Editorial

Whither Antarctic science?

There was a time when science in Antarctica was king. The frozen continent was still the big unknown and almost any information, a measurement, an observation, a collection of samples was seen as new, exciting and accepted as a potentially valuable contribution to scientific knowledge. Words like 'exploration' and 'survey' could be uttered without shame in polite company and even in the presence of assessors. We all knew that national presences in Antarctica were predicated by political motives, but all Antarctic programmes were nevertheless promoted on the basis of their contribution to the scientific exploration of our planet. And so it has continued, until now.

Attitudes are changing - fast! Despite the fact that Antarctica is still one of the least explored parts of our planet, and despite the fact that it is still one of the most poorly mapped areas of the World, the last premise on which anyone should try to promote a scientific investigation is 'survey'. Already we have come to accept that scientific endeavour has to be promoted on the basis of objectives and predicted achievements, global relevance, and relevance to quality of life (whatever that means). Indeed, cynics will tell you that one is more likely to get funded if one already knows the answer to what is to be investigated, so that not only is the goal know, but achievement is guaranteed. Yet, one of the assuredly most productive programmes to fund would be the detailed survey of a given region - say a multi-year programme of modern geological survey, sweeping systematically along a chain of mountains. Such an investigation, besides producing the by-product of a much-needed up-to-date map of the region, would turn up all manner of remarkable finds, some of which would have far reaching consequences in the world of geological science. The problem is than no one can predict what they would be, and so no one could obtain funding to do it. And I am sure the same analogies can be drawn for all other areas of science. No one set out to discover the law of gravity. No one set out to discover the theory of plate tectonics. No one set out to discover the ozone hole. These, and thousands of other really important scientific discoveries, were accidents; they were the results of the right people being in possession of the right data or observations at the right time, and being smart enough to draw the right conclusions from them.

Today, 'exploration' in Antarctica is all too often nothing more than another personal proving trip to the pole. We are even beginning to see such adventures officially supported by national programmes. And the only 'survey' that seems acceptable is that done from a satellite.

Just where is all this going to lead? One must surely wonder, under the present ethos of funding science on the basis of predicted scientific achievements, rather than seeking to discover what is there, whether the next one hundred years will be as scientifically productive as the last hundred. More and more, the scientific ideal in Antarctica is being eclipsed by concerns over its cost, by increasing tourism in all its guises, and the preservation of the Antarctic environment as an end in itself. We are also seeing national operators coming under increasing pressure to seek sponsorship or business links to pay their way, scientists are unfortunately not very good at doing this. Antarctic scientists would do well to look ahead, consider their role and think how they are going to promote and justify their science in, say, five or ten years time.

M.R.A THOMSON BRITISH ANTARCTIC SURVEY, CAMBRIDGE