

The International Year of Planet Earth

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Introduction

The International Year of Planet Earth (IYPE) was proclaimed for 2008 by the General Assembly of the United Nations in its Plenary Session on the 22nd of December 2005. The aim of IYPE is to demonstrate new and exciting ways in which Earth sciences can help future generations meet the challenges involved in ensuring a safer and more prosperous world. It is multi-disciplinary but based in the geosciences, global in scope and has 10 science themes:

1. Groundwater – towards sustainable use
2. Hazards – minimising risk, maximising awareness
3. Earth and Health – building a safer environment
4. Climate – the ‘stone tape’
5. Resources – towards sustainable use
6. Megacities – going deeper, building safer
7. Deep Earth – from crust to core
8. Ocean – abyss of time
9. Soils – the living skin of the Earth
10. Earth and Life – origins of diversity

In seeking to raise the awareness of the contribution and role of the Earth sciences in society in the minds of politicians, decision-makers, the media and the general public, IYPE will have a major *Outreach Programme* including educational ventures at all levels. This will complement a *Science Programme* concentrating on ‘big issues’ of complex interaction within the Earth system, and its long-term sustainability.

IYPE was initiated by the International Union of Geological Sciences (IUGS) and UNESCO and is being implemented by the International Year of Planet Earth Corporation, the Board of which is chaired by Prof. Dr Eduardo de Mulder. It has been decided that the IYPE will in fact be a triennium – the formal UN International Year of Planet Earth (2008) will be preceded by a preparatory year (2007) and succeeded by a wrap up year (2009). IYPE-related activities are to be featured at the next two International Congresses – in Oslo (2008) and Brisbane (2012).

It appears likely at this stage that there will be only limited funding available through the IYPE for individual activities.

IYPE in Australia

Australia’s National Committee for Earth Sciences (NCES) will act as the national committee for the IYPE. This is chaired by Professor Andrew Gleadow, and Ian Lambert will be the committee member responsible for IYPE matters.

In 2002, NCES developed a National Strategy for the Geosciences. The rationale for this strategy was that Australia’s development, for the foreseeable future, will be based around its strengths in mineral and energy resources, agriculture and tourism.

This requires enhanced understanding of natural systems and anthropogenic impacts so as to minimise environmental and social impacts. The national strategy has resulted in an increasing emphasis on geoscience activities aimed at creating a healthier, safer and wealthier society, in alignment with IYPE priority research themes.

Initial activities

At this early stage, publicity for the IYPE is being focussed on getting the geoscience community informed and involved.

The first formal IYPE-related event in Australia was a 2006 Priestley Workshop: Looking Forward to 2008: The International Year of Planet Earth. This was organised by Australia's IYPE "senior advisers", Tom Beer (CSIRO) and Ian Lambert (Geoscience Australia) and was held at CSIRO's Aspendale laboratories in Melbourne on 19 October 2006. This inaugurated and promoted Australian involvement with the IYPE. It included an overview of IYPE by Ed de Mulder and a series of expert presentations highlighting the status of knowledge and research for IYPE themes.

This was followed on 20th October by an IYPE workshop at Geoscience Australia in Canberra, which was introduced by a presentation by Ed de Mulder on the IYPE ethos. At this workshop, there were presentations on, and discussion of, a wide range of potential Australian IYPE activities – particularly outreach – and the IYPE web pages hosted by Geoscience Australia (<http://www.ga.gov.au/about/event/IYPE.jsp>) were 'launched'.

IYPE Outreach

There is acceptance that IYPE offers significant opportunities for geoscience outreach and education activities in Australia and the region. A Geoscience Australia Outreach Program: ***Earth science for everyone***, is being planned to promote the importance of the earth sciences in helping us to understand the world we live in – by providing information and activities to the public at large about topics as diverse as the exploration for resources, management of the environment, and safety of critical infrastructure. Geoscience Australia's Science Week and Earth Science Week activities will provide forums to address IYPE themes.

At the World Science Technology and Education Conference in Perth 2007 a workshop for science teachers will showcase our latest science education resources, demonstrating practical, effective tools for use in the classroom that relate to themes highlighted by IYPE. This workshop will include linkages to key learning areas beyond current state science and technology syllabuses. It will be linked to Earth Science Week and National Science Week activities and will be a collaborative initiative with the Australian Science Teachers Association and Geoscience Australia. This Association is planning to incorporate IYPE themes into the 2008 edition of their resource book for science teachers, with assistance from number of organisations including Geoscience Australia.

The Geological Society of Australia and some other geoscience associations are planning IYPE relevant outreach activities and scientific sessions within their national and regional meetings.

Geoscience Australia will maintain an Australian IYPE web site. This will include planned IYPE outreach activities, or ideas for such activities, which can be communicated to Jeanette.Holland@ga.gov.au for inclusion on this website.

IYPE research

New IYPE-specific research will be limited in Australia because of the numerous relevant activities that are already in train. Australia is planning to participate in the international IYPE collaborative project to develop a 1:1million digital geological map of the world – this will draw on the 1:1m digital geological map being prepared for Australia, and our leadership in development of the GeoSciML standard. In addition, Geoscience Australia is compiling structural/tectonic, volcanoes, earthquakes and geology layers for the southeast Asia-South Pacific region. This draws together currently available information from the region and will provide background information for the new Indian Ocean tsunami early warning system. Discussions are planned in the region to scope the potential to improve the geological and related information with a view to assembling more comprehensive geohazards information.