

Official Launch of International Year of Planet Earth Friday January 18th Dublin Castle

Minister Eamon Ryan of the Department of Communications, Energy and Natural Resources will officially launch IYPE in Ireland on Friday January 18th in Dublin Castle at 5.30pm.

The official event will incorporate the ministerial launch of IYPE in Ireland, a 15 minute presentation about the key events, a Planet Earth Public Lecture, an IYPE exhibition and a music reception.

Attendees of the launch will be able to inspect a seventeen-stand exhibition on various aspects of IYPE and geoscience initiatives in Ireland, as well as an exhibition of a selection of the 2007 entries in GSI's annual "Du Noyer Landscape Photography Competition."

The launch will also incorporate the first "Planet Earth" public lecture to be delivered by Professor Aubrey Manning. Aubrey is Emeritus Professor of Natural History at the University of Edinburgh. His research interests cover animal behaviour, development and evolution and he has long been involved in environmental issues. A distinguished broadcaster, his television series have included *Seven Wonders of the Earth* and *Earth Story*.

His talk will illustrate how the earth sciences and biology can together help us to understand something of how our planet 'works.' The histories of life and the Earth have been intertwined for almost 4 billion years and Aubrey will demonstrate how life has not always been given an easy ride. There have been several periods when conditions across the globe have been very hostile and there have been mass extinctions. These are revealed by fossils in the rocks, but the causes of these events - almost certainly multiple causes - still leave us with some fascinating geological and biological questions to answer. Aubrey will explore these and will discuss the importance of IYPE in inspiring us to cherish our beautiful planet and learn not to take it for granted.

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UN proclaims 2008 'International Year of Planet Earth'

January 5, 2006

The United Nations General Assembly, meeting in New York, has proclaimed the year 2008 to be the United Nations International Year of Planet Earth. The Year's activities will span the three years 2007-2009.

The International Year of Planet Earth was approved (*Note 1*) by general acclamation of the General Assembly, and no vote was taken.

The Year's purpose, encapsulated in its strapline Earth sciences for society, is to:

- * Reduce risks for society caused by natural and human-induced hazards
- * Reduce health problems by improving understanding of the medical aspects of Earth science
- * Discover new natural resources and make them available in a sustainable manner
- * Build safer structures and expand urban areas, utilizing natural subsurface conditions
- * Determine the non-human factor in climatic change
- * Enhance understanding of the occurrence of natural resources so as to contribute to efforts to reduce political tension
- * Detect deep and poorly accessible groundwater resources
- * Improve understanding of the evolution of life
- * Increase interest in the Earth sciences in society at large
- * Encourage more young people to study Earth science in university

The Year aims to raise \$20 million from industry and governments and will spend half on co-funding research, and half on Outreach activities. It will be the biggest ever international effort to promote the Earth sciences.

Apart from researchers, who are expected to benefit under the Science Programme, the principal target groups for the Year's broader messages are:

- * Decision makers and politicians who need to be better informed about the how Earth scientific knowledge can be used for sustainable development
- * The voting public, which needs to know how Earth scientific knowledge can contribute to a better society
- * Fellow geoscientists, who are very knowledgeable about various aspects of the Earth but who need help in using their knowledge for the benefit of the world's population.

The research themes of the year, set out in 10 science prospectuses (*Note 2*) were chosen for their societal relevance, multidisciplinary and outreach potential. The Year has 12 Founding Partners (*Note 3*), 23 Associate Partners (*Note 4*), and is backed politically by 97 countries representing 87% of the world's population (*Note 5*). The Year was promoted politically at UNESCO and at the United Nations in New York by the People's Republic of Tanzania

The Year's Project Leader, former IUGS President Professor Eduardo FJ de Mulder, said:

"Around the shores of the Indian Ocean, some 230,000 people are dead because the world's governments have not yet grasped the need to use geoscientists' knowledge and understanding of the Earth more effectively.

"Yet that knowledge is readily available in the practical experience and publications of some half a million Earth scientists all over the world, a professional community that is ready and willing to contribute to a safer, healthier and wealthier society if called upon by politicians and decision makers.

"The International Year of Planet Earth (2007-2009) aims to contribute to the improvement of everyday life, especially in the less developed countries, by promoting the societal potential of the world's Earth scientists."

The International Year of Planet Earth has been in planning since 2001. The Year's Science Committee is chaired by Prof. Edward Derbyshire (Royal Holloway) and its Outreach Committee by Dr Ted Nield (Geological Society of London).

Notes

1. The International Year of Planet Earth project was initiated jointly by the International Union of Geological Sciences (IUGS) and the United Nations Educational Scientific and Cultural Organisation (UNESCO). The UN press release reads: *"By a draft on the International Year of Planet Earth, 2008, which the Committee approved without a vote on 11 November, the Assembly would declare 2008 the International Year of Planet Earth. It would also designate the United Nations Educational, Scientific and Cultural Organization (UNESCO) to organize activities to be undertaken during the Year, in collaboration with UNEP and other relevant United Nations bodies, the International Union of Geological Sciences and other Earth sciences societies and groups throughout the world. Also by that draft, the Assembly would encourage Member States, the United Nations system and other actors to use the Year to increase awareness of the importance of Earth sciences in achieving sustainable development and promoting local, national, regional and international action".*

2. The Year's research themes are: Groundwater: reservoir for a thirsty planet?; Hazards: minimizing risk, maximizing awareness; Earth and Health: building a safer environment; Climate change: the 'stone tape'; Resources: sustainable power for sustainable development; Megacities: going deeper, building safer; Deep Earth: from crust to core; Ocean: abyss of time; Soil: Earth's living skin; Earth and Life: origins of diversity. Each is described within an accessibly-written prospectus available on the Web site. In addition, Planet Earth in our Hands, states the rationale for the Year, and Outreach: bringing Earth sciences to everyone, describes how the Outreach programme will work.

