

Guest Editorial

Opening the Doors Between Science and Policy

Arguably, governments invest in scientific research in Antarctica for two fundamental reasons. Firstly, science provides the glue for international political engagement in the region. The Antarctic Treaty System is founded upon the principle and practice of international cooperation on scientific research. Secondly, Antarctica provides an invaluable platform for understanding processes of global relevance. But there is a third aspect to Antarctic research that has arguably received less focus. It is fundamentally important to meeting our stewardship responsibilities that we adequately develop our knowledge base to underpin robust management of Antarctica and of human activities occurring there. This is essential to allow the first two reasons to continue to be pursued. Any loss or reduction in the science value of Antarctica and the Southern Ocean will have both research and political consequences.

Yet evidence-based management of the region faces several challenges. National Antarctic research strategies generally focus on the science of global change. Research to support management rarely features as a deliberate target; although some countries, with Australia as a prime example, have explicitly directed some resources to research needed to support management.

The rapidly changing nature of Antarctica's climate and biological systems demands policy and management responses that are both timely and effective. Historically, the Antarctic Treaty Parties have addressed major challenges before they became political and divisive, often on the basis of advice from SCAR. However, those attempting to develop and implement effective management actions now are increasingly challenged by the pace of change in physical and biological systems and in the growth of human activity in the region.

An essential element of the solution to this challenge lies in finding innovative means of enhancing cooperation between the research and policy communities.

Policy makers need routinely to review and make known to the science community their knowledge needs as well as supporting calls for research funding to address gaps in knowledge, at both the international and national levels. In turn the science community needs to support informed management of the region by communicating its knowledge and identifying policy-makers as a primary target audience. But publishing in peer-reviewed journals simply does not provide an appropriate communication channel to reach the policy makers. New communication approaches need to be found to ensure science is readily available to a wider audience.

This thinking lies behind the Antarctic Environments Portal (www.environments.aq) that was launched at the recent Antarctic Treaty Consultative Meeting in Bulgaria in June 2015. The Portal aims to support SCAR's important role of linking science and policy in a fast changing world where topicality, synthesis accuracy, accessibility, transparency, and neutrality are the underlying elements of communicating the science.

Through a rigorous process of international drafting together with a science and policy review process, the Portal aims to put the best available research knowledge at the fingertips of policy makers on issues that are of direct policy concern.

But tools such as the Portal are only effective to the extent that they are used. The science community must increasingly regard the institutions of the Antarctic Treaty System as a primary audience for its knowledge and insights. Research programmes need to be developed and funded to address contemporary management challenges. And policy makers need to use the evidence that is presented to them as a basis for bold and timely decisions if they are to maintain the value of Antarctica as a natural reserve devoted to peace and science.

Collectively the Antarctic community needs to ensure that ignorance is not available as an excuse for failing to fulfil the high environmental standards that have been set for Antarctica.

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