Low Head (Figure 1). At Vauréal Peak (Figure 1) the Low Head Member rests on diamictites of the Krakowiak Member of the Polonez Cove Formation, being overlain by volcanic rocks of the Boy Point Formation. The succession is cut by intrusive rocks of the Cape Syrezol Group. Available K-Ar and Sr-isotope dating from the type-area indicate a Lower Oligocene age for the Low Head Member (Birkenmajer and Gazdzicki, 1986; Dingle *et al.*, 1997).

We present here additional paleontological data for the unit on the basis of a preliminary study of new specimens of invertebrates collected in the summer of 2004. According to Perinotto *et al.* (this volume), the Polonez Cove strata corresponds to a glacio-marine deglacial sequence including polymictic diamictites at the base (Krakowiak Member) and interbedded sandstone and diamictites toward the top (Low Head Member). This work represents the first taxonomic study of Tertiary invertebrates from the Cape Vauréal area. Specimens identified include three bryozoan species of the Order Cyclostomata; one terebratulid brachiopod (*Paraladingia?* sp.); one indeterminate scaphopod, four bivalve species of the orders Arcoida [*Limopsis?* (*Pectunculina*) sp.], Pectinoida [*Chlamys?* (*Chlamys*) sp.] and two *incertae sedis* species. Some of these taxa are known from Tertiary strata in Western Antarctica.

Additional taxonomic study and Sr isotope dating of the fauna is under way as a contribution to the understanding of its correlation and affinities with other southern Pacific Tertiary faunas. The paleontological data may bear also on the interpretation of the environment of deposition and age of the glacial-marine rocks of the Low Head Formation.

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