3. The Project is backed by the following Founding Partners: International Union of Geodesy and Geophysics (IUGG); the International Geographical Union (IGU); the International Union of Soil Sciences (IUSS); the International Lithosphere Programme (ILP); the National Geological Survey of the Netherlands (TNO); The Geological Society of London (GSL); the International Soil Reference and

Information Centre (ISRIC); A consortium of the International Association of Engineering Geologists and the Environment (IAEG), the International Society of Rock Mechanics (ISRM) and the International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE); the International Union for Quaternary Research (INQUA); the American Geological Institute (AGI); the American Association of Petroleum Geologists (AAPG); the American Institute of Professional Geologists (AIPG).

4. The Year enjoys the support of 23 Associate Partners, including all major international geoscientific and other relevant organisations: ICSU International Council for Science; IOC Intergovernmental Oceanographic Commission of UNESCO; IPA International Permafrost Association; IAGOD International Association on the Genesis of Ore Deposits; SEG Society of Economic Geologists; SGA Society for Geology Applied to Mineral Deposits; IAH International Association of Hydrogeologists; IGCP International Geoscience Programme; EFG European Federation of Geoscientists; AARSE African Association of Remote Sensing of the Environment; SCA Science Council of Asia; ProGEO European Association for the Conservation of the Geological Heritage; SEPM Society for Sedimentary Geology; CCOP Coordinating Committee for Geoscience Programmes in East and Southeast Asia; GSAf Geological Society of Africa; UNU United Nations University; AGID Association of Geoscientists for International Development; UN/ISDR United Nations International Strategy for Disaster Reduction; NESF North-eastern Science Foundation (USA); AASG Association of American State Geologists; ISPRS International Society of Photogrammetry and Remote Sensing; GSA Geological Society of America; NACSN North American Committee for Stratigraphic Nomenclature.

5. As of 23 November 2005.

Planet Earth in our hands

<http://www.esfs.org/downloads/planetearth.pdf> (1.2 MB)

Groundwater - *towards sustainable use*

Nearly all the potentially drinkable water on the Earth exists as groundwater. New techniques of exploration and production, and improved understanding of the dynamics of natural water reservoirs, are helping Earth scientists find this most precious of all commodities.

<http://www.esfs.org/downloads/Groundwater.pdf> (3.3 MB)

Hazards - *minimising risk, maximising awareness*

The Earth can be a dangerous place, and is often made more dangerous by human intervention. Crucial to minimising the hazard potential from different geological threats facing people all over the world, is the accurate assessment and communication of risk.

<http://www.esfs.org/downloads/Hazards.pdf> (4 MB)

Earth & Health - *building a safer environment*

Everyone who lives in a polluted city appreciates that where you live affects your health. Much, if not most of the control over whether an environment is healthy or not lies beneath your feet in the environmental geochemistry of your habitat.

<http://www.esfs.org/downloads/EarthAndHealth.pdf> (2.2 MB)

Climate - *the 'stone tape'*

Understanding climate trends, so vital to our stewardship of Planet Earth, relies heavily upon the preserved record of sedimentary rocks of many types. By studying this precious natural record, using proxy indicators for different aspects of climate, Earth scientists are now understanding in increasing detail how the climate works and how it has behaved in the past. However, these records are rare and precious and must be conserved before development destroys them forever.

<http://www.esfs.org/downloads/ClimateChange.pdf> (1.8 MB)

Resource issues - *towards sustainable use*

Earth scientists have consistently confounded gloomy predictions about the exhaustion of resources, by improving their understanding of the Earth and of how potentially useful minerals accumulate. However, this does not absolve the world of responsibility to use these resources intelligently, or to find new, cleaner ways of liberating their energy.

http://www.esfs.org/downloads/Resources_2.pdf (5.7 MB - New edition)

Megacities - *going deeper, building safer*

Urban areas, often concentrated on narrow coastal strips, are running out of space and the price of land is sky-high. More and more, architects will wish to switch from building high to building deep. This is more expensive in the short term, but much more sustainable in the long term.

<http://www.esfs.org/downloads/Megacities.pdf> (4.8 MB)

Deep Earth - *from crust to core*

All of the Earth's long history and evolution right up to its current condition is really but scum on the surface of a vast, heat-driven engine. Consisting of a central nickel-iron core (an inner solid core and outer liquid core, generating most of the Earth's magnetic field) and the mantle, which though solid nevertheless convects and moves the planet's crustal plates, this motor is what makes our planet 'alive'.

<http://www.esfs.org/downloads/DeepEarth.pdf> (1.7 MB)

Ocean - *abyss of time*

The oceans, which began to be scientifically explored 200 years ago, hold the key to how the Earth works. Although our improving knowledge of the oceans has revolutionised our understanding of the planet as a whole, much more remains to be discovered not only in the use of oceans to the benefit of humankind, but also in preventing disruptions around the continental margins where so much of the human population is concentrated.

<http://www.esfs.org/downloads/Ocean.pdf> (2.2 MB)

Outreach - *bringing earth sciences to everyone*

<http://www.esfs.org/downloads/Outreach.pdf> (1.5 MB)

Earth & Life - *the origins of diversity*

<http://www.esfs.org/downloads/Outreach.pdf> (3.9 MB)

International Year of Planet Earth (IYPE)

<http://www.yearofplanetearth.org>

[Planet Earth.ie](http://www.planetearth.ie/)

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