

# WELCOME TO THE INTERNATIONAL POLAR YEAR



CHRIS WILSON

On 1 March this year the Australian Antarctic Division (AAD) joined others around the world to celebrate the start of the International Polar Year (IPY).

Co-sponsored by the International Council for Science and the World Meteorological Organisation, the IPY will bring together thousands of scientists from over 60 nations investigating a wide range of physical, biological and social research topics in the Arctic and Antarctic. Focussing attention on the poles in this way encourages international scientific collaboration and the pooling of resources, providing opportunities for research that may not otherwise be possible and increasing the prospect of significant scientific advances.

Expectations of the IPY are high given the success of its predecessor – the International Geophysical Year (IGY) of 1957-58. The IGY saw major advances in the physical sciences, established the modern *modus operandi* in Antarctica, and led to negotiation of the Antarctic Treaty.

The IGY in turn followed two successful IPYs; the first in 1882-83 and the second in 1932-33. However, unlike these earlier events, which focused on the Arctic, the IGY was the first major international scientific effort focused on Antarctica.

Fifty years on, the fourth IPY (which will run until March 2009) promises to provide, among other things, critical insights into the environmental and social impacts of climate change at both poles. Other goals of the IPY include a legacy of enhanced observation networks and facilities for future research; access to data and information about the polar regions; the inspiration of a new generation of polar scientists; and public engagement in polar science.

The Australian Antarctic Division is leading four IPY projects, co-leading three, and participating in more than 40 other international projects. This issue of the *Australian Antarctic Magazine* features some of these projects, including the first marine research voyage for the AAD-coordinated Census of Antarctic Marine Life. The voyage provided the first exciting glimpses of long-hidden seabed life under the recently collapsed Larsen ice shelf (page 6).

This issue also looks at other Australian-led IPY projects and considers the logistical support required to undertake Antarctic operations during the IPY; while our Antarctic Arts Fellows – Network Ten's *Totally Wild* team – describe their experiences filming stories that will engage young people in Antarctic science – a major goal of the IPY (page 21).

Moving on to other activities, this issue features some early results from a recent marine science voyage to the sub-Antarctic. The voyage focused on the topical issue of carbon uptake by the Southern Ocean, and the effect of increased acidification of the water on tiny marine plants and animals. Professor Russ Hopcroft, a visiting scientist from the University of Alaska, provides some stunning images of the life forms that may be threatened by these changes (page 28).

We also look at three projects funded through the new Australian Centre for Applied Marine Mammal Science, headquartered at the Australian Antarctic Division. Research through the Centre will fulfil part of our broader marine mammal research and advisory role within the new Department of the Environment and Water Resources (formerly the Department of the Environment and Heritage).

I hope you enjoy this issue of the magazine and look forward to telling you more about our exciting IPY research in the next one.

A.J. PRESS  
Director, AAD



Dr Ian Allison of the Australian Antarctic Division and the Antarctic Climate and Ecosystems Cooperative Research Centre, speaking at the IPY launch in Paris on 1 March.

©INTERNATIONAL POLAR FOUNDATION – PHILIPPE GOSSERIES