

Palynology of the James Ross Island Area, Antarctic Peninsula

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Book Reviews

Palynology of the James Ross Island Area, Antarctic Peninsula

Edited by A.M. Duane, D. Pirrie and J.B. Riding

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Blackwell Scientific Publications Ltd. Oxford, England

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When one is beginning research in paleontology one is told, firstly, that it is desirable to embody one's research results in large papers — small ones being of much less value — and secondly that, to establish priority, one must publish quickly. Experience, however, soon shows the flaws in such advice. Small papers tend to be published relatively quickly, whereas large papers take endless time, causing priority to be forfeited. (The fact that the date of receipt of a paper is usually indicated by the editor is no consolation at all; priority of publication, not of submission, is what counts). Consequently, we paleontologists soon become convinced of the practicality of writing short papers on limited themes, not big ones on larger themes. When, every so often, we succumb to the temptation to write a large paper, usually we have cause to regret it. (One of my own large papers was eight years in press; another has not yet appeared, after four years of impatient waiting).

A compromise solution is for a group of specialists to gang together and produce a special journal issue devoted to papers on some common theme. (Mysteriously, such special multi-author issues tend to gain much faster action from journal editors than do papers by a single

author that would occupy a whole journal part). Although each contribution is small, the whole is impressive.

In the present instance, the theme is a tight one: all papers relate to the palynology of Jurassic to Paleogene localities in the James Ross Basin, on the northeast side of the Antarctic Peninsula. The time-frame for receipt of papers was also tight, all being submitted between August 1991 and February 1992. Publication was reasonably speedy; the Special Issue of *Antarctic Science* appeared in September 1992, so that all papers were published within seven to twelve months of submission. Physicists or biologists might condemn that as being an over-long delay; for us less fortunate geologists, anything less than two years has to be considered quick.

Paradoxically for a Special Issue dealing with fossils of such minute size, the front cover depicts, in colour, the tail of a whale. (Yes, perhaps whales do rely ultimately on plankton for their food, but the connection is remote.) A black and white sketch of a dinoflagellate, tucked into the lower right corner of the cover, seems to have been an embarrassed afterthought.

In the first paper, the three editors give a coherent, if rather bloodless — multi-authored papers tend to be bloodless! — stratigraphical and palynological overview of the James Ross Basin. Their large-scale map shows James Ross Island and adjacent smaller islands quite well; the inset on smaller scale, showing the whole Antarctic Peninsula, confusingly outlines not the map area, but that of the Larsen Basin. This procedure remains surprising even when, upon reading the text, a definition of that larger basin is discovered, since the inset is rendered irrelevant to the understanding of the larger map. The stratigraphical section (figure 2) usefully indicates the relative positions of the sequences of palynological assemblages examined in the eight sub-

sequent papers, and indicates also the uncertainties in stage correlation.

The earliest assemblages, described by Michael Snape, are Jurassic and considered to be mid-Tithonian in age; they were obtained from an allochthonous block on northwest James Ross Island. Five subsequent papers treat Cretaceous assemblages of progressively younger date, from Aptian to Late Campanian, from outcrops on James Ross and nearby Humps Island. The last paper, by Cocozza and Clarke, reports an assemblage of Early to Middle Eocene date from northern Seymour Island. All eight papers feature clear maps and sections, while the photographs are of good to excellent quality. The identifications, insofar as I could check them, appear generally either accurate or arguable.

Attention is concentrated on dinoflagellates, pollen and spores. Other microfossils are treated only perfunctorily and inexactly, the name *Micrhystridium* being twice misspelled (p. 323, 361) and the chlorophycean algal name *Palambages* once (p. 353), while the superfluous generic name *Pterospermella*, a conceptual junior synonym of *Pterospermopsis*, is thrice undesirably used (p. 292, 353, 361). The listing of "Dinocyst N Gen. X" (p. 353) as an acritarch on uncertain subgroup position deserves, but does not receive, explanation.

Setting aside these minor carpings, this is a work of high quality, the most important yet produced on the palynology of the Antarctic region. Through the fresh knowledge it provides of the dinoflagellates, it is also a significant contribution to our comprehension of marine microfloral provinces and oceanic circulation patterns during Late Mesozoic and Early Cenozoic times. Such useful bringings-together of data merit both praise and emulation.